



## COLORADO

Division of Reclamation,  
Mining and Safety

Department of Natural Resources  
1313 Sherman Street, Room 215  
Denver, CO 80203

### MEMORANDUM

**DATE:** September 15, 2017

**TO:** Mined Land Reclamation Board

**FROM:** Amy Eschberger, Environmental Protection Specialist

**RE:** Enforcement Hearing  
Colorado Milling Company, LLC; Permit No. M-1994-117; Gold Hill Mill

Consideration of a possible violation, cease and desist order, corrective actions, and civil penalty for failure to protect areas outside of the affected land from slides or damages occurring during the mining operation.

---

The Board packet contains the following documents:

1. Reason to Believe a Violation Exists and Notice of Board Hearing, sent on August 28, 2017
2. Inspection Report for August 1, 2017 inspection, sent on August 28, 2017
3. Letter of Authorization for Mark Steen, received August 4, 2017





## COLORADO

Division of Reclamation,  
Mining and Safety

Department of Natural Resources

1313 Sherman Street, Room 215  
Denver, Colorado 80203

August 28, 2017

Mike Bynum  
Colorado Milling Company, LLC  
50 West 100 South Street  
Moab, UT 80342

**RE: Reason to Believe a Violation Exists and Notice of Board Hearing  
Gold Hill Mill, Permit No. M-1994-117**

Mr. Bynum:

The Division conducted an inspection of the Gold Hill Mill on August 1, 2017 and found that land has been affected outside of the approved permit boundary. Specifically, in efforts to rehabilitate the historic Times Mine to support water conveyance infrastructure for mill use, the operator caused subsidence of the ground surface to occur directly adjacent to and north of Sunshine Canyon Drive.

We believe this is a violation pursuant to:

C.R.S. 34-32-116(7)(h) for failure to protect areas outside of the affected land from slides or damages occurring during the mining operation.

Therefore, the Division has reason to believe a violation exists to Permit No. M-1994-117 and the Colorado Mined Land Reclamation Act, C.R.S. 34-32-101 et seq., and has scheduled this matter to appear before the Mined Land Reclamation Board (Board).

A Formal Board Hearing will be held during the September 27-28, 2017 Board meeting for consideration of this possible violation. The hearing will be held in Room 318 of 1313 Sherman Street, Denver, Colorado, beginning at 9:00 a.m. on September 27<sup>th</sup> or as soon thereafter as the matter can be considered. At the hearing, you will have the opportunity to present your defense.

**This is an important legal proceeding and you must appear in person for this hearing. If you fail to appear an order and money judgment may be entered against you. In addition, failure to appear at the hearing may result in legal consequences including, but not limited to, loss of party status and your ability to seek reconsideration from the Board or seek judicial appeal in district court.**

If the Board finds a violation at this hearing, it may issue a cease and desist order, pursuant to C.R.S. 34-32-124(2)(a); assess a civil penalty in the amount of \$50 to \$200 for each day of violation, pursuant to C.R.S. 34-32-124(7), and may suspend, modify, or revoke the permit pursuant to C.R.S. 34-32-124(6)(a). Additionally, the Board may set the matter for consideration of forfeiture of the financial warranty at a



Mike Bynum  
August 28, 2017  
Page 2 of 2

subsequent hearing. If you have evidence indicating the possible violation noted above does not exist or has been corrected, please provide it to the Division as soon as possible or bring it to the hearing.

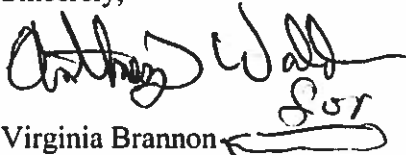
All parties have an opportunity to review and comment on a draft of the Board's Order before it becomes final. If you wish to do so, you must provide the Board with a written request to review the draft Order prior to or at the time of your hearing, or you must inform the Board orally during the hearing you request to review the draft Order. The Board's attorney must receive your comments on the draft Order within three calendar days of the date the draft Order is e-mailed, unless that deadline is extended by the Board's attorney. Submit all comments in writing to John J. Roberts, First Assistant Attorney General, Colorado Department of Law, by email at [John.Roberts@coag.gov](mailto:John.Roberts@coag.gov), or by fax at (720) 508-6037.

Please note the Division has requested and will be allowed to review and comment on the draft Board Order.

The Board's agenda may not be finalized until the week of the Board meeting. Therefore, we recommend you contact the Board Secretary, Camille Mojar by telephone at (303) 866-3567 ext. 8136, or by email at [Camille.Mojar@state.co.us](mailto:Camille.Mojar@state.co.us) on Monday, September 25, 2017 to confirm the specific date for the hearing.

If you have any questions about this letter or the hearing, you may contact the Environmental Protection Specialist, Amy Eschberger, by telephone at (303) 866-3567, ext. 8129, or by email at [Amy.Eschberger@state.co.us](mailto:Amy.Eschberger@state.co.us).

Sincerely,

A handwritten signature in black ink, appearing to read "Virginia Brannon", with a stylized flourish underneath.

Virginia Brannon  
Division Director

CERTIFIED MAIL NO. 7014 2120 0001 7871 1257  
Return Receipt Requested

Cc: Tony Waldron, DRMS  
Wally Erickson, DRMS  
Amy Eschberger, DRMS  
Jeff Fugate, AGO for DRMS


**COLORADO**Division of Reclamation,  
Mining and Safety

Department of Natural Resources

**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.

<b>MINE NAME:</b> Gold Hill Mill	<b>MINE/PROSPECTING ID#:</b> M-1994-117	<b>MINERAL:</b> Gold and silver	<b>COUNTY:</b> Boulder
<b>INSPECTION TYPE:</b> Monitoring	<b>INSPECTOR(S):</b> Amy Eschberger, Wally Erickson	<b>INSP. DATE:</b> August 1, 2017	<b>INSP. TIME:</b> 10:25
<b>OPERATOR:</b> Colorado Milling Company, LLC	<b>OPERATOR REPRESENTATIVE:</b> Mark Steen	<b>TYPE OF OPERATION:</b> 110(2) - Hard Rock Limited Impact	

<b>REASON FOR INSPECTION:</b> Priority	<b>BOND CALCULATION TYPE:</b> None	<b>BOND AMOUNT:</b> \$56,200.00
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None
<b>WEATHER:</b> Clear	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> August 28, 2017

**The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.**

**INSPECTION TOPIC:** Off-site Damage

**POSSIBLE VIOLATION:** Land has been affected outside of the approved permit boundary. Specifically, in efforts to rehabilitate the portal at the historic Times Mine to support water conveyance infrastructure for mill use, the operator caused subsidence of the ground surface to occur directly adjacent to and north of Sunshine Canyon Drive. This is a possible violation at this time pursuant to C.R.S. 34-32-116(7)(h) for failure to protect areas outside of the affected land from slides or damages occurring during the mining operation and reclamation.

**CORRECTIVE ACTIONS:** This possible violation will require a hearing before the Mined Land Reclamation Board (MLRB), to occur during the September 27-28, 2017 meeting. The schedule and other details for the MLRB hearing will be sent separately via certified mail.

**CORRECTIVE ACTION DUE DATE:** September 27-28, 2017 MLRB meeting

**INSPECTION TOPIC:** Signs & Markers

**PROBLEM:** The mine identification sign was not posted at the entrance of the mine site. This is a problem for failure to post a mine identification sign as required by Rule 3.1.12(1).

**CORRECTIVE ACTIONS:** The operator shall, at the entrance of the mine site, post a sign which shall be clearly visible from the access road with the following: the name of the operator, a statement that a reclamation permit for the operation has been issued by the Colorado Mined Land Reclamation Board; and the permit number. The operator shall submit photo documentation that a proper sign has been posted by the corrective action due date.

**CORRECTIVE ACTION DUE DATE:** September 27, 2017



**INSPECTION TOPIC:** Gen. Compliance With Mine Plan

**PROBLEM:** The approved mining plan for the tailings impoundment requires a minimum two feet of freeboard (as measured from the top of the synthetic liner) be maintained at all times to allow sufficient capacity for a 100-year, 24-hour precipitation event. The top of the tailings deposit is currently less than two feet from top of liner along the southern edge of the impoundment, and near top of liner at the eastern edge of the impoundment. This is a problem at this time pursuant to C.R.S. 34-32-116(7)(c) and Rule 3.1.5(5) for failure to handle acid-forming or toxic-producing material that has been mined in a manner that will protect the drainage system from pollution.

**CORRECTIVE ACTIONS:** The operator shall relocate the tailings inside the impoundment to allow for a minimum two feet of freeboard around the entire perimeter of the impoundment in accordance with the approved mining plan. In completing this task, the operator shall be very careful not to damage the liner (e.g., use hand tools and/or light equipment). The operator shall submit photo documentation showing this task has been completed by the corrective action due date.

**CORRECTIVE ACTION DUE DATE:** October 27, 2017

**INSPECTION TOPIC:** Revegetation

**PROBLEM:** There are state-listed noxious weeds present on site. This is a problem for failure to employ weed control methods for state-listed noxious weed species within the permitted area, and to reduce the spread of weeds to nearby areas as required by Rule 3.1.10(6).

**CORRECTIVE ACTIONS:** Implement the approved weed control plan and provide proof to the Division that this has been done. If a weed control plan is not already in place, the operator shall develop a weed control and management plan in accordance with Rule 3.1.10(6). This plan should be developed in consultation with the county extension agency, or weed control district office and should include specific control measures to be applied, a schedule for when control measures will be applied and a post-treatment monitoring plan. This weed control plan shall be submitted to the Division as a Technical Revision to the approved plan with the appropriate fee of \$216.00 by the corrective action due date.

**CORRECTIVE ACTION DUE DATE:** October 27, 2017

**GENERAL INSPECTION TOPICS**

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

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

## **OBSERVATIONS**

This inspection of the Gold Hill Mill (Permit No. M-1994-117) occurred in response to a complaint submitted by Boulder County Parks and Open Space (County) on July 19 and 20, 2017 (**see enclosed complaint**). The complaint included notice of collapse of a mine tunnel owned by Mark Steen which runs under Sunshine Canyon Drive, and notice of potential trespassing by Mr. Steen to pump water from Left Hand Creek for use in the mill. The County indicated Mr. Steen was working with their transportation department to help stabilize the collapsed mine tunnel. Mr. Steen accompanied the Division during the inspection. The Gold Hill Mill is located approximately 10 miles northwest of Boulder, Colorado. The site can be accessed from the north via Sunshine Canyon Drive.

### **Permit Summary**

This is a 110(2) operation permitted for 8.4 acres, and includes a mill, a tailings impoundment, and an ore stockpile area. The affected land is composed of several patented mining claims owned by Colorado Milling Company, LLC, with some unpatented claims managed by the Bureau of Land Management (BLM). The mill was initially included in Permit No. M-1983-141 (Cash and Who Do Mines), but was separated into its own permit in 1995. Since then, the permit has been transferred six times, with transfer to the current permittee occurring in 2015. The permit has been revised through a series of nine Technical Revisions, the last of which modified the approved groundwater monitoring plan (TR-09). The site has been inactive since 2008, and is currently in its final term of Temporary Cessation, which will expire in June 2018, per Rules 1.13.5(1)(b) and 1.13.9.

The approved post-mining land use for the site is forestry. All disturbance on site including the tailings impoundment will be reclaimed, except for the existing access road, which will remain. The fencing around the tailings impoundment will be removed for reclamation. The impoundment liner will be punctured, consolidated tailings will be ripped and mixed with lime, the area covered with topsoil, and revegetated with a mixture of grasses. Other disturbed areas will be retopsoiled and revegetated with a mixture of grasses and Rocky Mountain Juniper and Ponderosa Pine trees. All milling equipment and chemicals will be removed from the mill after operations are complete, and the building will remain after reclamation. The Division received a letter from Boulder County Land Use Department on July 31, 1995 which confirms leaving the mill building after reclamation is compliant with the uses established for the Forestry zoning district. After reclamation, the current groundwater monitoring program will be continued for a minimum of four quarters.

### **Times Mine Adit**

The Division inspected the Times Mine portal area where the collapse was reported to have occurred (**Photos 1-4**). This area is located just north of and adjacent to Sunshine Canyon Drive, approximately 300 feet northwest of the approved permit boundary for the mill site (**see enclosed Google Earth image of site showing location of Times Mine subsidence in relation to approved permit area**), and approximately 0.2 mile east from Gold Hill, Colorado. According to the original permit files for the mill, the Times Mine portal is located approximately 45 feet below Sunshine Canyon Drive, and the adit extends 395 feet in a southeasterly direction to connect with the first level of the Wynona Mine by way of a 50 foot deep winze.

Boulder County has placed orange cones along the edge of Sunshine Canyon Drive and signs on either side of the subsidence area to warn passersby. The Division observed the subsidence area from the road. Mr. Steen indicated he had placed fill material in the depression caused by the subsidence in efforts to temporarily stabilize the feature and keep it from migrating into the road. Additionally, a temporary retaining wall composed of timbers stacked between steel stakes had been installed across the fill area. The edge of the

subsidence appeared to be within three feet from the northern edge of Sunshine Canyon Drive. It appeared the subsidence may be impacting the stability of the road. According to Mr. Steen, the underlying granitic bedrock extends from the south to approximately the middle of the road. The rest of the road (northern half) is composed of fill material, in which the subsidence occurred. The potential for the subsidence to migrate through the rest of the fill material (and road) until it reaches bedrock is present.

Mr. Steen stated the collapse occurred after he had removed old timber sets from the Times Mine portal and replaced them with a culvert that is 16 feet long, with a diameter of 5 feet. Mr. Steen had been working to rehabilitate the Times Mine adit for future use by the mill operation. The original permit discusses pumping water from the south bank of Left Hand Creek, conveying the water up Lick Skillet Gulch via a surface laid two inch pipeline, running the water line through the Times Mine adit, which passes under the road through the underground crosscut feature to connect to the historic Wynona Mine, where stored water would be pumped from a collared shaft located southwest of the mill building. By constructing a bulkhead in the Times Mine, and pumping the water from Left Hand Creek behind this bulkhead, both the Times and Wynona mines were to be used for underground storage of water for mill operations. The original permit stated that together, these two mines have sufficient capacity to store enough water to carry the milling operation through the period between November 1<sup>st</sup> and May 31<sup>st</sup>. Pumping from the creek is limited to a maximum rate of 50 gpm during the irrigation season, which extends between April 1<sup>st</sup> and October 31<sup>st</sup>. Water rights for the mill were obtained by the purchase of 20 shares of stock in the Left Hand Ditch Company, as filed with the Colorado Water Court, Water Division No. 1, under Case No. 85CW117.

The Wynona Mine shaft from which water was to be pumped for mill use is included in the approved permit area. However, the other structures and facilities associated with the operator's proposed water acquisition, conveyance, and storage plan (including the Times Mine adit) are not located within the approved affected lands boundary. In efforts to rehabilitate the historic Times Mine adit to support water conveyance/storage infrastructure for mill use, the operator caused subsidence of the ground surface to occur directly adjacent to and north of Sunshine Canyon Drive. This is a possible violation at this time pursuant to C.R.S. 34-32-116(7)(h) for failure to protect areas outside of the affected land from slides or damages occurring during the mining operation. This matter will be scheduled for a hearing before the Mined Land Reclamation Board at their September 27-28, 2017 meeting. Official notice of the possible violation and Board hearing will be mailed to the operator under separate cover.

#### Left Hand Creek

The Division followed Licksillet Road from Gold Hill down to Left Hand Creek to observe the area in which the Operator proposes to pump water from the creek for use in the mill (**Photos 5 and 6**). The complaint submitted by the County reported that a property owner along Left Hand Creek indicated Mr. Steen will be trespassing across their property to install the pump. The area in question is part of parcel no. 145902000004, owned by James McCumber and Amy Fortunato, located directly east of Licksillet Road, adjacent to the creek. Mr. Steen stated that he had recently asked the property owner for access, but never received an answer. He confirmed that he does not intend to trespass to install his water pump. He now intends to access the creek from further east, which the Division has determined to be BLM managed property. Establishing the pumping area would include installing an alluvial well and pump, either a gas-powered generator or a power line, and a water line.

The Division also observed the access point located off Licksillet Road (**Photos 7-10**) which was identified in the County's complaint. This access point is located on property owned by Boulder County, parcel no. 145911000025. The access starts as a dirt road, then turns into a rough trail which traverses the east side of Lick Skillet Gulch. The Division observed two existing pipelines near the trail, including a two inch black HDPE

pipe, and a larger (approximately 4 inch) PVC pipe. According to Mr. Steen, the PVC pipe was installed by himself in the 1980's to support the newly constructed mill. This pipe was later disconnected. The black HDPE pipe was installed by a previous mill operator in the 1990's. Mr. Steen indicated he intends to remove both pipelines and install a new pipe to run from the creek to the historic mine workings uphill, over a total of approximately 3,900 horizontal feet and approximately 1,000 vertical feet. Mr. Steen indicated the pipeline would be installed on Boulder County property for which he holds a legal easement. Mr. Steen showed the Division portions of the new pipe he intends to install, which is currently being stored on top of the large ore stockpile adjacent to the mill (**Photo 11**). This pipe is a black two inch HDPE pipe with a thickness of approximately 0.5 inch. Mr. Steen indicated he intends to install the new pipe within the month if possible. He also intends to install a longer culvert through the Times Mine adit once the subsidence has been repaired and stabilized.

The Operator should be advised the proposed disturbances related to water acquisition, conveyance, and storage to support the mill operation are considered by the Division to be affected lands pursuant to C.R.S. 34-32-103(1.5), and must be permitted. Therefore, the operator is not authorized to install or utilize any structures, equipment, or facilities located outside of the approved permit boundary for acquiring, conveying, or storing water for mill use. The Division considers this issue to be related to the possible violation cited in this report regarding the Times Mine subsidence, as both are related to the Operator's efforts to get water to the mill. For the current proposed plan, the Operator would need to incorporate the pump area adjacent to Left Hand Creek, the pipeline footprint, and any historic mine workings to be used for conveyance or storage of water for the mill, into the affected lands boundary. Due to the complexities and potential dangers of storing water in historic mine workings, the Division would need to reevaluate this plan to determine whether it can be implemented in a manner that minimizes impact to the hydrologic balance of the surrounding system and protects public safety.

#### Mill Permitted Area

The Division inspected the permitted site which includes the mill, tailings impoundment, and ore stockpile area. The mill (**Photos 12-21**) was dormant at the time of the inspection. Mine personnel were present on site working to bring the mill into operation. According to Mr. Steen, the mill was left in poor condition by the previous operator so that much of the equipment has required repairs, upgrades, or complete replacement. Mr. Steen hopes to have the mill fully operational prior to the expiration of the 2<sup>nd</sup> term of Temporary Cessation next summer, and begin processing the ore stockpiled on site. In the meantime, he is working to obtain BLM approval of a plan of operations for the site. Given the types of activities occurring at the mill site, the Division believes the operator is eligible for active status. According to Rule 1.13.2(3), indications of Temporary Cessation include personnel other than security people present at the site, but are engaged in activities which can be described as maintenance or housekeeping, or related activity. The restoration activities occurring in the mill could be considered more than maintenance or housekeeping. However, because milling activities cannot commence until the BLM has approved a plan of operations, Mr. Steen indicated he prefers to keep the site in Temporary Cessation until such time.

The Division observed the tailings impoundment located just east of the mill building (**Photos 22-29**). The impoundment is enclosed by fencing. The western portion of the impoundment was holding some water at the time of the inspection. A dense cluster of cattails was growing from the tailings deposited in this area, which Mr. Steen indicated would be cleared from the impoundment prior to mill operations recommencing. The northern edge of the impoundment appeared to be approximately two feet higher in elevation than the southern edge. The portion of liner exposed appeared to be in good condition. The Division is concerned about current available freeboard in the impoundment. The approved permit requires a minimum freeboard of two feet in order for the impoundment to accommodate a 100-year, 24-hour storm event without overtopping the liner. The Division observed the freeboard to be less than two feet along portions of the southern edge of the

impoundment, and near top of liner in the eastern portion of the impoundment. The Division considers this to be a problem at this time pursuant to C.R.S. 34-32-116(7)(c) and Rule 3.1.5(5) for failure to handle acid-forming or toxic-producing material that has been mined in a manner that will protect the drainage system from pollution. The operator will need to redistribute the tailings in the impoundment so that a minimum two feet of freeboard is re-established. In doing this, the operator should be very careful not to damage the liner. This may require using hand tools and/or light equipment to complete the task.

Given the limited remaining capacity of the tailings impoundment, an expansion of the existing impoundment or construction of an additional impoundment may be required to support continued milling operations. Mr. Steen agreed the permit would most likely need to be converted to a 112 operation in the future. However, he believes the current impoundment will be sufficient at least during the initial stages of mill recommencement, as the volume of material to be processed is intended to be much smaller than what was run through the mill during previous operations. The mill was originally designed to process a maximum of 50 tons of material per day. Mr. Steen believes there to be sufficient capacity left in the impoundment to hold approximately 3,000 tons of additional tailings. It was not clear whether the required minimum two foot freeboard was factored into Mr. Steen's calculations. A topsoil stockpile is stored just north of the impoundment outside of the fenced enclosure (**Photo 30**). This stockpile appeared to be stable and well vegetated.

The Division observed the ore stockpile area located southwest of the mill building (**Photos 31-33**). According to the permit file, the material came from the permitted Cash Mine (located approximately 0.4 mile downhill from the mill). Mr. Steen estimates the stockpile to contain approximately 35,000-40,000 tons of material. A ramp connects the top of the stockpile to the two coarse ore bins located at the southwestern edge of the mill building. The stockpile appeared to be stable. No signs of acid rock drainage from the stockpile were observed.

The Division could not find a permit sign posted at the main entrance to the mine site. Mr. Steen indicated the permit sign was removed from the main road because it invited vandalism and curious trespassers. While the Division is understanding of the operator's reasoning for removal of the sign, a proper permit sign must be posted at the site entrance as required by Rule 3.1.12(1). This sign must be clearly visible from the access road, and include the following: a) the name of the operator, b) a statement that a reclamation permit for the operation has been issued by the Colorado Mined Land Reclamation Board, and c) the permit number. The Division considers this to be a problem at this time pursuant to Rule 3.1.12(1) for failure to post the required mine identification sign. The operator shall post a proper permit sign at the mine entrance which is clearly visible from the access road.

Additionally, the Division observed several state-listed noxious weed species growing in the mill permit area, including knapweed, Canada thistle, Common mullein, and Downy brome (cheat grass). The Division considers this to be a problem at this time pursuant to Rule 3.1.10(6), for failure to employ methods of weed control for all prohibited noxious weed species. The operator shall implement the approved weed control plan for the site. If a weed control plan is not already in place, the operator shall develop a weed control and management plan in consultation with the county extension agency or weed control district office. This plan should include specific control measures to be applied, a schedule for when control measures will be applied, and a post-treatment monitoring plan. This weed control plan shall be submitted to the Division as a Technical Revision to the approved plan.

#### Hazel A Mine Adit

The Division inspected the entrance to the Hazel A Mine adit (**Photos 34 and 35**), located south of and downhill from the permitted mill site. This portal is located adjacent to a dirt haul road that connects the mill site to the operator's Cash and Who Do Mines to the south (Permit No. M-1983-141). Originally, the Hazel A

Mine adit was part of the mill's approved stormwater management plan which allowed the operator to decant excess water from the tailings impoundment to the adit as needed, and to pump water from the adit to the mill. The adit is not included in the approved permit area for the mill. According to Mr. Steen, the Hazel A Mine adit has not been utilized by the mill in many years. It is the Division's understanding that all water lines connecting the adit to the tailings pond and mill have been removed. A steel door secured with a deadbolt is installed in the Hazel A portal. No evidence of mine drainage was observed.

This concluded the inspection.



## PHOTOGRAPHS



**Photo 1.** View looking west down Sunshine Canyon Drive, showing sign and safety cones placed by Boulder County Transportation Department to warn passersby of unsafe conditions ahead (associated with Times Mine subsidence).



**Photo 2.** View looking west down Sunshine Canyon Drive, showing section of road directly above Times Mine subsidence area.





**Photo 3.** View looking down from northern edge of Sunshine Canyon Drive at Times Mine subsidence area. Approximate edge of subsidence feature (not visible due to fill placement) is indicated with a yellow dashed line.



**Photo 4.** View looking down from northern edge of Sunshine Canyon Drive at Times Mine subsidence area. Approximate edge of subsidence feature (not visible due to fill placement) is indicated with a yellow dashed line. Note fill being held in place by temporary retaining wall composed of timbers stacked between stakes.





**Photo 5.** View looking south from north of Left Hand Creek, showing area (across creek) where Mr. Steen intends to install pump for acquiring water for mill operation. The Division believes this parcel of land to currently be owned by the BLM.



**Photo 6.** View looking west across parcel of land located north of Left Hand Creek, marked with orange stakes (circled with yellow dashed lines) where Mr. Steen intends to cross the creek to install pump on south side of creek (shown in Photo 5).





**Photo 7.** View looking west toward access off Licksillet Road which Mr. Steen intends to utilize for accessing water pipe for mill operation.



**Photo 8.** View looking downhill along trail following Lick Skillet Gulch, showing two existing pipelines present along edge of trail. According to Mr. Steen, PVC pipe was installed by him when mill was first constructed in 1980's, and smaller black HDPE pipe was installed by previous operator in 1990's. Note PVC pipe disconnected.





**Photo 9.** Closer view of two existing pipelines (indicated with arrows) present along edge of trail in Lick Skillet Gulch. According to Mr. Steen, PVC pipe was installed by him when mill was first constructed in 1980's, and smaller black HDPE pipe was installed by previous operator in 1990's.

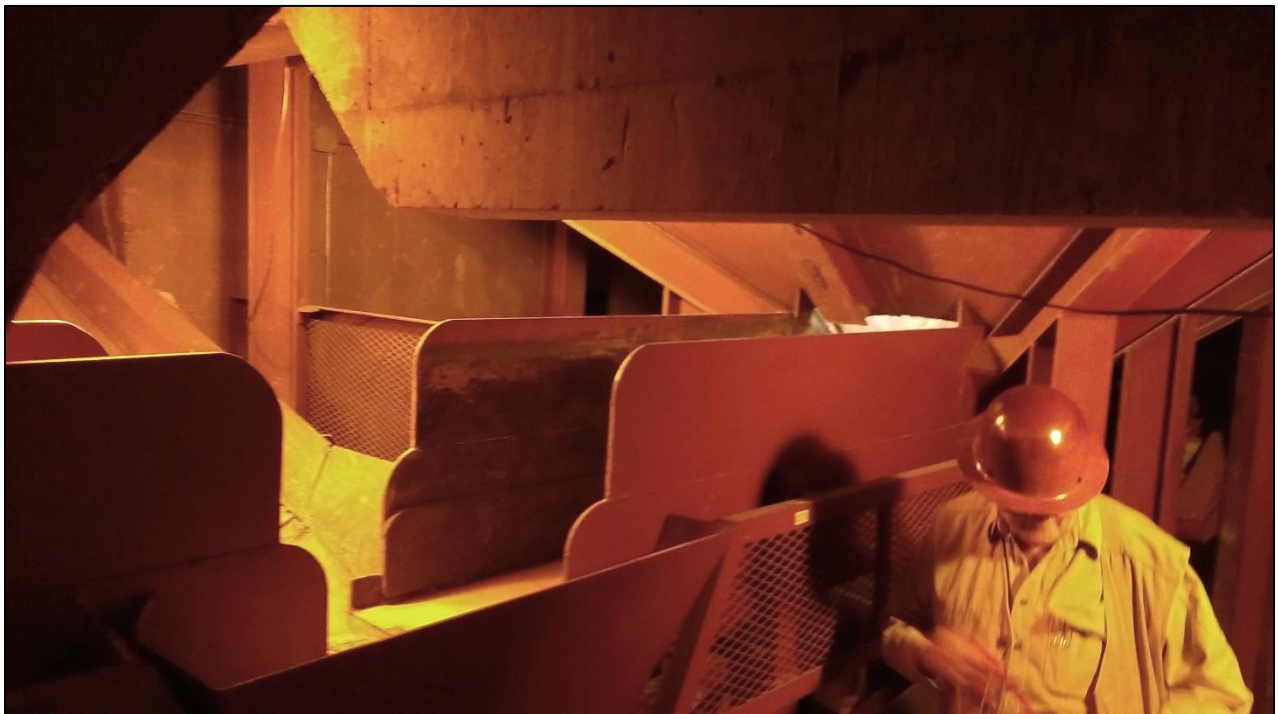


**Photo 10.** View looking uphill along trail following Lick Skillet Gulch, showing two existing pipelines present along edge of trail, which Mr. Steen indicates conveyed water to the mill in the 1980's and 1990's.



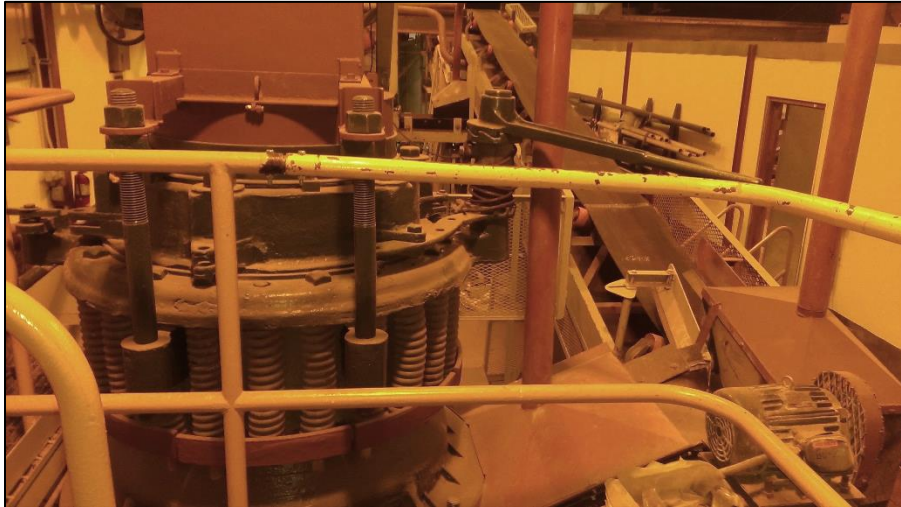


**Photo 11.** View of one of two stacks of black two inch HDPE pipe currently stored on top of ore stockpile in mill permit area. This pipe is intended to replace two existing pipelines present in Lick Skillet Gulch in order to convey water pumped from Left Hand Creek to the mill.



**Photo 12.** View inside mill showing shoot from two outside coarse ore bins.





**Photo 13.** View inside mill showing closed-circuit crushing plant. No water is added in this circuit. A dust-collection system is in place.



**Photo 14.** View inside mill showing closed-circuit crushing plant. No water is added in this circuit. A dust-collection system is in place (including red pipeline shown at top of photo).



**Photo 15.** View inside mill showing fine ore bin where crushed ore is stored until conveyed to grinding circuit to complete comminution process.



**Photo 16.** View inside mill showing closed-circuit grinding plant, which includes a ball mill and a spiral classifier. Fresh water is added to ore at this phase for wet grinding. Soda ash is added to control pH levels.



**Photo 17.** View inside mill showing large thickener tank where overflow from shaking table carries suspended, finely divided fraction of pulverized ore. This tank clarifies mill water which is returned to ball mill for recycling, and increases concentration of suspended solids prior to flotation.

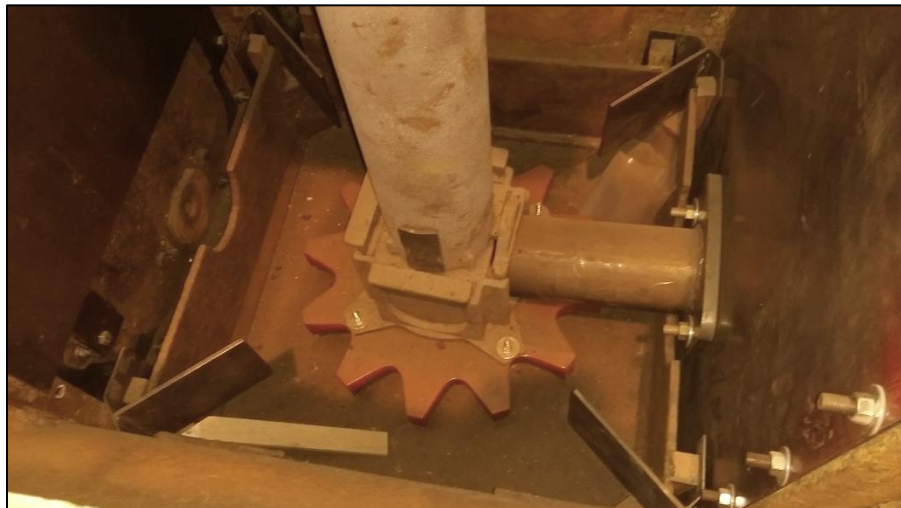


**Photo 18.** View inside mill showing conditioner tank (adjacent to thickener tank) where reagents are added to pulp before entering flotation circuit. Most likely, reagents will include a readily soluble frothing oil (i.e., pine oil, cresol) and quick-acting promoting reagent (i.e., xanthate).





**Photo 19.** View inside mill showing flotation circuit composed of 8 cells where conditioned pulp enters for final concentration. Final concentrate pulp is collected for filtration, while tailings are pumped to tailings impoundment.



**Photo 20.** View inside one of eight cells in the flotation circuit showing agitator at center.



**Photo 21.** View inside mill showing deck where concentrated pump enters a disc vacuum filter (in background) to dewater the concentrate in preparation for shipment.





**Photo 22.** View looking northeast across lined tailings impoundment located east of mill building. Note water and cattails present in western portion of impoundment.



**Photo 23.** View looking across western edge of lined tailings impoundment. Note water and cattails present in this portion of the impoundment. Also note available freeboard along western edge meets or exceeds the required two feet.





**Photo 24.** View looking north across lined tailings impoundment. Note available freeboard along northern edge exceeds the required two feet. It should be noted, the northern edge of the impoundment appears to be approximately 2 feet higher in elevation than the southern edge of the impoundment.



**Photo 25.** View looking across eastern portion of lined tailings impoundment. Note available freeboard along eastern edge is less than the required two feet (particular area of concern circled).





**Photo 26.** Closer view of eastern edge of lined tailings impoundment showing available freeboard is less than the required two feet.



**Photo 27.** Close-up of portion of eastern edge of lined tailings impoundment where tailings are at or near top of liner.





**Photo 28.** View looking across southern edge of lined tailings impoundment showing portions where available freeboard is less than the required two feet (particular area of concern circled).



**Photo 29.** View looking across northern edge of lined tailings impoundment showing available freeboard exceeds the required two feet.





**Photo 30.** View of topsoil stockpile stored north of tailings impoundment, outside of fenced enclosure. Note stockpile is well vegetated and stable.



**Photo 31.** View looking southwest from top of ramp at edge of mill building (near coarse ore bins), showing top of large ore stockpile.





**Photo 32.** View of two coarse ore bins located at top of ramp on southwestern edge of mill building.



**Photo 33.** View looking northeast from haul road showing large ore stockpile stored southwest of mill building.





**Photo 34.** View of Hazel A Mine entrance located approximately 0.25 mile southeast and downhill from mill site off main access road that connects mill site to Cash and Who Do Mines (Permit No. M1983-141).



**Photo 35.** Closer view of Hazel A Mine entrance, secured with a locked door.

**Inspection Contact Address**

Mike Bynum  
Colorado Milling Company, LLC  
50 West 100 South Street  
Moab, UT 80342

Enclosures: Complaint submitted by Boulder County Parks and Open Space, received July 19 and 20, 2017  
Google Earth image of site showing location of Times Mine subsidence in relation to approved permit area

EC: Mark Steen at: [goldtontine@gmail.com](mailto:goldtontine@gmail.com)  
Mindy Carson Hatcher, Boulder County Parks & Open Space at: [mcarsonhatcher@bouldercounty.org](mailto:mcarsonhatcher@bouldercounty.org)  
Stephanie Carter, BLM at: [sscarter@blm.gov](mailto:sscarter@blm.gov)  
Wally Erickson, DRMS at: [wally.erickson@state.co.us](mailto:wally.erickson@state.co.us)  
Tony Waldron, DRMS at: [tony.waldron@state.co.us](mailto:tony.waldron@state.co.us)

Tara

On Wed, Jul 19, 2017 at 11:40 AM, Carson Hatcher, Mindy <[mcarsonhatcher@bouldercounty.org](mailto:mcarsonhatcher@bouldercounty.org)> wrote:

Hello Tara –

Would you have the information I am requesting below please?

Thank you!

Mindy

---

**From:** Carson Hatcher, Mindy  
**Sent:** Wednesday, July 19, 2017 11:38 AM  
**To:** 'Crosby - DNR, Erica'; Al Amundson  
**Subject:** Gold Hill Mine/Mark Steen  
**Importance:** High

Hello Erica/Al:

Are you aware that a mine shaft, owned by Mark Steen, collapsed under Sunshine Canyon Road? Are you aware of any planned improvements to the mine including installing a pump in Lefthand Creek to supply water up to this mine?

Please provide any information you may have on this as soon as possible as: a) the road is in poor condition and being inspected by Transportation, and b) a neighboring property owner is stating he will be trespassing across her property to upgrade his mine with the pump.

Thank you!

Mindy



**Parks &  
Open Space**

Mindy Carson Hatcher  
*Senior Paralegal*

*Open Space Access Specialist*  
(303) 678-6025 (office)  
(303) 678-6179 (fax)

[BoulderCountyOpenSpace.org](http://BoulderCountyOpenSpace.org)  
[Twitter](#) | [Facebook](#) | [YouTube](#)



---

**Re: FW: Gold Hill Mine/Mark Steen**

---

**Carson Hatcher, Mindy** <mcarsonhatcher@bouldercounty.org>

To: "Eschberger - DNR, Amy" <amy.eschberger@state.co.us>

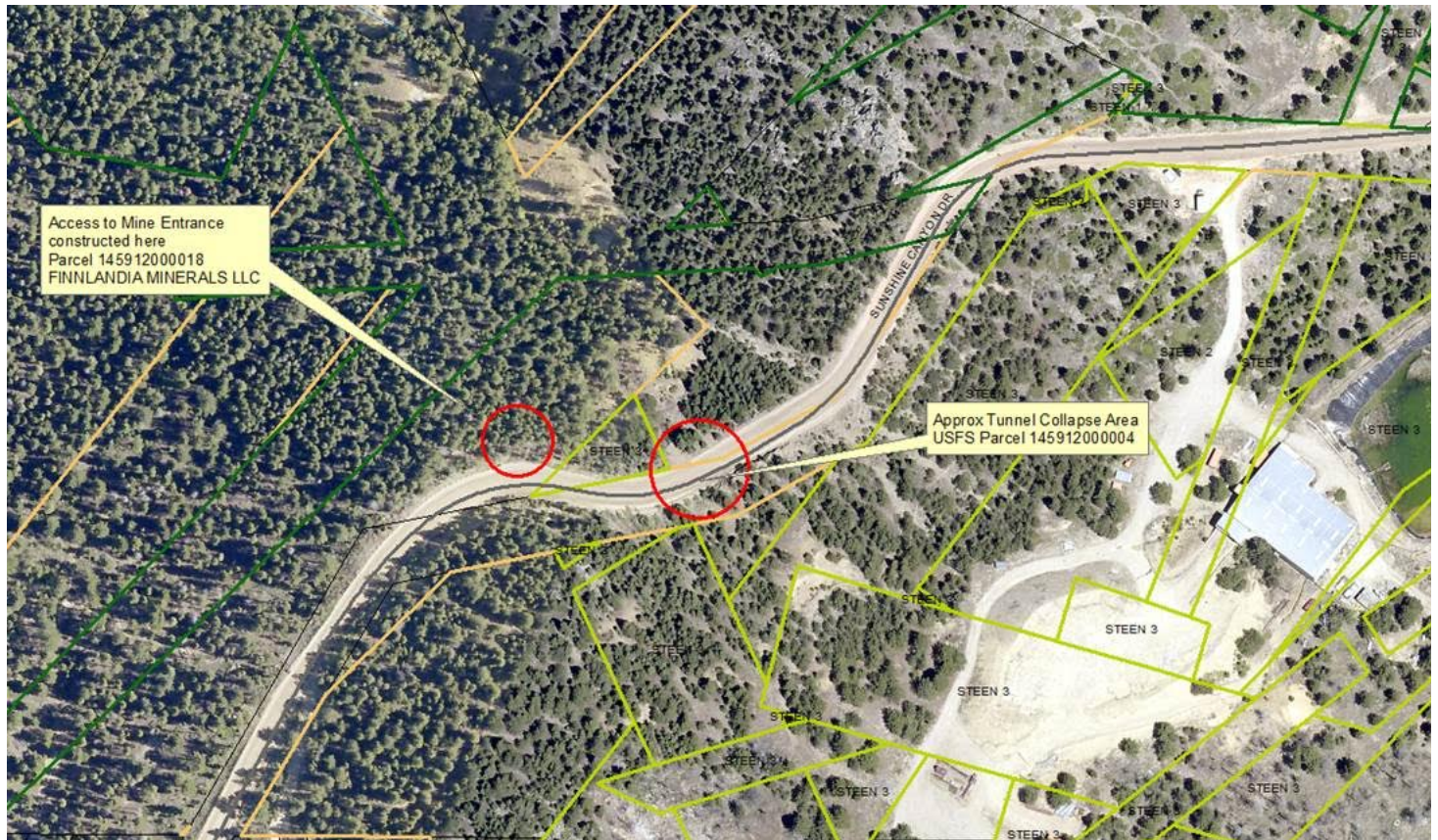
Cc: Tara Tafi - DNR <tara.tafi@state.co.us>, "Waldron - DNR, Tony" <tony.waldron@state.co.us>, Erica Crosby - DNR <erica.crosby@state.co.us>

Hi Amy –

This is the information I have been able to collect. The contact information for Mr. Steen's general manager is: Lewis Perkins, General Manager - 303-440-0633 (o) and 720-427-7166 (c).

The location the tunnel caved under Sunshine Canyon Drive is shown generally on Map #1. Mr. Steen has been working with our Transportation Department on this, and has since installed structures (out of the right of way) to help stabilize the tunnel. Transportation is still working with Mr. Steen on this issue.

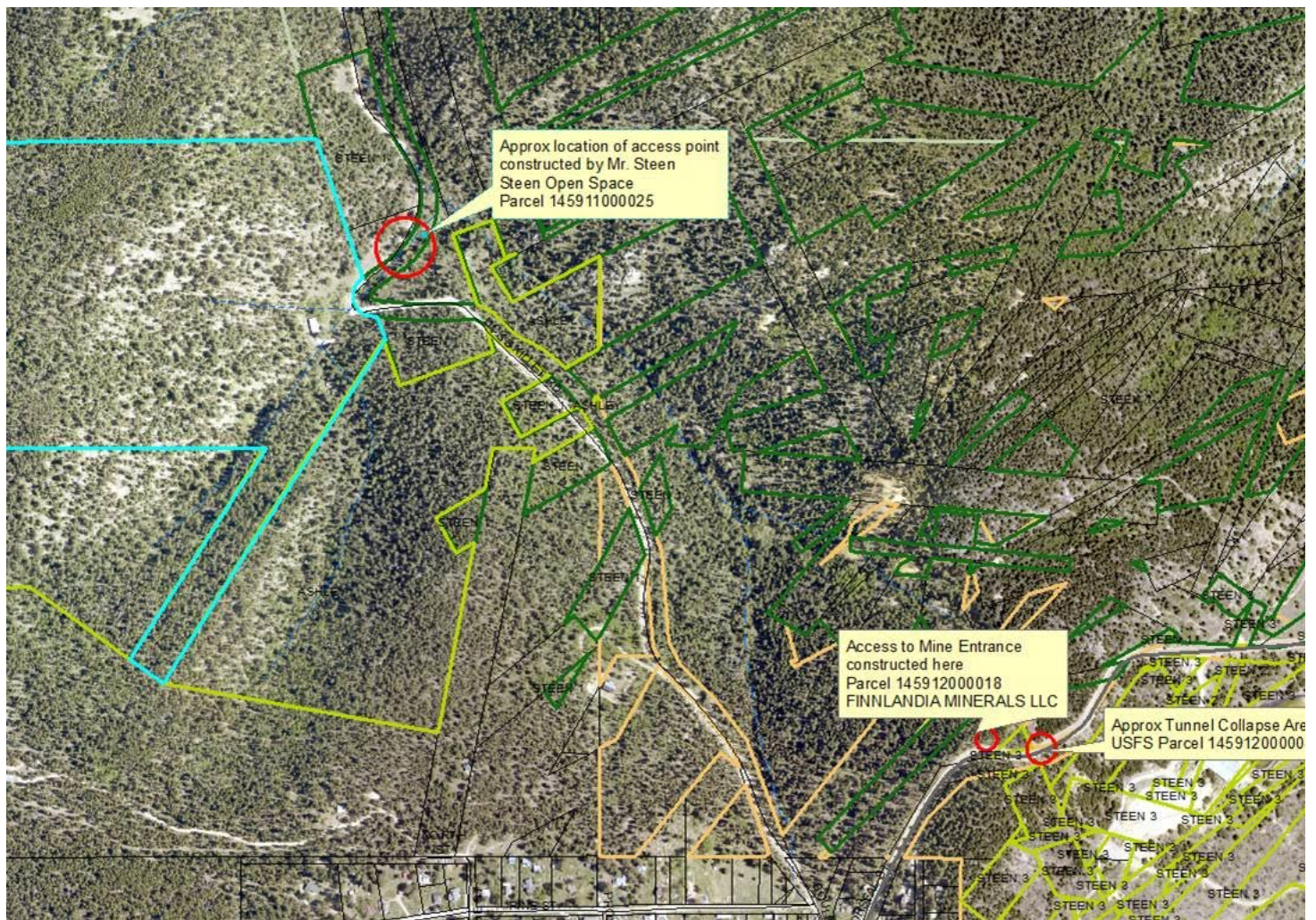
Map #1



An access point to something related to the mine was constructed off of Licksillet Rd and appears to be on open space, generally shown on Map #2.

Map #2

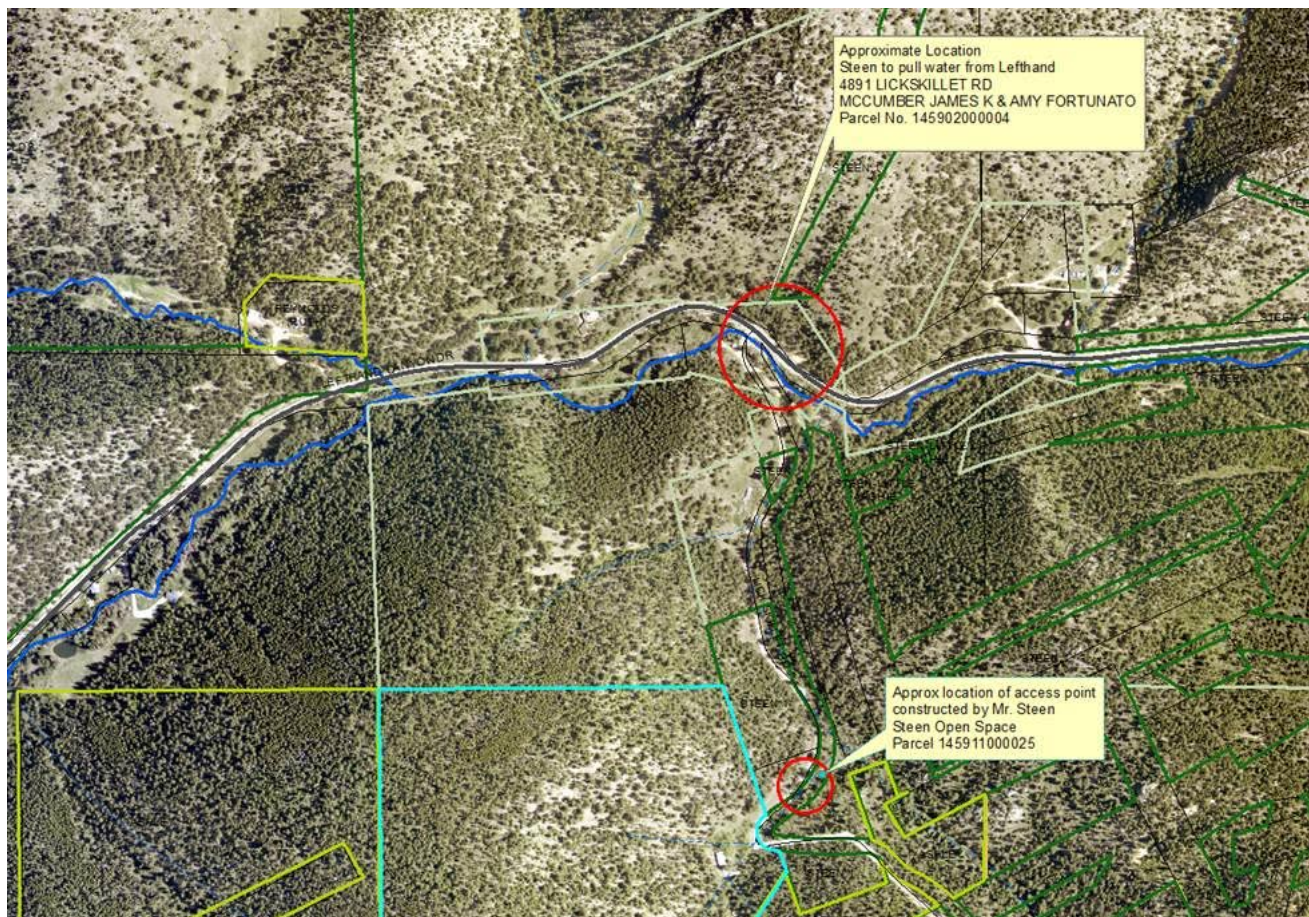




A private land owner has been notified by Mr. Steen that he has the right to cross her property to pump water out of Lefthand Creek for his mine. The parcel and creek location are ger

Map #3






Our Land Use Department is conducting an investigation regarding zoning, and I am looking into the access on open space for my department. Erica may have more information on this closely in the past.

Please keep me updated about any issues on your end.

Thank you!

Mindy


**Boulder County Parks & Open Space**  
 Mindy Carson Hatcher  
 Senior Paralegal  
 Open Space Access Specialist  
 (303) 678-6025 (office)  
 (303) 678-6179 (fax)

[BoulderCountyOpenSpace.org](http://BoulderCountyOpenSpace.org)  
 Twitter | Facebook | YouTube

Sent: Thursday, July 20, 2017 8:21 AM



# M-1994-117 / Gold Hill Mill / Colorado Milling Company, LLC

Red outline = 8.40 acres = Approved permit area  
Yellow outline = Location of Times Mine subsidence  
(Image data from 9/7/2016)





AME  
**Colorado Milling Company  
50 W 100 S  
Moab, UT 84532**

**RECEIVED**

AUG 04 2017

DIVISION OF RECLAMATION  
MINING AND SAFETY

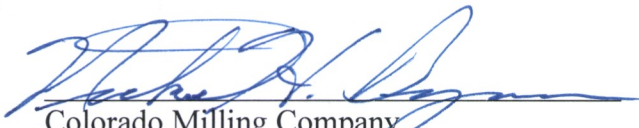
July 28, 2017

Colorado Division of Reclamation, Mining & Safety  
Attn: Amy Eschberger  
Environmental Protection Specialist  
Amy.eschberger@state.co.us

**LETTER OF AUTHORIZATION**

To Whom It May Concern:

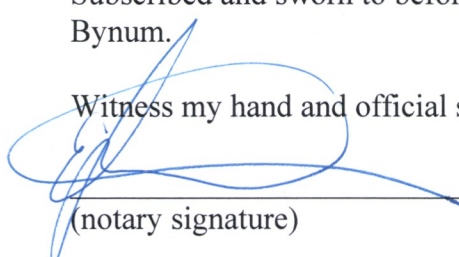
On behalf of Colorado Milling Company, I, Michael H. Bynum, authorize Mark Steen to represent Colorado Milling Company, specifically with the Gold Hill Mill, Permit No. M-1994-117 and the Cash & Who Do Mines, Permit No. M-1983-141. I hereby authorize the Colorado Division of Reclamation, Mining and Safety to correspond with Mark Steen on any matters related to the above-mentioned permits.

  
Colorado Milling Company  
By: Michael H. Bynum, Manager

State of Utah  
County of Grand

Subscribed and sworn to before me on this 28<sup>th</sup> day of July, in the year 2017, by Michael H. Bynum.

Witness my hand and official seal.

  
(notary signature)

