

December 19, 2019



1313 Sherman Street, Room 215
Denver, CO 80203

RE: Pitch Project, Permit # M-1977-004, Rationale for Recommendation to Approve a 112d-3 Amendment (AM-01) Application with Objections

INTRODUCTION

This document provides the basis for the Division's recommendation to approve the 112d-3 amendment application (AM-01), submitted by Homestake Mining Company, for the Pitch Project, Permit # M-1977-004, over the objections to the application submitted by Information Network for Responsible Mining (INFORM).

The Pitch Project is located approximately six miles east of Sargents in Saguache County, at an elevation of approximately 10,000 feet above sea level. The current permit area consists of 2,912 acres located on private and public lands. The private acreage is owned by the operator. The public acreage is managed by the United States Forest Service. The permit area proposed through AM-01 includes an additional 91.4 acres in order to incorporate all of the affected land into the permit area.

In 2017 the Division initiated discussions with the operator, requesting an updated reclamation plan and reasonable timetable for completing reclamation. The operator submitted AM-01 in response to the Division's request for an updated reclamation plan for the site.

Homestake Mining Company acquired the Pitch property in 1972. Prior to the acquisition underground mining was performed by Pinnacle Exploration. A reclamation permit was issued for the site in 1977. Homestake conducted open pit uranium mining from 1979 to 1984. A massive land slide feature began to develop in the north part of the pit in approximately 1979, and by 1983 had taken over the northeast pit wall. At that point mining was determined to no longer be feasible at the site. Homestake placed the site into "care and maintenance" status in 1984, and began the process of final closure in 1993. Barrick Gold Corporation merged with Homestake in 2001 and acquired the Pitch Project through the merger. The reclamation plan for the Pitch Project has not been updated since 1984, necessitating the Division's request for an updated reclamation plan. A significant amount of reclamation work remains to be completed at the site, and complex geotechnical stability and water quality issues exist.



In response to the Division's request the Operator has submitted an amendment application, AM-01. There is no further mining proposed at the site through AM-01. This is a "reclamation only" project.

Herein, all references to the Act and Rules refer to the Colorado Mined Land Reclamation Act, C.R.S. 34-32-101 et seq. (the Act), and to the Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard Rock, Metal, and Designated Mining Operations (Rules or Rule).

OBJECTION

During the public comment period the Division received a timely objection letter from Information Network for Responsible Mining (INFORM) dated September 11, 2019. In addition, the Division received a response to the INFORM letter from the Operator dated September 26, 2019.

Issues Raised by the Objector:

The issues presented by the Objector are summarized below in bold italics. The Division's responses are also summarized, along with citations to the applicable sections of the Act and/or Rules.

1. The permit area should not be expanded by an additional 91.4 acres.

Division Response

Mine impacts, in the form of tension cracks, are located outside the current permit boundary, on the northeast side of the pit. The tension cracks are part of the 1983 landslide feature that formed as a direct result of mining operations at the site. Therefore, the area is considered affected land as defined by the Act under section C.R.S. 34-32-103 (1.5). Pursuant to C.R.S. 34-32-112 (3), the Act requires operators to reclaim all affected land. In order to authorize the operator to perform reclamation activities on the additional acreage pursuant to C.R.S. 34-32-112, the area must be properly designated affected lands, must be included in the permit area, and must be adequately addressed in the reclamation plan. The Division has determined that the entire area disturbed by the mine should be incorporated into the permit area so that it can be included in the reclamation plan and be appropriately covered by the associated financial warranty. Therefore, it is necessary to expand the permit area by an additional 91.4 acres in order to ensure reclamation of the entire affected area.

2. The proposed reclamation plan is incomplete. The reclamation plan should be finalized prior to determination of water quality standard requirements by the Colorado Water Quality Control Commission (WQCC).

Division Response

The Act and Rules require that disturbances to the prevailing hydrologic balance of the affected land and of the surrounding area, and to the quality and quantity of water in surface

and groundwater systems, both during and after the mining operation and during reclamation, be minimized pursuant to C.R.S. 34-32-116 (7)(g). Additionally, Rule 3.1.6 specifies that operators must comply with state and federal water laws and regulations. Accordingly, compliance with water quality laws largely dictates how reclamation should be performed. The proposed Reclamation Plan includes plans for final grading and revegetation to reclaim the affected area to a stable configuration that will result in land that can be put to beneficial use as wildlife habitat. The Reclamation Plan has been reviewed by the Division in order to ensure it meets the requirements set forth by the Act and Rules, and was determined to be adequate.

However, water quality standards for the site, imposed by Colorado Department of Public Health and Environment (CDPHE) Water Quality Control Division (WQCD), are anticipated to change in 2022. The site is currently authorized to discharge water under CDPHE WQCD Permit # CO-22756 and, importantly, has an established history of meeting the water quality standards imposed by the discharge permit. In anticipation of changing water quality standards, the operator has been working in cooperation with CDPHE in order to determine the lowest practical level (LPL) of uranium that can be achieved at the site. The LPL is anticipated to become the standard for the discharge permit. Discharge from the site meets current water quality requirements imposed under the CDPHE discharge permit. Anticipating that the requirements are likely to change in 2022, it is reasonable and appropriate to anticipate that revisions to the reclamation permit will be necessary in order to ensure reclamation is completed in a manner that facilitates compliance with future water quality laws.

At this time, however, it is appropriate to consider the reclamation plan based on current site and regulatory conditions. Therefore, based on current site and regulatory conditions, the Division has determined the reclamation plan proposed through AM-01 adequately meets the requirements set forth by the Act and Rules.

3. *Future modifications to the permit should be considered only through permit amendments and not through technical revisions, in order to allow for public notice and participation.*

Division Response

The Act, under section C.R.S. 34-32-112 (8), states that an operator may, within the term of a reclamation permit, apply for a permit amendment increasing the acreage to be affected or otherwise revising the reclamation plan. Rule 1.1(16) further defines a permit amendment as a change in the permit which increases the acreage of the affected land, or which has a significant effect upon the approved reclamation plan. Rule 1.1(52) defines a technical revision as a change in the permit which does not have more than a minor effect upon the approved reclamation plan. Rule 1.10 (4) states that amendment applications shall be reviewed by the Division in the same manner as applications for new permits, which include public notice and comment period during the Division's review process. Technical revision applications do not require public notice by the applicant nor have public comment period during the Division's review process. Notice of technical revisions are acknowledged, however, in the activity report attached to the monthly Board agenda.

The Division determines, on a case by case basis, whether a revision to the permit shall be processed as an amendment or technical revision according to the definitions in the Act and Rules. It is not appropriate to impose that any future revisions to permit # M-1977-004 be allowed only as amendments. Changes to the permit that do not have more than a minor effect upon the approved reclamation plan should be processed as technical revisions pursuant to Rule 1.9. Any change to the permit that has more than a minor effect upon the approved reclamation plan should be processed as an amendment pursuant to Rule 1.10 and C.R.S. 34-32-112 (8).

4. ***The Division should require a complete reclamation plan that meets the requirements of Rule 3.1 (2), which states that all reclamation shall be carried out within five years of the date the Operator informs the Board that reclamation has commenced.***

Division Response

The proposed reclamation schedule on page 75 of the amendment application, in Exhibit E Reclamation Plan, indicates reclamation will be completed in five years.

5. ***The Division should require a complete reclamation plan that includes measures to minimize disturbance to the hydrologic balance with concerns to water quality and quantity, pursuant to C.R.S. 34-32-116(7) and Rule 3.1.6 (1).***

Division Response

The Act and Rules do require that disturbances to the prevailing hydrologic balance of the affected land and of the surrounding area, and to the quality and quantity of water in surface and groundwater systems, both during and after the mining operation and during reclamation, be minimized, pursuant to C.R.S. 34-32-116 (7)(g). Additionally, Rule 3.1.6 specifies that operators must comply with state and federal water laws and regulations.

The operator has a documented history of compliance with water quality laws and is currently authorized to discharge water from the site under CDPHE WQCD Permit # CO-22756. The discharge permit imposes site specific limits for particular constituents, with uranium being the primary constituent of concern. Discharge from the site has consistently been in compliance with the discharge permit. Furthermore, AM-01 contains substantial information, primarily located in the amended Reclamation Plan, Exhibit E, section 4.3 Water Quality – Surface and Groundwater, regarding site hydrology, and measures proposed to minimize disturbance to the hydrologic balance. The Division has reviewed the proposed plans and finds them compliant with the requirements of the Act and Rules.

Some uncertainty exists, however, with regards to future water quality requirements. Water quality standards for the site, imposed by CDPHE, are anticipated to change in 2022. The operator has been working in cooperation with CDPHE in order to determine the lowest practical level (LPL) of uranium that can be achieved at the site. The LPL is anticipated to become the standard for the discharge permit. However, the establishment of the applicable standard is exclusively within the jurisdiction and authority of CDPHE, and not the Division or the Board. Anticipating that the requirements will likely change in 2022, it is reasonable and appropriate to anticipate that revisions to the reclamation permit will be necessary in

order to address changes to water quality requirements. Future changes to the reclamation permit necessary to maintain compliance with future water quality laws will need to be addressed through appropriate permit revisions. Again, discharge from the site meets current water quality requirements imposed under the CDPHE discharge permit. Based on current water quality standards the Division determined that the reclamation plan proposed in AM-01 is complete and adequate with regards to minimizing disturbance to the hydrologic balance.

6. ***The Division should require a complete reclamation plan that includes a brief statement or plan showing how water from dewatering operations or from runoff from disturbed areas, piled material and operating surfaces will be managed to protect against pollution of either surface or groundwater (and, where applicable, control pollution in a manner that is consistent with water quality discharge permits), both during and after the operation, pursuant to Rule 6.4.7.***

Division Response

The applicable information, required under Rule 6.4.7 (2)(c), is contained within the application, primarily located in the amended Reclamation Plan, Exhibit E, section 4.3 Water Quality – Surface and Groundwater. Additionally, the Operator has a documented history of controlling pollution in a manner consistent with their discharge permit, WQCD Permit # CO-22756. Water quality management practices currently in use at the site have been effective thus far, but are to be improved upon as part of the proposed reclamation plan. The Division determined the application adequately addresses the requirements of Rule 6.4.7.

7. ***Surface and groundwater monitoring should be required indefinitely into the future.***

Division Response

As stated above, the site is authorized to discharge water under CDPHE WQCD Permit # CO-22756, and has complied with the discharge permit requirements. Following completion of reclamation, water quality monitoring will be required as long as deemed necessary by WQCD and the Division in order to meet the requirements of the discharge permit and reclamation standards, and to ensure compliance with water quality laws.

8. ***Costs for indefinite water monitoring should be included in the financial warranty. The Division should be diligent in anticipation of the new requirements of HB 19-1113, which increases the Division's authority to bond for maintenance of water quality standards before and after closure.***

Division Response

Sections of the Act were amended through House Bill HB 19-1113 (HB 19-1113), approved by Governor Polis on April 4, 2019, which included parts of C.R.S. 34-32-117. Pursuant to C.R.S. 34-32-117 (4)(b), as amended, the amount of financial warranty held must be sufficient to assure the completion of reclamation of affected lands if the office has to complete the reclamation due to forfeiture, including all measures commenced or reasonably foreseen to assure the protection of water resources, including costs necessary to cover water

quality protection, treatment and monitoring as may be required by permit. The operator has included costs in their financial warranty estimate, Exhibit L, for full operation of an engineered treatment cell for four years, and partial costs for forty years. The costs were estimated based on current water quality requirements for the site, and found appropriate and adequate by the Division. The amount of financial warranty currently held for this site is \$2,263,000. Through AM-01 the financial warranty will be increased to \$24,451,940, an increase of just over \$22 million.

If the water quality standards, imposed under the exclusive jurisdiction of WQCC, become more stringent, it will at that time become necessary to revise the reclamation plan in order to address the new water quality requirements. It may also become necessary to require additional financial warranty in order to ensure that water quality protection, treatment and monitoring can be completed by the Division in case of forfeiture.

Pursuant to C.R.S. 34-32-117(4)(b), reclamation costs shall be computed with reference to current reclamation costs. Therefore, it is appropriate to base the reclamation plan and associated financial warranty on current site and regulatory conditions, i.e. current reclamation costs. The Division has determined the financial warranty estimate, Exhibit L, included with the AM-01 application is adequate based on current reclamation costs.

DIVISION RECOMMENDATION

The Division has determined that the 112d-3 amendment application submitted by Homestake Mining Company for the Pitch Project, Permit # M-1977-004, meets the requirements of the Act and Rules. Therefore, it is the recommendation of the Division that the Board approve the amendment application, AM-01.

CERTIFICATE OF SERVICE

I, Dustin Czapla, hereby certify that on Thursday, December 19, 2019 I deposited a true copy of the foregoing *Rationale for Division Recommendation* in the United States Mail, postage paid, addressed to the following:

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