

DEPARTMENT OF STATE LANDS



STAN STEPHENS, GOVERNOR

CAPITOL STATION

STATE OF MONTANA

(406) 444-2074

1625 ELEVENTH AVENUE
HELENA, MONTANA 59620

July 8, 1992

RECEIVED
JUL 09 1992
ENVIRONMENTAL
QUALITY COUNCIL

Dear Reader:

Enclosed for your review is an Environmental Assessment (EA) prepared by the Department of State Lands (DSL). The EA evaluates a proposal by Cable Mountain Mine, Inc to expand the mine permit area.

Public comment on this EA will be received by the DSL until 5:00 p.m. July 29, 1992. Comments should be about the adequacy of the EA in assessing issues, new information not considered that may influence the analysis, and clarification. Comments should be specific. The agencies will use these comments and agency responses, the EA, and the application for amendment to make a final decision on the permit. The decision may be to approve the proposal, deny the proposal, or approve the proposal with modifications.

A public meeting is scheduled for 7:00 p.m. on July 23, 1992, in the Anaconda Deer Lodge County Courthouse. Written and verbal comments will be accepted. Comments will also be accepted by phone (444 - 2074) or by letter to:

Bob Winegar
Montana Dept. of State Lands
Capitol Station
Helena, MT 59620

Thank you for your time and consideration.

Sincerely,

Bob Winegar

Robert C. Winegar
Program Supervisor
Hard Rock Bureau
Reclamation Division

ENVIRONMENTAL ASSESSMENT

APPLICANT: Cable Mountain Mine, Inc.

TYPE OF OPERATION: Place Gold Mine

LOCATION: Sec. 10, 15, T5N, R13W COUNTY: Deer Lodge

PERSON PREPARING E.A.: Wayne Jepson, Bob Winegar, Peter Werner

APPLICATION COMPLETE: June 2, 1992 E.A. COMPLETE: _____
Date Date

	POTENTIAL IMPACTS					
	A	B	C	LONG TERM	SHORT TERM	AMPLIFICATION
PHYSICAL ENVIRONMENT						
1. <u>TOPOGRAPHY</u>			X		X	See Page 4
2. <u>GEOLOGY</u> ; Stability			X	X		See Page 4
3. <u>SOILS</u> ; Quality, Distribution			X	X		See Page 5
4. <u>WATER</u> ; Quality; Quantity; Distribution			X		X	See Page 5
5. <u>AIR</u> ; Quality			X		X	See Page 5
6. <u>UNIQUE, ENDANGERED, FRAGILE, or LIMITED</u> environmental resources			X			
BIOLOGICAL ENVIRONMENT						
1. <u>TERRESTRIAL, AVIAN, and AQUATIC</u> ; species and habitats			X			
2. <u>VEGETATION</u> ; quantity, quality, species			X		X	See Page 5
3. <u>AGRICULTURE</u> ; grazing, crops production			X			
HUMAN ENVIRONMENT						
1. <u>SOCIAL</u> ; structures and mores			X			
2. <u>CULTURAL</u> uniqueness, diversity			X			
3. <u>POPULATION</u> ; quantity and diversity			X			
4. <u>HOUSING</u> ; quantity and distribution			X			
5. <u>HUMAN HEALTH & SAFETY</u>						

	A	B	C	POTENTIAL IMPACTS		
				LONG TERM	SHORT TERM	AMPLIFICATION
6. <u>COMMUNITY & PERSONAL INCOME</u>			X			
7. <u>EMPLOYMENT</u> ; quantity and distribution			X			
8. <u>TAX BASE</u> ; local and state tax revenue			X			
9. <u>GOVERNMENT SERVICES</u> ; demand			X			
10. <u>INDUSTRIAL, COMMERCIAL</u> and <u>AGRICULTURAL</u> activities			X			
11. <u>HISTORICAL</u> and <u>ARCHAEOLOGICAL</u>			X	X		See Page 5
12. <u>AESTHETICS</u>			X			
13. <u>ENVIRONMENTAL PLANS</u> and <u>GOALS</u> ; local and regional			X			
14. <u>DEMANDS</u> on <u>ENVIRONMENTAL RESOURCES</u> of land, water, air and energy			X			
15. <u>TRANSPORTATION</u> ; networks and traffic flows			X			

PUBLIC INVOLVEMENT: Public Review of E.A.

ALTERNATIVES CONSIDERED: See attached discussion on page 6.

COMPLIANCE STATUS: No outstanding noncompliances.

RECOMMENDATIONS CONCERNING PREPARATION OF AN EIS: An EIS is not necessary for this level of disturbance

OTHER GROUPS OR AGENCIES CONTACTED OR WHICH MAY HAVE OVERLAPPING JURISDICTION: Montana Department of Fish Wildlife.

INDIVIDUALS OR GROUPS CONTRIBUTING TO THIS EA:

- A: Significant Unavoidable Impacts
- B: Insignificant as a result of conditioned mitigation
- C: Insignificant as proposed

Robert C. Winegar

 Signature

BACKGROUND

An application for an amendment to Operating Permit 00134 was received by the Department of State Lands on March 16, 1992, from Cable Mountain Mines, Inc. (CMI). CMI is a California Corporation headquartered at 5143 Sunset Boulevard, Los Angeles, California. The proposed placer mining expansion is located on private land 13 miles west of Anaconda, Montana, along the upper Cable Creek drainage. The mine area is in Secs. 10 and 15, T5N, R13W (Figure 1).

The mine was permitted July 6, 1988, for 93.6 permit acres and 51.2 acres of disturbance. Amendment 001 (April 18, 1989) reduced the permit to 54.8 acres and added a mercury amalgamation circuit. Amendment 002 (August 24, 1990) further reduced the disturbance and permit to 34.8 acres. This application would add 23.5 acres to the existing permit acres for a total of 58.3 permit acres and 15 acres to disturbance for a total of 49.8 disturbance acres.

PROPOSAL

CMI proposes to mine gold bearing placer gravels from an undisturbed area northwest of the previously permitted area. Ore would be mined from a zone approximately 20 - 30 feet deep. The plan of operations would be to recover gold by conventional gravity methods; sorting and sizing of gravels by trommel and screens, and concentrating by sluice and jigs.

According to the existing permit, the wash plant can process 2000 cubic yards per day. The total predicted volume to be processed over a 4 year mine life was 800,000 cubic yards. The maximum amount of material expected from the proposed expansion area is 581,000 cubic yards (12 acres X 30 feet deep). Therefore, this amendment could potentially extend the life of this mining project by about three years. The production rate stated in the application is 1,000 cubic yards per day for the expansion area. This area would be mined concurrently with the currently permitted mine area; an additional 1000 cubic yards per day would come from the current mine area to maintain the wash plant production rate.

Mining in the proposed amendment area would proceed uphill from the existing permit boundary. Gravel would be hauled from the hillside down to the existing washplant for processing. This gravel would be combined with gravels mined from the currently permitted mining area. Coarse material (+ 2 inch) would be dumped across the upper end of the mine pit in the lower mining area, forming a dam behind which a settling/filtration pond would be created. When this pond fills with sediment and the coarse barrier ceases to act as a filter, a new pond would be constructed downgradient of the old pond, as

mining in the lower region proceeds downhill. Meanwhile, additional washplant reject would be hauled back uphill to the proposed mine area to backfill the pit in that area. Slurry transport of reject material could be incorporated into the mine plan for the amendment area in the initial stages of mining when the pit is still relatively close to the processing plant. Overburden stockpiles would be limited to 8000 lcy, and process plant reject to 30,000 lcy at any given time regardless of whether mining occurs in the existing permit area, the amendment area, or both.

Ore processing would require a maximum of 2000 gallons per minute (gpm) water throughput. Water would be recycled but 400 gpm makeup water (calculated by DSL) would be required. The makeup water would be supplied by mine pit inflow and by inflow into the settling ponds at the washplant.

Mercury amalgamation of gold ore is permitted in the original plan. The same procedures and monitoring requirements would apply to this amendment.

Employment and equipment requirements would remain as permitted in the original plan.

RECLAMATION

Overburden and soil material will be stockpiled next to the mine pit. This overburden, along with overburden and reject material from the washplant and lower mine area, would be backfilled into the mine pit as the pit advances. The size of the open pit would be approximately 200' x 70' x 30', with out-of-hole overburden limited to 8000 lcy at any given time. Grading would be conducted to produce small dozer depressions to control rilling and reduce the runoff energy of the slope. Soil would then be replaced and seeded with a grass mixture. Slash materials would be scattered over the reclaimed area.

AMPLIFICATION OF ENVIRONMENTAL FACTORS

Physical Environment

Topography: The topography of the area would be altered during the operational life of the mine. This alteration would consist of the mine pit, topsoil and overburden stockpiles, and reject pile. All disturbances would be regraded to approximate original contours during reclamation.

Geology: Excavation, processing, and backfilling of the gravel will cause some swelling of the naturally compacted material. This will slowly settle after reclamation. No stability problems are anticipated as a result of this process.

Soils: Soil will be stripped and stockpiled before a panel is mined through, then respread after the pit is backfilled and mining has proceeded uphill. Soil thickness naturally varies, but will likely be respread in a uniformly thick layer. This minor change should not affect the soil's ability to support vegetation.

Water: To date, settling ponds have been effective in preventing sediment-related impacts to Cable creek. It is not anticipated that this proposal would result in increased sedimentation in the creek. CMMI monitors a wide variety of water quality parameters, including mercury (detection limit = 0.0002 mg/l). No changes from baseline water quality have been detected to date in either surface or groundwater.

Air: During dry periods, the mining operation on the hillside will likely create more dust than it would in the valley bottom, as there is less groundwater in the hillside area. Water is required for processing, therefore the ore is wet during this time. CMMI has committed to control dust by sprinkling as needed, and has an Air Quality Permit.

Biological Environment

Vegetation: Vegetation would be cleared ahead of the mine pit as the active mine area progressed uphill. At the same time, reclamation and revegetation would occur where mining has been completed. A forest would eventually become re-established in the mined area.

Human Environment

Historical and Archaeological: Some old unreclaimed trenches exist in the mine area, probably left behind from exploration activities conducted by the Anaconda Company. These trenches would be mined through and reclaimed.

RELATED ACTIONS

CMMI is currently conducting exploration in the proposed amendment area to determine the economic feasibility of the placer deposit. This involves timber removal at exploration sites, followed by topsoil removal and trenching. After samples are collected, the trenches are backfilled, topsoil respread, and slash is spread back over the disturbed area to discourage erosion and promote rapid revegetation after reseeding.

Exploration activities are ongoing in the Southern Cross/Old Georgetown/Cable Mountain mining districts. CMMI has conducted drilling in the area of the historic Cable Mountain Mine, an underground mine in which gold was recovered from a skarn deposit. Other companies are re-exploring historic mining districts to the north and northwest of CMMI's operation.

Exploratory drilling in the Southern Cross area has been blamed for damages to quality and/or quantity of the water supplies of several local residences. The validity of these allegations has not been proven, however. The proposed Cable Mountain Mine expansion area is located on the other side of a ridge from the Southern Cross and Old Georgetown communities and is a placer operation which would not impact the bedrock aquifer, therefore the water supplies of residences in the area would not be impacted by this operation.

CUMULATIVE IMPACTS

Continued exploration by mining companies in the southern Flint Creek Range may result in the discovery of more mineable ore reserves. If this occurs, it is foreseeable that the Department of State Lands will receive more applications for operating permits for mining activities, possibly including placer, open pit, and underground mining operations. If proposed and permitted, such mines would contribute to the socioeconomic base of the Georgetown Lake area. A cumulative visual impact of the Cable Mountain placer mine and other potential mines is not anticipated, as completion of mining at the Cable mine and subsequent reclamation of the hillside will be accomplished in the next few years. No new mines have as yet been proposed, and therefore none could be in operation before the Cable placer mine has been reclaimed.

ALTERNATIVES

The following alternatives to this proposal are being considered:

1. The company's proposal
2. Sequential mining of the current mine area and the amendment area
3. No Action

Under alternative #1, concurrent mining of the area permitted under amendment 002 and that proposed under this amendment would occur. The rate of mining of the amendment 002 area would be reduced to allow for concurrent mining, and the potential life of the mining project would be extended.

Under alternative #2, the hillside area described in amendment 003 would be mined after mining in the amendment 002 area is completed. This would be much less efficient than concurrent mining, as settling/filtration ponds could not be located near the wash plant during mining of the placer deposit on the hillside. The total area of unreclaimed disturbances at any one time would be decreased under this alternative, requiring less reclamation bonding from CMMI.

Under alternative #3, the proposed amendment 003 would be denied. Mining could continue in the area described under amendment 002 at 2000 cubic yards per day. With the exception of those areas cleared for exploration activities, the hillside above the active mine area would remain forested, unless cut by a timber company.