

STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY

Department of Natural Resources

1313 Sherman St., Room 215

Denver, Colorado 80203

Phone: (303) 866-3567

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March 25, 2013

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John W. Hickenlooper
Governor

Mike King
Executive Director

Loretta E. Piñeda
Director

**RE: Partial Response to Complaint,
Battle Mountain Resources, Inc., San Luis Project, Permit No. M-1988-112**

Dear Mr. McClure and Mr. Lobato:

Thank you for informing the Division of Reclamation, Mining and Safety (Division) of your concerns regarding the above referenced permitted operation. In response to your complaint the Division has commenced an investigation. The investigation will include a thorough review of the history of the permit and several site inspections. Copies of the inspection reports conducted in response to your complaint will be forwarded by US Mail and by electronic transmission as soon as the reports are generated. The inspection reports are intended to respond to portions of the numerous allegations raised in your complaint. The Division's comprehensive response, addressing all allegations raised in your complaint, will not occur until the Division has completed its investigation.

Please find enclosed copy of the Division's inspection report generated from the site inspection occurring on March 18, 2013. As noted on the first page of the inspection report, the inspection was conducted by Tony Waldron, Minerals Program Supervisor; Russ Means, Senior Environmental Protection Specialist; and Wally Erickson, Environmental Protection Specialist.

In Exhibit F of your complaint Mr. Lobato expressed frustration in accessing the public record for the permitted operation, available through the Division's web site. The Division's web site has been recently revised. Therefore, please consider the following directions, which have been updated from the directions I previously provided on November 27, 2012.

1. Access the Division's web site home page at <http://mining.state.co.us>.
2. Scroll to the bottom of the home page. At center screen under "News & Notices", select the menu option "Mining Permit Data".
3. The new page is titled "Imaged Document Data". There is some helpful information on this page regarding access to the public records. Select the highlighted box, "click here for imaged document data".
4. The new page is titled "Laserfiche WebLink", with menu options listed vertically on screen left. Insert the permit number or file number in the first window, which, for the San Luis Project is "m1988112". Please avoid inserting dash symbols or capital letters

with the permit number. The window immediately below the window for the permit number is titled "IBM Index Class Name" and has a drop down menu. On that drop down menu select one of the nine menu options according to the category of document you seek. "Permit File" is the correct menu option for accessing documents associated with the original application. "Revision" is the correct menu option for accessing documents associated with any amendments or revisions to the original application. Once you have selected one of the menu options scroll to the bottom of screen left and select "Search".

5. Had you selected "Revision" all documents associated with any revision to the permit will be listed. There are 1,793 entries under Revision for this permit and the computer may require more than a moment to list all the entries; please be patient. There will be 20 entries listed per page. Thus, there are 90 pages of entries under Revision. The entries are organized in a table format with 13 columns shown across the top of the window. The first column, shown on the far left, is titled "Name". The entries are initially listed alphabetically according to the Name. If you click on the column heading "Doc Date", all entries will be ordered in chronologic order according to the date of document. If you select "Doc Date" again, the documents will be reordered in reverse chronological order. As indicated in the column heading "Media Type" some of the entries are maps (M), some are documents (D), and some are photos (P).
6. To open an entry click on the Name of the entry, listed in the far left column.
7. After the entry is opened you can convert it to a PDF by selecting that menu option located at the top of the window. After the PDF conversion is complete you can save it to a storage device or print a hard copy.
8. Due to budget considerations there are a limited number of licenses procured for the Laserfiche WebLink. Therefore, if you are denied access please try again at a later time. There is a timeout feature whereby web access will be terminated if activity ceases. If you are timed out you may re-initiate the process.

If you continue to experience frustration please call me and I will walk you through the process.

Please contact me at the Division's office in Durango at 691 County Road 233, Suite A-2, Durango, Colorado 81301, phone (970) 247-5469, if you have any questions.

Sincerely,



Wallace H. Erickson

Environmental Protection Specialist

Enclosure: DRMS inspection report generated from the 3/28/13 inspection of the San Luis Project, M-1988-112, signed 3/25/13


ec w/enclosure: John Stulp, Special Policy Advisor to the Governor
John McClure, Esq., McClure & Eggleston, LLC
Ed Lobato, Esq.



COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME: San Luis Project	MINE/PROSPECTING ID#: M-1988-112	MINERAL: Gold and silver	COUNTY: Costilla
INSPECTION TYPE: Multi Person Inspection	INSPECTOR(S): TonyWaldron, RussMeans, WallyErickson	INSP. DATE: March 18, 2013	INSP. TIME: 10:00
OPERATOR: Battle Mountain Resources, Inc.	OPERATOR REPRESENTATIVE: Lawrence Fiske, Julio Madrid, Steve Carino, and Jim Witwer	TYPE OF OPERATION: 112d-3 - Designated Mining Operation	

REASON FOR INSPECTION: Citizen Complaint	BOND CALCULATION TYPE: Partial Bond	BOND AMOUNT: \$7,400,000.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: March 25, 2013

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

(AR) RECORDS----- <u>N</u>	(FN) FINANCIAL WARRANTY----- <u>Y</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>Y</u>	(SF) PROCESSING FACILITIES----- <u>Y</u>	(TS) TOPSOIL----- <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>N</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(SB) COMPLETE INSP---- <u>N</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>Y</u>	(OD) OFF-SITE DAMAGE----- <u>Y</u>	(ST) STIPULATIONS----- <u>N</u>

Y = Inspected and found in compliance / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

PURPOSE OF INSPECTION

This inspection occurred in response to a complaint submitted by McClure & Eggleston, LLC, on behalf of the Costilla County Commissioners and the Costilla County Conservancy District. The complaint was received electronically on February 26, 2013, and February 28, 2013. The complaint included the following documents:

- 2-page cover letter, dated February 26, 2013, signed by John C. McClure, Esq., and Edwin J. Lobato, Esq.; with an 8-page memo from Mr. McClure and Mr. Lobato; and supporting documents identified as Exhibits A, B, C, D-1, D-2, E, F and G, totaling 353 pages; and
- 1-page cover letter, dated February 28, 2013, signed by John C. McClure, Esq., and Edwin J. Lobato, Esq.; with supporting documents, totaling 75 pages (428 pages total for complaint).

The supporting documents included the following:

- Exhibit A – an incomplete copy of an Expert Report and Summary of Opinions, dated August 20, 2012, which was prepared by Scott G. Mefford, CPG, for District Court Case No. 07CW42 (9 pages);
- Exhibit B - a complete copy of the Deposition of William S. Lyle, taken November 2, 2012, for District Court Case No. 2007CW42 (148 pages);
- Exhibit C – a complete copy of the Deposition of Julio Madrid, taken November 5, 2012, for District Court Case No. 2007CW42 (105 pages);
- Exhibit D-1 – a correspondence from Julio Madrid, Battle Mountain Resources, dated November 15, 2011, addressed to the Division of Water Resources, regarding an annual report (8 pages);
- Exhibit D-2 – data table (1 page);
- Exhibit E – an incomplete copy of the transcript from the January 25, 1990, Mined Land Reclamation Board hearing, during which the Board considered the application for Amendment No. 1 to the San Luis Project, M-1988-112, with objections, and conditionally approved the application (43 pages);
- Exhibit F – an incomplete copy of the transcript from the December 13, 2012, District Court Case No. 2007CW42 (28 pages);
- Exhibit G – map, Battle Mountain Site Plan, prepared by Lytle Water Solutions, LLC (1 page); and
- An incomplete transcript from the December 12, 2012, District Court Case No. 2007CW42 (74 pages).

INVESTIGATION AND RESPONSE PROCEDURE

The above described complaint is atypical of the type of complaints generally received by the Division. Therefore, the Division's investigation and response procedure will be somewhat modified in addressing the issues raised by the Complainant. In response to the allegations raised by the Complainant the Division has

commenced a thorough review of the history of the permit. The history commences November 10, 1988, and includes numerous public hearings before the Mined Land Reclamation Board, civil action 89CV6224, three violations issued by the Mined Land Reclamation Board, one violation issued by the Water Quality Control Division (WQCD) of the Colorado Department of Public Health and Environment, three amendments (two were withdrawn after a protracted review period), 37 revisions and 100 site inspections by Division staff. The Division's investigation will include several site inspections with this inspection being the first in the investigation. The Division will forward copies of all inspection reports generated during the investigation to the Complainant by electronic transmittal and by US Mail. The Division's comprehensive response, addressing all of the allegations raised by the Complainant, will not occur until after the Division has completed its review of the permit history and has identified additional modifications to the permit, if necessary, to ensure compliance with the Colorado Mined Land Reclamation Act, 34-32-101 et seq., C.R.S. (the Act), and with the Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard Rock, Metal and Designated Mining Operations (the Rules). Copy of the current Act and Rules are available on the Division's web site at <http://mining.state.co.us>. If, during its investigation the Division discovers evidence of a possible violation of the permit conditions, and/or of the Act and Rules, the Division will pursue enforcement action against the Operator, Battle Mountain Resources, Inc.

CURRENT PERMIT STATUS

The San Luis Project is a 112d-3 type permit, with the "d" indicating its status as a Designated Mining Operation. As such the operation is subject to the most stringent environmental protection requirements available in the Act and Rules. The permit area for the San Luis Project encompasses 1,801 acres, within which boundaries the Operator is approved to affect 641 acres. The approved environmental protection plan, reclamation plan and financial warranty address the 641 acres affected lands. The majority of the affected lands will be reclaimed to support rangeland and wildlife habitat post-mining land use, with approximately 45 acres approved to be reclaimed to industrial/commercial land use. Mining and milling activities ceased on or about November 9, 1996, and the Operator commenced final reclamation. The Division holds \$7.4 million financial warranty.

PERPETUAL WATER TREATMENT AND/OR PERPETUAL WATER MANAGEMENT

During the active mining phase of the operation ore was extracted from the East and West Pit areas. The excavation at the West Pit encountered several aquifers. These aquifers were related to the Santa Fe Formation, the Precambrian bedrock and the alluvial aquifer for Rito Seco. Rito Seco is a perennial stream in close proximity to the south side of the West Pit area. Rito Seco is tributary to Culebra Creek, which is tributary to the Rio Grande River. These aquifers carried a substantial flow of ground water, estimated at 210 gallons per minute (gpm), which drained into the pit and created a dewatering necessity. Permit documents indicate approximately 60 gpm were retained at the West Pit area and utilized for dust control with the balance, approximately 150 gpm, apparently being transferred to the mill facility to be utilized as metallurgical processing fluids, or to the tailings repository to be disposed by evaporation.

With the commencement of final reclamation the West Pit was partially backfilled and the dewatering activity ceased. Ground water in the backfilled West Pit rose to an elevation sufficient to seep into the adjacent Rito Seco aquifer. The seep was discovered on or about October 28, 1998, and at that time was characterized as a seep flowing at 10 gpm. The Operator responded immediately and by December 15, 1998, had managed to reduce the surface seep from 10 gpm to 1 gpm. By June of 1999 the Operator had installed three production

wells in the backfilled West Pit and four ground water capture wells in the Rito Seco alluvium. The plan was to draw down the ground water elevation within the backfilled West Pit sufficient to stop the seep, reverse the hydrologic gradient of ground water moving from the West Pit into the Rito Seco aquifer, and to re-capture any West Pit ground water previously escaped to the Rito Seco aquifer. The plan proved successful.

Regardless, the seep did not meet receiving stream standards and ultimately resulted in a violation from WQCD, issued August 20, 1999. A water treatment plant was constructed and operated to reduce concentrations of manganese, fluoride and sulfate from the ground water pumped from the backfilled West Pit and the capture wells located in the Rito Seco alluvium, prior to discharge to Rito Seco. Discharge from the water treatment plant is permitted through Colorado Discharge Permit System (CDPS) CO-0045675.

OBSERVATIONS SPECIFIC TO THE TAILINGS REPOSITORY

Engineering designs for the tailings repository were reviewed and approved through Amendment No. 01 (AM-01) to the permit. AM-01 was approved January 24, 1990. Documents from the public record describe the tailings repository to include, but not limited to, a lined tailing impoundment with drainage blanket to direct fluids to a double lined collection pond; embankments, as necessary to impound tailings; a pump back system designed to return fluids from the collection pond to the free water pool of the tailing impoundment; pipelines and pump stations to transfer tailing slurry to the tailing impoundment and recycle fluids back to the mill circuits; and upland diversion structures to direct upland drainage around the tailings repository. The features of the tailings repository are discussed in greater detail below.

- A lined tailing impoundment designed to permanently contain approximately 12.2 million tons of tailings, with a final surface area of approximately 192 acres. The liner was a continuous composite liner system consisting of a foundation of compacted, low permeability soil overlaid by a geosynthetic membrane, generally 40-mil VLDPE (very low density polyethylene). 60-mil HDPE (high density polyethylene) membrane was installed in exposed areas (resistant to ultraviolet radiation) and/or in areas of anticipated high hydraulic head. VLDPE is specified to withstand 900% elongation and is preferred where differential settling of the foundation is anticipated. The majority of the impoundment was established in cut. Only several localized arroyos were filled to establish the final grade within the impoundment. The impoundment was constructed in a manner which minimized the potential for differential settling of the foundation. Approximately 5.3 million square feet of liner was installed during Phase 1 construction, with a total of approximately 7.3 million square feet of liner installed by the end of Phase 2 construction. The liner system was considered state of the art at the time of construction and had been installed with a high level of quality assurance and quality control. The Division accepted the design and final construction as adequate to protect ground water resources. Laboratory results of ground water samples taken down gradient of the impoundment on a quarterly basis indicate the liner system has proven to be protective of ground water resources.
- A drainage blanket, composed of a 2-foot thick layer of specified earthen material with an embedded network of perforated drainage pipes, was installed immediately above the geosynthetic membrane. The drainage blanket was intended to minimize hydraulic head on the liner system and thereby minimize leakage, and to provide a method of dewatering the tailings placed within the impoundment. The liner system and drainage blanket extend under the main embankment and ultimately drains to a double lined collection pond. The permeability of the tailings will vary over time with permeability decreasing as the tailings consolidate. Tailings were pumped to the impoundment in slurry with

approximately 50% of the slurry being fluids. The designs for the facility anticipated the quantity of fluids associated with the slurry at 780 gpm, based on a production rate of 4,680 tons of ore milled per day. During the time of tailings deposition (1992), flow rates from the drainage blanket to the collection pond approximated 300 gpm. Deposition of tailings slurry to the impoundment ceased on or about November 9, 1996. Since that time flow rates from the tailing impoundment to the collection pond have reduced. During the time of this inspection the Operator reported the flow rate to the collection pond to be 36 gpm.

- The main embankment for the tailing impoundment was constructed in two phases utilizing the upstream method of construction. The main embankment was designed and constructed to be permeable; the embankment was intended to impound tailings and not fluids. According to the approved designs, at the completion of Phase 1 construction the earthen embankment would be approximately 100 feet high with a crest length of 1,450 feet. The downstream face of the embankment would be no steeper than 3H:1V (3 units of distance in the horizontal plane to each unit of distance in the vertical plane) and the upstream face of the embankment not steeper than 2.5H:1V. The Phase 2 construction would include two additional lifts, both maintained at 3H:1V for the downstream face and 2.5H:1V for the upstream face, ultimately raising the embankment to 155 feet in height with a crest length of 1,900 feet. Stability analyses were performed for the tailings embankments, collection pond embankments, and other impoundment dikes for static and pseudostatic (seismic) conditions. The analysis rendered appropriate factors of safety to demonstrate the stability of the embankments during normal and earthquake conditions. The approved designs included water balance calculations which demonstrated the capacity of the tailings repository to be appropriate to ensure containment of not only normal operating fluids but also the probable maximum precipitation (PMP) storm event. There is a second tailing embankment, the "splitter" embankment, constructed during Phase 1 and running parallel to the main embankment. The purpose of the splitter was to aid in the management of tailings and fluids during the initial deposition of tailings. The splitter embankment is 90 feet high and is now buried in tailings and not evident by surface observations. During the time of this inspection the Division encountered a geotechnical engineer, Allen Jewell, who was conducting a stability and safety evaluation of the main embankment. Mr. Jewell indicated he had been retained by the Operator.
- A double lined collection pond is located at the downstream toe of the main embankment of the tailing impoundment. As noted above, the tailing impoundment is designed to separate the liquid component of the tailings slurry, impound the solids and pass the liquids under the main embankment to the collection pond. The collection pond was designed and constructed to impound fluids. Due to the high hydraulic head anticipated in the collection pond, the pond was double lined with the lower liner being a 40-mil VLDPE and the upper liner a 60-mil HDPE. A layer of geonet was placed between the two membranes to enhance stability and to collect any leakage from the upper liner. Leakage from the upper liner is conveyed to a secondary recovery sump located on the down gradient side of the collection pond. The design capacity of the collection pond was 10.5 million gallons with 2-feet of freeboard. A pump back system was installed, and has been maintained, whereby fluids from the collection pond are returned to the free water pool located on top of the tailings within the tailing impoundment.
- Upland drainage from the south and east sides of the tailings repository are routed around the facility by a series of drainage ditches and diversion berms, designed to safely convey drainage generated by

the 100 year, 24 hour storm event. Permit documents define the 100 year, 24 hour storm event at 2.9 inches precipitation and calculate storm runoff from the south drainage area at 292 cubic feet per second (cfs) and 80 cfs for the east drainage area. Storm runoff from the north side of the facility is not diverted but included within the water balance calculations for the tailing impoundment. In the case of a storm event greater than the 100 year, 24 hour, the tailings repository was designed to safely contain all drainage up to and including the PMP. Permit documents define the PMP at 14 inches precipitation over an 8-hour period. Given the catchment area of 1.29 square miles, flood flows generated by the PMP were estimated at 9,220 cfs. As noted previously, the tailings repository was designed to safely contain such event.

- The tailings delivery and distribution pipeline(s) with associated pump stations are no longer necessary and have been removed as part of reclamation activities.

Response to this inspection report should be directed to Wally Erickson at the Division's office in Durango located at 691 County Road 233, Suite A-2, Durango, Colorado 81301, phone (970) 247-5469, fax (970) 247-5104, or email at wally.erickson@state.co.us.

Certificate of Service

I, Wallace H. Erickson, hereby certify that on this 25th day of March, 2013, placed a true copy of the foregoing inspection report generated from the inspection of the San Luis Project, Permit No. M-1988-112, occurring on March 18, 2013, signed March 25, 2013, in the US Mail, postage affixed, addressed to the following three individuals:

Lawrence Fiske
Battle Mountain Resources, Inc.
P.O. Box 310
San Luis, CO 81152

John C. McClure, Esq.
McClure & Eggleston, LLC
1401 17th Street, Suite 660
Denver, CO 80202-1244

Edwin J. Lobato, Esq.
P.O. Box 1302
224 San Juan Avenue
Alamosa, CO 81101

And an electronic copy of the same inspection report sent by email to the following individuals:

John Stulp, Special Policy Advisor to the Governor, john.stulp@state.co.us

John McClure, Esq., McClure & Eggleston, LLC, jmcclure@melawllc.com

Ed Lobato, Esq., ejlobo2003@yahoo.com

Lawrence Fiske, Battle Mountain Resources, Inc., larry.fiske@newmont.com

Tony Waldron, DRMS Minerals Program Supervisor, tony.waldron@state.co.us

Russ Means, DRMS Senior Environmental Protection Specialist, russ.means@state.co.us

Jeff Fugate, Esq., AGO for DRMS, jeff.fugate@state.co.us

 3/25/13
Signature and Date