



## COLORADO

Division of Reclamation,  
Mining and Safety

Department of Natural Resources

1313 Sherman Street, Room 215  
Denver, Colorado 80203

December 21, 2018

Mark A. Steen  
Colorado Milling Company, LLC  
P.O. Box 1523  
Longmont, CO 80502

**Re: Gold Hill Mill, Permit No. M-1994-117, Amendment Application (Revision No. AM-01),  
Adequacy Review No. 2**

Mr. Steen:

The Division of Reclamation, Mining and Safety (Division) has completed its second adequacy review of the materials submitted for the above referenced amendment application. All comment and review periods for the application began on January 4, 2018, when the application was called complete for filing purposes. The decision date for the application is set for **December 30, 2018**.

After reviewing the operator's adequacy response submitted on December 11, 2018, the Division has identified adequacy items requiring clarification or additional information. These items are identified below under their respective exhibit heading, and are numbered sequentially. The item numbers referenced in this letter correlate with the Division's adequacy items identified in its review letter sent to the operator on January 26, 2018.

### **Application Form:**

- 1) The revised page 3 of the application form includes the following coordinates for the primary mine entrance location: 40° 03' 55.74"N, 105° 24' 24.12.1"W. The seconds given for the longitude is not accurate. Based on the coordinates provided on the revised location map, the Division believes the longitude should read: 105° 24' 12.1"W. Please correct this error on page 3.

### **Exhibit B – Site Description (Rule 6.3.2):**

- 2) The operator's response to item no. 9 states the only structures located within 200 feet of the entire affected area are three small wooden frame structures, a single family residence, several sheds, and an unused corral. However, in Exhibit L, the operator states there is a pole-mounted utility line extending east-west along the northern boundary of the pump station area, owned by Excel Energy Corporation. Additionally, the operator has not included Sunshine Canyon Drive, Lickskillet Road, or Lefthand Canyon Drive, which are all permanent, man-made structures located within 200 feet of the affected area. Please revise the structure list to include these 4 additional structures and their respective owners.



- 3) The operator's response to item no. 11 refers to information regarding water quality sampling and analytical data for Left Hand Creek being available in the files for permit nos. M-1983-141 and M-1994-117. Firstly, any information referenced for the amendment under review must be included in the permit file for M-1994-117. If this information is not already included in the permit file for M-1994-117, please provide the information with your response. Secondly, pursuant to Rule 1.10(2), the applicant shall clearly describe where, in the original application and supporting documents, the information not included in the amendment application, but necessary to render the amendment technically adequate, may be found. The operator did not specify where in the permit file for M-1994-117 the water quality sampling and analytical data for Left Hand Creek can be found. Please specify where this information can be found in the permit file, or provide the information with your response.

**Exhibit C – Mining Plan (Rule 6.3.3):**

- 4) The operator's response to item no. 15 describes only one 15 foot segment of the existing pipeline that will need to be excavated for removal of the pipeline. This buried portion of the pipeline occurs where it crosses the old mine access road below the Red Cloud and Cold Spring mine dumps. The operator states the decomposed granite that is removed during this activity will be distributed along the access road below the excavation. Please confirm the areas to be disturbed for removal of the existing pipeline, including areas where excavated material will be placed will be located within the proposed affected area.
- 5) The operator's response to item no. 18 states the maximum total volume of fuel to be stored at the pump house is 300 gallons. The fuel will be stored in a standard metal container approved for fuel storage. The Bean pump and generator will be installed within metal containment frames that will retain any fuel or lubricants inside the pump house. Please clarify whether the fuel storage container will be double-walled. Additionally, please provide details on the proposed secondary containment, including whether it will hold 110% of the maximum storage volume (in this case, 330 gallons). If the fuel tank will be double-walled, its outer shell capacity may be included in the 110% volume calculated for secondary containment.
- 6) The operator's response to item no. 19 states there is no other existing infrastructure to remove other than a 3-inch and a 2-inch PVC pipeline. Other portions of the amendment application refer to only one existing 2-inch pipeline. Please clarify if there is more than one pipeline that needs to be removed. Also, please provide an estimate of the maximum length of pipeline to be removed prior to installation of the new pipeline. Please be sure the reclamation bond estimate includes costs for removing all existing pipeline.
- 7) The operator's response to item no. 20 states the pump house (a 10 foot x 8 foot metal connex container) and the metal fuel container will be located well above the Left Hand Creek floodplain, including outside of the area affected by the 2013 flood. Please provide a map of the proposed permit area near the creek which includes the location of the 100-year floodplain of Left Hand Creek with respect to the location of all proposed structures in this area.



- 8) The operator's response to item no. 20 states the footbridge will be situated well above the highest observed level of Left Hand Creek at this location during the 2013 flood. Firstly, please provide the base flood elevation for the section of the creek where the footbridge would be installed, and the anticipated minimum distance above this elevation at which the footbridge would be installed. Secondly, please provide design specifications for the proposed footbridge. Lastly, please state whether a permit will be required for construction of the footbridge (i.e., county bridge construction permit). If so, please commit to providing a copy of any approvals to the Division prior to construction of the bridge.
- 9) The operator's response to item no. 21 includes maps of the Times Mine and Wynona Mine which were drawn in 1947 and 1934 respectively. These maps do not provide enough details of the workings to sufficiently depict the proposed water storage scenario. Please provide a generalized cross-section of the area between the Times Mine portal and the mill site, showing all underground workings proposed for water storage, including the connection between the Times and Wynona Mines. This cross-section should also include surface features such as the location of the Times Mine portal, Sunshine Canyon Drive, features associated with the mill site, and the shaft from which water would be pumped from the workings to the mill.
- 10) Please clarify how the operation intends to access the waterline easement for pipeline removal, installation, maintenance, and reclamation. Does the operation intend to access the waterline from Licksillet Gulch? If so, does the operation have a legal right to cross the property between the road and the easement for this purpose?
- 11) The operator's response to item no. 23 states the Times Mine bulkhead is situated 100 feet from the metal door of the 5 foot diameter galvanized steel culvert that provides entrance into the mine. This bulkhead is 3 feet thick and was constructed of concrete and rebar in a wooden form in 1987. There are 3 PVC pipes set within the bulkhead, including a 3-inch intake pipe, a 2-inch pipe, and a 1-1/2-inch pipe, all closed with ball valves. The operator submitted a rudimentary drawing of the existing bulkhead, presumably from the portal side, indicating approximate locations of the three pipes. The description and drawing submitted do not provide enough details for the Division to determine whether the bulkhead was properly designed and installed to be utilized for the proposed water storage. Please provide more details on the design and construction of the bulkhead, including a description of the competency of surrounding bedrock, whether any portions of the surrounding rock were pressure grouted to minimize water seepage, demonstration the bulkhead was designed to withstand the maximum hydrostatic pressure for the proposed water storage, demonstration the bulkhead is sufficiently thick and properly anchored, and an estimated thickness of overlying overburden.
- 12) What is the maximum elevation at which the operation proposes to store water in the Winona Mine workings versus the elevation of the Times Mine portal, and the collar elevation of the 50 foot winze that connects the Times Mine to the Wynona Mine? Will the operation need to keep water levels below a particular elevation to minimize hydrostatic pressure on the bulkhead? How does the



operation intend to monitor water levels in the workings (e.g., pressure transducer with data logger, periodic manual measurements)?

- 13) The operator's response to item no. 24 states the Times Mine still retains water from the last period when water was pumped behind the bulkhead. Does the operator have any idea of current water levels in the workings? Does the operator have any way to collect water quality samples from the existing mine-pool?
- 14) In accordance with a previous permit commitment made by the operator, once the operation begins storing water in the Wynona Mine, the operator will commence sampling at that location. Therefore, please submit a water quality sampling plan for the Wynona Mine.
- 15) The operator's response to item no. 25 states that operating at 50 tons per day for 260 days per year and at 4 tons of water per ton of ore processed would result in the removal of 1,651,000 gallons of water per year. The operator states this amount is well below the maximum volume of water that could be withdrawn from Left Hand Creek during irrigation season, which is 3,388,850 gallons of water. Please clarify the conversion factor that was used to determine the estimated gallons of water to be used per year by the mill operation. Based on the values given, the Division calculates the operation will use a total of 13,988,520 gallons of water per year [50 tons ore per day x 260 days per year = 13,000 tons ore per year x 4 tons water = 52,000 tons of water used per year; 1 ton water = 269.01 gallons (US liquid); so 52,000 tons water x 269.01 gallons = 13,988,520 gallons water used per year]. If this calculation is correct, the proposed annual water usage for mill operations greatly exceeds the maximum volume of water the operator can withdraw from Left Hand Creek during irrigation season (by 10,599,670 gallons). Please explain this discrepancy.
- 16) The operator's response to item no. 26 states that water that has been pumped from any of the mines in this district and stored underground behind bulkheads has remained at a nearly constant level behind those bulkheads throughout the year. Please provide any available monitoring data that supports this statement.
- 17) The operator's response to item no. 26 states the quality of the fresh water pumped from Left Hand Creek behind the Times Mine bulkhead is not anticipated to introduce any adverse impacts on the quality of the groundwater found in any mine workings in this area. Please describe all known mine openings connected to the Times Mine or Wynona Mine workings. Does the operator anticipate any loss of stored water at these openings either directly or via fracture flow?
- 18) The operator's response to item no. 29 (a) clarified the decant lines which connected the tailings pond with the Hazel A adit were disconnected, cut up and removed from the site in 1999. Please provide documentation to demonstrate the removal and proper disposal of the decant lines.
- 19) The operator's response to item no. 29 (b) clarified all of the tailings that had been placed within the Hazel A adit were removed in 1995. This contradicts information found in the permit file, including a letter received from the operator on August 28, 1998 stating the operation was in the



process of dewatering the Hazel A adit so they could clean out the remaining tailings sands from the adit. This indicates that all tailings were not removed from the adit in 1995. Please provide documentation to demonstrate the removal and proper disposal of these tailings.

- 20) The operator's response to item no. 29 (d) states a discharge permit has not been obtained from the CDPHE for the Hazel A adit as it is not discharging water. This contradicts information found in the permit file, including a Division inspection report for May 27, 2004 which notes standing water was observed outside the entrance to the Hazel A adit and within the opening. Please explain this discrepancy. What has been done to ensure zero discharge at the Hazel A adit?
- 21) The operator's response to item no. 30 states the mill originally used standard flotation reagents to process ore from the Cash Mine dump, including pine oil, soda ash, and a xanthate. However, the operator anticipates using different flotation reagents in the future to improve recovery. The Division will continue to review the Designated Mining status of this operation and will formally notify the operator under separate cover of any determination that the operation is, or has a reasonable potential to be, a Designated Mining Operation, in accordance with Rule 7.2.2. Please be advised, an approval of this amendment application would not authorize the operation to store or use designated chemicals on site.
- 22) The operator's response to item no. 31 states the operation anticipates processing batches of 500 tons of material from the Cash Mine stockpile to determine which combination of reagents will be used during initial milling operations; and that once a combination of reagents that results in the best recovery has been determined from these mill tests, these reagents will be used during future processing operations. Please refer to the Division's comments in item no. 21 above. Approval of this amendment application would not authorize the operation to store or use designated chemicals on site. Prior to conducting such activities at the site (including smaller scale operations), the operation must first be converted to a Designated Mining Operation through submittal and Division approval of the appropriate application.

**Exhibit D – Reclamation Plan (Rule 6.3.4):**

- 23) The operator's response to item no. 32 corrected the permit number referenced in the reclamation plan to M-1994-117. However, the response did not specify where in the referenced permit file the pertinent documents may be found, as required by Rule 1.10(2). Please specify where this information can be found in the permit file, or provide the mill site reclamation plan with your response.
- 24) The operator provided a revised reclamation cost estimate that removes language regarding an incremental acreage increase and adds costs for decommissioning the Times Mine water pipeline. However, the estimate does not provide enough details for the Division to calculate the actual costs to reclaim the site based on what it would cost the State of Colorado using an independent contractor to complete reclamation, as required by Rule 6.3.4(2). Please provide more details for the tasks listed in the estimate, including specific structures to be removed, and material volumes,





dimensions, lengths, etc. Additionally, please provide an estimated distance to the site at which demolished/removed materials will be disposed.

**Exhibit E – Map (Rule 6.3.5):**

- 25) The operator's response to item no. 35 states the mining and reclamation plan maps have been revised so that the entire area of the Gold Hill Mill operation is depicted. However, only the revised map labeled E-4 - Surface Ownership and Permit Area shows the entire affected area. The revised map labeled E-1 – Mine Plan shows only the proposed permit area near the creek, and the revised map labeled E-3 – Reclamation Plan shows only the proposed permit area to add through this amendment application. Given the scale of the permit area, the separate maps submitted showing closer views of portions of the permit area are very helpful. However, please submit at least one mining plan map and one reclamation plan map that depict the entire affected area of the Gold Hill Mill operation.
- 26) The operator's response to item no. 36 states the mining plan map has been revised to show the location of any permanent man-made structures within 200 feet of the affected area; and that all structures can be correlated with the description provided in Exhibit B. However, the only revised map labeled Mine Plan is E-1, and this map only shows structures located in the area near the creek. Please provide a mining plan map that shows the location of all permanent, man-made structures within 200 feet of the entire affected area, including the existing mill site.

**Exhibit F – List of Other Permits and Licenses (Rule 6.3.6):**

- 27) The operator's response to item no. 38 states a Plan of Operations has been prepared for the Gold Hill Mill and will be submitted (to the BLM) as soon as the Division has completed its review of this amendment application. Please commit to providing the Division with a copy of the BLM approval once attained.
- 28) The operator's response to item no. 39 states a Plan of Operations has been prepared for the Gold Hill Mill's Left Hand Creek pump station and will be submitted (to the USFS) as soon as the Division has completed its review of this amendment application. Please commit to providing the Division with a copy of the USFS approval once attained.

**Exhibit L – Permanent Man-Made Structures (Rule 6.3.12):**

- 29) The operator's response to item no. 45 states Exhibit L has been revised to include a detailed list of all permanent, man-made structures located within 200 feet of the affected land. The revised exhibit states there are 7 permanent man-made structures located within 200 feet of the operation or affected land, as well as an Excel Energy Corporation pole-mounted utility line extending east-west along the northern boundary of the pump station area. The exhibit also states all structures are shown on the E-1 Mine Plan Map. Firstly, the revised list does not include Sunshine Canyon Drive, Licksillet Road, or Lefthand Canyon Drive, which are all permanent, man-made structures located



within 200 feet of the affected area. Please add these structures to the list. Secondly, the Division could not locate the pole-mounted utility line on the E-1 Mine Plan Map. Please be sure this structure is located on the mining plan map.

- 30) Please provide demonstration that structure agreements have been attempted with all owners of permanent, man-made structures located on or within 200 feet of the affected land in accordance with Rule 6.3.12(a) and (c). Demonstration may be in the form of return receipts for Certified Mailing (or proof of hand delivery) and copies of the structure agreements that were sent to each structure owner.
- 31) The operator's response to item no. 46 does not address potential impacts to Sunshine Canyon Drive from utilization of the Times Mine for water conveyance and storage. Given the operator's activities in the Times Mine adit which led to Violation No. MV-2017-036, it is especially important the stability of Sunshine Canyon Drive be addressed in this amendment application. Please provide a notarized structure agreement with the owner of Sunshine Canyon Drive. If such an agreement cannot be reached, please provide an appropriate engineering evaluation that demonstrates this road will not be damaged by activities occurring at the mining operation in accordance with Rule 6.3.12(b).

**Additional Item(s):**

- 32) The Division previously forwarded all comment letters received for the amendment application during the public comment period that closed on January 24, 2018. Please respond to any jurisdictional concerns expressed by objectors, including the Pine Brook Water District (objection letter enclosed).
- 33) The Division accepts the operator's response to comments received from Boulder County Parks and Open Space, Boulder County Land Use Department, Colorado Historical Society, and Division of Water Resources. Please address any concerns or recommendations in agency comment letters received from the U.S. Army Corps of Engineers (February 6, 2018; comment letter enclosed) and the City of Boulder Public Works (March 5, 2018; comment letter enclosed).
- 34) Pursuant to Rule 1.6.2(e), the operator must submit proof of the notice to all owners of record of surface and mineral rights of the affected land, and to the owners of record of all land surface within 200 feet of the boundary of the affected land including all easement owners. To comply with this Rule, the operator submitted copies of return receipts of Certified Mailing. However, the following receipts were copied in a way that portions of the Certified Mailing number are not visible: Gene Sapp and Dene Sapp, Rene Murphy, and Finnlandia Minerals. Please either provide the Certified Mailing numbers for these receipts, or submit new copies of these receipts which show the entire Certified Mailing number.
- 35) Please remember that, pursuant to Rule 1.6.2(1)(c), any changes or additions to the application on file in our office must also be reflected in the public review copy which was placed with the County

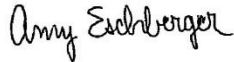


Clerk and Recorder. Pursuant to Rule 6.4.18, you must provide our office with an affidavit or receipt indicating the date this was done.

This concludes the Division's second adequacy review of your amendment application. If you are unable to sufficiently address all adequacy items by the application decision date, currently set for **December 30, 2018**, the application will be denied. If more time is needed to address the adequacy items, it will be your responsibility to submit an extension request prior to the decision date. Pursuant to Rule 1.4.1(9), the operator may request the application decision date be extended, not to exceed 365 days from the date the application was filed. In this case, the operator may request an extension to no later than January 4, 2019.

If you have any questions, you may call me at (303) 866-3567, ext. 8129, or email me at [amy.eschberger@state.co.us](mailto:amy.eschberger@state.co.us).

Sincerely,



Amy Eschberger  
Environmental Protection Specialist

Encls: Objection letter from Pine Brook Water District, received on 1/24/2018  
Comment letter from U.S. Army Corps of Engineers, received on 2/6/2018  
Comment letter from City of Boulder Public Works, received on 3/5/2018

Cc: Mike Bynum  
Colorado Milling Company, LLC  
50 West 100 South St.  
Moab, UT 80342

Michael Cunningham, DRMS







STATE OF  
COLORADO

Cunningham - DNR, Michael <michaela.cunningham@state.co.us>

## Permit M-1994-117 Revision AM-01

bob@pinebrookwater.com <bob@pinebrookwater.com>

Wed, Jan 24, 2018 at 12:55 PM

To: "Eschberger - DNR, Amy" <amy.eschberger@state.co.us>, Dick Cole <goldhillcole@gmail.com>

Cc: michaela.cunningham@state.co.us, Contact@pinebrookwater.com, cdphe.comments.wqcd@state.co.us, waterquality@lefthandwater.org, healthinfo@bouldercounty.org, gretchendief <gretchend@mac.com>, "Carson Hatcher, Mindy" <mcarsonhatcher@bouldercounty.org>, rogerflynn@colorado.edu, abutler@bouldercounty.org, kmartinez@bouldercounty.org, Michael.Cunningham@state.co.us, dcase@bouldercounty.org, huttonk@bouldercolorado.gov, taddeucciJ@bouldercolorado.gov

To All Concerned Parties,

As the manager of the Pine Brook Water District we would like to note that our concern is definitely water quality. As Dick Cole noted almost any release of water from the mines in question or the tailings pond located at the Mill site drains down Cash Gulch and into Four Mile Creek.

Four Mile Creek is our primary source of water which we treat for potable water use to our community. The Pine Brook Water District is a special district as defined by the State of Colorado and therefore is a governmental entity. We do have a complete treatment system which removes most contaminants.

However the result is that those contaminants then end up as part of our waste sludge. If the contaminants are found to be at to high of a level in our sludge then we have to have a specialty hauler dispose of them at a cost that is 6 times the normal cost. This has actually occurred post 2013 flood as many of the tailing piles in the area were disturbed by that flood. The concentrations of those contaminants is now slowly dropping as the area is stabilized.

We have stated that while we have no objection to the mine operation per se, however we do feel that given its history and the potential to contaminate Four Mile Creek that safeguards must be imposed and strictly enforced. That full water testing at approved monitoring sites should also be part of any permit.

While this is important to our operations, it is even more important for the many, many home owners who live along the creeks below the mine and all the way down to the City of Boulder. Most of these homes have wells with limited treatment. Nor is that treatment designed to remove/treat for the types of contaminants which can occur from mining operations. These homes are not within our service area and so do not receive the treated water we produce but rather are dependent on the natural flows of the creeks.

As Dick noted, there have been past violations which have occurred while the mine was under various management companies, but the common thread has been that the owner was actively involved also.

As for the water rights issues noted the only stance we have is that there must be a proper augmentation plan to protect the flows of the creeks, streams, etc down

gradient from the mine and the water right holders who then withdraw their water under their water rights.

Sincerely,

Robert de Haas, Manager  
Pine Brook Water District  
1903 Linden Drive, Boulder, CO 80304  
303-443-5394 - Office  
303-817-8153 - Cell  
303-415-0621 - Fax



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
**CORPS OF ENGINEERS, OMAHA DISTRICT**  
1616 CAPITOL AVENUE  
OMAHA NE 68102-4901

January 24, 2018

**RECEIVED**

FEB 06 2018

DIVISION OF RECLAMATION  
MINING AND SAFETY

Planning, Programs, and Project Management Division

Mr. Michael A. Cunningham  
Colorado Division of Reclamation, Mining and Safety  
1313 Sherman Street, Room 215  
Denver, Colorado 80203

Dear Mr. Cunningham:

The U.S. Army Corps of Engineers, Omaha District (Corps) has reviewed your letter dated January 5, 2018 (received January 11, 2018) regarding the Hard Rock/Metal Mining Materials Reclamation Permit Amendment Application Consideration for the Colorado Milling Company, LLC, in Boulder County, Colorado. It is understood that the proposed amendment to the Gold Hill Mill Permit No. M-1994-117-AM01 would formally add the previously permitted Left Hand Creek pump station, Gold Hill Mill pipeline and Times Mine adit portal to the affected land boundary of the Gold Hill Mill Permit. We offer the following comments for your consideration:

Your plans should be coordinated with the state water quality office that has jurisdiction within the area where the project is located to ensure compliance with federal and state water quality standards and regulations mandated by the Clean Water Act and administered by the U.S. Environmental Protection Agency. Please coordinate with the Colorado Department of Public Health and Environment concerning state water quality programs.

If you have not already done so, it is recommended you consult with the U.S. Fish and Wildlife Service and the Colorado Division of Wildlife regarding fish and wildlife resources. In addition, the Colorado State Historic Preservation Office should be contacted for information and recommendations on potential cultural resources in the project area.

If construction must occur in the floodplain, it must be located outside the floodway. If a floodway has not been determined and designated, the construction should be as far from the stream channel as possible. The goal of any construction in the floodplain is to achieve the highest level of flood protection with zero impact to adjacent property.

If the proposed waterline construction crosses the floodplains of small drainageways and streams, flood-related problems should not occur if the lines are buried far enough below the beds of drainageways and streams to prevent exposure due to streambed erosion during periods of high floodflows. Any aboveground construction subject to flood damage, such as pump houses, should either be placed above, or flood proofed to, a level above the one percent annual chance flood elevation.

Since the proposed project does not appear to be located within Corps owned or operated lands, your plans should be submitted to the local floodplain administrator for

review and approval prior to construction. It should be ensured that the proposed project is in compliance with the floodplain management criteria of Boulder County and the State of Colorado. In addition, please coordinate with the following floodplain management office:

Colorado Water Conservation Board  
Attention: Ms. Jamie Prochno  
1313 Sherman Street, Room 721  
Denver, Colorado 80203  
Telephone: 303-866-3441 ext. 3215  
Fax: 303-866-4474  
Email: [jamie.prochno@state.co.us](mailto:jamie.prochno@state.co.us)

Any proposed placement of dredged or fill material into waters of the United States (including jurisdictional wetlands) requires Department of the Army authorization under Section 404 of the Clean Water Act. You can visit the Omaha District's Regulatory website for permit applications and related information. Please review the information on the provided website (<http://www.nwo.usace.army.mil/Missions/RegulatoryProgram.aspx>) to determine if this project requires a 404 permit. For a detailed review of the permit requirements, preliminary and final project plans should be sent to:

U.S. Army Corps of Engineers  
Denver Regulatory Office  
Attention: Mr. Kiel Downing, CENWO-ODR-CO  
9307 South Wadsworth Boulevard  
Denver, Colorado 80128

In addition, please update your records with our current mailing address:

U.S. Army Corps of Engineers, Omaha District  
Planning Branch  
Attention: Mr. Eric Laux, CENWO-PMA-C  
1616 Capitol Ave.  
Omaha, Nebraska 68102-4901

If you have any questions, please contact Ms. Amee Rief of my staff at (402) 995-2544 or [amee.l.rief@usace.army.mil](mailto:amee.l.rief@usace.army.mil) and reference PD# 8028 in the subject line.

Sincerely,



Eric A. Laux  
Chief, Environmental Resources and Missouri  
River Recovery Program Plan Formulation  
Section





**City of Boulder  
Public Works**

**1739 Broadway  
Boulder, CO 80306-0791  
(303) 441-3200**

March 5, 2018

**RECEIVED**

**MAR 05 2018**

**DIVISION OF RECLAMATION  
MINING AND SAFETY**

Michael A. Cunningham  
Colorado Division of Reclamation and Mining Safety  
Colorado Department of Natural Resources  
1313 Sherman St. Room 215  
Denver, CO 80203

**Subject: Gold Hill Mill, DRMS File No. M-1994-117 Amendment AM01**

The City of Boulder (city) is submitting these comments regarding the application for an amendment to Permit No. M-1994-117-AM01. The city became aware of the amendment application on January 23, 2018 via an email sent from a Gold Hill resident that is a neighbor of the mine site. Under this amendment, the Colorado Milling Company, LLC proposes to construct and install the Left Hand Creek Pump Station, a footbridge across Left Hand Creek, and the Gold Hill Mill Pipeline, which will transport water from Left Hand Creek to the Times Mine adit portal.

The city owns water rights that divert from Left Hand Creek downstream from the proposed pump station. The city has concerns about potential water quality impacts to Left Hand Creek and contamination of the riparian and aquatic corridor that could occur if the proper spill-prevention techniques and other precautions are not taken during construction and operation of the pump station.

The amendment proposes constructing a pump station in the Left Hand Creek floodplain, and building a footbridge across Left Hand Creek. The pump house will store a generator and, presumably, fuel to power the generator. This area along Left Hand Creek was substantially impacted during the September 2013 flood. The city encourages Colorado Milling Company to seek an alternative site outside of the floodplain, and in particular, outside of the floodway. Construction within the floodplain can increase erosion and adversely impact water quality and riparian and aquatic habitat. In a flood or heavy rain event, the pump station, footbridge, and associated generator and fuel could be mobilized in Left Hand Creek, impacting water quality.

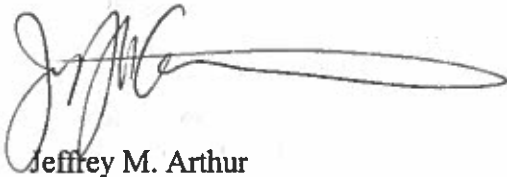
The city also owns municipal water rights that divert from Boulder Creek downstream of Fourmile Creek. Release of water from the mine tailing impoundment would flow to Fourmile Creek. We have concerns about potential water quality impacts to Fourmile and Boulder Creeks if mining and milling operations are not performed in accordance with protective stormwater and

discharge permits. The city has not seen documentation that Colorado Milling Company has a discharge permit, and we have concerns that use of the water pumped from Left Hand Creek to support milling operations could lead to an unacceptable risk of an unpermitted discharge at the site, particularly during rain events. Further, a malfunction of the pump could cause excess diversions from Left Hand Creek (in exceedance of decreed water rights allowances). The city encourages Colorado Milling Company to install an automatic shut off system on the pump, and submit diversion records to the State to show compliance with the terms and conditions of the water right.

In the amendment, Colorado Milling Company should include an inventory of the chemicals and fuels to be used and/or stored at the pump station or on the mining and milling site, including storage volumes. In addition, Colorado Milling Company should describe any secondary containment installed to prevent leaks and spills that could contaminate groundwater or surface water in the area.

To ensure protection of groundwater and surface water, Colorado Milling Company should demonstrate that they have the proper permits in place, including a discharge permit through the Colorado Department of Public Health and Environment, and other applicable Boulder County issued permits such as stormwater, construction, and floodplain development permits.

Sincerely,

A handwritten signature in dark ink, appearing to read 'J. Arthur', with a long horizontal flourish extending to the right.

Jeffrey M. Arthur  
Director of Public Works for Utilities

cc. Kate Dunlap, Source Water Quality Program Coordinator