

Bret Gibson Four Mile Fire Protection Dist. 1740 Fourmile Canyon Dr Boulder, CO 80302

# Re: Decision to Approve a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

Dear Party and/or Interested Person:

The Division of Reclamation, Mining and Safety (Division/DRMS) hereby issues its decision to approve the Colorado Milling Company, LLC. 110d conversion application (CN1) for the Gold Hill Mill, File No. M-1994-117.

The Division's decision to approve is based upon the conversion application meeting the requirements of the Colorado Mined Land Reclamation Act (C.R.S. § 34-32-101, *et seq*). A copy of the Division's rationale for its decision to approve is enclosed for your review.

Pursuant to Rule 1.4.11(1)(b), the Division's decision to approve may be appealed within thirty (30) days of the decision date.

If you need additional information or have any questions, please contact me by telephone at **303-866-3567 x8114**, or by email at <u>patrick.lennberg@state.co.us</u>.

Sincerely,

Patrick Lennberg Environmental Protection Specialist

Enclosure: Rationale for Approval

ec: Bret Gibson, <u>chiefbret@gmail.com</u> Russ Means; DRMS Jared Ebert; DRMS Scott Schultz; Esq., AGO for Division of Reclamation, Mining and Safety



Enclosure



# Re: Rationale for Decision for Approval of a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

#### Introduction

On February 7, 2024, the Division of Reclamation, Mining and Safety (Division/Office/DRMS) issued its decision to approve the permit conversion application (CN1) for the Gold Hill Mill, File No. M-1994-117, over public objections. This rationale document is intended to explain the process by which the Division arrived at its decision for approval over public objection and respond to the issues raised by the objecting parties. The Division reserves the right to further supplement, amend, modify, or clarify this document and decision with additional details as necessary.<sup>1</sup>

#### Summary of the Review Process for the Conversion Application

Colorado Milling Company, LLC., (CMC/Applicant) submitted a 110d conversion application (CN1) on September 13, 2022. The conversion application was deemed complete for the purposes of filing and review on February 7, 2023.

The conversion application is required based on the potential storage and use of designated chemicals during the milling process and that process has the potential to produce acid or toxic chemicals. The site is located in Boulder County approximately 8.2 miles northwest of Boulder, CO. The current Application states that the site is to be a processing facility only. No subsurface development is proposed in the conversion application. The conversion application does not add any additional permit area and it will remain at 9.2 acres in size. The application seeks to convert the currently held 110(2) permit to a 110d permit in order to comply with the Act, Rules, and specifically address the requirements of a designated mining operation (DMO).

Approval of the conversion application does not allow milling activities to immediately begin. Instead, the operator's conversion application includes a stricter set of permit requirements as this operation is a DMO. The requirements of a DMO include, but are not limited to, the development of an Environmental Protection Plan (EPP). Including the EPP in the conversion application provides a rigorous framework for the protection of human health, property and, ensures impacts to the hydrologic balance are minimized. Part of the EPP permitting process is a facilities evaluation

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criteria that evaluates the expected effectiveness of each proposed and existing facility. Prior to initiating milling activities at the site, the permittee must obtain DRMS approval of subsequent revisions (more details below). The operator's conversion application is the first step of the process of bringing the operator and site into the required DMO regulatory framework. Prior to any milling being proposed, the existing mill facilities would need to be upgraded. Any proposed milling would require that all future Environmental Protection Facilities are permitted and certified prior to use. The operator's conversion application provides that the Mill and associated facilities must be permitted through the EPP process. The EPP's process includes strict requirements prior to the initiation of milling activities and allows the Division to better ensure the public and the environment are protected.

Pursuant to Section 34-32-110(6), Rule 1.6.2(1)(d) and Rule 1.6.3, the Applicant initially published the required public notice for the conversion application once on February 15, 2023. A review of that notice determined the notice did not contain all the required information pursuant to Rules 1.6.2(1)(d)(v) and (vi). The Applicant republished an updated public notice on February 17, 2023. The public comment period closed on February 27, 2023. The public notices were published in the Daily Camera, a publication in general circulation in the vicinity of the mine. During the public comment period, the Division received six (6) written objections and six (6) written comments from individuals and groups. The Division also received three (3) timely and one (1) untimely comment letter to the application, one letter of support and one withdrawal. The withdrawal was from Mark Schueneman whose concerns were to be addressed through The Watershed Center's comment letter. Below is a list of the objections and comments received.

Person or Entity	Date Objection Received
Amy Fortunato	February 25, 2023
Clark Edwards, Left Hand Ditch Company (LHDC)	February 24, 2023
John Daspit	February 15, 2023
Norman Skarstad	February 24, 2023
Pam Leland, Left Hand Canyon Residences	February 27, 2023
Stephen Strand	February 26, 2023

# **Timely Letters of Objection:**

#### **Timely Comment Letters:**

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Brenden Besetzny/Barbara Sheedlo, Boulder Flycasters-St. Vrain Anglers	February 24, 2023
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Bret Gibson, Four Mile Fire Protection District	February 28, 2023
Colorado Parks and Wildlife	March 7, 2023

#### Letter of Support:

Person or Agency	Date Comment Received
Rene Murphy	February 25, 2023

The Division forwarded copies of the objections and comments to the Applicant.

During the review period the Division generated four (4) adequacy letters. The Applicant addressed all adequacy issues to the Division's satisfaction. Therefore, on February 7, 2024, the Division determined the conversion application CN1 satisfied the requirements of C.R.S. § 34-32-115(4) and issued its decision to approve the operator's conversion application over objections.

#### **Issues Raised by the Objecting Parties**

The timely objections received by the Division have been categorized as issues pertaining to hydrologic impacts to Left Hand Creek, relic water pipeline, pumphouse construction, impacts to the hydrologic balance at the mill, Tailings Storage Facility and non-jurisdictional issues. The issues raised by the objecting parties are represented by italic bold font. The last names of the objecting parties who raised the issue are listed after the issue. The Division's response follows in standard font.

#### 1. Hydrologic Impacts to Left Hand Creek

a. Water Consumption from Left Hand Creek (LHDC, Daspit, Leland and Strand)

The Applicant provided copies of the Water Court Decree No. 85CW117. In the decree, and from comments provided by the Division of Water Resources, the Applicant is entitled to divert a minimum of 10.4 acre-feet a year from Left Hand Creek and store the water underground for use at the mill site. The Applicant will measure the amount of water divert using a continuous recording measuring device. Water will only be removed from creek between April 1 and October 31 as water is available. The decree contained a dry covenant, the Applicant has stated that irrigation activities ceased when the water right was established. If irrigation of the land is taking place using creek water, it is being done illegally and not within the control of the Applicant. The Division finds the Applicant has complied the applicable Rules 3.1.6(1)(a) and 6.3.3, and C.R.S. § 34-32-112.5.

# b. Affects to Water Quality of Left Hand Creek (LHDC, Daspit, Leland and Strand)

The Gold Hill Mill will contain all water used during the milling process and will not discharge any water to Left Hand Creek. Water contained within the tailings material will evaporate from the Tailings Storage Facility (TSF). The TSF will be recertified prior to any milling taking place at the site. The pipeline leading from the creek to mill will be constructed with equipment to prevent any backflow from occurring to creek.

The Applicant will be collecting quarterly surface water samples from Left Hand Creek as part of the Groundwater and Surface Water Sampling and Analysis Plan for the site. The monitoring plan includes quarterly samples collected from five (5) groundwater monitoring wells, the Times-Wynona shaft, and TSF. The Applicant has provided a plan protective of Left Hand Creek and a monitoring plan that will allow the Applicant and the Division to verify the effectiveness of the plan. The Division finds the Applicant has complied the applicable Rules 3.1.6, 3.1.7, 6.3.3 and 6.4.21(10) and C.R.S. § 34-32-112.5.

# c. Removal of Pipeline Materials and Pumphouse Location (Fortunato and Skarstad)

The Applicant proposes to remove the relic pipeline materials during construction of the new pipeline. The conversion application states that at the end of milling operations all pipeline and pumphouse materials will be removed in accordance with the Reclamation Plan. The pumphouse and fuel tanks are proposed to be located outside of the 500-year floodplain. The location of the proposed pipeline from pumphouse will be located on land owned by the U.S. Forest Service (USFS). Prior to any construction occurring on USFS land, the Applicant would first need to obtain a Plan of Operations and approval from the USFS. The Division finds the Applicant has complied the applicable Rules 6.3.3 and 6.3.4.

# 2. Gold Hill Mill Site

# a. Impacts to Groundwater Quality (Strand)

The EPP has been designed to minimize the impacts to the hydrologic balance of the groundwater system. A thorough groundwater monitoring plan has been designed to verify the effectiveness of the EPP. In the application, the Applicant has committed to sampling five (5) groundwater monitoring wells at the site, which includes one point-of-compliance well. These wells along with

the TSF, Times-Wynona Shaft, and Left Hand Creek will be sampled on quarterly basis. Sampling reports containing the results of the collected samples will be submitted a month following the end of the previous quarter. The Groundwater and Surface Water Sampling and Analysis Plan (SAP) has an expanded number of locations to be sampled along with an expanded analyte suite to aid in comparison of data. Groundwater samples will be compared to the standards contained in WQCD Regulation 41 - The Basic Standards for Ground Water. The plan will allow for a comparison of the existing mine pool water quality to the surrounding wells. The SAP includes a quality control and quality assurance protocol according to current industry standards. The SAP is an improvement over the currently approved monitoring plan contained in the 110(2) Permit. If data gaps are identified during the monitoring process, the Division would require that the SAP be updated to adequately address any gaps. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 C.R.S. § 34-32-116.

# b. Hydrologic Impacts to the Town of Gold Hill (Strand)

The Mill site is located on Boulder Creek Granodiorite which is characterized to be massive to gneissic. Groundwater flow within the granodiorite is controlled by localized fracturing, joints and voids. In general, these flow paths decreases with depth. Between the mill and the Town of Gold Hill is the Hoosier Reef. The Reef is a mapped structure that is 10 to 80 feet wide and extends over 1,000 feet deep and is composed of silicified breccia that is barrier to groundwater flow. The Reef runs southeast to northwest. Fractures around the site also trend southeast to northwest but meet the Hoosier Reef towards the Town of Gold Hill thus preventing groundwater flow from the site reaching the town. A comparison of groundwater elevations at the site to available groundwater level data in the town indicates there is a significant difference in overall water elevations indicating the mill site and town are separated and the water levels are reflective of localized fractured flow. An additional indication of the relative impermeability of the granodiorite is the difference in the Times-Wynona Shaft water level relative to the surround groundwater monitoring wells. The mine pool water elevation is typically higher than the surrounding monitoring wells, an indication of the lack of interconnectedness within the granodiorite. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 and C.R.S. § 34-32-116.

# c. Stability of Tailings Storage Facility (Strand and Skarstad)

The Applicant has committed to a recertification schedule to determine the condition of the Tailings Storage Facility (TSF). If the TSF can be recertified, a schedule for the completion of the recertification activities will be submitted through a Technical Revision pursuant to Rule 6.4.21(15). If it is determined the TSF cannot be recertified, a schedule for reclamation will be submitted through a Technical Revision according to the approved reclamation plan. Recertification of the TSF is a requirement of Rule 7.3.2. The recertification process provides a framework to insure the TSF has suitable capacity to prevent a release of materials from a design storm event plus operational material volumes during worst case conditions. Additionally, the recertification process will verify stability of the TSF embankments meet the minimum requirements for stability in accordance with Mined Land Reclamation Board Policy 30 for Factors of Safety for Slope Stability/Geotechnical Analyses and Rule 6.5. At a minimum, no milling activities may take place until the TSF is recertified. If the TSF is reclaimed, no milling activities may take place until an alternative tailings disposal method is approved by the Division. In order to gain Division approval of the recertification of the TSF, the Applicant must comply with Rules 6.3, 6.4.21, 6.5 and 7.4.

# d. Chemical Management and Storage (Skarstad)

At this time there are designated chemicals awaiting EPA approval for proper disposal at a certified disposal facility. The chemicals were identified during the pre-operation inspection in October 2023. The chemicals are being stored inside the mill building, protected from the weather and within secondary containment, until the EPA provides the proper documentation allowing for proper disposal of the chemicals. Following proper disposal, and prior to any designated chemicals being handled or stored at the site, the Applicant must submit and get Division approval, through individual Technical Revisions, for the following Environmental Protection Facilities (EPF); Mill Facility, Reagent Storage Facility, Tailings Delivery Line, Tailings Storage Facility (mentioned above) and the Surface Ore Stockpile Facility. Each Technical Revision for the individual EPFs will be reviewed by the Division and must meet the applicable requirement of Rules 6.4.21, 6.5, 7.3, and 7.4. The EPF's will not be considered certified for operations until all applicable QA/QC documentation and certified as-builts have been submitted and accepted by the Division. No milling may take place until all EPFs are accepted by the Division.

The application conversion includes a Materials Containment Plan and a Spill Prevention, Control and Countermeasure (SPCC) Plan for the site. The SPCC Plan will provide measures for properly storing and handling petroleum products and responding to, and reporting, spills. Normally, the SPCC Plan covers only petroleum-based chemicals but the SPCC Plan contained within the conversion application for this site includes inspection and reporting requirements for the chemicals stored at the processing facility. The Material Containment Plan will provide guidance for the storage, use, cleanup, training, and reporting associated with the use of mill chemicals on site. The SPCC Plan also addresses response actions in the event of a site emergency. Additionally, the Applicant provided an Emergency Response Plan (ERP) as required by Rules 6.4.21 and 8.3. The ERP describes procedures that are intended to be followed during an emergency situation at the Gold Hill Mill. These plans will be reviewed and updated as needed once all the EPF's have been accepted by the Division.

All chemicals used at the site will be stored according to manufactures specifications and MSDS guidance. Transportation of chemicals to and from the mill will be completed by a licensed supplier following, at a minimum, the appropriate regulations set by the Department of Transportation, OSHA, and Boulder County.

No milling activities may occur at the site until all the EPF's have been accepted and approved by DRMS. Upon Division approval the Applicant will have complied with Rules 6.4.21, 6.5, 7.3, 7.4 and 8.3.

# e. Wildlife Issues (Skarstad)

Concerns the TSF would be used by birds. During the comment period the Division received a comment letter from the Colorado Parks and Wildlife (CPW). In the letter, CPW did not express any concerns the site will have a significant effect to local wildlife. The Applicant followed up again with CPW to verify this statement in April 2023 and CPW reiterated there were minimal biological concerns. Currently there is fence around the TSF that prevents large wildlife from coming into contact with tailings material. Recertification of the TSF will also evaluate the need for additional or improved measures to prevent wildlife exposure to tailings. The Division finds the Applicant has complied with required by Rules 6.3.2(d) and 6.4.21(18).

# 3. Non-Jurisdictional Items

In these proceedings, the Division's jurisdiction is limited to enforcement of the specific requirements of the Act and Rules. While other issues are recognized as important, the Division does not have the authority to address them. The Division considers all timely submitted objections and comments in its review but can address only the issues that directly relate to the specific requirements of an application as stated in the Act and Rules.

# a. Concerns regarding aesthetic impact and quality of life.

The Act and Rules do not specifically address impacts to visually appealing landscapes, aesthetics, hours and/or days of operation, noise pollution and impacts to the viewshed, and quality of life. Such issues are typically addressed at the local government level and not at the State government level. These issues should be addressed through Boulder County.

# b. Concerns regarding dust and air pollution. (Lloyd, Muhler, Gould)

The Act and Rules do not specifically address air quality issues. Such issues are under the jurisdiction of Boulder County and the Air Pollution Control Division (APCD) of the Colorado Department of Public Health and Environment (CDPHE). The Applicant has affirmatively stated in Exhibit F of the CN1 application that an Air Pollution Permit will be obtained prior to operations.

# 4. List of Commitments Required for the Gold Hill Mill

During review of the CN1 the Applicant has committed to the following items prior to initiating milling activities at the site:

- 1. No milling may take place until all EPFs are accepted by the Division. Each EPF will require a Technical Revision application for the Division's review. Included in this item is also the required recertification, or reclamation, of the Tailings Storage Facility.
- 2. The Applicant has committed to submitting a Technical Revision, in TR-11, to address how the pumped water, estimated to be 370,000 gallons, will be removed and managed from the Times-Wynona Mine to drop the water below the top of the Wynona Winze. No milling will occur until either the new bulkhead (which would be permitted pursuant to TR11) is installed or the dewatering plan has taken place.

- 3. Provide copies of the approved Plans of Operations from the Bureau of Land Management (BLM) and USFS prior to initiating activities on land managed by these entities. From the BLM in 2013, "that initiation of mining or milling operations cannot occur until BLM has completed the NEPA process, approved a Plan of Operations for these activities and terminated this suspension order."
- 4. The Applicant must provide suitable documentation from Boulder County allowing milling to occur at the site. It is noted that the Applicant still has to get any and all required building and utility permits to be in compliance with County regulations.
- 5. The Applicant shall at least 60 days prior to the start of operations, obtain a grab sample from the Times-Wynona Mine pool and have it analyzed and have the results provided to the Division. The results of the sample will be compared to results from the surrounding monitoring wells. It should be noted the mine pool is going to be monitored on a quarterly basis, along with the monitoring wells for comparison, as part of the site groundwater and surface water monitoring program.
- 6. The Applicant shall provide DRMS notification prior to accepting off-site material for processing. At a minimum the Division expects the notification to come in letter form that identifies the mine location, permit number, permittee providing the material, the results of the SPLP and ABA testing, and quantity of material.
- 7. The Applicant shall submit a Technical Revision to the Division for consideration of an offsite disposal/storage location of tailings material where the specific details can be reviewed.

# Conclusion

After conducting a thorough technical review of the application, as outlined in part in the discussion above, on February 7, 2024, the Division determined the amendment application satisfied the requirements of the Act and Rules, and specifically C.R.S. § 34-32-112.5, and issued its decision to approve the Hard Rock 110d conversion application for the Gold Hill Mill (CN1), File No. M-1994-117.



Amy Fortunato 4891 Lickskillet Rd Jamestown, CO 80455

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ec: Amy Fortunato, <u>nanooksyellowsnow@gmail.com</u> Russ Means; DRMS Jared Ebert; DRMS Scott Schultz; Esq., AGO for Division of Reclamation, Mining and Safety



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#### **Issues Raised by the Objecting Parties**

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the TSF, Times-Wynona Shaft, and Left Hand Creek will be sampled on quarterly basis. Sampling reports containing the results of the collected samples will be submitted a month following the end of the previous quarter. The Groundwater and Surface Water Sampling and Analysis Plan (SAP) has an expanded number of locations to be sampled along with an expanded analyte suite to aid in comparison of data. Groundwater samples will be compared to the standards contained in WQCD Regulation 41 - The Basic Standards for Ground Water. The plan will allow for a comparison of the existing mine pool water quality to the surrounding wells. The SAP includes a quality control and quality assurance protocol according to current industry standards. The SAP is an improvement over the currently approved monitoring plan contained in the 110(2) Permit. If data gaps are identified during the monitoring process, the Division would require that the SAP be updated to adequately address any gaps. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 C.R.S. § 34-32-116.

# b. Hydrologic Impacts to the Town of Gold Hill (Strand)

The Mill site is located on Boulder Creek Granodiorite which is characterized to be massive to gneissic. Groundwater flow within the granodiorite is controlled by localized fracturing, joints and voids. In general, these flow paths decreases with depth. Between the mill and the Town of Gold Hill is the Hoosier Reef. The Reef is a mapped structure that is 10 to 80 feet wide and extends over 1,000 feet deep and is composed of silicified breccia that is barrier to groundwater flow. The Reef runs southeast to northwest. Fractures around the site also trend southeast to northwest but meet the Hoosier Reef towards the Town of Gold Hill thus preventing groundwater flow from the site reaching the town. A comparison of groundwater elevations at the site to available groundwater level data in the town indicates there is a significant difference in overall water elevations indicating the mill site and town are separated and the water levels are reflective of localized fractured flow. An additional indication of the relative impermeability of the granodiorite is the difference in the Times-Wynona Shaft water level relative to the surround groundwater monitoring wells. The mine pool water elevation is typically higher than the surrounding monitoring wells, an indication of the lack of interconnectedness within the granodiorite. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 and C.R.S. § 34-32-116.

# c. Stability of Tailings Storage Facility (Strand and Skarstad)

The Applicant has committed to a recertification schedule to determine the condition of the Tailings Storage Facility (TSF). If the TSF can be recertified, a schedule for the completion of the recertification activities will be submitted through a Technical Revision pursuant to Rule 6.4.21(15). If it is determined the TSF cannot be recertified, a schedule for reclamation will be submitted through a Technical Revision according to the approved reclamation plan. Recertification of the TSF is a requirement of Rule 7.3.2. The recertification process provides a framework to insure the TSF has suitable capacity to prevent a release of materials from a design storm event plus operational material volumes during worst case conditions. Additionally, the recertification process will verify stability of the TSF embankments meet the minimum requirements for stability in accordance with Mined Land Reclamation Board Policy 30 for Factors of Safety for Slope Stability/Geotechnical Analyses and Rule 6.5. At a minimum, no milling activities may take place until the TSF is recertified. If the TSF is reclaimed, no milling activities may take place until an alternative tailings disposal method is approved by the Division. In order to gain Division approval of the recertification of the TSF, the Applicant must comply with Rules 6.3, 6.4.21, 6.5 and 7.4.

# d. Chemical Management and Storage (Skarstad)

At this time there are designated chemicals awaiting EPA approval for proper disposal at a certified disposal facility. The chemicals were identified during the pre-operation inspection in October 2023. The chemicals are being stored inside the mill building, protected from the weather and within secondary containment, until the EPA provides the proper documentation allowing for proper disposal of the chemicals. Following proper disposal, and prior to any designated chemicals being handled or stored at the site, the Applicant must submit and get Division approval, through individual Technical Revisions, for the following Environmental Protection Facilities (EPF); Mill Facility, Reagent Storage Facility, Tailings Delivery Line, Tailings Storage Facility (mentioned above) and the Surface Ore Stockpile Facility. Each Technical Revision for the individual EPFs will be reviewed by the Division and must meet the applicable requirement of Rules 6.4.21, 6.5, 7.3, and 7.4. The EPF's will not be considered certified for operations until all applicable QA/QC documentation and certified as-builts have been submitted and accepted by the Division. No milling may take place until all EPFs are accepted by the Division.

The application conversion includes a Materials Containment Plan and a Spill Prevention, Control and Countermeasure (SPCC) Plan for the site. The SPCC Plan will provide measures for properly storing and handling petroleum products and responding to, and reporting, spills. Normally, the SPCC Plan covers only petroleum-based chemicals but the SPCC Plan contained within the conversion application for this site includes inspection and reporting requirements for the chemicals stored at the processing facility. The Material Containment Plan will provide guidance for the storage, use, cleanup, training, and reporting associated with the use of mill chemicals on site. The SPCC Plan also addresses response actions in the event of a site emergency. Additionally, the Applicant provided an Emergency Response Plan (ERP) as required by Rules 6.4.21 and 8.3. The ERP describes procedures that are intended to be followed during an emergency situation at the Gold Hill Mill. These plans will be reviewed and updated as needed once all the EPF's have been accepted by the Division.

All chemicals used at the site will be stored according to manufactures specifications and MSDS guidance. Transportation of chemicals to and from the mill will be completed by a licensed supplier following, at a minimum, the appropriate regulations set by the Department of Transportation, OSHA, and Boulder County.

No milling activities may occur at the site until all the EPF's have been accepted and approved by DRMS. Upon Division approval the Applicant will have complied with Rules 6.4.21, 6.5, 7.3, 7.4 and 8.3.

# e. Wildlife Issues (Skarstad)

Concerns the TSF would be used by birds. During the comment period the Division received a comment letter from the Colorado Parks and Wildlife (CPW). In the letter, CPW did not express any concerns the site will have a significant effect to local wildlife. The Applicant followed up again with CPW to verify this statement in April 2023 and CPW reiterated there were minimal biological concerns. Currently there is fence around the TSF that prevents large wildlife from coming into contact with tailings material. Recertification of the TSF will also evaluate the need for additional or improved measures to prevent wildlife exposure to tailings. The Division finds the Applicant has complied with required by Rules 6.3.2(d) and 6.4.21(18).

# 3. Non-Jurisdictional Items

In these proceedings, the Division's jurisdiction is limited to enforcement of the specific requirements of the Act and Rules. While other issues are recognized as important, the Division does not have the authority to address them. The Division considers all timely submitted objections and comments in its review but can address only the issues that directly relate to the specific requirements of an application as stated in the Act and Rules.

# a. Concerns regarding aesthetic impact and quality of life.

The Act and Rules do not specifically address impacts to visually appealing landscapes, aesthetics, hours and/or days of operation, noise pollution and impacts to the viewshed, and quality of life. Such issues are typically addressed at the local government level and not at the State government level. These issues should be addressed through Boulder County.

# b. Concerns regarding dust and air pollution. (Lloyd, Muhler, Gould)

The Act and Rules do not specifically address air quality issues. Such issues are under the jurisdiction of Boulder County and the Air Pollution Control Division (APCD) of the Colorado Department of Public Health and Environment (CDPHE). The Applicant has affirmatively stated in Exhibit F of the CN1 application that an Air Pollution Permit will be obtained prior to operations.

# 4. List of Commitments Required for the Gold Hill Mill

During review of the CN1 the Applicant has committed to the following items prior to initiating milling activities at the site:

- 1. No milling may take place until all EPFs are accepted by the Division. Each EPF will require a Technical Revision application for the Division's review. Included in this item is also the required recertification, or reclamation, of the Tailings Storage Facility.
- 2. The Applicant has committed to submitting a Technical Revision, in TR-11, to address how the pumped water, estimated to be 370,000 gallons, will be removed and managed from the Times-Wynona Mine to drop the water below the top of the Wynona Winze. No milling will occur until either the new bulkhead (which would be permitted pursuant to TR11) is installed or the dewatering plan has taken place.

- 3. Provide copies of the approved Plans of Operations from the Bureau of Land Management (BLM) and USFS prior to initiating activities on land managed by these entities. From the BLM in 2013, "that initiation of mining or milling operations cannot occur until BLM has completed the NEPA process, approved a Plan of Operations for these activities and terminated this suspension order."
- 4. The Applicant must provide suitable documentation from Boulder County allowing milling to occur at the site. It is noted that the Applicant still has to get any and all required building and utility permits to be in compliance with County regulations.
- 5. The Applicant shall at least 60 days prior to the start of operations, obtain a grab sample from the Times-Wynona Mine pool and have it analyzed and have the results provided to the Division. The results of the sample will be compared to results from the surrounding monitoring wells. It should be noted the mine pool is going to be monitored on a quarterly basis, along with the monitoring wells for comparison, as part of the site groundwater and surface water monitoring program.
- 6. The Applicant shall provide DRMS notification prior to accepting off-site material for processing. At a minimum the Division expects the notification to come in letter form that identifies the mine location, permit number, permittee providing the material, the results of the SPLP and ABA testing, and quantity of material.
- 7. The Applicant shall submit a Technical Revision to the Division for consideration of an offsite disposal/storage location of tailings material where the specific details can be reviewed.

# Conclusion

After conducting a thorough technical review of the application, as outlined in part in the discussion above, on February 7, 2024, the Division determined the amendment application satisfied the requirements of the Act and Rules, and specifically C.R.S. § 34-32-112.5, and issued its decision to approve the Hard Rock 110d conversion application for the Gold Hill Mill (CN1), File No. M-1994-117.



Brendan Besetzny Trout Unlimited 2627 Fremont Street Boulder, CO 80304

# Re: Decision to Approve a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

Dear Party and/or Interested Person:

The Division of Reclamation, Mining and Safety (Division/DRMS) hereby issues its decision to approve the Colorado Milling Company, LLC. 110d conversion application (CN1) for the Gold Hill Mill, File No. M-1994-117.

The Division's decision to approve is based upon the conversion application meeting the requirements of the Colorado Mined Land Reclamation Act (C.R.S. § 34-32-101, *et seq*). A copy of the Division's rationale for its decision to approve is enclosed for your review.

Pursuant to Rule 1.4.11(1)(b), the Division's decision to approve may be appealed within thirty (30) days of the decision date.

If you need additional information or have any questions, please contact me by telephone at **303-866-3567 x8114**, or by email at <u>patrick.lennberg@state.co.us</u>.

Sincerely,

Patrick Lennberg Environmental Protection Specialist

Enclosure: Rationale for Approval

ec: Brendan Besetzny, <u>boulderflycasters@gmail.com</u> Russ Means; DRMS Jared Ebert; DRMS Scott Schultz; Esq., AGO for Division of Reclamation, Mining and Safety



Enclosure



# Re: Rationale for Decision for Approval of a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

#### Introduction

On February 7, 2024, the Division of Reclamation, Mining and Safety (Division/Office/DRMS) issued its decision to approve the permit conversion application (CN1) for the Gold Hill Mill, File No. M-1994-117, over public objections. This rationale document is intended to explain the process by which the Division arrived at its decision for approval over public objection and respond to the issues raised by the objecting parties. The Division reserves the right to further supplement, amend, modify, or clarify this document and decision with additional details as necessary.<sup>1</sup>

#### Summary of the Review Process for the Conversion Application

Colorado Milling Company, LLC., (CMC/Applicant) submitted a 110d conversion application (CN1) on September 13, 2022. The conversion application was deemed complete for the purposes of filing and review on February 7, 2023.

The conversion application is required based on the potential storage and use of designated chemicals during the milling process and that process has the potential to produce acid or toxic chemicals. The site is located in Boulder County approximately 8.2 miles northwest of Boulder, CO. The current Application states that the site is to be a processing facility only. No subsurface development is proposed in the conversion application. The conversion application does not add any additional permit area and it will remain at 9.2 acres in size. The application seeks to convert the currently held 110(2) permit to a 110d permit in order to comply with the Act, Rules, and specifically address the requirements of a designated mining operation (DMO).

Approval of the conversion application does not allow milling activities to immediately begin. Instead, the operator's conversion application includes a stricter set of permit requirements as this operation is a DMO. The requirements of a DMO include, but are not limited to, the development of an Environmental Protection Plan (EPP). Including the EPP in the conversion application provides a rigorous framework for the protection of human health, property and, ensures impacts to the hydrologic balance are minimized. Part of the EPP permitting process is a facilities evaluation

<sup>&</sup>lt;sup>1</sup> Herein, all references to the Act and Rules refer to the Colorado Land Reclamation Act for Hard Rock, Metal, and Designated Mining Operations 34-32-101 *et seq.*, C.R.S. (the Act), and to the Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard Rock, Metal, and Designated Mining Operations (the Rules or Rule). Copy of the Act and Rules are available through the Division's web site at <u>https://drms.colorado.gov/.</u>



criteria that evaluates the expected effectiveness of each proposed and existing facility. Prior to initiating milling activities at the site, the permittee must obtain DRMS approval of subsequent revisions (more details below). The operator's conversion application is the first step of the process of bringing the operator and site into the required DMO regulatory framework. Prior to any milling being proposed, the existing mill facilities would need to be upgraded. Any proposed milling would require that all future Environmental Protection Facilities are permitted and certified prior to use. The operator's conversion application provides that the Mill and associated facilities must be permitted through the EPP process. The EPP's process includes strict requirements prior to the initiation of milling activities and allows the Division to better ensure the public and the environment are protected.

Pursuant to Section 34-32-110(6), Rule 1.6.2(1)(d) and Rule 1.6.3, the Applicant initially published the required public notice for the conversion application once on February 15, 2023. A review of that notice determined the notice did not contain all the required information pursuant to Rules 1.6.2(1)(d)(v) and (vi). The Applicant republished an updated public notice on February 17, 2023. The public comment period closed on February 27, 2023. The public notices were published in the Daily Camera, a publication in general circulation in the vicinity of the mine. During the public comment period, the Division received six (6) written objections and six (6) written comments from individuals and groups. The Division also received three (3) timely and one (1) untimely comment letter to the application, one letter of support and one withdrawal. The withdrawal was from Mark Schueneman whose concerns were to be addressed through The Watershed Center's comment letter. Below is a list of the objections and comments received.

Person or Entity	Date Objection Received
Amy Fortunato	February 25, 2023
Clark Edwards, Left Hand Ditch Company (LHDC)	February 24, 2023
John Daspit	February 15, 2023
Norman Skarstad	February 24, 2023
Pam Leland, Left Hand Canyon Residences	February 27, 2023
Stephen Strand	February 26, 2023

# **Timely Letters of Objection:**

#### **Timely Comment Letters:**

Person or Entity	Date Objection Received
Brenden Besetzny/Barbara Sheedlo, Boulder Flycasters-St. Vrain Anglers	February 24, 2023
Deb Hummel, The Watershed Center	February 27, 2023
Gold Hill Fire Protection District	February 26, 2023
Marcus Moench, Town of Gold Hill	February 27, 2023

Maya MacHamer, Boulder Watershed Collective	February 27, 2023
Robert De Haas, Pine Brook Water District	February 8, 2023

#### Timely Commenting Agency:

Agency	Date Comment Received
History Colorado	February 17, 2023
Division of Water Resources	February 15, 2023
Boulder County	February 24, 2023

#### **Untimely Comment Letters:**

Person or Agency	Date Comment Received
Bret Gibson, Four Mile Fire Protection District	February 28, 2023
Colorado Parks and Wildlife	March 7, 2023

#### Letter of Support:

Person or Agency	Date Comment Received
Rene Murphy	February 25, 2023

The Division forwarded copies of the objections and comments to the Applicant.

During the review period the Division generated four (4) adequacy letters. The Applicant addressed all adequacy issues to the Division's satisfaction. Therefore, on February 7, 2024, the Division determined the conversion application CN1 satisfied the requirements of C.R.S. § 34-32-115(4) and issued its decision to approve the operator's conversion application over objections.

#### **Issues Raised by the Objecting Parties**

The timely objections received by the Division have been categorized as issues pertaining to hydrologic impacts to Left Hand Creek, relic water pipeline, pumphouse construction, impacts to the hydrologic balance at the mill, Tailings Storage Facility and non-jurisdictional issues. The issues raised by the objecting parties are represented by italic bold font. The last names of the objecting parties who raised the issue are listed after the issue. The Division's response follows in standard font.

#### 1. Hydrologic Impacts to Left Hand Creek

a. Water Consumption from Left Hand Creek (LHDC, Daspit, Leland and Strand)

The Applicant provided copies of the Water Court Decree No. 85CW117. In the decree, and from comments provided by the Division of Water Resources, the Applicant is entitled to divert a minimum of 10.4 acre-feet a year from Left Hand Creek and store the water underground for use at the mill site. The Applicant will measure the amount of water divert using a continuous recording measuring device. Water will only be removed from creek between April 1 and October 31 as water is available. The decree contained a dry covenant, the Applicant has stated that irrigation activities ceased when the water right was established. If irrigation of the land is taking place using creek water, it is being done illegally and not within the control of the Applicant. The Division finds the Applicant has complied the applicable Rules 3.1.6(1)(a) and 6.3.3, and C.R.S. § 34-32-112.5.

# b. Affects to Water Quality of Left Hand Creek (LHDC, Daspit, Leland and Strand)

The Gold Hill Mill will contain all water used during the milling process and will not discharge any water to Left Hand Creek. Water contained within the tailings material will evaporate from the Tailings Storage Facility (TSF). The TSF will be recertified prior to any milling taking place at the site. The pipeline leading from the creek to mill will be constructed with equipment to prevent any backflow from occurring to creek.

The Applicant will be collecting quarterly surface water samples from Left Hand Creek as part of the Groundwater and Surface Water Sampling and Analysis Plan for the site. The monitoring plan includes quarterly samples collected from five (5) groundwater monitoring wells, the Times-Wynona shaft, and TSF. The Applicant has provided a plan protective of Left Hand Creek and a monitoring plan that will allow the Applicant and the Division to verify the effectiveness of the plan. The Division finds the Applicant has complied the applicable Rules 3.1.6, 3.1.7, 6.3.3 and 6.4.21(10) and C.R.S. § 34-32-112.5.

# c. Removal of Pipeline Materials and Pumphouse Location (Fortunato and Skarstad)

The Applicant proposes to remove the relic pipeline materials during construction of the new pipeline. The conversion application states that at the end of milling operations all pipeline and pumphouse materials will be removed in accordance with the Reclamation Plan. The pumphouse and fuel tanks are proposed to be located outside of the 500-year floodplain. The location of the proposed pipeline from pumphouse will be located on land owned by the U.S. Forest Service (USFS). Prior to any construction occurring on USFS land, the Applicant would first need to obtain a Plan of Operations and approval from the USFS. The Division finds the Applicant has complied the applicable Rules 6.3.3 and 6.3.4.

# 2. Gold Hill Mill Site

# a. Impacts to Groundwater Quality (Strand)

The EPP has been designed to minimize the impacts to the hydrologic balance of the groundwater system. A thorough groundwater monitoring plan has been designed to verify the effectiveness of the EPP. In the application, the Applicant has committed to sampling five (5) groundwater monitoring wells at the site, which includes one point-of-compliance well. These wells along with

the TSF, Times-Wynona Shaft, and Left Hand Creek will be sampled on quarterly basis. Sampling reports containing the results of the collected samples will be submitted a month following the end of the previous quarter. The Groundwater and Surface Water Sampling and Analysis Plan (SAP) has an expanded number of locations to be sampled along with an expanded analyte suite to aid in comparison of data. Groundwater samples will be compared to the standards contained in WQCD Regulation 41 - The Basic Standards for Ground Water. The plan will allow for a comparison of the existing mine pool water quality to the surrounding wells. The SAP includes a quality control and quality assurance protocol according to current industry standards. The SAP is an improvement over the currently approved monitoring plan contained in the 110(2) Permit. If data gaps are identified during the monitoring process, the Division would require that the SAP be updated to adequately address any gaps. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 C.R.S. § 34-32-116.

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The Mill site is located on Boulder Creek Granodiorite which is characterized to be massive to gneissic. Groundwater flow within the granodiorite is controlled by localized fracturing, joints and voids. In general, these flow paths decreases with depth. Between the mill and the Town of Gold Hill is the Hoosier Reef. The Reef is a mapped structure that is 10 to 80 feet wide and extends over 1,000 feet deep and is composed of silicified breccia that is barrier to groundwater flow. The Reef runs southeast to northwest. Fractures around the site also trend southeast to northwest but meet the Hoosier Reef towards the Town of Gold Hill thus preventing groundwater flow from the site reaching the town. A comparison of groundwater elevations at the site to available groundwater level data in the town indicates there is a significant difference in overall water elevations indicating the mill site and town are separated and the water levels are reflective of localized fractured flow. An additional indication of the relative impermeability of the granodiorite is the difference in the Times-Wynona Shaft water level relative to the surround groundwater monitoring wells. The mine pool water elevation is typically higher than the surrounding monitoring wells, an indication of the lack of interconnectedness within the granodiorite. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 and C.R.S. § 34-32-116.

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During review of the CN1 the Applicant has committed to the following items prior to initiating milling activities at the site:

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# Conclusion

After conducting a thorough technical review of the application, as outlined in part in the discussion above, on February 7, 2024, the Division determined the amendment application satisfied the requirements of the Act and Rules, and specifically C.R.S. § 34-32-112.5, and issued its decision to approve the Hard Rock 110d conversion application for the Gold Hill Mill (CN1), File No. M-1994-117.



John Daspit 8600 Lefthand Canyon Dr Jamestown, CO 80455

# Re: Decision to Approve a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

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Pursuant to Rule 1.4.11(1)(b), the Division's decision to approve may be appealed within thirty (30) days of the decision date.

If you need additional information or have any questions, please contact me by telephone at **303-866-3567 x8114**, or by email at <u>patrick.lennberg@state.co.us</u>.

Sincerely,

Patrick Lennberg Environmental Protection Specialist

Enclosure: Rationale for Approval

ec: John Daspit, <u>cleanbiker2@gmail.com</u> Russ Means; DRMS Jared Ebert; DRMS Scott Schultz; Esq., AGO for Division of Reclamation, Mining and Safety



Enclosure



# Re: Rationale for Decision for Approval of a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

#### Introduction

On February 7, 2024, the Division of Reclamation, Mining and Safety (Division/Office/DRMS) issued its decision to approve the permit conversion application (CN1) for the Gold Hill Mill, File No. M-1994-117, over public objections. This rationale document is intended to explain the process by which the Division arrived at its decision for approval over public objection and respond to the issues raised by the objecting parties. The Division reserves the right to further supplement, amend, modify, or clarify this document and decision with additional details as necessary.<sup>1</sup>

#### Summary of the Review Process for the Conversion Application

Colorado Milling Company, LLC., (CMC/Applicant) submitted a 110d conversion application (CN1) on September 13, 2022. The conversion application was deemed complete for the purposes of filing and review on February 7, 2023.

The conversion application is required based on the potential storage and use of designated chemicals during the milling process and that process has the potential to produce acid or toxic chemicals. The site is located in Boulder County approximately 8.2 miles northwest of Boulder, CO. The current Application states that the site is to be a processing facility only. No subsurface development is proposed in the conversion application. The conversion application does not add any additional permit area and it will remain at 9.2 acres in size. The application seeks to convert the currently held 110(2) permit to a 110d permit in order to comply with the Act, Rules, and specifically address the requirements of a designated mining operation (DMO).

Approval of the conversion application does not allow milling activities to immediately begin. Instead, the operator's conversion application includes a stricter set of permit requirements as this operation is a DMO. The requirements of a DMO include, but are not limited to, the development of an Environmental Protection Plan (EPP). Including the EPP in the conversion application provides a rigorous framework for the protection of human health, property and, ensures impacts to the hydrologic balance are minimized. Part of the EPP permitting process is a facilities evaluation

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criteria that evaluates the expected effectiveness of each proposed and existing facility. Prior to initiating milling activities at the site, the permittee must obtain DRMS approval of subsequent revisions (more details below). The operator's conversion application is the first step of the process of bringing the operator and site into the required DMO regulatory framework. Prior to any milling being proposed, the existing mill facilities would need to be upgraded. Any proposed milling would require that all future Environmental Protection Facilities are permitted and certified prior to use. The operator's conversion application provides that the Mill and associated facilities must be permitted through the EPP process. The EPP's process includes strict requirements prior to the initiation of milling activities and allows the Division to better ensure the public and the environment are protected.

Pursuant to Section 34-32-110(6), Rule 1.6.2(1)(d) and Rule 1.6.3, the Applicant initially published the required public notice for the conversion application once on February 15, 2023. A review of that notice determined the notice did not contain all the required information pursuant to Rules 1.6.2(1)(d)(v) and (vi). The Applicant republished an updated public notice on February 17, 2023. The public comment period closed on February 27, 2023. The public notices were published in the Daily Camera, a publication in general circulation in the vicinity of the mine. During the public comment period, the Division received six (6) written objections and six (6) written comments from individuals and groups. The Division also received three (3) timely and one (1) untimely comment letter to the application, one letter of support and one withdrawal. The withdrawal was from Mark Schueneman whose concerns were to be addressed through The Watershed Center's comment letter. Below is a list of the objections and comments received.

Person or Entity	Date Objection Received
Amy Fortunato	February 25, 2023
Clark Edwards, Left Hand Ditch Company (LHDC)	February 24, 2023
John Daspit	February 15, 2023
Norman Skarstad	February 24, 2023
Pam Leland, Left Hand Canyon Residences	February 27, 2023
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# **Timely Letters of Objection:**

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Person or Agency	Date Comment Received
Rene Murphy	February 25, 2023

The Division forwarded copies of the objections and comments to the Applicant.

During the review period the Division generated four (4) adequacy letters. The Applicant addressed all adequacy issues to the Division's satisfaction. Therefore, on February 7, 2024, the Division determined the conversion application CN1 satisfied the requirements of C.R.S. § 34-32-115(4) and issued its decision to approve the operator's conversion application over objections.

#### **Issues Raised by the Objecting Parties**

The timely objections received by the Division have been categorized as issues pertaining to hydrologic impacts to Left Hand Creek, relic water pipeline, pumphouse construction, impacts to the hydrologic balance at the mill, Tailings Storage Facility and non-jurisdictional issues. The issues raised by the objecting parties are represented by italic bold font. The last names of the objecting parties who raised the issue are listed after the issue. The Division's response follows in standard font.

#### 1. Hydrologic Impacts to Left Hand Creek

a. Water Consumption from Left Hand Creek (LHDC, Daspit, Leland and Strand)

The Applicant provided copies of the Water Court Decree No. 85CW117. In the decree, and from comments provided by the Division of Water Resources, the Applicant is entitled to divert a minimum of 10.4 acre-feet a year from Left Hand Creek and store the water underground for use at the mill site. The Applicant will measure the amount of water divert using a continuous recording measuring device. Water will only be removed from creek between April 1 and October 31 as water is available. The decree contained a dry covenant, the Applicant has stated that irrigation activities ceased when the water right was established. If irrigation of the land is taking place using creek water, it is being done illegally and not within the control of the Applicant. The Division finds the Applicant has complied the applicable Rules 3.1.6(1)(a) and 6.3.3, and C.R.S. § 34-32-112.5.

# b. Affects to Water Quality of Left Hand Creek (LHDC, Daspit, Leland and Strand)

The Gold Hill Mill will contain all water used during the milling process and will not discharge any water to Left Hand Creek. Water contained within the tailings material will evaporate from the Tailings Storage Facility (TSF). The TSF will be recertified prior to any milling taking place at the site. The pipeline leading from the creek to mill will be constructed with equipment to prevent any backflow from occurring to creek.

The Applicant will be collecting quarterly surface water samples from Left Hand Creek as part of the Groundwater and Surface Water Sampling and Analysis Plan for the site. The monitoring plan includes quarterly samples collected from five (5) groundwater monitoring wells, the Times-Wynona shaft, and TSF. The Applicant has provided a plan protective of Left Hand Creek and a monitoring plan that will allow the Applicant and the Division to verify the effectiveness of the plan. The Division finds the Applicant has complied the applicable Rules 3.1.6, 3.1.7, 6.3.3 and 6.4.21(10) and C.R.S. § 34-32-112.5.

# c. Removal of Pipeline Materials and Pumphouse Location (Fortunato and Skarstad)

The Applicant proposes to remove the relic pipeline materials during construction of the new pipeline. The conversion application states that at the end of milling operations all pipeline and pumphouse materials will be removed in accordance with the Reclamation Plan. The pumphouse and fuel tanks are proposed to be located outside of the 500-year floodplain. The location of the proposed pipeline from pumphouse will be located on land owned by the U.S. Forest Service (USFS). Prior to any construction occurring on USFS land, the Applicant would first need to obtain a Plan of Operations and approval from the USFS. The Division finds the Applicant has complied the applicable Rules 6.3.3 and 6.3.4.

# 2. Gold Hill Mill Site

# a. Impacts to Groundwater Quality (Strand)

The EPP has been designed to minimize the impacts to the hydrologic balance of the groundwater system. A thorough groundwater monitoring plan has been designed to verify the effectiveness of the EPP. In the application, the Applicant has committed to sampling five (5) groundwater monitoring wells at the site, which includes one point-of-compliance well. These wells along with
the TSF, Times-Wynona Shaft, and Left Hand Creek will be sampled on quarterly basis. Sampling reports containing the results of the collected samples will be submitted a month following the end of the previous quarter. The Groundwater and Surface Water Sampling and Analysis Plan (SAP) has an expanded number of locations to be sampled along with an expanded analyte suite to aid in comparison of data. Groundwater samples will be compared to the standards contained in WQCD Regulation 41 - The Basic Standards for Ground Water. The plan will allow for a comparison of the existing mine pool water quality to the surrounding wells. The SAP includes a quality control and quality assurance protocol according to current industry standards. The SAP is an improvement over the currently approved monitoring plan contained in the 110(2) Permit. If data gaps are identified during the monitoring process, the Division would require that the SAP be updated to adequately address any gaps. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 C.R.S. § 34-32-116.

## b. Hydrologic Impacts to the Town of Gold Hill (Strand)

The Mill site is located on Boulder Creek Granodiorite which is characterized to be massive to gneissic. Groundwater flow within the granodiorite is controlled by localized fracturing, joints and voids. In general, these flow paths decreases with depth. Between the mill and the Town of Gold Hill is the Hoosier Reef. The Reef is a mapped structure that is 10 to 80 feet wide and extends over 1,000 feet deep and is composed of silicified breccia that is barrier to groundwater flow. The Reef runs southeast to northwest. Fractures around the site also trend southeast to northwest but meet the Hoosier Reef towards the Town of Gold Hill thus preventing groundwater flow from the site reaching the town. A comparison of groundwater elevations at the site to available groundwater level data in the town indicates there is a significant difference in overall water elevations indicating the mill site and town are separated and the water levels are reflective of localized fractured flow. An additional indication of the relative impermeability of the granodiorite is the difference in the Times-Wynona Shaft water level relative to the surround groundwater monitoring wells. The mine pool water elevation is typically higher than the surrounding monitoring wells, an indication of the lack of interconnectedness within the granodiorite. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 and C.R.S. § 34-32-116.

## c. Stability of Tailings Storage Facility (Strand and Skarstad)

The Applicant has committed to a recertification schedule to determine the condition of the Tailings Storage Facility (TSF). If the TSF can be recertified, a schedule for the completion of the recertification activities will be submitted through a Technical Revision pursuant to Rule 6.4.21(15). If it is determined the TSF cannot be recertified, a schedule for reclamation will be submitted through a Technical Revision according to the approved reclamation plan. Recertification of the TSF is a requirement of Rule 7.3.2. The recertification process provides a framework to insure the TSF has suitable capacity to prevent a release of materials from a design storm event plus operational material volumes during worst case conditions. Additionally, the recertification process will verify stability of the TSF embankments meet the minimum requirements for stability in accordance with Mined Land Reclamation Board Policy 30 for Factors of Safety for Slope Stability/Geotechnical Analyses and Rule 6.5. At a minimum, no milling activities may take place until the TSF is recertified. If the TSF is reclaimed, no milling activities may take place until an alternative tailings disposal method is approved by the Division. In order to gain Division approval of the recertification of the TSF, the Applicant must comply with Rules 6.3, 6.4.21, 6.5 and 7.4.

## d. Chemical Management and Storage (Skarstad)

At this time there are designated chemicals awaiting EPA approval for proper disposal at a certified disposal facility. The chemicals were identified during the pre-operation inspection in October 2023. The chemicals are being stored inside the mill building, protected from the weather and within secondary containment, until the EPA provides the proper documentation allowing for proper disposal of the chemicals. Following proper disposal, and prior to any designated chemicals being handled or stored at the site, the Applicant must submit and get Division approval, through individual Technical Revisions, for the following Environmental Protection Facilities (EPF); Mill Facility, Reagent Storage Facility, Tailings Delivery Line, Tailings Storage Facility (mentioned above) and the Surface Ore Stockpile Facility. Each Technical Revision for the individual EPFs will be reviewed by the Division and must meet the applicable requirement of Rules 6.4.21, 6.5, 7.3, and 7.4. The EPF's will not be considered certified for operations until all applicable QA/QC documentation and certified as-builts have been submitted and accepted by the Division. No milling may take place until all EPFs are accepted by the Division.

The application conversion includes a Materials Containment Plan and a Spill Prevention, Control and Countermeasure (SPCC) Plan for the site. The SPCC Plan will provide measures for properly storing and handling petroleum products and responding to, and reporting, spills. Normally, the SPCC Plan covers only petroleum-based chemicals but the SPCC Plan contained within the conversion application for this site includes inspection and reporting requirements for the chemicals stored at the processing facility. The Material Containment Plan will provide guidance for the storage, use, cleanup, training, and reporting associated with the use of mill chemicals on site. The SPCC Plan also addresses response actions in the event of a site emergency. Additionally, the Applicant provided an Emergency Response Plan (ERP) as required by Rules 6.4.21 and 8.3. The ERP describes procedures that are intended to be followed during an emergency situation at the Gold Hill Mill. These plans will be reviewed and updated as needed once all the EPF's have been accepted by the Division.

All chemicals used at the site will be stored according to manufactures specifications and MSDS guidance. Transportation of chemicals to and from the mill will be completed by a licensed supplier following, at a minimum, the appropriate regulations set by the Department of Transportation, OSHA, and Boulder County.

No milling activities may occur at the site until all the EPF's have been accepted and approved by DRMS. Upon Division approval the Applicant will have complied with Rules 6.4.21, 6.5, 7.3, 7.4 and 8.3.

## e. Wildlife Issues (Skarstad)

Concerns the TSF would be used by birds. During the comment period the Division received a comment letter from the Colorado Parks and Wildlife (CPW). In the letter, CPW did not express any concerns the site will have a significant effect to local wildlife. The Applicant followed up again with CPW to verify this statement in April 2023 and CPW reiterated there were minimal biological concerns. Currently there is fence around the TSF that prevents large wildlife from coming into contact with tailings material. Recertification of the TSF will also evaluate the need for additional or improved measures to prevent wildlife exposure to tailings. The Division finds the Applicant has complied with required by Rules 6.3.2(d) and 6.4.21(18).

# 3. Non-Jurisdictional Items

In these proceedings, the Division's jurisdiction is limited to enforcement of the specific requirements of the Act and Rules. While other issues are recognized as important, the Division does not have the authority to address them. The Division considers all timely submitted objections and comments in its review but can address only the issues that directly relate to the specific requirements of an application as stated in the Act and Rules.

# a. Concerns regarding aesthetic impact and quality of life.

The Act and Rules do not specifically address impacts to visually appealing landscapes, aesthetics, hours and/or days of operation, noise pollution and impacts to the viewshed, and quality of life. Such issues are typically addressed at the local government level and not at the State government level. These issues should be addressed through Boulder County.

# b. Concerns regarding dust and air pollution. (Lloyd, Muhler, Gould)

The Act and Rules do not specifically address air quality issues. Such issues are under the jurisdiction of Boulder County and the Air Pollution Control Division (APCD) of the Colorado Department of Public Health and Environment (CDPHE). The Applicant has affirmatively stated in Exhibit F of the CN1 application that an Air Pollution Permit will be obtained prior to operations.

## 4. List of Commitments Required for the Gold Hill Mill

During review of the CN1 the Applicant has committed to the following items prior to initiating milling activities at the site:

- 1. No milling may take place until all EPFs are accepted by the Division. Each EPF will require a Technical Revision application for the Division's review. Included in this item is also the required recertification, or reclamation, of the Tailings Storage Facility.
- 2. The Applicant has committed to submitting a Technical Revision, in TR-11, to address how the pumped water, estimated to be 370,000 gallons, will be removed and managed from the Times-Wynona Mine to drop the water below the top of the Wynona Winze. No milling will occur until either the new bulkhead (which would be permitted pursuant to TR11) is installed or the dewatering plan has taken place.

- 3. Provide copies of the approved Plans of Operations from the Bureau of Land Management (BLM) and USFS prior to initiating activities on land managed by these entities. From the BLM in 2013, "that initiation of mining or milling operations cannot occur until BLM has completed the NEPA process, approved a Plan of Operations for these activities and terminated this suspension order."
- 4. The Applicant must provide suitable documentation from Boulder County allowing milling to occur at the site. It is noted that the Applicant still has to get any and all required building and utility permits to be in compliance with County regulations.
- 5. The Applicant shall at least 60 days prior to the start of operations, obtain a grab sample from the Times-Wynona Mine pool and have it analyzed and have the results provided to the Division. The results of the sample will be compared to results from the surrounding monitoring wells. It should be noted the mine pool is going to be monitored on a quarterly basis, along with the monitoring wells for comparison, as part of the site groundwater and surface water monitoring program.
- 6. The Applicant shall provide DRMS notification prior to accepting off-site material for processing. At a minimum the Division expects the notification to come in letter form that identifies the mine location, permit number, permittee providing the material, the results of the SPLP and ABA testing, and quantity of material.
- 7. The Applicant shall submit a Technical Revision to the Division for consideration of an offsite disposal/storage location of tailings material where the specific details can be reviewed.

## Conclusion

After conducting a thorough technical review of the application, as outlined in part in the discussion above, on February 7, 2024, the Division determined the amendment application satisfied the requirements of the Act and Rules, and specifically C.R.S. § 34-32-112.5, and issued its decision to approve the Hard Rock 110d conversion application for the Gold Hill Mill (CN1), File No. M-1994-117.



February 7, 2024

Clark G. Edwards Left Hand Ditch Company 921 Walnut St, Suite 200 Boulder, CO 80302

## Re: Decision to Approve a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

Dear Party and/or Interested Person:

The Division of Reclamation, Mining and Safety (Division/DRMS) hereby issues its decision to approve the Colorado Milling Company, LLC. 110d conversion application (CN1) for the Gold Hill Mill, File No. M-1994-117.

The Division's decision to approve is based upon the conversion application meeting the requirements of the Colorado Mined Land Reclamation Act (C.R.S. § 34-32-101, *et seq*). A copy of the Division's rationale for its decision to approve is enclosed for your review.

Pursuant to Rule 1.4.11(1)(b), the Division's decision to approve may be appealed within thirty (30) days of the decision date.

If you need additional information or have any questions, please contact me by telephone at **303-866-3567 x8114**, or by email at <u>patrick.lennberg@state.co.us</u>.

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Enclosure: Rationale for Approval

ec: Clark G. Edwards, <u>clark.edwards@hbcboulder.com</u> Russ Means; DRMS Jared Ebert; DRMS Scott Schultz; Esq., AGO for Division of Reclamation, Mining and Safety



Enclosure



February 7, 2024

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The Applicant proposes to remove the relic pipeline materials during construction of the new pipeline. The conversion application states that at the end of milling operations all pipeline and pumphouse materials will be removed in accordance with the Reclamation Plan. The pumphouse and fuel tanks are proposed to be located outside of the 500-year floodplain. The location of the proposed pipeline from pumphouse will be located on land owned by the U.S. Forest Service (USFS). Prior to any construction occurring on USFS land, the Applicant would first need to obtain a Plan of Operations and approval from the USFS. The Division finds the Applicant has complied the applicable Rules 6.3.3 and 6.3.4.

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## b. Hydrologic Impacts to the Town of Gold Hill (Strand)

The Mill site is located on Boulder Creek Granodiorite which is characterized to be massive to gneissic. Groundwater flow within the granodiorite is controlled by localized fracturing, joints and voids. In general, these flow paths decreases with depth. Between the mill and the Town of Gold Hill is the Hoosier Reef. The Reef is a mapped structure that is 10 to 80 feet wide and extends over 1,000 feet deep and is composed of silicified breccia that is barrier to groundwater flow. The Reef runs southeast to northwest. Fractures around the site also trend southeast to northwest but meet the Hoosier Reef towards the Town of Gold Hill thus preventing groundwater flow from the site reaching the town. A comparison of groundwater elevations at the site to available groundwater level data in the town indicates there is a significant difference in overall water elevations indicating the mill site and town are separated and the water levels are reflective of localized fractured flow. An additional indication of the relative impermeability of the granodiorite is the difference in the Times-Wynona Shaft water level relative to the surround groundwater monitoring wells. The mine pool water elevation is typically higher than the surrounding monitoring wells, an indication of the lack of interconnectedness within the granodiorite. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 and C.R.S. § 34-32-116.

## c. Stability of Tailings Storage Facility (Strand and Skarstad)

The Applicant has committed to a recertification schedule to determine the condition of the Tailings Storage Facility (TSF). If the TSF can be recertified, a schedule for the completion of the recertification activities will be submitted through a Technical Revision pursuant to Rule 6.4.21(15). If it is determined the TSF cannot be recertified, a schedule for reclamation will be submitted through a Technical Revision according to the approved reclamation plan. Recertification of the TSF is a requirement of Rule 7.3.2. The recertification process provides a framework to insure the TSF has suitable capacity to prevent a release of materials from a design storm event plus operational material volumes during worst case conditions. Additionally, the recertification process will verify stability of the TSF embankments meet the minimum requirements for stability in accordance with Mined Land Reclamation Board Policy 30 for Factors of Safety for Slope Stability/Geotechnical Analyses and Rule 6.5. At a minimum, no milling activities may take place until the TSF is recertified. If the TSF is reclaimed, no milling activities may take place until an alternative tailings disposal method is approved by the Division. In order to gain Division approval of the recertification of the TSF, the Applicant must comply with Rules 6.3, 6.4.21, 6.5 and 7.4.

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At this time there are designated chemicals awaiting EPA approval for proper disposal at a certified disposal facility. The chemicals were identified during the pre-operation inspection in October 2023. The chemicals are being stored inside the mill building, protected from the weather and within secondary containment, until the EPA provides the proper documentation allowing for proper disposal of the chemicals. Following proper disposal, and prior to any designated chemicals being handled or stored at the site, the Applicant must submit and get Division approval, through individual Technical Revisions, for the following Environmental Protection Facilities (EPF); Mill Facility, Reagent Storage Facility, Tailings Delivery Line, Tailings Storage Facility (mentioned above) and the Surface Ore Stockpile Facility. Each Technical Revision for the individual EPFs will be reviewed by the Division and must meet the applicable requirement of Rules 6.4.21, 6.5, 7.3, and 7.4. The EPF's will not be considered certified for operations until all applicable QA/QC documentation and certified as-builts have been submitted and accepted by the Division. No milling may take place until all EPFs are accepted by the Division.

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No milling activities may occur at the site until all the EPF's have been accepted and approved by DRMS. Upon Division approval the Applicant will have complied with Rules 6.4.21, 6.5, 7.3, 7.4 and 8.3.

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Concerns the TSF would be used by birds. During the comment period the Division received a comment letter from the Colorado Parks and Wildlife (CPW). In the letter, CPW did not express any concerns the site will have a significant effect to local wildlife. The Applicant followed up again with CPW to verify this statement in April 2023 and CPW reiterated there were minimal biological concerns. Currently there is fence around the TSF that prevents large wildlife from coming into contact with tailings material. Recertification of the TSF will also evaluate the need for additional or improved measures to prevent wildlife exposure to tailings. The Division finds the Applicant has complied with required by Rules 6.3.2(d) and 6.4.21(18).

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In these proceedings, the Division's jurisdiction is limited to enforcement of the specific requirements of the Act and Rules. While other issues are recognized as important, the Division does not have the authority to address them. The Division considers all timely submitted objections and comments in its review but can address only the issues that directly relate to the specific requirements of an application as stated in the Act and Rules.

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## 4. List of Commitments Required for the Gold Hill Mill

During review of the CN1 the Applicant has committed to the following items prior to initiating milling activities at the site:

- 1. No milling may take place until all EPFs are accepted by the Division. Each EPF will require a Technical Revision application for the Division's review. Included in this item is also the required recertification, or reclamation, of the Tailings Storage Facility.
- 2. The Applicant has committed to submitting a Technical Revision, in TR-11, to address how the pumped water, estimated to be 370,000 gallons, will be removed and managed from the Times-Wynona Mine to drop the water below the top of the Wynona Winze. No milling will occur until either the new bulkhead (which would be permitted pursuant to TR11) is installed or the dewatering plan has taken place.

- 3. Provide copies of the approved Plans of Operations from the Bureau of Land Management (BLM) and USFS prior to initiating activities on land managed by these entities. From the BLM in 2013, "that initiation of mining or milling operations cannot occur until BLM has completed the NEPA process, approved a Plan of Operations for these activities and terminated this suspension order."
- 4. The Applicant must provide suitable documentation from Boulder County allowing milling to occur at the site. It is noted that the Applicant still has to get any and all required building and utility permits to be in compliance with County regulations.
- 5. The Applicant shall at least 60 days prior to the start of operations, obtain a grab sample from the Times-Wynona Mine pool and have it analyzed and have the results provided to the Division. The results of the sample will be compared to results from the surrounding monitoring wells. It should be noted the mine pool is going to be monitored on a quarterly basis, along with the monitoring wells for comparison, as part of the site groundwater and surface water monitoring program.
- 6. The Applicant shall provide DRMS notification prior to accepting off-site material for processing. At a minimum the Division expects the notification to come in letter form that identifies the mine location, permit number, permittee providing the material, the results of the SPLP and ABA testing, and quantity of material.
- 7. The Applicant shall submit a Technical Revision to the Division for consideration of an offsite disposal/storage location of tailings material where the specific details can be reviewed.

## Conclusion

After conducting a thorough technical review of the application, as outlined in part in the discussion above, on February 7, 2024, the Division determined the amendment application satisfied the requirements of the Act and Rules, and specifically C.R.S. § 34-32-112.5, and issued its decision to approve the Hard Rock 110d conversion application for the Gold Hill Mill (CN1), File No. M-1994-117.



February 7, 2024

Maya MacHamer Boulder Watershed Collective 1740 Fourmile Canyon Dr Boulder, CO 80302

## Re: Decision to Approve a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

Dear Party and/or Interested Person:

The Division of Reclamation, Mining and Safety (Division/DRMS) hereby issues its decision to approve the Colorado Milling Company, LLC. 110d conversion application (CN1) for the Gold Hill Mill, File No. M-1994-117.

The Division's decision to approve is based upon the conversion application meeting the requirements of the Colorado Mined Land Reclamation Act (C.R.S. § 34-32-101, *et seq*). A copy of the Division's rationale for its decision to approve is enclosed for your review.

Pursuant to Rule 1.4.11(1)(b), the Division's decision to approve may be appealed within thirty (30) days of the decision date.

If you need additional information or have any questions, please contact me by telephone at **303-866-3567 x8114**, or by email at <u>patrick.lennberg@state.co.us</u>.

Sincerely,

Patrick Lennberg Environmental Protection Specialist

Enclosure: Rationale for Approval

ec: Maya MacHamer, <u>maya@boulderwatershedcollective.org</u> Russ Means; DRMS Jared Ebert; DRMS Scott Schultz; Esq., AGO for Division of Reclamation, Mining and Safety



Enclosure



February 7, 2024

# Re: Rationale for Decision for Approval of a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

#### Introduction

On February 7, 2024, the Division of Reclamation, Mining and Safety (Division/Office/DRMS) issued its decision to approve the permit conversion application (CN1) for the Gold Hill Mill, File No. M-1994-117, over public objections. This rationale document is intended to explain the process by which the Division arrived at its decision for approval over public objection and respond to the issues raised by the objecting parties. The Division reserves the right to further supplement, amend, modify, or clarify this document and decision with additional details as necessary.<sup>1</sup>

#### Summary of the Review Process for the Conversion Application

Colorado Milling Company, LLC., (CMC/Applicant) submitted a 110d conversion application (CN1) on September 13, 2022. The conversion application was deemed complete for the purposes of filing and review on February 7, 2023.

The conversion application is required based on the potential storage and use of designated chemicals during the milling process and that process has the potential to produce acid or toxic chemicals. The site is located in Boulder County approximately 8.2 miles northwest of Boulder, CO. The current Application states that the site is to be a processing facility only. No subsurface development is proposed in the conversion application. The conversion application does not add any additional permit area and it will remain at 9.2 acres in size. The application seeks to convert the currently held 110(2) permit to a 110d permit in order to comply with the Act, Rules, and specifically address the requirements of a designated mining operation (DMO).

Approval of the conversion application does not allow milling activities to immediately begin. Instead, the operator's conversion application includes a stricter set of permit requirements as this operation is a DMO. The requirements of a DMO include, but are not limited to, the development of an Environmental Protection Plan (EPP). Including the EPP in the conversion application provides a rigorous framework for the protection of human health, property and, ensures impacts to the hydrologic balance are minimized. Part of the EPP permitting process is a facilities evaluation

<sup>&</sup>lt;sup>1</sup> Herein, all references to the Act and Rules refer to the Colorado Land Reclamation Act for Hard Rock, Metal, and Designated Mining Operations 34-32-101 *et seq.*, C.R.S. (the Act), and to the Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard Rock, Metal, and Designated Mining Operations (the Rules or Rule). Copy of the Act and Rules are available through the Division's web site at <u>https://drms.colorado.gov/.</u>



criteria that evaluates the expected effectiveness of each proposed and existing facility. Prior to initiating milling activities at the site, the permittee must obtain DRMS approval of subsequent revisions (more details below). The operator's conversion application is the first step of the process of bringing the operator and site into the required DMO regulatory framework. Prior to any milling being proposed, the existing mill facilities would need to be upgraded. Any proposed milling would require that all future Environmental Protection Facilities are permitted and certified prior to use. The operator's conversion application provides that the Mill and associated facilities must be permitted through the EPP process. The EPP's process includes strict requirements prior to the initiation of milling activities and allows the Division to better ensure the public and the environment are protected.

Pursuant to Section 34-32-110(6), Rule 1.6.2(1)(d) and Rule 1.6.3, the Applicant initially published the required public notice for the conversion application once on February 15, 2023. A review of that notice determined the notice did not contain all the required information pursuant to Rules 1.6.2(1)(d)(v) and (vi). The Applicant republished an updated public notice on February 17, 2023. The public comment period closed on February 27, 2023. The public notices were published in the Daily Camera, a publication in general circulation in the vicinity of the mine. During the public comment period, the Division received six (6) written objections and six (6) written comments from individuals and groups. The Division also received three (3) timely and one (1) untimely comment letter to the application, one letter of support and one withdrawal. The withdrawal was from Mark Schueneman whose concerns were to be addressed through The Watershed Center's comment letter. Below is a list of the objections and comments received.

Person or Entity	Date Objection Received
Amy Fortunato	February 25, 2023
Clark Edwards, Left Hand Ditch Company (LHDC)	February 24, 2023
John Daspit	February 15, 2023
Norman Skarstad	February 24, 2023
Pam Leland, Left Hand Canyon Residences	February 27, 2023
Stephen Strand	February 26, 2023

## **Timely Letters of Objection:**

#### **Timely Comment Letters:**

Person or Entity	Date Objection Received
Brenden Besetzny/Barbara Sheedlo, Boulder Flycasters-St. Vrain Anglers	February 24, 2023
Deb Hummel, The Watershed Center	February 27, 2023
Gold Hill Fire Protection District	February 26, 2023
Marcus Moench, Town of Gold Hill	February 27, 2023

Maya MacHamer, Boulder Watershed Collective	February 27, 2023
Robert De Haas, Pine Brook Water District	February 8, 2023

#### **Timely Commenting Agency:**

Agency	Date Comment Received
History Colorado	February 17, 2023
Division of Water Resources	February 15, 2023
Boulder County	February 24, 2023

#### **Untimely Comment Letters:**

Person or Agency	Date Comment Received
Bret Gibson, Four Mile Fire Protection District	February 28, 2023
Colorado Parks and Wildlife	March 7, 2023

#### Letter of Support:

Person or Agency	Date Comment Received
Rene Murphy	February 25, 2023

The Division forwarded copies of the objections and comments to the Applicant.

During the review period the Division generated four (4) adequacy letters. The Applicant addressed all adequacy issues to the Division's satisfaction. Therefore, on February 7, 2024, the Division determined the conversion application CN1 satisfied the requirements of C.R.S. § 34-32-115(4) and issued its decision to approve the operator's conversion application over objections.

#### **Issues Raised by the Objecting Parties**

The timely objections received by the Division have been categorized as issues pertaining to hydrologic impacts to Left Hand Creek, relic water pipeline, pumphouse construction, impacts to the hydrologic balance at the mill, Tailings Storage Facility and non-jurisdictional issues. The issues raised by the objecting parties are represented by italic bold font. The last names of the objecting parties who raised the issue are listed after the issue. The Division's response follows in standard font.

#### 1. Hydrologic Impacts to Left Hand Creek

a. Water Consumption from Left Hand Creek (LHDC, Daspit, Leland and Strand)

The Applicant provided copies of the Water Court Decree No. 85CW117. In the decree, and from comments provided by the Division of Water Resources, the Applicant is entitled to divert a minimum of 10.4 acre-feet a year from Left Hand Creek and store the water underground for use at the mill site. The Applicant will measure the amount of water divert using a continuous recording measuring device. Water will only be removed from creek between April 1 and October 31 as water is available. The decree contained a dry covenant, the Applicant has stated that irrigation activities ceased when the water right was established. If irrigation of the land is taking place using creek water, it is being done illegally and not within the control of the Applicant. The Division finds the Applicant has complied the applicable Rules 3.1.6(1)(a) and 6.3.3, and C.R.S. § 34-32-112.5.

# b. Affects to Water Quality of Left Hand Creek (LHDC, Daspit, Leland and Strand)

The Gold Hill Mill will contain all water used during the milling process and will not discharge any water to Left Hand Creek. Water contained within the tailings material will evaporate from the Tailings Storage Facility (TSF). The TSF will be recertified prior to any milling taking place at the site. The pipeline leading from the creek to mill will be constructed with equipment to prevent any backflow from occurring to creek.

The Applicant will be collecting quarterly surface water samples from Left Hand Creek as part of the Groundwater and Surface Water Sampling and Analysis Plan for the site. The monitoring plan includes quarterly samples collected from five (5) groundwater monitoring wells, the Times-Wynona shaft, and TSF. The Applicant has provided a plan protective of Left Hand Creek and a monitoring plan that will allow the Applicant and the Division to verify the effectiveness of the plan. The Division finds the Applicant has complied the applicable Rules 3.1.6, 3.1.7, 6.3.3 and 6.4.21(10) and C.R.S. § 34-32-112.5.

## c. Removal of Pipeline Materials and Pumphouse Location (Fortunato and Skarstad)

The Applicant proposes to remove the relic pipeline materials during construction of the new pipeline. The conversion application states that at the end of milling operations all pipeline and pumphouse materials will be removed in accordance with the Reclamation Plan. The pumphouse and fuel tanks are proposed to be located outside of the 500-year floodplain. The location of the proposed pipeline from pumphouse will be located on land owned by the U.S. Forest Service (USFS). Prior to any construction occurring on USFS land, the Applicant would first need to obtain a Plan of Operations and approval from the USFS. The Division finds the Applicant has complied the applicable Rules 6.3.3 and 6.3.4.

## 2. Gold Hill Mill Site

## a. Impacts to Groundwater Quality (Strand)

The EPP has been designed to minimize the impacts to the hydrologic balance of the groundwater system. A thorough groundwater monitoring plan has been designed to verify the effectiveness of the EPP. In the application, the Applicant has committed to sampling five (5) groundwater monitoring wells at the site, which includes one point-of-compliance well. These wells along with

the TSF, Times-Wynona Shaft, and Left Hand Creek will be sampled on quarterly basis. Sampling reports containing the results of the collected samples will be submitted a month following the end of the previous quarter. The Groundwater and Surface Water Sampling and Analysis Plan (SAP) has an expanded number of locations to be sampled along with an expanded analyte suite to aid in comparison of data. Groundwater samples will be compared to the standards contained in WQCD Regulation 41 - The Basic Standards for Ground Water. The plan will allow for a comparison of the existing mine pool water quality to the surrounding wells. The SAP includes a quality control and quality assurance protocol according to current industry standards. The SAP is an improvement over the currently approved monitoring plan contained in the 110(2) Permit. If data gaps are identified during the monitoring process, the Division would require that the SAP be updated to adequately address any gaps. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 C.R.S. § 34-32-116.

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## Conclusion

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February 7, 2024

Norman Skarstad 10180 Lefthand Canyon Dr Jamestown, CO 80455

## Re: Decision to Approve a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

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Sincerely,

Patrick Lennberg Environmental Protection Specialist

Enclosure: Rationale for Approval

ec: Norman Skarstad, <u>norman.skarstad@colorado.edu</u> Russ Means; DRMS Jared Ebert; DRMS Scott Schultz; Esq., AGO for Division of Reclamation, Mining and Safety



Enclosure



February 7, 2024

# Re: Rationale for Decision for Approval of a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

#### Introduction

On February 7, 2024, the Division of Reclamation, Mining and Safety (Division/Office/DRMS) issued its decision to approve the permit conversion application (CN1) for the Gold Hill Mill, File No. M-1994-117, over public objections. This rationale document is intended to explain the process by which the Division arrived at its decision for approval over public objection and respond to the issues raised by the objecting parties. The Division reserves the right to further supplement, amend, modify, or clarify this document and decision with additional details as necessary.<sup>1</sup>

#### Summary of the Review Process for the Conversion Application

Colorado Milling Company, LLC., (CMC/Applicant) submitted a 110d conversion application (CN1) on September 13, 2022. The conversion application was deemed complete for the purposes of filing and review on February 7, 2023.

The conversion application is required based on the potential storage and use of designated chemicals during the milling process and that process has the potential to produce acid or toxic chemicals. The site is located in Boulder County approximately 8.2 miles northwest of Boulder, CO. The current Application states that the site is to be a processing facility only. No subsurface development is proposed in the conversion application. The conversion application does not add any additional permit area and it will remain at 9.2 acres in size. The application seeks to convert the currently held 110(2) permit to a 110d permit in order to comply with the Act, Rules, and specifically address the requirements of a designated mining operation (DMO).

Approval of the conversion application does not allow milling activities to immediately begin. Instead, the operator's conversion application includes a stricter set of permit requirements as this operation is a DMO. The requirements of a DMO include, but are not limited to, the development of an Environmental Protection Plan (EPP). Including the EPP in the conversion application provides a rigorous framework for the protection of human health, property and, ensures impacts to the hydrologic balance are minimized. Part of the EPP permitting process is a facilities evaluation

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criteria that evaluates the expected effectiveness of each proposed and existing facility. Prior to initiating milling activities at the site, the permittee must obtain DRMS approval of subsequent revisions (more details below). The operator's conversion application is the first step of the process of bringing the operator and site into the required DMO regulatory framework. Prior to any milling being proposed, the existing mill facilities would need to be upgraded. Any proposed milling would require that all future Environmental Protection Facilities are permitted and certified prior to use. The operator's conversion application provides that the Mill and associated facilities must be permitted through the EPP process. The EPP's process includes strict requirements prior to the initiation of milling activities and allows the Division to better ensure the public and the environment are protected.

Pursuant to Section 34-32-110(6), Rule 1.6.2(1)(d) and Rule 1.6.3, the Applicant initially published the required public notice for the conversion application once on February 15, 2023. A review of that notice determined the notice did not contain all the required information pursuant to Rules 1.6.2(1)(d)(v) and (vi). The Applicant republished an updated public notice on February 17, 2023. The public comment period closed on February 27, 2023. The public notices were published in the Daily Camera, a publication in general circulation in the vicinity of the mine. During the public comment period, the Division received six (6) written objections and six (6) written comments from individuals and groups. The Division also received three (3) timely and one (1) untimely comment letter to the application, one letter of support and one withdrawal. The withdrawal was from Mark Schueneman whose concerns were to be addressed through The Watershed Center's comment letter. Below is a list of the objections and comments received.

Person or Entity	Date Objection Received
Amy Fortunato	February 25, 2023
Clark Edwards, Left Hand Ditch Company (LHDC)	February 24, 2023
John Daspit	February 15, 2023
Norman Skarstad	February 24, 2023
Pam Leland, Left Hand Canyon Residences	February 27, 2023
Stephen Strand	February 26, 2023

## **Timely Letters of Objection:**

#### **Timely Comment Letters:**

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Brenden Besetzny/Barbara Sheedlo, Boulder Flycasters-St. Vrain Anglers	February 24, 2023
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#### Letter of Support:

Person or Agency	Date Comment Received
Rene Murphy	February 25, 2023

The Division forwarded copies of the objections and comments to the Applicant.

During the review period the Division generated four (4) adequacy letters. The Applicant addressed all adequacy issues to the Division's satisfaction. Therefore, on February 7, 2024, the Division determined the conversion application CN1 satisfied the requirements of C.R.S. § 34-32-115(4) and issued its decision to approve the operator's conversion application over objections.

#### **Issues Raised by the Objecting Parties**

The timely objections received by the Division have been categorized as issues pertaining to hydrologic impacts to Left Hand Creek, relic water pipeline, pumphouse construction, impacts to the hydrologic balance at the mill, Tailings Storage Facility and non-jurisdictional issues. The issues raised by the objecting parties are represented by italic bold font. The last names of the objecting parties who raised the issue are listed after the issue. The Division's response follows in standard font.

#### 1. Hydrologic Impacts to Left Hand Creek

a. Water Consumption from Left Hand Creek (LHDC, Daspit, Leland and Strand)

The Applicant provided copies of the Water Court Decree No. 85CW117. In the decree, and from comments provided by the Division of Water Resources, the Applicant is entitled to divert a minimum of 10.4 acre-feet a year from Left Hand Creek and store the water underground for use at the mill site. The Applicant will measure the amount of water divert using a continuous recording measuring device. Water will only be removed from creek between April 1 and October 31 as water is available. The decree contained a dry covenant, the Applicant has stated that irrigation activities ceased when the water right was established. If irrigation of the land is taking place using creek water, it is being done illegally and not within the control of the Applicant. The Division finds the Applicant has complied the applicable Rules 3.1.6(1)(a) and 6.3.3, and C.R.S. § 34-32-112.5.

# b. Affects to Water Quality of Left Hand Creek (LHDC, Daspit, Leland and Strand)

The Gold Hill Mill will contain all water used during the milling process and will not discharge any water to Left Hand Creek. Water contained within the tailings material will evaporate from the Tailings Storage Facility (TSF). The TSF will be recertified prior to any milling taking place at the site. The pipeline leading from the creek to mill will be constructed with equipment to prevent any backflow from occurring to creek.

The Applicant will be collecting quarterly surface water samples from Left Hand Creek as part of the Groundwater and Surface Water Sampling and Analysis Plan for the site. The monitoring plan includes quarterly samples collected from five (5) groundwater monitoring wells, the Times-Wynona shaft, and TSF. The Applicant has provided a plan protective of Left Hand Creek and a monitoring plan that will allow the Applicant and the Division to verify the effectiveness of the plan. The Division finds the Applicant has complied the applicable Rules 3.1.6, 3.1.7, 6.3.3 and 6.4.21(10) and C.R.S. § 34-32-112.5.

## c. Removal of Pipeline Materials and Pumphouse Location (Fortunato and Skarstad)

The Applicant proposes to remove the relic pipeline materials during construction of the new pipeline. The conversion application states that at the end of milling operations all pipeline and pumphouse materials will be removed in accordance with the Reclamation Plan. The pumphouse and fuel tanks are proposed to be located outside of the 500-year floodplain. The location of the proposed pipeline from pumphouse will be located on land owned by the U.S. Forest Service (USFS). Prior to any construction occurring on USFS land, the Applicant would first need to obtain a Plan of Operations and approval from the USFS. The Division finds the Applicant has complied the applicable Rules 6.3.3 and 6.3.4.

## 2. Gold Hill Mill Site

## a. Impacts to Groundwater Quality (Strand)

The EPP has been designed to minimize the impacts to the hydrologic balance of the groundwater system. A thorough groundwater monitoring plan has been designed to verify the effectiveness of the EPP. In the application, the Applicant has committed to sampling five (5) groundwater monitoring wells at the site, which includes one point-of-compliance well. These wells along with

the TSF, Times-Wynona Shaft, and Left Hand Creek will be sampled on quarterly basis. Sampling reports containing the results of the collected samples will be submitted a month following the end of the previous quarter. The Groundwater and Surface Water Sampling and Analysis Plan (SAP) has an expanded number of locations to be sampled along with an expanded analyte suite to aid in comparison of data. Groundwater samples will be compared to the standards contained in WQCD Regulation 41 - The Basic Standards for Ground Water. The plan will allow for a comparison of the existing mine pool water quality to the surrounding wells. The SAP includes a quality control and quality assurance protocol according to current industry standards. The SAP is an improvement over the currently approved monitoring plan contained in the 110(2) Permit. If data gaps are identified during the monitoring process, the Division would require that the SAP be updated to adequately address any gaps. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 C.R.S. § 34-32-116.

## b. Hydrologic Impacts to the Town of Gold Hill (Strand)

The Mill site is located on Boulder Creek Granodiorite which is characterized to be massive to gneissic. Groundwater flow within the granodiorite is controlled by localized fracturing, joints and voids. In general, these flow paths decreases with depth. Between the mill and the Town of Gold Hill is the Hoosier Reef. The Reef is a mapped structure that is 10 to 80 feet wide and extends over 1,000 feet deep and is composed of silicified breccia that is barrier to groundwater flow. The Reef runs southeast to northwest. Fractures around the site also trend southeast to northwest but meet the Hoosier Reef towards the Town of Gold Hill thus preventing groundwater flow from the site reaching the town. A comparison of groundwater elevations at the site to available groundwater level data in the town indicates there is a significant difference in overall water elevations indicating the mill site and town are separated and the water levels are reflective of localized fractured flow. An additional indication of the relative impermeability of the granodiorite is the difference in the Times-Wynona Shaft water level relative to the surround groundwater monitoring wells. The mine pool water elevation is typically higher than the surrounding monitoring wells, an indication of the lack of interconnectedness within the granodiorite. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 and C.R.S. § 34-32-116.

## c. Stability of Tailings Storage Facility (Strand and Skarstad)

The Applicant has committed to a recertification schedule to determine the condition of the Tailings Storage Facility (TSF). If the TSF can be recertified, a schedule for the completion of the recertification activities will be submitted through a Technical Revision pursuant to Rule 6.4.21(15). If it is determined the TSF cannot be recertified, a schedule for reclamation will be submitted through a Technical Revision according to the approved reclamation plan. Recertification of the TSF is a requirement of Rule 7.3.2. The recertification process provides a framework to insure the TSF has suitable capacity to prevent a release of materials from a design storm event plus operational material volumes during worst case conditions. Additionally, the recertification process will verify stability of the TSF embankments meet the minimum requirements for stability in accordance with Mined Land Reclamation Board Policy 30 for Factors of Safety for Slope Stability/Geotechnical Analyses and Rule 6.5. At a minimum, no milling activities may take place until the TSF is recertified. If the TSF is reclaimed, no milling activities may take place until an alternative tailings disposal method is approved by the Division. In order to gain Division approval of the recertification of the TSF, the Applicant must comply with Rules 6.3, 6.4.21, 6.5 and 7.4.

## d. Chemical Management and Storage (Skarstad)

At this time there are designated chemicals awaiting EPA approval for proper disposal at a certified disposal facility. The chemicals were identified during the pre-operation inspection in October 2023. The chemicals are being stored inside the mill building, protected from the weather and within secondary containment, until the EPA provides the proper documentation allowing for proper disposal of the chemicals. Following proper disposal, and prior to any designated chemicals being handled or stored at the site, the Applicant must submit and get Division approval, through individual Technical Revisions, for the following Environmental Protection Facilities (EPF); Mill Facility, Reagent Storage Facility, Tailings Delivery Line, Tailings Storage Facility (mentioned above) and the Surface Ore Stockpile Facility. Each Technical Revision for the individual EPFs will be reviewed by the Division and must meet the applicable requirement of Rules 6.4.21, 6.5, 7.3, and 7.4. The EPF's will not be considered certified for operations until all applicable QA/QC documentation and certified as-builts have been submitted and accepted by the Division. No milling may take place until all EPFs are accepted by the Division.

The application conversion includes a Materials Containment Plan and a Spill Prevention, Control and Countermeasure (SPCC) Plan for the site. The SPCC Plan will provide measures for properly storing and handling petroleum products and responding to, and reporting, spills. Normally, the SPCC Plan covers only petroleum-based chemicals but the SPCC Plan contained within the conversion application for this site includes inspection and reporting requirements for the chemicals stored at the processing facility. The Material Containment Plan will provide guidance for the storage, use, cleanup, training, and reporting associated with the use of mill chemicals on site. The SPCC Plan also addresses response actions in the event of a site emergency. Additionally, the Applicant provided an Emergency Response Plan (ERP) as required by Rules 6.4.21 and 8.3. The ERP describes procedures that are intended to be followed during an emergency situation at the Gold Hill Mill. These plans will be reviewed and updated as needed once all the EPF's have been accepted by the Division.

All chemicals used at the site will be stored according to manufactures specifications and MSDS guidance. Transportation of chemicals to and from the mill will be completed by a licensed supplier following, at a minimum, the appropriate regulations set by the Department of Transportation, OSHA, and Boulder County.

No milling activities may occur at the site until all the EPF's have been accepted and approved by DRMS. Upon Division approval the Applicant will have complied with Rules 6.4.21, 6.5, 7.3, 7.4 and 8.3.

## e. Wildlife Issues (Skarstad)

Concerns the TSF would be used by birds. During the comment period the Division received a comment letter from the Colorado Parks and Wildlife (CPW). In the letter, CPW did not express any concerns the site will have a significant effect to local wildlife. The Applicant followed up again with CPW to verify this statement in April 2023 and CPW reiterated there were minimal biological concerns. Currently there is fence around the TSF that prevents large wildlife from coming into contact with tailings material. Recertification of the TSF will also evaluate the need for additional or improved measures to prevent wildlife exposure to tailings. The Division finds the Applicant has complied with required by Rules 6.3.2(d) and 6.4.21(18).

# 3. Non-Jurisdictional Items

In these proceedings, the Division's jurisdiction is limited to enforcement of the specific requirements of the Act and Rules. While other issues are recognized as important, the Division does not have the authority to address them. The Division considers all timely submitted objections and comments in its review but can address only the issues that directly relate to the specific requirements of an application as stated in the Act and Rules.

# a. Concerns regarding aesthetic impact and quality of life.

The Act and Rules do not specifically address impacts to visually appealing landscapes, aesthetics, hours and/or days of operation, noise pollution and impacts to the viewshed, and quality of life. Such issues are typically addressed at the local government level and not at the State government level. These issues should be addressed through Boulder County.

# b. Concerns regarding dust and air pollution. (Lloyd, Muhler, Gould)

The Act and Rules do not specifically address air quality issues. Such issues are under the jurisdiction of Boulder County and the Air Pollution Control Division (APCD) of the Colorado Department of Public Health and Environment (CDPHE). The Applicant has affirmatively stated in Exhibit F of the CN1 application that an Air Pollution Permit will be obtained prior to operations.

## 4. List of Commitments Required for the Gold Hill Mill

During review of the CN1 the Applicant has committed to the following items prior to initiating milling activities at the site:

- 1. No milling may take place until all EPFs are accepted by the Division. Each EPF will require a Technical Revision application for the Division's review. Included in this item is also the required recertification, or reclamation, of the Tailings Storage Facility.
- 2. The Applicant has committed to submitting a Technical Revision, in TR-11, to address how the pumped water, estimated to be 370,000 gallons, will be removed and managed from the Times-Wynona Mine to drop the water below the top of the Wynona Winze. No milling will occur until either the new bulkhead (which would be permitted pursuant to TR11) is installed or the dewatering plan has taken place.

- 3. Provide copies of the approved Plans of Operations from the Bureau of Land Management (BLM) and USFS prior to initiating activities on land managed by these entities. From the BLM in 2013, "that initiation of mining or milling operations cannot occur until BLM has completed the NEPA process, approved a Plan of Operations for these activities and terminated this suspension order."
- 4. The Applicant must provide suitable documentation from Boulder County allowing milling to occur at the site. It is noted that the Applicant still has to get any and all required building and utility permits to be in compliance with County regulations.
- 5. The Applicant shall at least 60 days prior to the start of operations, obtain a grab sample from the Times-Wynona Mine pool and have it analyzed and have the results provided to the Division. The results of the sample will be compared to results from the surrounding monitoring wells. It should be noted the mine pool is going to be monitored on a quarterly basis, along with the monitoring wells for comparison, as part of the site groundwater and surface water monitoring program.
- 6. The Applicant shall provide DRMS notification prior to accepting off-site material for processing. At a minimum the Division expects the notification to come in letter form that identifies the mine location, permit number, permittee providing the material, the results of the SPLP and ABA testing, and quantity of material.
- 7. The Applicant shall submit a Technical Revision to the Division for consideration of an offsite disposal/storage location of tailings material where the specific details can be reviewed.

## Conclusion

After conducting a thorough technical review of the application, as outlined in part in the discussion above, on February 7, 2024, the Division determined the amendment application satisfied the requirements of the Act and Rules, and specifically C.R.S. § 34-32-112.5, and issued its decision to approve the Hard Rock 110d conversion application for the Gold Hill Mill (CN1), File No. M-1994-117.



February 7, 2024

Robert De Haas Pine Brook Water District 1903 Linden Dr Boulder, CO 80304

## Re: Decision to Approve a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

Dear Party and/or Interested Person:

The Division of Reclamation, Mining and Safety (Division/DRMS) hereby issues its decision to approve the Colorado Milling Company, LLC. 110d conversion application (CN1) for the Gold Hill Mill, File No. M-1994-117.

The Division's decision to approve is based upon the conversion application meeting the requirements of the Colorado Mined Land Reclamation Act (C.R.S. § 34-32-101, *et seq*). A copy of the Division's rationale for its decision to approve is enclosed for your review.

Pursuant to Rule 1.4.11(1)(b), the Division's decision to approve may be appealed within thirty (30) days of the decision date.

If you need additional information or have any questions, please contact me by telephone at **303-866-3567 x8114**, or by email at <u>patrick.lennberg@state.co.us</u>.

Sincerely,

Patrick Lennberg Environmental Protection Specialist

Enclosure: Rationale for Approval

ec: Robert De Haas, <u>contact@pinebrookwater.com</u> Russ Means; DRMS Jared Ebert; DRMS Scott Schultz; Esq., AGO for Division of Reclamation, Mining and Safety



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## b. Hydrologic Impacts to the Town of Gold Hill (Strand)

The Mill site is located on Boulder Creek Granodiorite which is characterized to be massive to gneissic. Groundwater flow within the granodiorite is controlled by localized fracturing, joints and voids. In general, these flow paths decreases with depth. Between the mill and the Town of Gold Hill is the Hoosier Reef. The Reef is a mapped structure that is 10 to 80 feet wide and extends over 1,000 feet deep and is composed of silicified breccia that is barrier to groundwater flow. The Reef runs southeast to northwest. Fractures around the site also trend southeast to northwest but meet the Hoosier Reef towards the Town of Gold Hill thus preventing groundwater flow from the site reaching the town. A comparison of groundwater elevations at the site to available groundwater level data in the town indicates there is a significant difference in overall water elevations indicating the mill site and town are separated and the water levels are reflective of localized fractured flow. An additional indication of the relative impermeability of the granodiorite is the difference in the Times-Wynona Shaft water level relative to the surround groundwater monitoring wells. The mine pool water elevation is typically higher than the surrounding monitoring wells, an indication of the lack of interconnectedness within the granodiorite. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 and C.R.S. § 34-32-116.

## c. Stability of Tailings Storage Facility (Strand and Skarstad)

The Applicant has committed to a recertification schedule to determine the condition of the Tailings Storage Facility (TSF). If the TSF can be recertified, a schedule for the completion of the recertification activities will be submitted through a Technical Revision pursuant to Rule 6.4.21(15). If it is determined the TSF cannot be recertified, a schedule for reclamation will be submitted through a Technical Revision according to the approved reclamation plan. Recertification of the TSF is a requirement of Rule 7.3.2. The recertification process provides a framework to insure the TSF has suitable capacity to prevent a release of materials from a design storm event plus operational material volumes during worst case conditions. Additionally, the recertification process will verify stability of the TSF embankments meet the minimum requirements for stability in accordance with Mined Land Reclamation Board Policy 30 for Factors of Safety for Slope Stability/Geotechnical Analyses and Rule 6.5. At a minimum, no milling activities may take place until the TSF is recertified. If the TSF is reclaimed, no milling activities may take place until an alternative tailings disposal method is approved by the Division. In order to gain Division approval of the recertification of the TSF, the Applicant must comply with Rules 6.3, 6.4.21, 6.5 and 7.4.

## d. Chemical Management and Storage (Skarstad)

At this time there are designated chemicals awaiting EPA approval for proper disposal at a certified disposal facility. The chemicals were identified during the pre-operation inspection in October 2023. The chemicals are being stored inside the mill building, protected from the weather and within secondary containment, until the EPA provides the proper documentation allowing for proper disposal of the chemicals. Following proper disposal, and prior to any designated chemicals being handled or stored at the site, the Applicant must submit and get Division approval, through individual Technical Revisions, for the following Environmental Protection Facilities (EPF); Mill Facility, Reagent Storage Facility, Tailings Delivery Line, Tailings Storage Facility (mentioned above) and the Surface Ore Stockpile Facility. Each Technical Revision for the individual EPFs will be reviewed by the Division and must meet the applicable requirement of Rules 6.4.21, 6.5, 7.3, and 7.4. The EPF's will not be considered certified for operations until all applicable QA/QC documentation and certified as-builts have been submitted and accepted by the Division. No milling may take place until all EPFs are accepted by the Division.

The application conversion includes a Materials Containment Plan and a Spill Prevention, Control and Countermeasure (SPCC) Plan for the site. The SPCC Plan will provide measures for properly storing and handling petroleum products and responding to, and reporting, spills. Normally, the SPCC Plan covers only petroleum-based chemicals but the SPCC Plan contained within the conversion application for this site includes inspection and reporting requirements for the chemicals stored at the processing facility. The Material Containment Plan will provide guidance for the storage, use, cleanup, training, and reporting associated with the use of mill chemicals on site. The SPCC Plan also addresses response actions in the event of a site emergency. Additionally, the Applicant provided an Emergency Response Plan (ERP) as required by Rules 6.4.21 and 8.3. The ERP describes procedures that are intended to be followed during an emergency situation at the Gold Hill Mill. These plans will be reviewed and updated as needed once all the EPF's have been accepted by the Division.

All chemicals used at the site will be stored according to manufactures specifications and MSDS guidance. Transportation of chemicals to and from the mill will be completed by a licensed supplier following, at a minimum, the appropriate regulations set by the Department of Transportation, OSHA, and Boulder County.

No milling activities may occur at the site until all the EPF's have been accepted and approved by DRMS. Upon Division approval the Applicant will have complied with Rules 6.4.21, 6.5, 7.3, 7.4 and 8.3.

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Concerns the TSF would be used by birds. During the comment period the Division received a comment letter from the Colorado Parks and Wildlife (CPW). In the letter, CPW did not express any concerns the site will have a significant effect to local wildlife. The Applicant followed up again with CPW to verify this statement in April 2023 and CPW reiterated there were minimal biological concerns. Currently there is fence around the TSF that prevents large wildlife from coming into contact with tailings material. Recertification of the TSF will also evaluate the need for additional or improved measures to prevent wildlife exposure to tailings. The Division finds the Applicant has complied with required by Rules 6.3.2(d) and 6.4.21(18).

## 3. Non-Jurisdictional Items

In these proceedings, the Division's jurisdiction is limited to enforcement of the specific requirements of the Act and Rules. While other issues are recognized as important, the Division does not have the authority to address them. The Division considers all timely submitted objections and comments in its review but can address only the issues that directly relate to the specific requirements of an application as stated in the Act and Rules.

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The Act and Rules do not specifically address air quality issues. Such issues are under the jurisdiction of Boulder County and the Air Pollution Control Division (APCD) of the Colorado Department of Public Health and Environment (CDPHE). The Applicant has affirmatively stated in Exhibit F of the CN1 application that an Air Pollution Permit will be obtained prior to operations.

## 4. List of Commitments Required for the Gold Hill Mill

During review of the CN1 the Applicant has committed to the following items prior to initiating milling activities at the site:

- 1. No milling may take place until all EPFs are accepted by the Division. Each EPF will require a Technical Revision application for the Division's review. Included in this item is also the required recertification, or reclamation, of the Tailings Storage Facility.
- 2. The Applicant has committed to submitting a Technical Revision, in TR-11, to address how the pumped water, estimated to be 370,000 gallons, will be removed and managed from the Times-Wynona Mine to drop the water below the top of the Wynona Winze. No milling will occur until either the new bulkhead (which would be permitted pursuant to TR11) is installed or the dewatering plan has taken place.

- 3. Provide copies of the approved Plans of Operations from the Bureau of Land Management (BLM) and USFS prior to initiating activities on land managed by these entities. From the BLM in 2013, "that initiation of mining or milling operations cannot occur until BLM has completed the NEPA process, approved a Plan of Operations for these activities and terminated this suspension order."
- 4. The Applicant must provide suitable documentation from Boulder County allowing milling to occur at the site. It is noted that the Applicant still has to get any and all required building and utility permits to be in compliance with County regulations.
- 5. The Applicant shall at least 60 days prior to the start of operations, obtain a grab sample from the Times-Wynona Mine pool and have it analyzed and have the results provided to the Division. The results of the sample will be compared to results from the surrounding monitoring wells. It should be noted the mine pool is going to be monitored on a quarterly basis, along with the monitoring wells for comparison, as part of the site groundwater and surface water monitoring program.
- 6. The Applicant shall provide DRMS notification prior to accepting off-site material for processing. At a minimum the Division expects the notification to come in letter form that identifies the mine location, permit number, permittee providing the material, the results of the SPLP and ABA testing, and quantity of material.
- 7. The Applicant shall submit a Technical Revision to the Division for consideration of an offsite disposal/storage location of tailings material where the specific details can be reviewed.

## Conclusion

After conducting a thorough technical review of the application, as outlined in part in the discussion above, on February 7, 2024, the Division determined the amendment application satisfied the requirements of the Act and Rules, and specifically C.R.S. § 34-32-112.5, and issued its decision to approve the Hard Rock 110d conversion application for the Gold Hill Mill (CN1), File No. M-1994-117.



February 7, 2024

Pam Leland Lefthand Canyon Residents 8350 Left Hand Canyon Jamestown, CO 80455

## Re: Decision to Approve a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

Dear Party and/or Interested Person:

The Division of Reclamation, Mining and Safety (Division/DRMS) hereby issues its decision to approve the Colorado Milling Company, LLC. 110d conversion application (CN1) for the Gold Hill Mill, File No. M-1994-117.

The Division's decision to approve is based upon the conversion application meeting the requirements of the Colorado Mined Land Reclamation Act (C.R.S. § 34-32-101, *et seq*). A copy of the Division's rationale for its decision to approve is enclosed for your review.

Pursuant to Rule 1.4.11(1)(b), the Division's decision to approve may be appealed within thirty (30) days of the decision date.

If you need additional information or have any questions, please contact me by telephone at **303-866-3567 x8114**, or by email at <u>patrick.lennberg@state.co.us</u>.

Sincerely,

Patrick Lennberg Environmental Protection Specialist

Enclosure: Rationale for Approval

ec: Pam Leland, <u>zydecopam@gmail.com</u> Russ Means; DRMS Jared Ebert; DRMS Scott Schultz; Esq., AGO for Division of Reclamation, Mining and Safety



Enclosure



February 7, 2024

# Re: Rationale for Decision for Approval of a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

## Introduction

On February 7, 2024, the Division of Reclamation, Mining and Safety (Division/Office/DRMS) issued its decision to approve the permit conversion application (CN1) for the Gold Hill Mill, File No. M-1994-117, over public objections. This rationale document is intended to explain the process by which the Division arrived at its decision for approval over public objection and respond to the issues raised by the objecting parties. The Division reserves the right to further supplement, amend, modify, or clarify this document and decision with additional details as necessary.<sup>1</sup>

#### Summary of the Review Process for the Conversion Application

Colorado Milling Company, LLC., (CMC/Applicant) submitted a 110d conversion application (CN1) on September 13, 2022. The conversion application was deemed complete for the purposes of filing and review on February 7, 2023.

The conversion application is required based on the potential storage and use of designated chemicals during the milling process and that process has the potential to produce acid or toxic chemicals. The site is located in Boulder County approximately 8.2 miles northwest of Boulder, CO. The current Application states that the site is to be a processing facility only. No subsurface development is proposed in the conversion application. The conversion application does not add any additional permit area and it will remain at 9.2 acres in size. The application seeks to convert the currently held 110(2) permit to a 110d permit in order to comply with the Act, Rules, and specifically address the requirements of a designated mining operation (DMO).

Approval of the conversion application does not allow milling activities to immediately begin. Instead, the operator's conversion application includes a stricter set of permit requirements as this operation is a DMO. The requirements of a DMO include, but are not limited to, the development of an Environmental Protection Plan (EPP). Including the EPP in the conversion application provides a rigorous framework for the protection of human health, property and, ensures impacts to the hydrologic balance are minimized. Part of the EPP permitting process is a facilities evaluation

<sup>&</sup>lt;sup>1</sup> Herein, all references to the Act and Rules refer to the Colorado Land Reclamation Act for Hard Rock, Metal, and Designated Mining Operations 34-32-101 *et seq.*, C.R.S. (the Act), and to the Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard Rock, Metal, and Designated Mining Operations (the Rules or Rule). Copy of the Act and Rules are available through the Division's web site at <u>https://drms.colorado.gov/.</u>



criteria that evaluates the expected effectiveness of each proposed and existing facility. Prior to initiating milling activities at the site, the permittee must obtain DRMS approval of subsequent revisions (more details below). The operator's conversion application is the first step of the process of bringing the operator and site into the required DMO regulatory framework. Prior to any milling being proposed, the existing mill facilities would need to be upgraded. Any proposed milling would require that all future Environmental Protection Facilities are permitted and certified prior to use. The operator's conversion application provides that the Mill and associated facilities must be permitted through the EPP process. The EPP's process includes strict requirements prior to the initiation of milling activities and allows the Division to better ensure the public and the environment are protected.

Pursuant to Section 34-32-110(6), Rule 1.6.2(1)(d) and Rule 1.6.3, the Applicant initially published the required public notice for the conversion application once on February 15, 2023. A review of that notice determined the notice did not contain all the required information pursuant to Rules 1.6.2(1)(d)(v) and (vi). The Applicant republished an updated public notice on February 17, 2023. The public comment period closed on February 27, 2023. The public notices were published in the Daily Camera, a publication in general circulation in the vicinity of the mine. During the public comment period, the Division received six (6) written objections and six (6) written comments from individuals and groups. The Division also received three (3) timely and one (1) untimely comment letter to the application, one letter of support and one withdrawal. The withdrawal was from Mark Schueneman whose concerns were to be addressed through The Watershed Center's comment letter. Below is a list of the objections and comments received.

Person or Entity	Date Objection Received
Amy Fortunato	February 25, 2023
Clark Edwards, Left Hand Ditch Company (LHDC)	February 24, 2023
John Daspit	February 15, 2023
Norman Skarstad	February 24, 2023
Pam Leland, Left Hand Canyon Residences	February 27, 2023
Stephen Strand	February 26, 2023

## **Timely Letters of Objection:**

## **Timely Comment Letters:**

Person or Entity	Date Objection Received
Brenden Besetzny/Barbara Sheedlo, Boulder Flycasters-St. Vrain Anglers	February 24, 2023
Deb Hummel, The Watershed Center	February 27, 2023
Gold Hill Fire Protection District	February 26, 2023
Marcus Moench, Town of Gold Hill	February 27, 2023

Maya MacHamer, Boulder Watershed Collective	February 27, 2023
Robert De Haas, Pine Brook Water District	February 8, 2023

#### **Timely Commenting Agency:**

Agency	Date Comment Received
History Colorado	February 17, 2023
Division of Water Resources	February 15, 2023
Boulder County	February 24, 2023

#### **Untimely Comment Letters:**

Person or Agency	Date Comment Received
Bret Gibson, Four Mile Fire Protection District	February 28, 2023
Colorado Parks and Wildlife	March 7, 2023

#### Letter of Support:

Person or Agency	Date Comment Received
Rene Murphy	February 25, 2023

The Division forwarded copies of the objections and comments to the Applicant.

During the review period the Division generated four (4) adequacy letters. The Applicant addressed all adequacy issues to the Division's satisfaction. Therefore, on February 7, 2024, the Division determined the conversion application CN1 satisfied the requirements of C.R.S. § 34-32-115(4) and issued its decision to approve the operator's conversion application over objections.

#### **Issues Raised by the Objecting Parties**

The timely objections received by the Division have been categorized as issues pertaining to hydrologic impacts to Left Hand Creek, relic water pipeline, pumphouse construction, impacts to the hydrologic balance at the mill, Tailings Storage Facility and non-jurisdictional issues. The issues raised by the objecting parties are represented by italic bold font. The last names of the objecting parties who raised the issue are listed after the issue. The Division's response follows in standard font.

#### 1. Hydrologic Impacts to Left Hand Creek

a. Water Consumption from Left Hand Creek (LHDC, Daspit, Leland and Strand)

The Applicant provided copies of the Water Court Decree No. 85CW117. In the decree, and from comments provided by the Division of Water Resources, the Applicant is entitled to divert a minimum of 10.4 acre-feet a year from Left Hand Creek and store the water underground for use at the mill site. The Applicant will measure the amount of water divert using a continuous recording measuring device. Water will only be removed from creek between April 1 and October 31 as water is available. The decree contained a dry covenant, the Applicant has stated that irrigation activities ceased when the water right was established. If irrigation of the land is taking place using creek water, it is being done illegally and not within the control of the Applicant. The Division finds the Applicant has complied the applicable Rules 3.1.6(1)(a) and 6.3.3, and C.R.S. § 34-32-112.5.

# b. Affects to Water Quality of Left Hand Creek (LHDC, Daspit, Leland and Strand)

The Gold Hill Mill will contain all water used during the milling process and will not discharge any water to Left Hand Creek. Water contained within the tailings material will evaporate from the Tailings Storage Facility (TSF). The TSF will be recertified prior to any milling taking place at the site. The pipeline leading from the creek to mill will be constructed with equipment to prevent any backflow from occurring to creek.

The Applicant will be collecting quarterly surface water samples from Left Hand Creek as part of the Groundwater and Surface Water Sampling and Analysis Plan for the site. The monitoring plan includes quarterly samples collected from five (5) groundwater monitoring wells, the Times-Wynona shaft, and TSF. The Applicant has provided a plan protective of Left Hand Creek and a monitoring plan that will allow the Applicant and the Division to verify the effectiveness of the plan. The Division finds the Applicant has complied the applicable Rules 3.1.6, 3.1.7, 6.3.3 and 6.4.21(10) and C.R.S. § 34-32-112.5.

## c. Removal of Pipeline Materials and Pumphouse Location (Fortunato and Skarstad)

The Applicant proposes to remove the relic pipeline materials during construction of the new pipeline. The conversion application states that at the end of milling operations all pipeline and pumphouse materials will be removed in accordance with the Reclamation Plan. The pumphouse and fuel tanks are proposed to be located outside of the 500-year floodplain. The location of the proposed pipeline from pumphouse will be located on land owned by the U.S. Forest Service (USFS). Prior to any construction occurring on USFS land, the Applicant would first need to obtain a Plan of Operations and approval from the USFS. The Division finds the Applicant has complied the applicable Rules 6.3.3 and 6.3.4.

## 2. Gold Hill Mill Site

## a. Impacts to Groundwater Quality (Strand)

The EPP has been designed to minimize the impacts to the hydrologic balance of the groundwater system. A thorough groundwater monitoring plan has been designed to verify the effectiveness of the EPP. In the application, the Applicant has committed to sampling five (5) groundwater monitoring wells at the site, which includes one point-of-compliance well. These wells along with

the TSF, Times-Wynona Shaft, and Left Hand Creek will be sampled on quarterly basis. Sampling reports containing the results of the collected samples will be submitted a month following the end of the previous quarter. The Groundwater and Surface Water Sampling and Analysis Plan (SAP) has an expanded number of locations to be sampled along with an expanded analyte suite to aid in comparison of data. Groundwater samples will be compared to the standards contained in WQCD Regulation 41 - The Basic Standards for Ground Water. The plan will allow for a comparison of the existing mine pool water quality to the surrounding wells. The SAP includes a quality control and quality assurance protocol according to current industry standards. The SAP is an improvement over the currently approved monitoring plan contained in the 110(2) Permit. If data gaps are identified during the monitoring process, the Division would require that the SAP be updated to adequately address any gaps. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 C.R.S. § 34-32-116.

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The Mill site is located on Boulder Creek Granodiorite which is characterized to be massive to gneissic. Groundwater flow within the granodiorite is controlled by localized fracturing, joints and voids. In general, these flow paths decreases with depth. Between the mill and the Town of Gold Hill is the Hoosier Reef. The Reef is a mapped structure that is 10 to 80 feet wide and extends over 1,000 feet deep and is composed of silicified breccia that is barrier to groundwater flow. The Reef runs southeast to northwest. Fractures around the site also trend southeast to northwest but meet the Hoosier Reef towards the Town of Gold Hill thus preventing groundwater flow from the site reaching the town. A comparison of groundwater elevations at the site to available groundwater level data in the town indicates there is a significant difference in overall water elevations indicating the mill site and town are separated and the water levels are reflective of localized fractured flow. An additional indication of the relative impermeability of the granodiorite is the difference in the Times-Wynona Shaft water level relative to the surround groundwater monitoring wells. The mine pool water elevation is typically higher than the surrounding monitoring wells, an indication of the lack of interconnectedness within the granodiorite. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 and C.R.S. § 34-32-116.

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## Conclusion

After conducting a thorough technical review of the application, as outlined in part in the discussion above, on February 7, 2024, the Division determined the amendment application satisfied the requirements of the Act and Rules, and specifically C.R.S. § 34-32-112.5, and issued its decision to approve the Hard Rock 110d conversion application for the Gold Hill Mill (CN1), File No. M-1994-117.



February 7, 2024

Richard Lopez Gold Hill Fire Protection District 1011 Main St Boulder, CO 80302

## Re: Decision to Approve a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

Dear Party and/or Interested Person:

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Sincerely,

Patrick Lennberg Environmental Protection Specialist

Enclosure: Rationale for Approval

ec: Richard Lopez, <u>lopezlawofficeco@gmail.com</u> Russ Means; DRMS Jared Ebert; DRMS Scott Schultz; Esq., AGO for Division of Reclamation, Mining and Safety



Enclosure



February 7, 2024

# Re: Rationale for Decision for Approval of a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

## Introduction

On February 7, 2024, the Division of Reclamation, Mining and Safety (Division/Office/DRMS) issued its decision to approve the permit conversion application (CN1) for the Gold Hill Mill, File No. M-1994-117, over public objections. This rationale document is intended to explain the process by which the Division arrived at its decision for approval over public objection and respond to the issues raised by the objecting parties. The Division reserves the right to further supplement, amend, modify, or clarify this document and decision with additional details as necessary.<sup>1</sup>

#### Summary of the Review Process for the Conversion Application

Colorado Milling Company, LLC., (CMC/Applicant) submitted a 110d conversion application (CN1) on September 13, 2022. The conversion application was deemed complete for the purposes of filing and review on February 7, 2023.

The conversion application is required based on the potential storage and use of designated chemicals during the milling process and that process has the potential to produce acid or toxic chemicals. The site is located in Boulder County approximately 8.2 miles northwest of Boulder, CO. The current Application states that the site is to be a processing facility only. No subsurface development is proposed in the conversion application. The conversion application does not add any additional permit area and it will remain at 9.2 acres in size. The application seeks to convert the currently held 110(2) permit to a 110d permit in order to comply with the Act, Rules, and specifically address the requirements of a designated mining operation (DMO).

Approval of the conversion application does not allow milling activities to immediately begin. Instead, the operator's conversion application includes a stricter set of permit requirements as this operation is a DMO. The requirements of a DMO include, but are not limited to, the development of an Environmental Protection Plan (EPP). Including the EPP in the conversion application provides a rigorous framework for the protection of human health, property and, ensures impacts to the hydrologic balance are minimized. Part of the EPP permitting process is a facilities evaluation

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criteria that evaluates the expected effectiveness of each proposed and existing facility. Prior to initiating milling activities at the site, the permittee must obtain DRMS approval of subsequent revisions (more details below). The operator's conversion application is the first step of the process of bringing the operator and site into the required DMO regulatory framework. Prior to any milling being proposed, the existing mill facilities would need to be upgraded. Any proposed milling would require that all future Environmental Protection Facilities are permitted and certified prior to use. The operator's conversion application provides that the Mill and associated facilities must be permitted through the EPP process. The EPP's process includes strict requirements prior to the initiation of milling activities and allows the Division to better ensure the public and the environment are protected.

Pursuant to Section 34-32-110(6), Rule 1.6.2(1)(d) and Rule 1.6.3, the Applicant initially published the required public notice for the conversion application once on February 15, 2023. A review of that notice determined the notice did not contain all the required information pursuant to Rules 1.6.2(1)(d)(v) and (vi). The Applicant republished an updated public notice on February 17, 2023. The public comment period closed on February 27, 2023. The public notices were published in the Daily Camera, a publication in general circulation in the vicinity of the mine. During the public comment period, the Division received six (6) written objections and six (6) written comments from individuals and groups. The Division also received three (3) timely and one (1) untimely comment letter to the application, one letter of support and one withdrawal. The withdrawal was from Mark Schueneman whose concerns were to be addressed through The Watershed Center's comment letter. Below is a list of the objections and comments received.

Person or Entity	Date Objection Received
Amy Fortunato	February 25, 2023
Clark Edwards, Left Hand Ditch Company (LHDC)	February 24, 2023
John Daspit	February 15, 2023
Norman Skarstad	February 24, 2023
Pam Leland, Left Hand Canyon Residences	February 27, 2023
Stephen Strand	February 26, 2023

## **Timely Letters of Objection:**

## **Timely Comment Letters:**

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#### Letter of Support:

Person or Agency	Date Comment Received
Rene Murphy	February 25, 2023

The Division forwarded copies of the objections and comments to the Applicant.

During the review period the Division generated four (4) adequacy letters. The Applicant addressed all adequacy issues to the Division's satisfaction. Therefore, on February 7, 2024, the Division determined the conversion application CN1 satisfied the requirements of C.R.S. § 34-32-115(4) and issued its decision to approve the operator's conversion application over objections.

#### **Issues Raised by the Objecting Parties**

The timely objections received by the Division have been categorized as issues pertaining to hydrologic impacts to Left Hand Creek, relic water pipeline, pumphouse construction, impacts to the hydrologic balance at the mill, Tailings Storage Facility and non-jurisdictional issues. The issues raised by the objecting parties are represented by italic bold font. The last names of the objecting parties who raised the issue are listed after the issue. The Division's response follows in standard font.

#### 1. Hydrologic Impacts to Left Hand Creek

a. Water Consumption from Left Hand Creek (LHDC, Daspit, Leland and Strand)

The Applicant provided copies of the Water Court Decree No. 85CW117. In the decree, and from comments provided by the Division of Water Resources, the Applicant is entitled to divert a minimum of 10.4 acre-feet a year from Left Hand Creek and store the water underground for use at the mill site. The Applicant will measure the amount of water divert using a continuous recording measuring device. Water will only be removed from creek between April 1 and October 31 as water is available. The decree contained a dry covenant, the Applicant has stated that irrigation activities ceased when the water right was established. If irrigation of the land is taking place using creek water, it is being done illegally and not within the control of the Applicant. The Division finds the Applicant has complied the applicable Rules 3.1.6(1)(a) and 6.3.3, and C.R.S. § 34-32-112.5.

# b. Affects to Water Quality of Left Hand Creek (LHDC, Daspit, Leland and Strand)

The Gold Hill Mill will contain all water used during the milling process and will not discharge any water to Left Hand Creek. Water contained within the tailings material will evaporate from the Tailings Storage Facility (TSF). The TSF will be recertified prior to any milling taking place at the site. The pipeline leading from the creek to mill will be constructed with equipment to prevent any backflow from occurring to creek.

The Applicant will be collecting quarterly surface water samples from Left Hand Creek as part of the Groundwater and Surface Water Sampling and Analysis Plan for the site. The monitoring plan includes quarterly samples collected from five (5) groundwater monitoring wells, the Times-Wynona shaft, and TSF. The Applicant has provided a plan protective of Left Hand Creek and a monitoring plan that will allow the Applicant and the Division to verify the effectiveness of the plan. The Division finds the Applicant has complied the applicable Rules 3.1.6, 3.1.7, 6.3.3 and 6.4.21(10) and C.R.S. § 34-32-112.5.

## c. Removal of Pipeline Materials and Pumphouse Location (Fortunato and Skarstad)

The Applicant proposes to remove the relic pipeline materials during construction of the new pipeline. The conversion application states that at the end of milling operations all pipeline and pumphouse materials will be removed in accordance with the Reclamation Plan. The pumphouse and fuel tanks are proposed to be located outside of the 500-year floodplain. The location of the proposed pipeline from pumphouse will be located on land owned by the U.S. Forest Service (USFS). Prior to any construction occurring on USFS land, the Applicant would first need to obtain a Plan of Operations and approval from the USFS. The Division finds the Applicant has complied the applicable Rules 6.3.3 and 6.3.4.

## 2. Gold Hill Mill Site

## a. Impacts to Groundwater Quality (Strand)

The EPP has been designed to minimize the impacts to the hydrologic balance of the groundwater system. A thorough groundwater monitoring plan has been designed to verify the effectiveness of the EPP. In the application, the Applicant has committed to sampling five (5) groundwater monitoring wells at the site, which includes one point-of-compliance well. These wells along with

the TSF, Times-Wynona Shaft, and Left Hand Creek will be sampled on quarterly basis. Sampling reports containing the results of the collected samples will be submitted a month following the end of the previous quarter. The Groundwater and Surface Water Sampling and Analysis Plan (SAP) has an expanded number of locations to be sampled along with an expanded analyte suite to aid in comparison of data. Groundwater samples will be compared to the standards contained in WQCD Regulation 41 - The Basic Standards for Ground Water. The plan will allow for a comparison of the existing mine pool water quality to the surrounding wells. The SAP includes a quality control and quality assurance protocol according to current industry standards. The SAP is an improvement over the currently approved monitoring plan contained in the 110(2) Permit. If data gaps are identified during the monitoring process, the Division would require that the SAP be updated to adequately address any gaps. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 C.R.S. § 34-32-116.

## b. Hydrologic Impacts to the Town of Gold Hill (Strand)

The Mill site is located on Boulder Creek Granodiorite which is characterized to be massive to gneissic. Groundwater flow within the granodiorite is controlled by localized fracturing, joints and voids. In general, these flow paths decreases with depth. Between the mill and the Town of Gold Hill is the Hoosier Reef. The Reef is a mapped structure that is 10 to 80 feet wide and extends over 1,000 feet deep and is composed of silicified breccia that is barrier to groundwater flow. The Reef runs southeast to northwest. Fractures around the site also trend southeast to northwest but meet the Hoosier Reef towards the Town of Gold Hill thus preventing groundwater flow from the site reaching the town. A comparison of groundwater elevations at the site to available groundwater level data in the town indicates there is a significant difference in overall water elevations indicating the mill site and town are separated and the water levels are reflective of localized fractured flow. An additional indication of the relative impermeability of the granodiorite is the difference in the Times-Wynona Shaft water level relative to the surround groundwater monitoring wells. The mine pool water elevation is typically higher than the surrounding monitoring wells, an indication of the lack of interconnectedness within the granodiorite. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 and C.R.S. § 34-32-116.

## c. Stability of Tailings Storage Facility (Strand and Skarstad)

The Applicant has committed to a recertification schedule to determine the condition of the Tailings Storage Facility (TSF). If the TSF can be recertified, a schedule for the completion of the recertification activities will be submitted through a Technical Revision pursuant to Rule 6.4.21(15). If it is determined the TSF cannot be recertified, a schedule for reclamation will be submitted through a Technical Revision according to the approved reclamation plan. Recertification of the TSF is a requirement of Rule 7.3.2. The recertification process provides a framework to insure the TSF has suitable capacity to prevent a release of materials from a design storm event plus operational material volumes during worst case conditions. Additionally, the recertification process will verify stability of the TSF embankments meet the minimum requirements for stability in accordance with Mined Land Reclamation Board Policy 30 for Factors of Safety for Slope Stability/Geotechnical Analyses and Rule 6.5. At a minimum, no milling activities may take place until the TSF is recertified. If the TSF is reclaimed, no milling activities may take place until an alternative tailings disposal method is approved by the Division. In order to gain Division approval of the recertification of the TSF, the Applicant must comply with Rules 6.3, 6.4.21, 6.5 and 7.4.

## d. Chemical Management and Storage (Skarstad)

At this time there are designated chemicals awaiting EPA approval for proper disposal at a certified disposal facility. The chemicals were identified during the pre-operation inspection in October 2023. The chemicals are being stored inside the mill building, protected from the weather and within secondary containment, until the EPA provides the proper documentation allowing for proper disposal of the chemicals. Following proper disposal, and prior to any designated chemicals being handled or stored at the site, the Applicant must submit and get Division approval, through individual Technical Revisions, for the following Environmental Protection Facilities (EPF); Mill Facility, Reagent Storage Facility, Tailings Delivery Line, Tailings Storage Facility (mentioned above) and the Surface Ore Stockpile Facility. Each Technical Revision for the individual EPFs will be reviewed by the Division and must meet the applicable requirement of Rules 6.4.21, 6.5, 7.3, and 7.4. The EPF's will not be considered certified for operations until all applicable QA/QC documentation and certified as-builts have been submitted and accepted by the Division. No milling may take place until all EPFs are accepted by the Division.

The application conversion includes a Materials Containment Plan and a Spill Prevention, Control and Countermeasure (SPCC) Plan for the site. The SPCC Plan will provide measures for properly storing and handling petroleum products and responding to, and reporting, spills. Normally, the SPCC Plan covers only petroleum-based chemicals but the SPCC Plan contained within the conversion application for this site includes inspection and reporting requirements for the chemicals stored at the processing facility. The Material Containment Plan will provide guidance for the storage, use, cleanup, training, and reporting associated with the use of mill chemicals on site. The SPCC Plan also addresses response actions in the event of a site emergency. Additionally, the Applicant provided an Emergency Response Plan (ERP) as required by Rules 6.4.21 and 8.3. The ERP describes procedures that are intended to be followed during an emergency situation at the Gold Hill Mill. These plans will be reviewed and updated as needed once all the EPF's have been accepted by the Division.

All chemicals used at the site will be stored according to manufactures specifications and MSDS guidance. Transportation of chemicals to and from the mill will be completed by a licensed supplier following, at a minimum, the appropriate regulations set by the Department of Transportation, OSHA, and Boulder County.

No milling activities may occur at the site until all the EPF's have been accepted and approved by DRMS. Upon Division approval the Applicant will have complied with Rules 6.4.21, 6.5, 7.3, 7.4 and 8.3.

## e. Wildlife Issues (Skarstad)

Concerns the TSF would be used by birds. During the comment period the Division received a comment letter from the Colorado Parks and Wildlife (CPW). In the letter, CPW did not express any concerns the site will have a significant effect to local wildlife. The Applicant followed up again with CPW to verify this statement in April 2023 and CPW reiterated there were minimal biological concerns. Currently there is fence around the TSF that prevents large wildlife from coming into contact with tailings material. Recertification of the TSF will also evaluate the need for additional or improved measures to prevent wildlife exposure to tailings. The Division finds the Applicant has complied with required by Rules 6.3.2(d) and 6.4.21(18).

## 3. Non-Jurisdictional Items

In these proceedings, the Division's jurisdiction is limited to enforcement of the specific requirements of the Act and Rules. While other issues are recognized as important, the Division does not have the authority to address them. The Division considers all timely submitted objections and comments in its review but can address only the issues that directly relate to the specific requirements of an application as stated in the Act and Rules.

## a. Concerns regarding aesthetic impact and quality of life.

The Act and Rules do not specifically address impacts to visually appealing landscapes, aesthetics, hours and/or days of operation, noise pollution and impacts to the viewshed, and quality of life. Such issues are typically addressed at the local government level and not at the State government level. These issues should be addressed through Boulder County.

## b. Concerns regarding dust and air pollution. (Lloyd, Muhler, Gould)

The Act and Rules do not specifically address air quality issues. Such issues are under the jurisdiction of Boulder County and the Air Pollution Control Division (APCD) of the Colorado Department of Public Health and Environment (CDPHE). The Applicant has affirmatively stated in Exhibit F of the CN1 application that an Air Pollution Permit will be obtained prior to operations.

## 4. List of Commitments Required for the Gold Hill Mill

During review of the CN1 the Applicant has committed to the following items prior to initiating milling activities at the site:

- 1. No milling may take place until all EPFs are accepted by the Division. Each EPF will require a Technical Revision application for the Division's review. Included in this item is also the required recertification, or reclamation, of the Tailings Storage Facility.
- 2. The Applicant has committed to submitting a Technical Revision, in TR-11, to address how the pumped water, estimated to be 370,000 gallons, will be removed and managed from the Times-Wynona Mine to drop the water below the top of the Wynona Winze. No milling will occur until either the new bulkhead (which would be permitted pursuant to TR11) is installed or the dewatering plan has taken place.

- 3. Provide copies of the approved Plans of Operations from the Bureau of Land Management (BLM) and USFS prior to initiating activities on land managed by these entities. From the BLM in 2013, "that initiation of mining or milling operations cannot occur until BLM has completed the NEPA process, approved a Plan of Operations for these activities and terminated this suspension order."
- 4. The Applicant must provide suitable documentation from Boulder County allowing milling to occur at the site. It is noted that the Applicant still has to get any and all required building and utility permits to be in compliance with County regulations.
- 5. The Applicant shall at least 60 days prior to the start of operations, obtain a grab sample from the Times-Wynona Mine pool and have it analyzed and have the results provided to the Division. The results of the sample will be compared to results from the surrounding monitoring wells. It should be noted the mine pool is going to be monitored on a quarterly basis, along with the monitoring wells for comparison, as part of the site groundwater and surface water monitoring program.
- 6. The Applicant shall provide DRMS notification prior to accepting off-site material for processing. At a minimum the Division expects the notification to come in letter form that identifies the mine location, permit number, permittee providing the material, the results of the SPLP and ABA testing, and quantity of material.
- 7. The Applicant shall submit a Technical Revision to the Division for consideration of an offsite disposal/storage location of tailings material where the specific details can be reviewed.

## Conclusion

After conducting a thorough technical review of the application, as outlined in part in the discussion above, on February 7, 2024, the Division determined the amendment application satisfied the requirements of the Act and Rules, and specifically C.R.S. § 34-32-112.5, and issued its decision to approve the Hard Rock 110d conversion application for the Gold Hill Mill (CN1), File No. M-1994-117.



February 7, 2024

Rene Murphy 3914 Orchard Court Boulder, CO 80304

## Re: Decision to Approve a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

Dear Party and/or Interested Person:

The Division of Reclamation, Mining and Safety (Division/DRMS) hereby issues its decision to approve the Colorado Milling Company, LLC. 110d conversion application (CN1) for the Gold Hill Mill, File No. M-1994-117.

The Division's decision to approve is based upon the conversion application meeting the requirements of the Colorado Mined Land Reclamation Act (C.R.S. § 34-32-101, *et seq*). A copy of the Division's rationale for its decision to approve is enclosed for your review.

Pursuant to Rule 1.4.11(1)(b), the Division's decision to approve may be appealed within thirty (30) days of the decision date.

If you need additional information or have any questions, please contact me by telephone at **303-866-3567 x8114**, or by email at <u>patrick.lennberg@state.co.us</u>.

Sincerely,

Patrick Lennberg Environmental Protection Specialist

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ec: Rene Murphy, <u>rene.murphy@comcast.net</u> Russ Means; DRMS Jared Ebert; DRMS Scott Schultz; Esq., AGO for Division of Reclamation, Mining and Safety



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#### **Issues Raised by the Objecting Parties**

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## c. Removal of Pipeline Materials and Pumphouse Location (Fortunato and Skarstad)

The Applicant proposes to remove the relic pipeline materials during construction of the new pipeline. The conversion application states that at the end of milling operations all pipeline and pumphouse materials will be removed in accordance with the Reclamation Plan. The pumphouse and fuel tanks are proposed to be located outside of the 500-year floodplain. The location of the proposed pipeline from pumphouse will be located on land owned by the U.S. Forest Service (USFS). Prior to any construction occurring on USFS land, the Applicant would first need to obtain a Plan of Operations and approval from the USFS. The Division finds the Applicant has complied the applicable Rules 6.3.3 and 6.3.4.

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the TSF, Times-Wynona Shaft, and Left Hand Creek will be sampled on quarterly basis. Sampling reports containing the results of the collected samples will be submitted a month following the end of the previous quarter. The Groundwater and Surface Water Sampling and Analysis Plan (SAP) has an expanded number of locations to be sampled along with an expanded analyte suite to aid in comparison of data. Groundwater samples will be compared to the standards contained in WQCD Regulation 41 - The Basic Standards for Ground Water. The plan will allow for a comparison of the existing mine pool water quality to the surrounding wells. The SAP includes a quality control and quality assurance protocol according to current industry standards. The SAP is an improvement over the currently approved monitoring plan contained in the 110(2) Permit. If data gaps are identified during the monitoring process, the Division would require that the SAP be updated to adequately address any gaps. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 C.R.S. § 34-32-116.

## b. Hydrologic Impacts to the Town of Gold Hill (Strand)

The Mill site is located on Boulder Creek Granodiorite which is characterized to be massive to gneissic. Groundwater flow within the granodiorite is controlled by localized fracturing, joints and voids. In general, these flow paths decreases with depth. Between the mill and the Town of Gold Hill is the Hoosier Reef. The Reef is a mapped structure that is 10 to 80 feet wide and extends over 1,000 feet deep and is composed of silicified breccia that is barrier to groundwater flow. The Reef runs southeast to northwest. Fractures around the site also trend southeast to northwest but meet the Hoosier Reef towards the Town of Gold Hill thus preventing groundwater flow from the site reaching the town. A comparison of groundwater elevations at the site to available groundwater level data in the town indicates there is a significant difference in overall water elevations indicating the mill site and town are separated and the water levels are reflective of localized fractured flow. An additional indication of the relative impermeability of the granodiorite is the difference in the Times-Wynona Shaft water level relative to the surround groundwater monitoring wells. The mine pool water elevation is typically higher than the surrounding monitoring wells, an indication of the lack of interconnectedness within the granodiorite. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 and C.R.S. § 34-32-116.

## c. Stability of Tailings Storage Facility (Strand and Skarstad)

The Applicant has committed to a recertification schedule to determine the condition of the Tailings Storage Facility (TSF). If the TSF can be recertified, a schedule for the completion of the recertification activities will be submitted through a Technical Revision pursuant to Rule 6.4.21(15). If it is determined the TSF cannot be recertified, a schedule for reclamation will be submitted through a Technical Revision according to the approved reclamation plan. Recertification of the TSF is a requirement of Rule 7.3.2. The recertification process provides a framework to insure the TSF has suitable capacity to prevent a release of materials from a design storm event plus operational material volumes during worst case conditions. Additionally, the recertification process will verify stability of the TSF embankments meet the minimum requirements for stability in accordance with Mined Land Reclamation Board Policy 30 for Factors of Safety for Slope Stability/Geotechnical Analyses and Rule 6.5. At a minimum, no milling activities may take place until the TSF is recertified. If the TSF is reclaimed, no milling activities may take place until an alternative tailings disposal method is approved by the Division. In order to gain Division approval of the recertification of the TSF, the Applicant must comply with Rules 6.3, 6.4.21, 6.5 and 7.4.

## d. Chemical Management and Storage (Skarstad)

At this time there are designated chemicals awaiting EPA approval for proper disposal at a certified disposal facility. The chemicals were identified during the pre-operation inspection in October 2023. The chemicals are being stored inside the mill building, protected from the weather and within secondary containment, until the EPA provides the proper documentation allowing for proper disposal of the chemicals. Following proper disposal, and prior to any designated chemicals being handled or stored at the site, the Applicant must submit and get Division approval, through individual Technical Revisions, for the following Environmental Protection Facilities (EPF); Mill Facility, Reagent Storage Facility, Tailings Delivery Line, Tailings Storage Facility (mentioned above) and the Surface Ore Stockpile Facility. Each Technical Revision for the individual EPFs will be reviewed by the Division and must meet the applicable requirement of Rules 6.4.21, 6.5, 7.3, and 7.4. The EPF's will not be considered certified for operations until all applicable QA/QC documentation and certified as-builts have been submitted and accepted by the Division. No milling may take place until all EPFs are accepted by the Division.

The application conversion includes a Materials Containment Plan and a Spill Prevention, Control and Countermeasure (SPCC) Plan for the site. The SPCC Plan will provide measures for properly storing and handling petroleum products and responding to, and reporting, spills. Normally, the SPCC Plan covers only petroleum-based chemicals but the SPCC Plan contained within the conversion application for this site includes inspection and reporting requirements for the chemicals stored at the processing facility. The Material Containment Plan will provide guidance for the storage, use, cleanup, training, and reporting associated with the use of mill chemicals on site. The SPCC Plan also addresses response actions in the event of a site emergency. Additionally, the Applicant provided an Emergency Response Plan (ERP) as required by Rules 6.4.21 and 8.3. The ERP describes procedures that are intended to be followed during an emergency situation at the Gold Hill Mill. These plans will be reviewed and updated as needed once all the EPF's have been accepted by the Division.

All chemicals used at the site will be stored according to manufactures specifications and MSDS guidance. Transportation of chemicals to and from the mill will be completed by a licensed supplier following, at a minimum, the appropriate regulations set by the Department of Transportation, OSHA, and Boulder County.

No milling activities may occur at the site until all the EPF's have been accepted and approved by DRMS. Upon Division approval the Applicant will have complied with Rules 6.4.21, 6.5, 7.3, 7.4 and 8.3.

## e. Wildlife Issues (Skarstad)
Concerns the TSF would be used by birds. During the comment period the Division received a comment letter from the Colorado Parks and Wildlife (CPW). In the letter, CPW did not express any concerns the site will have a significant effect to local wildlife. The Applicant followed up again with CPW to verify this statement in April 2023 and CPW reiterated there were minimal biological concerns. Currently there is fence around the TSF that prevents large wildlife from coming into contact with tailings material. Recertification of the TSF will also evaluate the need for additional or improved measures to prevent wildlife exposure to tailings. The Division finds the Applicant has complied with required by Rules 6.3.2(d) and 6.4.21(18).

# 3. Non-Jurisdictional Items

In these proceedings, the Division's jurisdiction is limited to enforcement of the specific requirements of the Act and Rules. While other issues are recognized as important, the Division does not have the authority to address them. The Division considers all timely submitted objections and comments in its review but can address only the issues that directly relate to the specific requirements of an application as stated in the Act and Rules.

# a. Concerns regarding aesthetic impact and quality of life.

The Act and Rules do not specifically address impacts to visually appealing landscapes, aesthetics, hours and/or days of operation, noise pollution and impacts to the viewshed, and quality of life. Such issues are typically addressed at the local government level and not at the State government level. These issues should be addressed through Boulder County.

# b. Concerns regarding dust and air pollution. (Lloyd, Muhler, Gould)

The Act and Rules do not specifically address air quality issues. Such issues are under the jurisdiction of Boulder County and the Air Pollution Control Division (APCD) of the Colorado Department of Public Health and Environment (CDPHE). The Applicant has affirmatively stated in Exhibit F of the CN1 application that an Air Pollution Permit will be obtained prior to operations.

## 4. List of Commitments Required for the Gold Hill Mill

During review of the CN1 the Applicant has committed to the following items prior to initiating milling activities at the site:

- 1. No milling may take place until all EPFs are accepted by the Division. Each EPF will require a Technical Revision application for the Division's review. Included in this item is also the required recertification, or reclamation, of the Tailings Storage Facility.
- 2. The Applicant has committed to submitting a Technical Revision, in TR-11, to address how the pumped water, estimated to be 370,000 gallons, will be removed and managed from the Times-Wynona Mine to drop the water below the top of the Wynona Winze. No milling will occur until either the new bulkhead (which would be permitted pursuant to TR11) is installed or the dewatering plan has taken place.

- 3. Provide copies of the approved Plans of Operations from the Bureau of Land Management (BLM) and USFS prior to initiating activities on land managed by these entities. From the BLM in 2013, "that initiation of mining or milling operations cannot occur until BLM has completed the NEPA process, approved a Plan of Operations for these activities and terminated this suspension order."
- 4. The Applicant must provide suitable documentation from Boulder County allowing milling to occur at the site. It is noted that the Applicant still has to get any and all required building and utility permits to be in compliance with County regulations.
- 5. The Applicant shall at least 60 days prior to the start of operations, obtain a grab sample from the Times-Wynona Mine pool and have it analyzed and have the results provided to the Division. The results of the sample will be compared to results from the surrounding monitoring wells. It should be noted the mine pool is going to be monitored on a quarterly basis, along with the monitoring wells for comparison, as part of the site groundwater and surface water monitoring program.
- 6. The Applicant shall provide DRMS notification prior to accepting off-site material for processing. At a minimum the Division expects the notification to come in letter form that identifies the mine location, permit number, permittee providing the material, the results of the SPLP and ABA testing, and quantity of material.
- 7. The Applicant shall submit a Technical Revision to the Division for consideration of an offsite disposal/storage location of tailings material where the specific details can be reviewed.

## Conclusion

After conducting a thorough technical review of the application, as outlined in part in the discussion above, on February 7, 2024, the Division determined the amendment application satisfied the requirements of the Act and Rules, and specifically C.R.S. § 34-32-112.5, and issued its decision to approve the Hard Rock 110d conversion application for the Gold Hill Mill (CN1), File No. M-1994-117.



February 7, 2024

Stephen Strand 8398 Lefthand Canyon Dr Jamestown, CO 80455

## Re: Decision to Approve a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

Dear Party and/or Interested Person:

The Division of Reclamation, Mining and Safety (Division/DRMS) hereby issues its decision to approve the Colorado Milling Company, LLC. 110d conversion application (CN1) for the Gold Hill Mill, File No. M-1994-117.

The Division's decision to approve is based upon the conversion application meeting the requirements of the Colorado Mined Land Reclamation Act (C.R.S. § 34-32-101, *et seq*). A copy of the Division's rationale for its decision to approve is enclosed for your review.

Pursuant to Rule 1.4.11(1)(b), the Division's decision to approve may be appealed within thirty (30) days of the decision date.

If you need additional information or have any questions, please contact me by telephone at **303-866-3567 x8114**, or by email at <u>patrick.lennberg@state.co.us</u>.

Sincerely,

Patrick Lennberg Environmental Protection Specialist

Enclosure: Rationale for Approval

ec: Stephen Strand, <u>stephenstrand@msn.com</u> Russ Means; DRMS Jared Ebert; DRMS Scott Schultz; Esq., AGO for Division of Reclamation, Mining and Safety



Enclosure



February 7, 2024

# Re: Rationale for Decision for Approval of a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

#### Introduction

On February 7, 2024, the Division of Reclamation, Mining and Safety (Division/Office/DRMS) issued its decision to approve the permit conversion application (CN1) for the Gold Hill Mill, File No. M-1994-117, over public objections. This rationale document is intended to explain the process by which the Division arrived at its decision for approval over public objection and respond to the issues raised by the objecting parties. The Division reserves the right to further supplement, amend, modify, or clarify this document and decision with additional details as necessary.<sup>1</sup>

#### Summary of the Review Process for the Conversion Application

Colorado Milling Company, LLC., (CMC/Applicant) submitted a 110d conversion application (CN1) on September 13, 2022. The conversion application was deemed complete for the purposes of filing and review on February 7, 2023.

The conversion application is required based on the potential storage and use of designated chemicals during the milling process and that process has the potential to produce acid or toxic chemicals. The site is located in Boulder County approximately 8.2 miles northwest of Boulder, CO. The current Application states that the site is to be a processing facility only. No subsurface development is proposed in the conversion application. The conversion application does not add any additional permit area and it will remain at 9.2 acres in size. The application seeks to convert the currently held 110(2) permit to a 110d permit in order to comply with the Act, Rules, and specifically address the requirements of a designated mining operation (DMO).

Approval of the conversion application does not allow milling activities to immediately begin. Instead, the operator's conversion application includes a stricter set of permit requirements as this operation is a DMO. The requirements of a DMO include, but are not limited to, the development of an Environmental Protection Plan (EPP). Including the EPP in the conversion application provides a rigorous framework for the protection of human health, property and, ensures impacts to the hydrologic balance are minimized. Part of the EPP permitting process is a facilities evaluation

<sup>&</sup>lt;sup>1</sup> Herein, all references to the Act and Rules refer to the Colorado Land Reclamation Act for Hard Rock, Metal, and Designated Mining Operations 34-32-101 *et seq.*, C.R.S. (the Act), and to the Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard Rock, Metal, and Designated Mining Operations (the Rules or Rule). Copy of the Act and Rules are available through the Division's web site at <u>https://drms.colorado.gov/.</u>



criteria that evaluates the expected effectiveness of each proposed and existing facility. Prior to initiating milling activities at the site, the permittee must obtain DRMS approval of subsequent revisions (more details below). The operator's conversion application is the first step of the process of bringing the operator and site into the required DMO regulatory framework. Prior to any milling being proposed, the existing mill facilities would need to be upgraded. Any proposed milling would require that all future Environmental Protection Facilities are permitted and certified prior to use. The operator's conversion application provides that the Mill and associated facilities must be permitted through the EPP process. The EPP's process includes strict requirements prior to the initiation of milling activities and allows the Division to better ensure the public and the environment are protected.

Pursuant to Section 34-32-110(6), Rule 1.6.2(1)(d) and Rule 1.6.3, the Applicant initially published the required public notice for the conversion application once on February 15, 2023. A review of that notice determined the notice did not contain all the required information pursuant to Rules 1.6.2(1)(d)(v) and (vi). The Applicant republished an updated public notice on February 17, 2023. The public comment period closed on February 27, 2023. The public notices were published in the Daily Camera, a publication in general circulation in the vicinity of the mine. During the public comment period, the Division received six (6) written objections and six (6) written comments from individuals and groups. The Division also received three (3) timely and one (1) untimely comment letter to the application, one letter of support and one withdrawal. The withdrawal was from Mark Schueneman whose concerns were to be addressed through The Watershed Center's comment letter. Below is a list of the objections and comments received.

Person or Entity	Date Objection Received
Amy Fortunato	February 25, 2023
Clark Edwards, Left Hand Ditch Company (LHDC)	February 24, 2023
John Daspit	February 15, 2023
Norman Skarstad	February 24, 2023
Pam Leland, Left Hand Canyon Residences	February 27, 2023
Stephen Strand	February 26, 2023

## **Timely Letters of Objection:**

#### **Timely Comment Letters:**

Person or Entity	Date Objection Received
Brenden Besetzny/Barbara Sheedlo, Boulder Flycasters-St. Vrain Anglers	February 24, 2023
Deb Hummel, The Watershed Center	February 27, 2023
Gold Hill Fire Protection District	February 26, 2023
Marcus Moench, Town of Gold Hill	February 27, 2023

Maya MacHamer, Boulder Watershed Collective	February 27, 2023
Robert De Haas, Pine Brook Water District	February 8, 2023

#### Timely Commenting Agency:

Agency	Date Comment Received
History Colorado	February 17, 2023
Division of Water Resources	February 15, 2023
Boulder County	February 24, 2023

#### **Untimely Comment Letters:**

Person or Agency	Date Comment Received
Bret Gibson, Four Mile Fire Protection District	February 28, 2023
Colorado Parks and Wildlife	March 7, 2023

#### Letter of Support:

Person or Agency	Date Comment Received
Rene Murphy	February 25, 2023

The Division forwarded copies of the objections and comments to the Applicant.

During the review period the Division generated four (4) adequacy letters. The Applicant addressed all adequacy issues to the Division's satisfaction. Therefore, on February 7, 2024, the Division determined the conversion application CN1 satisfied the requirements of C.R.S. § 34-32-115(4) and issued its decision to approve the operator's conversion application over objections.

#### **Issues Raised by the Objecting Parties**

The timely objections received by the Division have been categorized as issues pertaining to hydrologic impacts to Left Hand Creek, relic water pipeline, pumphouse construction, impacts to the hydrologic balance at the mill, Tailings Storage Facility and non-jurisdictional issues. The issues raised by the objecting parties are represented by italic bold font. The last names of the objecting parties who raised the issue are listed after the issue. The Division's response follows in standard font.

#### 1. Hydrologic Impacts to Left Hand Creek

a. Water Consumption from Left Hand Creek (LHDC, Daspit, Leland and Strand)

The Applicant provided copies of the Water Court Decree No. 85CW117. In the decree, and from comments provided by the Division of Water Resources, the Applicant is entitled to divert a minimum of 10.4 acre-feet a year from Left Hand Creek and store the water underground for use at the mill site. The Applicant will measure the amount of water divert using a continuous recording measuring device. Water will only be removed from creek between April 1 and October 31 as water is available. The decree contained a dry covenant, the Applicant has stated that irrigation activities ceased when the water right was established. If irrigation of the land is taking place using creek water, it is being done illegally and not within the control of the Applicant. The Division finds the Applicant has complied the applicable Rules 3.1.6(1)(a) and 6.3.3, and C.R.S. § 34-32-112.5.

# b. Affects to Water Quality of Left Hand Creek (LHDC, Daspit, Leland and Strand)

The Gold Hill Mill will contain all water used during the milling process and will not discharge any water to Left Hand Creek. Water contained within the tailings material will evaporate from the Tailings Storage Facility (TSF). The TSF will be recertified prior to any milling taking place at the site. The pipeline leading from the creek to mill will be constructed with equipment to prevent any backflow from occurring to creek.

The Applicant will be collecting quarterly surface water samples from Left Hand Creek as part of the Groundwater and Surface Water Sampling and Analysis Plan for the site. The monitoring plan includes quarterly samples collected from five (5) groundwater monitoring wells, the Times-Wynona shaft, and TSF. The Applicant has provided a plan protective of Left Hand Creek and a monitoring plan that will allow the Applicant and the Division to verify the effectiveness of the plan. The Division finds the Applicant has complied the applicable Rules 3.1.6, 3.1.7, 6.3.3 and 6.4.21(10) and C.R.S. § 34-32-112.5.

## c. Removal of Pipeline Materials and Pumphouse Location (Fortunato and Skarstad)

The Applicant proposes to remove the relic pipeline materials during construction of the new pipeline. The conversion application states that at the end of milling operations all pipeline and pumphouse materials will be removed in accordance with the Reclamation Plan. The pumphouse and fuel tanks are proposed to be located outside of the 500-year floodplain. The location of the proposed pipeline from pumphouse will be located on land owned by the U.S. Forest Service (USFS). Prior to any construction occurring on USFS land, the Applicant would first need to obtain a Plan of Operations and approval from the USFS. The Division finds the Applicant has complied the applicable Rules 6.3.3 and 6.3.4.

## 2. Gold Hill Mill Site

## a. Impacts to Groundwater Quality (Strand)

The EPP has been designed to minimize the impacts to the hydrologic balance of the groundwater system. A thorough groundwater monitoring plan has been designed to verify the effectiveness of the EPP. In the application, the Applicant has committed to sampling five (5) groundwater monitoring wells at the site, which includes one point-of-compliance well. These wells along with

the TSF, Times-Wynona Shaft, and Left Hand Creek will be sampled on quarterly basis. Sampling reports containing the results of the collected samples will be submitted a month following the end of the previous quarter. The Groundwater and Surface Water Sampling and Analysis Plan (SAP) has an expanded number of locations to be sampled along with an expanded analyte suite to aid in comparison of data. Groundwater samples will be compared to the standards contained in WQCD Regulation 41 - The Basic Standards for Ground Water. The plan will allow for a comparison of the existing mine pool water quality to the surrounding wells. The SAP includes a quality control and quality assurance protocol according to current industry standards. The SAP is an improvement over the currently approved monitoring plan contained in the 110(2) Permit. If data gaps are identified during the monitoring process, the Division would require that the SAP be updated to adequately address any gaps. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 C.R.S. § 34-32-116.

## b. Hydrologic Impacts to the Town of Gold Hill (Strand)

The Mill site is located on Boulder Creek Granodiorite which is characterized to be massive to gneissic. Groundwater flow within the granodiorite is controlled by localized fracturing, joints and voids. In general, these flow paths decreases with depth. Between the mill and the Town of Gold Hill is the Hoosier Reef. The Reef is a mapped structure that is 10 to 80 feet wide and extends over 1,000 feet deep and is composed of silicified breccia that is barrier to groundwater flow. The Reef runs southeast to northwest. Fractures around the site also trend southeast to northwest but meet the Hoosier Reef towards the Town of Gold Hill thus preventing groundwater flow from the site reaching the town. A comparison of groundwater elevations at the site to available groundwater level data in the town indicates there is a significant difference in overall water elevations indicating the mill site and town are separated and the water levels are reflective of localized fractured flow. An additional indication of the relative impermeability of the granodiorite is the difference in the Times-Wynona Shaft water level relative to the surround groundwater monitoring wells. The mine pool water elevation is typically higher than the surrounding monitoring wells, an indication of the lack of interconnectedness within the granodiorite. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 and C.R.S. § 34-32-116.

## c. Stability of Tailings Storage Facility (Strand and Skarstad)

The Applicant has committed to a recertification schedule to determine the condition of the Tailings Storage Facility (TSF). If the TSF can be recertified, a schedule for the completion of the recertification activities will be submitted through a Technical Revision pursuant to Rule 6.4.21(15). If it is determined the TSF cannot be recertified, a schedule for reclamation will be submitted through a Technical Revision according to the approved reclamation plan. Recertification of the TSF is a requirement of Rule 7.3.2. The recertification process provides a framework to insure the TSF has suitable capacity to prevent a release of materials from a design storm event plus operational material volumes during worst case conditions. Additionally, the recertification process will verify stability of the TSF embankments meet the minimum requirements for stability in accordance with Mined Land Reclamation Board Policy 30 for Factors of Safety for Slope Stability/Geotechnical Analyses and Rule 6.5. At a minimum, no milling activities may take place until the TSF is recertified. If the TSF is reclaimed, no milling activities may take place until an alternative tailings disposal method is approved by the Division. In order to gain Division approval of the recertification of the TSF, the Applicant must comply with Rules 6.3, 6.4.21, 6.5 and 7.4.

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At this time there are designated chemicals awaiting EPA approval for proper disposal at a certified disposal facility. The chemicals were identified during the pre-operation inspection in October 2023. The chemicals are being stored inside the mill building, protected from the weather and within secondary containment, until the EPA provides the proper documentation allowing for proper disposal of the chemicals. Following proper disposal, and prior to any designated chemicals being handled or stored at the site, the Applicant must submit and get Division approval, through individual Technical Revisions, for the following Environmental Protection Facilities (EPF); Mill Facility, Reagent Storage Facility, Tailings Delivery Line, Tailings Storage Facility (mentioned above) and the Surface Ore Stockpile Facility. Each Technical Revision for the individual EPFs will be reviewed by the Division and must meet the applicable requirement of Rules 6.4.21, 6.5, 7.3, and 7.4. The EPF's will not be considered certified for operations until all applicable QA/QC documentation and certified as-builts have been submitted and accepted by the Division. No milling may take place until all EPFs are accepted by the Division.

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No milling activities may occur at the site until all the EPF's have been accepted and approved by DRMS. Upon Division approval the Applicant will have complied with Rules 6.4.21, 6.5, 7.3, 7.4 and 8.3.

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## 4. List of Commitments Required for the Gold Hill Mill

During review of the CN1 the Applicant has committed to the following items prior to initiating milling activities at the site:

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- 2. The Applicant has committed to submitting a Technical Revision, in TR-11, to address how the pumped water, estimated to be 370,000 gallons, will be removed and managed from the Times-Wynona Mine to drop the water below the top of the Wynona Winze. No milling will occur until either the new bulkhead (which would be permitted pursuant to TR11) is installed or the dewatering plan has taken place.

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- 5. The Applicant shall at least 60 days prior to the start of operations, obtain a grab sample from the Times-Wynona Mine pool and have it analyzed and have the results provided to the Division. The results of the sample will be compared to results from the surrounding monitoring wells. It should be noted the mine pool is going to be monitored on a quarterly basis, along with the monitoring wells for comparison, as part of the site groundwater and surface water monitoring program.
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## Conclusion

After conducting a thorough technical review of the application, as outlined in part in the discussion above, on February 7, 2024, the Division determined the amendment application satisfied the requirements of the Act and Rules, and specifically C.R.S. § 34-32-112.5, and issued its decision to approve the Hard Rock 110d conversion application for the Gold Hill Mill (CN1), File No. M-1994-117.



February 7, 2024

Marcus Moench Town of Gold Hill 601 Gold Run St Boulder, CO 80302

## Re: Decision to Approve a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

Dear Party and/or Interested Person:

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If you need additional information or have any questions, please contact me by telephone at **303-866-3567 x8114**, or by email at <u>patrick.lennberg@state.co.us</u>.

Sincerely,

Patrick Lennberg Environmental Protection Specialist

Enclosure: Rationale for Approval

ec: Marcus Moench, <u>ghtownmeeting@gmail.com</u> Russ Means; DRMS Jared Ebert; DRMS Scott Schultz; Esq., AGO for Division of Reclamation, Mining and Safety



Enclosure



February 7, 2024

# Re: Rationale for Decision for Approval of a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

#### Introduction

On February 7, 2024, the Division of Reclamation, Mining and Safety (Division/Office/DRMS) issued its decision to approve the permit conversion application (CN1) for the Gold Hill Mill, File No. M-1994-117, over public objections. This rationale document is intended to explain the process by which the Division arrived at its decision for approval over public objection and respond to the issues raised by the objecting parties. The Division reserves the right to further supplement, amend, modify, or clarify this document and decision with additional details as necessary.<sup>1</sup>

#### Summary of the Review Process for the Conversion Application

Colorado Milling Company, LLC., (CMC/Applicant) submitted a 110d conversion application (CN1) on September 13, 2022. The conversion application was deemed complete for the purposes of filing and review on February 7, 2023.

The conversion application is required based on the potential storage and use of designated chemicals during the milling process and that process has the potential to produce acid or toxic chemicals. The site is located in Boulder County approximately 8.2 miles northwest of Boulder, CO. The current Application states that the site is to be a processing facility only. No subsurface development is proposed in the conversion application. The conversion application does not add any additional permit area and it will remain at 9.2 acres in size. The application seeks to convert the currently held 110(2) permit to a 110d permit in order to comply with the Act, Rules, and specifically address the requirements of a designated mining operation (DMO).

Approval of the conversion application does not allow milling activities to immediately begin. Instead, the operator's conversion application includes a stricter set of permit requirements as this operation is a DMO. The requirements of a DMO include, but are not limited to, the development of an Environmental Protection Plan (EPP). Including the EPP in the conversion application provides a rigorous framework for the protection of human health, property and, ensures impacts to the hydrologic balance are minimized. Part of the EPP permitting process is a facilities evaluation

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criteria that evaluates the expected effectiveness of each proposed and existing facility. Prior to initiating milling activities at the site, the permittee must obtain DRMS approval of subsequent revisions (more details below). The operator's conversion application is the first step of the process of bringing the operator and site into the required DMO regulatory framework. Prior to any milling being proposed, the existing mill facilities would need to be upgraded. Any proposed milling would require that all future Environmental Protection Facilities are permitted and certified prior to use. The operator's conversion application provides that the Mill and associated facilities must be permitted through the EPP process. The EPP's process includes strict requirements prior to the initiation of milling activities and allows the Division to better ensure the public and the environment are protected.

Pursuant to Section 34-32-110(6), Rule 1.6.2(1)(d) and Rule 1.6.3, the Applicant initially published the required public notice for the conversion application once on February 15, 2023. A review of that notice determined the notice did not contain all the required information pursuant to Rules 1.6.2(1)(d)(v) and (vi). The Applicant republished an updated public notice on February 17, 2023. The public comment period closed on February 27, 2023. The public notices were published in the Daily Camera, a publication in general circulation in the vicinity of the mine. During the public comment period, the Division received six (6) written objections and six (6) written comments from individuals and groups. The Division also received three (3) timely and one (1) untimely comment letter to the application, one letter of support and one withdrawal. The withdrawal was from Mark Schueneman whose concerns were to be addressed through The Watershed Center's comment letter. Below is a list of the objections and comments received.

Person or Entity	Date Objection Received
Amy Fortunato	February 25, 2023
Clark Edwards, Left Hand Ditch Company (LHDC)	February 24, 2023
John Daspit	February 15, 2023
Norman Skarstad	February 24, 2023
Pam Leland, Left Hand Canyon Residences	February 27, 2023
Stephen Strand	February 26, 2023

## **Timely Letters of Objection:**

#### **Timely Comment Letters:**

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#### Letter of Support:

Person or Agency	Date Comment Received
Rene Murphy	February 25, 2023

The Division forwarded copies of the objections and comments to the Applicant.

During the review period the Division generated four (4) adequacy letters. The Applicant addressed all adequacy issues to the Division's satisfaction. Therefore, on February 7, 2024, the Division determined the conversion application CN1 satisfied the requirements of C.R.S. § 34-32-115(4) and issued its decision to approve the operator's conversion application over objections.

#### **Issues Raised by the Objecting Parties**

The timely objections received by the Division have been categorized as issues pertaining to hydrologic impacts to Left Hand Creek, relic water pipeline, pumphouse construction, impacts to the hydrologic balance at the mill, Tailings Storage Facility and non-jurisdictional issues. The issues raised by the objecting parties are represented by italic bold font. The last names of the objecting parties who raised the issue are listed after the issue. The Division's response follows in standard font.

#### 1. Hydrologic Impacts to Left Hand Creek

a. Water Consumption from Left Hand Creek (LHDC, Daspit, Leland and Strand)

The Applicant provided copies of the Water Court Decree No. 85CW117. In the decree, and from comments provided by the Division of Water Resources, the Applicant is entitled to divert a minimum of 10.4 acre-feet a year from Left Hand Creek and store the water underground for use at the mill site. The Applicant will measure the amount of water divert using a continuous recording measuring device. Water will only be removed from creek between April 1 and October 31 as water is available. The decree contained a dry covenant, the Applicant has stated that irrigation activities ceased when the water right was established. If irrigation of the land is taking place using creek water, it is being done illegally and not within the control of the Applicant. The Division finds the Applicant has complied the applicable Rules 3.1.6(1)(a) and 6.3.3, and C.R.S. § 34-32-112.5.

# b. Affects to Water Quality of Left Hand Creek (LHDC, Daspit, Leland and Strand)

The Gold Hill Mill will contain all water used during the milling process and will not discharge any water to Left Hand Creek. Water contained within the tailings material will evaporate from the Tailings Storage Facility (TSF). The TSF will be recertified prior to any milling taking place at the site. The pipeline leading from the creek to mill will be constructed with equipment to prevent any backflow from occurring to creek.

The Applicant will be collecting quarterly surface water samples from Left Hand Creek as part of the Groundwater and Surface Water Sampling and Analysis Plan for the site. The monitoring plan includes quarterly samples collected from five (5) groundwater monitoring wells, the Times-Wynona shaft, and TSF. The Applicant has provided a plan protective of Left Hand Creek and a monitoring plan that will allow the Applicant and the Division to verify the effectiveness of the plan. The Division finds the Applicant has complied the applicable Rules 3.1.6, 3.1.7, 6.3.3 and 6.4.21(10) and C.R.S. § 34-32-112.5.

## c. Removal of Pipeline Materials and Pumphouse Location (Fortunato and Skarstad)

The Applicant proposes to remove the relic pipeline materials during construction of the new pipeline. The conversion application states that at the end of milling operations all pipeline and pumphouse materials will be removed in accordance with the Reclamation Plan. The pumphouse and fuel tanks are proposed to be located outside of the 500-year floodplain. The location of the proposed pipeline from pumphouse will be located on land owned by the U.S. Forest Service (USFS). Prior to any construction occurring on USFS land, the Applicant would first need to obtain a Plan of Operations and approval from the USFS. The Division finds the Applicant has complied the applicable Rules 6.3.3 and 6.3.4.

## 2. Gold Hill Mill Site

## a. Impacts to Groundwater Quality (Strand)

The EPP has been designed to minimize the impacts to the hydrologic balance of the groundwater system. A thorough groundwater monitoring plan has been designed to verify the effectiveness of the EPP. In the application, the Applicant has committed to sampling five (5) groundwater monitoring wells at the site, which includes one point-of-compliance well. These wells along with

the TSF, Times-Wynona Shaft, and Left Hand Creek will be sampled on quarterly basis. Sampling reports containing the results of the collected samples will be submitted a month following the end of the previous quarter. The Groundwater and Surface Water Sampling and Analysis Plan (SAP) has an expanded number of locations to be sampled along with an expanded analyte suite to aid in comparison of data. Groundwater samples will be compared to the standards contained in WQCD Regulation 41 - The Basic Standards for Ground Water. The plan will allow for a comparison of the existing mine pool water quality to the surrounding wells. The SAP includes a quality control and quality assurance protocol according to current industry standards. The SAP is an improvement over the currently approved monitoring plan contained in the 110(2) Permit. If data gaps are identified during the monitoring process, the Division would require that the SAP be updated to adequately address any gaps. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 C.R.S. § 34-32-116.

## b. Hydrologic Impacts to the Town of Gold Hill (Strand)

The Mill site is located on Boulder Creek Granodiorite which is characterized to be massive to gneissic. Groundwater flow within the granodiorite is controlled by localized fracturing, joints and voids. In general, these flow paths decreases with depth. Between the mill and the Town of Gold Hill is the Hoosier Reef. The Reef is a mapped structure that is 10 to 80 feet wide and extends over 1,000 feet deep and is composed of silicified breccia that is barrier to groundwater flow. The Reef runs southeast to northwest. Fractures around the site also trend southeast to northwest but meet the Hoosier Reef towards the Town of Gold Hill thus preventing groundwater flow from the site reaching the town. A comparison of groundwater elevations at the site to available groundwater level data in the town indicates there is a significant difference in overall water elevations indicating the mill site and town are separated and the water levels are reflective of localized fractured flow. An additional indication of the relative impermeability of the granodiorite is the difference in the Times-Wynona Shaft water level relative to the surround groundwater monitoring wells. The mine pool water elevation is typically higher than the surrounding monitoring wells, an indication of the lack of interconnectedness within the granodiorite. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 and C.R.S. § 34-32-116.

## c. Stability of Tailings Storage Facility (Strand and Skarstad)

The Applicant has committed to a recertification schedule to determine the condition of the Tailings Storage Facility (TSF). If the TSF can be recertified, a schedule for the completion of the recertification activities will be submitted through a Technical Revision pursuant to Rule 6.4.21(15). If it is determined the TSF cannot be recertified, a schedule for reclamation will be submitted through a Technical Revision according to the approved reclamation plan. Recertification of the TSF is a requirement of Rule 7.3.2. The recertification process provides a framework to insure the TSF has suitable capacity to prevent a release of materials from a design storm event plus operational material volumes during worst case conditions. Additionally, the recertification process will verify stability of the TSF embankments meet the minimum requirements for stability in accordance with Mined Land Reclamation Board Policy 30 for Factors of Safety for Slope Stability/Geotechnical Analyses and Rule 6.5. At a minimum, no milling activities may take place until the TSF is recertified. If the TSF is reclaimed, no milling activities may take place until an alternative tailings disposal method is approved by the Division. In order to gain Division approval of the recertification of the TSF, the Applicant must comply with Rules 6.3, 6.4.21, 6.5 and 7.4.

## d. Chemical Management and Storage (Skarstad)

At this time there are designated chemicals awaiting EPA approval for proper disposal at a certified disposal facility. The chemicals were identified during the pre-operation inspection in October 2023. The chemicals are being stored inside the mill building, protected from the weather and within secondary containment, until the EPA provides the proper documentation allowing for proper disposal of the chemicals. Following proper disposal, and prior to any designated chemicals being handled or stored at the site, the Applicant must submit and get Division approval, through individual Technical Revisions, for the following Environmental Protection Facilities (EPF); Mill Facility, Reagent Storage Facility, Tailings Delivery Line, Tailings Storage Facility (mentioned above) and the Surface Ore Stockpile Facility. Each Technical Revision for the individual EPFs will be reviewed by the Division and must meet the applicable requirement of Rules 6.4.21, 6.5, 7.3, and 7.4. The EPF's will not be considered certified for operations until all applicable QA/QC documentation and certified as-builts have been submitted and accepted by the Division. No milling may take place until all EPFs are accepted by the Division.

The application conversion includes a Materials Containment Plan and a Spill Prevention, Control and Countermeasure (SPCC) Plan for the site. The SPCC Plan will provide measures for properly storing and handling petroleum products and responding to, and reporting, spills. Normally, the SPCC Plan covers only petroleum-based chemicals but the SPCC Plan contained within the conversion application for this site includes inspection and reporting requirements for the chemicals stored at the processing facility. The Material Containment Plan will provide guidance for the storage, use, cleanup, training, and reporting associated with the use of mill chemicals on site. The SPCC Plan also addresses response actions in the event of a site emergency. Additionally, the Applicant provided an Emergency Response Plan (ERP) as required by Rules 6.4.21 and 8.3. The ERP describes procedures that are intended to be followed during an emergency situation at the Gold Hill Mill. These plans will be reviewed and updated as needed once all the EPF's have been accepted by the Division.

All chemicals used at the site will be stored according to manufactures specifications and MSDS guidance. Transportation of chemicals to and from the mill will be completed by a licensed supplier following, at a minimum, the appropriate regulations set by the Department of Transportation, OSHA, and Boulder County.

No milling activities may occur at the site until all the EPF's have been accepted and approved by DRMS. Upon Division approval the Applicant will have complied with Rules 6.4.21, 6.5, 7.3, 7.4 and 8.3.

## e. Wildlife Issues (Skarstad)

Concerns the TSF would be used by birds. During the comment period the Division received a comment letter from the Colorado Parks and Wildlife (CPW). In the letter, CPW did not express any concerns the site will have a significant effect to local wildlife. The Applicant followed up again with CPW to verify this statement in April 2023 and CPW reiterated there were minimal biological concerns. Currently there is fence around the TSF that prevents large wildlife from coming into contact with tailings material. Recertification of the TSF will also evaluate the need for additional or improved measures to prevent wildlife exposure to tailings. The Division finds the Applicant has complied with required by Rules 6.3.2(d) and 6.4.21(18).

# 3. Non-Jurisdictional Items

In these proceedings, the Division's jurisdiction is limited to enforcement of the specific requirements of the Act and Rules. While other issues are recognized as important, the Division does not have the authority to address them. The Division considers all timely submitted objections and comments in its review but can address only the issues that directly relate to the specific requirements of an application as stated in the Act and Rules.

# a. Concerns regarding aesthetic impact and quality of life.

The Act and Rules do not specifically address impacts to visually appealing landscapes, aesthetics, hours and/or days of operation, noise pollution and impacts to the viewshed, and quality of life. Such issues are typically addressed at the local government level and not at the State government level. These issues should be addressed through Boulder County.

# b. Concerns regarding dust and air pollution. (Lloyd, Muhler, Gould)

The Act and Rules do not specifically address air quality issues. Such issues are under the jurisdiction of Boulder County and the Air Pollution Control Division (APCD) of the Colorado Department of Public Health and Environment (CDPHE). The Applicant has affirmatively stated in Exhibit F of the CN1 application that an Air Pollution Permit will be obtained prior to operations.

## 4. List of Commitments Required for the Gold Hill Mill

During review of the CN1 the Applicant has committed to the following items prior to initiating milling activities at the site:

- 1. No milling may take place until all EPFs are accepted by the Division. Each EPF will require a Technical Revision application for the Division's review. Included in this item is also the required recertification, or reclamation, of the Tailings Storage Facility.
- 2. The Applicant has committed to submitting a Technical Revision, in TR-11, to address how the pumped water, estimated to be 370,000 gallons, will be removed and managed from the Times-Wynona Mine to drop the water below the top of the Wynona Winze. No milling will occur until either the new bulkhead (which would be permitted pursuant to TR11) is installed or the dewatering plan has taken place.

- 3. Provide copies of the approved Plans of Operations from the Bureau of Land Management (BLM) and USFS prior to initiating activities on land managed by these entities. From the BLM in 2013, "that initiation of mining or milling operations cannot occur until BLM has completed the NEPA process, approved a Plan of Operations for these activities and terminated this suspension order."
- 4. The Applicant must provide suitable documentation from Boulder County allowing milling to occur at the site. It is noted that the Applicant still has to get any and all required building and utility permits to be in compliance with County regulations.
- 5. The Applicant shall at least 60 days prior to the start of operations, obtain a grab sample from the Times-Wynona Mine pool and have it analyzed and have the results provided to the Division. The results of the sample will be compared to results from the surrounding monitoring wells. It should be noted the mine pool is going to be monitored on a quarterly basis, along with the monitoring wells for comparison, as part of the site groundwater and surface water monitoring program.
- 6. The Applicant shall provide DRMS notification prior to accepting off-site material for processing. At a minimum the Division expects the notification to come in letter form that identifies the mine location, permit number, permittee providing the material, the results of the SPLP and ABA testing, and quantity of material.
- 7. The Applicant shall submit a Technical Revision to the Division for consideration of an offsite disposal/storage location of tailings material where the specific details can be reviewed.

## Conclusion

After conducting a thorough technical review of the application, as outlined in part in the discussion above, on February 7, 2024, the Division determined the amendment application satisfied the requirements of the Act and Rules, and specifically C.R.S. § 34-32-112.5, and issued its decision to approve the Hard Rock 110d conversion application for the Gold Hill Mill (CN1), File No. M-1994-117.



February 7, 2024

Deb Hummel The Watershed Center Org. 6800 Nimbus Road Longmont, CO 80503

## Re: Decision to Approve a Hard Rock 110d Conversion Application (CN1) with Objections, Colorado Milling Company, LLC., Gold Hill Mill, File No. M-1994-117

Dear Party and/or Interested Person:

The Division of Reclamation, Mining and Safety (Division/DRMS) hereby issues its decision to approve the Colorado Milling Company, LLC. 110d conversion application (CN1) for the Gold Hill Mill, File No. M-1994-117.

The Division's decision to approve is based upon the conversion application meeting the requirements of the Colorado Mined Land Reclamation Act (C.R.S. § 34-32-101, *et seq*). A copy of the Division's rationale for its decision to approve is enclosed for your review.

Pursuant to Rule 1.4.11(1)(b), the Division's decision to approve may be appealed within thirty (30) days of the decision date.

If you need additional information or have any questions, please contact me by telephone at **303-866-3567 x8114**, or by email at <u>patrick.lennberg@state.co.us</u>.

Sincerely,

Patrick Lennberg Environmental Protection Specialist

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ec: Deb Hummel, <u>dhummel@watershed.center</u> Russ Means; DRMS Jared Ebert; DRMS Scott Schultz; Esq., AGO for Division of Reclamation, Mining and Safety



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## c. Removal of Pipeline Materials and Pumphouse Location (Fortunato and Skarstad)

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the TSF, Times-Wynona Shaft, and Left Hand Creek will be sampled on quarterly basis. Sampling reports containing the results of the collected samples will be submitted a month following the end of the previous quarter. The Groundwater and Surface Water Sampling and Analysis Plan (SAP) has an expanded number of locations to be sampled along with an expanded analyte suite to aid in comparison of data. Groundwater samples will be compared to the standards contained in WQCD Regulation 41 - The Basic Standards for Ground Water. The plan will allow for a comparison of the existing mine pool water quality to the surrounding wells. The SAP includes a quality control and quality assurance protocol according to current industry standards. The SAP is an improvement over the currently approved monitoring plan contained in the 110(2) Permit. If data gaps are identified during the monitoring process, the Division would require that the SAP be updated to adequately address any gaps. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 C.R.S. § 34-32-116.

## b. Hydrologic Impacts to the Town of Gold Hill (Strand)

The Mill site is located on Boulder Creek Granodiorite which is characterized to be massive to gneissic. Groundwater flow within the granodiorite is controlled by localized fracturing, joints and voids. In general, these flow paths decreases with depth. Between the mill and the Town of Gold Hill is the Hoosier Reef. The Reef is a mapped structure that is 10 to 80 feet wide and extends over 1,000 feet deep and is composed of silicified breccia that is barrier to groundwater flow. The Reef runs southeast to northwest. Fractures around the site also trend southeast to northwest but meet the Hoosier Reef towards the Town of Gold Hill thus preventing groundwater flow from the site reaching the town. A comparison of groundwater elevations at the site to available groundwater level data in the town indicates there is a significant difference in overall water elevations indicating the mill site and town are separated and the water levels are reflective of localized fractured flow. An additional indication of the relative impermeability of the granodiorite is the difference in the Times-Wynona Shaft water level relative to the surround groundwater monitoring wells. The mine pool water elevation is typically higher than the surrounding monitoring wells, an indication of the lack of interconnectedness within the granodiorite. The Division finds the Applicant has complied the applicable Rules 3.1.7, 6.3.3 and 6.4.21 and C.R.S. § 34-32-116.

## c. Stability of Tailings Storage Facility (Strand and Skarstad)

The Applicant has committed to a recertification schedule to determine the condition of the Tailings Storage Facility (TSF). If the TSF can be recertified, a schedule for the completion of the recertification activities will be submitted through a Technical Revision pursuant to Rule 6.4.21(15). If it is determined the TSF cannot be recertified, a schedule for reclamation will be submitted through a Technical Revision according to the approved reclamation plan. Recertification of the TSF is a requirement of Rule 7.3.2. The recertification process provides a framework to insure the TSF has suitable capacity to prevent a release of materials from a design storm event plus operational material volumes during worst case conditions. Additionally, the recertification process will verify stability of the TSF embankments meet the minimum requirements for stability in accordance with Mined Land Reclamation Board Policy 30 for Factors of Safety for Slope Stability/Geotechnical Analyses and Rule 6.5. At a minimum, no milling activities may take place until the TSF is recertified. If the TSF is reclaimed, no milling activities may take place until an alternative tailings disposal method is approved by the Division. In order to gain Division approval of the recertification of the TSF, the Applicant must comply with Rules 6.3, 6.4.21, 6.5 and 7.4.

## d. Chemical Management and Storage (Skarstad)

At this time there are designated chemicals awaiting EPA approval for proper disposal at a certified disposal facility. The chemicals were identified during the pre-operation inspection in October 2023. The chemicals are being stored inside the mill building, protected from the weather and within secondary containment, until the EPA provides the proper documentation allowing for proper disposal of the chemicals. Following proper disposal, and prior to any designated chemicals being handled or stored at the site, the Applicant must submit and get Division approval, through individual Technical Revisions, for the following Environmental Protection Facilities (EPF); Mill Facility, Reagent Storage Facility, Tailings Delivery Line, Tailings Storage Facility (mentioned above) and the Surface Ore Stockpile Facility. Each Technical Revision for the individual EPFs will be reviewed by the Division and must meet the applicable requirement of Rules 6.4.21, 6.5, 7.3, and 7.4. The EPF's will not be considered certified for operations until all applicable QA/QC documentation and certified as-builts have been submitted and accepted by the Division. No milling may take place until all EPFs are accepted by the Division.

The application conversion includes a Materials Containment Plan and a Spill Prevention, Control and Countermeasure (SPCC) Plan for the site. The SPCC Plan will provide measures for properly storing and handling petroleum products and responding to, and reporting, spills. Normally, the SPCC Plan covers only petroleum-based chemicals but the SPCC Plan contained within the conversion application for this site includes inspection and reporting requirements for the chemicals stored at the processing facility. The Material Containment Plan will provide guidance for the storage, use, cleanup, training, and reporting associated with the use of mill chemicals on site. The SPCC Plan also addresses response actions in the event of a site emergency. Additionally, the Applicant provided an Emergency Response Plan (ERP) as required by Rules 6.4.21 and 8.3. The ERP describes procedures that are intended to be followed during an emergency situation at the Gold Hill Mill. These plans will be reviewed and updated as needed once all the EPF's have been accepted by the Division.

All chemicals used at the site will be stored according to manufactures specifications and MSDS guidance. Transportation of chemicals to and from the mill will be completed by a licensed supplier following, at a minimum, the appropriate regulations set by the Department of Transportation, OSHA, and Boulder County.

No milling activities may occur at the site until all the EPF's have been accepted and approved by DRMS. Upon Division approval the Applicant will have complied with Rules 6.4.21, 6.5, 7.3, 7.4 and 8.3.

## e. Wildlife Issues (Skarstad)

Concerns the TSF would be used by birds. During the comment period the Division received a comment letter from the Colorado Parks and Wildlife (CPW). In the letter, CPW did not express any concerns the site will have a significant effect to local wildlife. The Applicant followed up again with CPW to verify this statement in April 2023 and CPW reiterated there were minimal biological concerns. Currently there is fence around the TSF that prevents large wildlife from coming into contact with tailings material. Recertification of the TSF will also evaluate the need for additional or improved measures to prevent wildlife exposure to tailings. The Division finds the Applicant has complied with required by Rules 6.3.2(d) and 6.4.21(18).

# 3. Non-Jurisdictional Items

In these proceedings, the Division's jurisdiction is limited to enforcement of the specific requirements of the Act and Rules. While other issues are recognized as important, the Division does not have the authority to address them. The Division considers all timely submitted objections and comments in its review but can address only the issues that directly relate to the specific requirements of an application as stated in the Act and Rules.

# a. Concerns regarding aesthetic impact and quality of life.

The Act and Rules do not specifically address impacts to visually appealing landscapes, aesthetics, hours and/or days of operation, noise pollution and impacts to the viewshed, and quality of life. Such issues are typically addressed at the local government level and not at the State government level. These issues should be addressed through Boulder County.

# b. Concerns regarding dust and air pollution. (Lloyd, Muhler, Gould)

The Act and Rules do not specifically address air quality issues. Such issues are under the jurisdiction of Boulder County and the Air Pollution Control Division (APCD) of the Colorado Department of Public Health and Environment (CDPHE). The Applicant has affirmatively stated in Exhibit F of the CN1 application that an Air Pollution Permit will be obtained prior to operations.

## 4. List of Commitments Required for the Gold Hill Mill

During review of the CN1 the Applicant has committed to the following items prior to initiating milling activities at the site:

- 1. No milling may take place until all EPFs are accepted by the Division. Each EPF will require a Technical Revision application for the Division's review. Included in this item is also the required recertification, or reclamation, of the Tailings Storage Facility.
- 2. The Applicant has committed to submitting a Technical Revision, in TR-11, to address how the pumped water, estimated to be 370,000 gallons, will be removed and managed from the Times-Wynona Mine to drop the water below the top of the Wynona Winze. No milling will occur until either the new bulkhead (which would be permitted pursuant to TR11) is installed or the dewatering plan has taken place.

- 3. Provide copies of the approved Plans of Operations from the Bureau of Land Management (BLM) and USFS prior to initiating activities on land managed by these entities. From the BLM in 2013, "that initiation of mining or milling operations cannot occur until BLM has completed the NEPA process, approved a Plan of Operations for these activities and terminated this suspension order."
- 4. The Applicant must provide suitable documentation from Boulder County allowing milling to occur at the site. It is noted that the Applicant still has to get any and all required building and utility permits to be in compliance with County regulations.
- 5. The Applicant shall at least 60 days prior to the start of operations, obtain a grab sample from the Times-Wynona Mine pool and have it analyzed and have the results provided to the Division. The results of the sample will be compared to results from the surrounding monitoring wells. It should be noted the mine pool is going to be monitored on a quarterly basis, along with the monitoring wells for comparison, as part of the site groundwater and surface water monitoring program.
- 6. The Applicant shall provide DRMS notification prior to accepting off-site material for processing. At a minimum the Division expects the notification to come in letter form that identifies the mine location, permit number, permittee providing the material, the results of the SPLP and ABA testing, and quantity of material.
- 7. The Applicant shall submit a Technical Revision to the Division for consideration of an offsite disposal/storage location of tailings material where the specific details can be reviewed.

## Conclusion

After conducting a thorough technical review of the application, as outlined in part in the discussion above, on February 7, 2024, the Division determined the amendment application satisfied the requirements of the Act and Rules, and specifically C.R.S. § 34-32-112.5, and issued its decision to approve the Hard Rock 110d conversion application for the Gold Hill Mill (CN1), File No. M-1994-117.