

APPENDIX C

DEIS Public Comments and Responses

In the response to comments, every effort was made to address all points that were brought up by the person or group submitting the letter. Some comments are considered “non-substantive” as defined in the BLM NEPA Handbook and are not conducive to a response because they are:

- Comments in favor of or against the Proposed Action or alternatives that do not provide a reasonable basis to question the accuracy, adequacy, methodology, or assumptions within the EIS; present new information relative to the analysis; present new and reasonable alternatives; or cause changes or revisions to the EIS analysis, Proposed Action or alternatives;
- Comments that only agree or disagree with BLM policy or resource decisions without justification or supporting data that meet the criteria listed above (such as “more grazing should be permitted”);
- Comments that do not pertain to the project area or the project (such as “the government should eliminate all dams,” when the project is about a grazing permit); and
- Comments that take the form of vague, open-ended questions.

In cases such as the above, the BLM response will be “statement noted” indicating the letter or point was acknowledged, but no specific response was warranted.

A



JIM GIBBONS
Governor

STATE OF NEVADA
DEPARTMENT OF WILDLIFE

1100 Valley Road
Reno, Nevada 89512
(775) 688-1500 • Fax (775) 688-1595

KENNETH E. MAYER
Director

DOUG HUNT
Deputy Director

January 5, 2009



Lynn Bjorklund
BLM – Ely District Office
HC33 Box 33500
Ely, NV 89301-9408

RE: Bald Mountain Mine North Operations Area Project DEIS

Dear Ms. Bjorklund,

Thank you for the opportunity to read and review Barrick's proposed Bald Mountain Mine North Operations Area Project. The Nevada Department of Wildlife has enjoyed working with Barrick and the BLM to address issues through the NEPA process and the development of this document.

A-1

The Nevada Department of Wildlife would like to take this opportunity to endorse the Partial Backfill Alternative, as described in section 2.5.2 of the DEIS. The Partial Backfill Alternative maximizes the post-mining habitat for wildlife use. Large open pits left on the landscape not only reduce the quantity of habitat present for wildlife post-mining, but can pose as obstacles in terrestrial wildlife migration. Mule deer have been documented to use the proposed action area as transitional habitat between summer and wintering ranges. The Partial Backfill Alternative will increase the amount of transitional habitat present, as opposed to the Proposed Action, after mining ceases in the project area. As such, this alternative will minimize the long term impacts to Nevada's wildlife.

If you have any questions about my comments, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "K Miller".

Katie Erin G. Miller
Eastern Region Mining Biologist
Nevada Department of Wildlife
60 Youth Center Road
Elko, NV 89801
775-777-2368
kmiller@ndw.org

Response No. A-1: Statement noted.



B

Bald Mountain Mine North Operations Area Project Draft Environmental Impact Statement



Draft EIS Public Meeting Comment Form

Informed decisions are better decisions: The Bureau of Land Management (BLM) believes that extensive public involvement will serve to improve communication, develop enhanced understanding of different perspectives, and identify solutions to issues and problems. We look forward to hearing from you.

Where to provide comments: You can hand this form in at a public scoping meeting or mail using the address on reverse. **Comments can also be provided via email to: Lynn_Bjorklund@blm.gov.**

Bureau of Land Management
JAN 12 2009
RECEIVED

Name PATRICK ROGERS County ELKO

Title _____ Organization _____

Mailing Address 408 FIR STREET

City ELKO State NV Zip 89801

Email _____

Date 08 Jan 2009 Meeting Location (if applicable) ELKO

Please check box if you do **not** want your name released when comments are made public.

Please check box if you want to receive a hard copy of the Final Environmental Impact Statement and Record of Decision.

COMMENT (use back side if you need additional space or attach additional sheets)

I strongly support the Bald Mountain Mines North Operations Area Project and encourage the BLM to quickly move to an FEIS and favorable R.O.D. The DEIS is comprehensive and well-written. The design features and SOPs, effectively minimize potential environmental impacts. The project will create much-needed economic growth and stability. Barrick has a proven record of responsible, environmentally-protective operations and is a strong supporter of the communities in which they operate.

To Return via US Mail: Fold in thirds so BLM address (on reverse) is showing, add postage, tape bottom of fold, and mail. **Please have comments postmarked by February 2, 2009.**

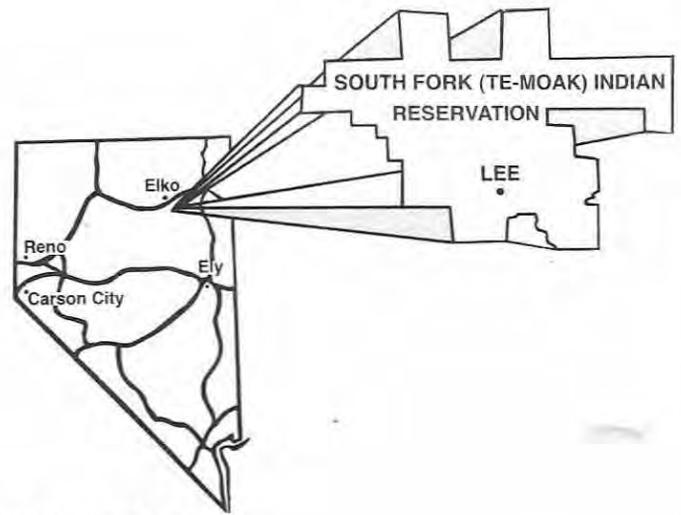
To provide comments via email: Please email comments to: Lynn_Bjorklund@blm.gov by **February 2, 2009.**

Comments, including names, street addresses, e-mail addresses, and phone numbers (if provided) of respondents will be available for public review at the BLM Ely District Office during regular business hours (7:30 am to 4:30 pm), Monday through Friday, except holidays. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Response No. B-1: Statements noted.

SOUTH FORK BAND COUNCIL
SOUTH FORK INDIAN RESERVATION
21 LEE, B-13
SPRING CREEK, NEVADA 89815

775-744-4273 FAX 775-744-4523



**RESOLUTION OF THE GOVERNING BODY
OF THE
SOUTH FORK BAND INDIAN RESERVATION**

Resolution No. 07-SF-19

BE IT RESOLVED BY THE SOUTH FORK BAND COUNCIL:

WHEREAS, this is a constituent Band of the Te-Moak Tribe, known as the South Fork Band Council, as defined by the Indian Reorganization Act of June 18, 1934, as amended and operates and functions in accordance with the Constitution of Te-Moak Tribe of Western Shoshone Indians of Nevada, and

WHEREAS, the South Fork Band Council is the governing body of the South Fork Indian Reservation, and is empowered by the Constitution to promote and protect the welfare of its members, and to enact all ordinances and resolutions which shall be necessary and proper for carrying into effect the foregoing powers, and

WHEREAS, mining that is in operation by Barrick Mining Company has escalated out of proportion to affect the lands by polluting the waters, fish, and changing the migration paths and routes of all animals that have been here for thousands of years, and

WHEREAS, the mines that Barrick has operating and are planning to open are the Cortez Hills, Pipeline Project, Horse Canyon, Bal Mountain, Beteiz Mine, and other mines that are not made public as of yet. These mines will affect all people, sportsmen, grazers, water tables, springs, Shoshone gathering areas for pine nuts, medicine plants, sacred areas, burial areas, animals, birds, and all things that have a purpose in the circle of life, and

C-1

WHEREAS, the Shoshone People have not agreed to the vast devastation of lands and cultural areas that have been removed by the mining of gold, and

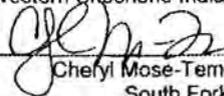
WHEREAS, the expansion of Bald Mountain will have an ever lasting impact to the Odgers Ranch area in ways that hurt the members that are trying to make a living for their families and the South Fork Reservation. The members of the Odgers Reservation will lose water, grazing areas, pine nut areas, gathering areas, and many traditional values.

C-2 | **NOW THEREFORE BE IT RESOLVED** that Barrick Mining cease in being partners with BLM in destroying Nevada and Shoshone ancestral lands under the Treaty of Ruby Valley. The South Fork Band Council opposes any and all mining expansions until the Supreme law of the land is respected and Barrick be more involved in following its guidelines and policy on indigenous lands and its people.

C-3 | **BE IT FURTHER RESOLVED THAT**, the South Fork Band Council encourages the Te-Moak Tribal Council to become more involved in these mining issues on behalf of the Western Shoshone People.

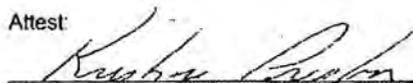
- CERTIFICATION -

I, the undersigned as Chairman of the South Fork Band Council do hereby certify that the South Fork Band Council is composed of seven (7) members, of whom 6 constituting a quorum were present at a Special Meeting duly held on the 26th day of June 2007, and that the forgoing resolution was duly adopted at such meeting by a vote of 6 for, 0 against, and 0 abstentions, pursuant to Article 4, Section 12 (a) and (b) and Section 13 of the Constitution of the Te-Moak Tribe of Western Shoshone Indians of Nevada.



Cheryl Mose-Temoke, Chairman
South Fork Band Council

Attest:



Kristine Preston, Acting Recording Secretary

Response No. C-1: *All resources identified in the South Fork Band Resolution No. 07-SF-19 (such as grazing-Section 3.10, water resources-Section 3.2, pine nut areas-Section 3.12, etc.) have been identified and addressed in the FEIS. Environmental Justice is discussed in Section 3.18.1 and Section 3.18.2 and identifies the Proposed Action is not expected to have a disproportionate effect on any particular population. Section 3.20 indicates no traditional cultural properties have been identified within the Proposed Action area that might be impacted by the Proposed Action or any of the alternatives.*

Response No. C-2: *Statements noted.*

Response No. C-3: *BLM will continue ongoing consultation with Native American Tribes and governmental representatives in accordance with the American Indian Religious Freedom Act of 1978, Executive Order 13007, Indian Sacred Sites, and Section 106 of the National Historic Preservation Act.*

D

Lynn Bjorklund
Environmental Protection Specialist/Minerals Egan Field Office, Ely
District Bureau of Land Management
775 289-1893
----- Forwarded by Lynn Bjorklund/EYFO/NV/BLM/DOI on 02/02/2009 04:16 PM

Emiliano McLane
<bosquedo@yahoo.com>
02/02/2009 04:09 PM
To
lynn_bjorklund@nv.blm.gov
cc
Subject
Bald Mountain DEIS comment

D-1

To whom this may concern,
On behalf of the South Fork Band Environmental Department, we would like to oppose any expansion of the said mine as it will harm even more of the surrounding environment. Until false studies have been eliminated from your reports and comments are actually looked at and considered, our department will continue to oppose the Bald Mountain Mine North Operations Area Project in White Pine County, Nevada. Also, I have attached a resolution from the South Fork Band Tribal Council opposing the project. Thank you for your consideration,

Emiliano McLane, Coordinator
South Fork Band Environmental
21 Lee B-13
Spring Creek, NV 89815
Phone: 775-744-2387

(See attached file: Microsoft_Word_-_south_fork_resolution[1].pdf)

Response No. D-1: *The South Fork Band Council Resolution 07-SF-19 that was attached to this letter is addressed in Responses C-1 through C-3. All substantive comments have been considered and responded to in this Final Environmental Impact Statement.*



United States Department of the Interior

U. S. GEOLOGICAL SURVEY

Reston, VA 20192

In Reply Refer To:
Mail Stop 423

January 29, 2009

Ms. Lynn Bjorklund, Project Lead
Bureau of Land Management
Ely District Office
HC 33 Box 33500
705 No. Industrial Way
Ely, Nevada 89301-9408

Subject: Draft Environmental Impact Statement for the Bald Mountain Mine North Operations Area Project

Dear Ms. Bjorklund:

As requested by your correspondence of December 8, 2008, the U.S. Geological Survey (USGS) has reviewed the subject draft environmental impact statement (DEIS) and offers the following comment.

SPECIFIC COMMENT

Section 3.2.3 Groundwater Affected Environment, page 3-27, first paragraph, last 2 sentences; and Section 6.1 References, page 6-15

E-1 | The USGS publication (2007) is no longer current due to changes in the water budget calculations. It has been superseded by the more recent publication, Welch and others (2008). The results presented in the more recent report should be incorporated into analyses presented in the final EIS.

REFERENCE

Welch, A. H.; Bright, D.J.; and Knochenmus, L. A., eds, 2008, Water Resources of the Basin and Range Carbonate-Rock Aquifer System, White Pine County, Nevada, and Adjacent Areas in Nevada and Utah, U.S. Geological Survey Scientific Investigations Report 2007-5261, 97 p. available on the Internet at <http://pubs.usgs.gov/sir/2007/5261/>

Thank you for the opportunity to review and comment on the DEIS. If you have any questions concerning our comment, please contact Lloyd Woosley, Chief of the USGS Environmental Affairs Program, at (703) 350-8797 or at lwoosley@usgs.gov.

Sincerely,

/Signed/

James F. Devine
Senior Advisor for Science Applications

Response No. E-1: *This reference information has been changed in the FEIS, as suggested except for the date. The date was kept as 2007 as this is the preferred reference listed in the publication. The information in the new publication was reviewed. As it did not present information that changed the evaluation or conclusion of this document, no further changes were deemed necessary.*

F

"Steve Tuttle"
<stuttle@klune.com>
01/06/2009 09:52 AM

To <Lynn_Bjorklund@nv.blm.gov>
cc
bcc
Subject DEIS Objection to Expansion

History: This message has been forwarded.

To: Lynn Bjorklund
Project Lead
BLM

In Reference to:
DEIS
380910 NV040
N82888
Jan. 6, 2009

General Comments:

Dear Lynn,

F-1

I am a property owner of forty acres of private patented property bordering the proposed mining plan for the Bald Mountain Mine North Operation Area Project.

The location description of my property is the NE ¼ NE ¼ Sec. 5, Township 23, Range 58 Lot #1. I purchased the property in 1981 and my plans were, and still are, to develop the property into recreational building lots. My concern is that this Environmental Impact Statement Proposal has ignored the proximity of my property to the mining activity and does not address the impact the mine activity will have on my property. The current proposal will bring the Mooney Leach Pad, Saga RDA and the Saga Pit a few thousand feet from my property.

Barrick Gold is well aware of the proximity of my property and my plans for the recreational development. Placer Dome (Barrick Gold), placed mining claims on my property on June 4, 2005, and have, until recently, been active in purchasing the surface and mineral rights, but to date no agreements for sale have been made. Therefore; to protect my interests and guarantee the greatest return on my investment from my property, I must take exception, and object to the Expansion Proposal of the Bald Mountain Mine North Operations Area Project for the environmental impacts the mining will place on my property.

F-2

I hope my property concerns are addressed within any final draft of the DEIS and that all my property rights for clean air, adequate clean water, land access, and visual impact are addressed and that I am protected. I will be e-mailing you specific comments and questions before the Feb. 2, 2009 deadline of the scoping period.

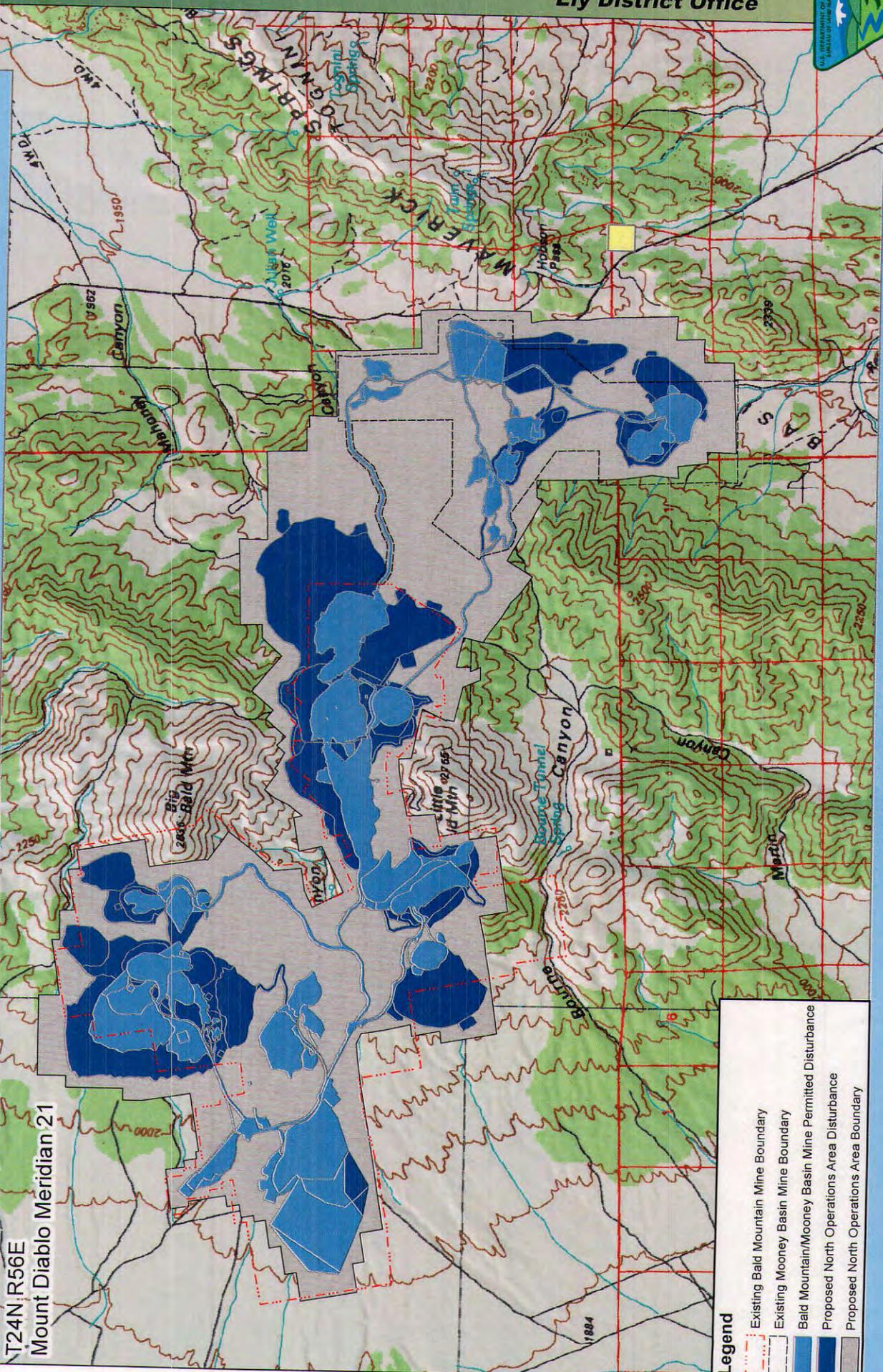
You,

Thank

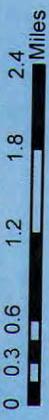


Barrick Gold U.S. Inc. North Operations Area DEIS

T24N R56E
Mount Diablo Meridian 21



- Legend**
- Existing Bald Mountain Mine Boundary
 - Existing Mooney Basin Mine Boundary
 - Bald Mountain/Mooney Basin Mine Permitted Disturbance
 - Proposed North Operations Area Disturbance
 - Proposed North Operations Area Boundary



Scale 1:75,000

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data.

Response No. F-1: *Potential impacts of the Proposed Action on surrounding areas have been analyzed in Section 3 of the FEIS. The property in question was analyzed in its current undeveloped state. On March 2, 2009, JBR spoke with Mr. Bob Bishop, White Pine County Assessor's office. According to the Assessor's office, no plans for development have been submitted to White Pine County for consideration for this property. It is also noted the property identified in the letter does not border the North Operations Project plan of operations border, but is approximately 3,300 feet (0.63 mile) from the Plan of Operations border. Implementation of the proposed project will result in the Saga Rock Disposal Area being 5,100 feet (0.97 mile) from the subject parcel; Saga Pit being 8,000 feet (1.52 miles) from the subject parcel; and the Mooney Heap Leach Pad being 4,800 feet (0.91 mile) from the subject parcel.*

Response No. F-2: *The text of the FEIS has been revised to address these issues and they have been addressed throughout Chapter 3 of the FEIS.*

Lynn Bjorklund
Environmental Protection Specialist/Minerals Egan Field Office, Ely
District Bureau of Land Management
775 289-1893
----- Forwarded by Lynn Bjorklund/EYFO/NV/BLM/DOI on 01/28/2009 09:19 AM

"Steve Tuttle"
<stuttle@klune.com>
01/28/2009 09:18 AM
To: <Lynn_Bjorklund@nv.blm.gov>
cc
Subject: Specific Comments on DEIS Bald Mountain

In my opposition to this expansion, these are specific issues and questions I have with this draft of the DEIS Bald Mountain Mine North Operation Area Project.
To: Lynn Bjorklund
Project Lead
BLM

In Reference to:
DEIS
380910 NV040
N82888

Jan. 28, 2009

Dear Lynn,

G-1

I am a property owner of forty acres of private patented property bordering the proposed mining plan for the Bald Mountain Mine North Operation Area Project.

The location description of my property is the NE ¼ NE ¼ Sec. 5, Township 23, Range 58, Lot #1. I purchased the property in 1981 and my plans were, and still are, to develop the property into recreational building lots. My concern is that this Environmental Impact Statement Proposal has

ignored the proximity of my property to the mining activity and does not address the impact the mine activity will have on my property. The current proposal will bring the Mooney Leach Pad, Saga RDA and the Saga Pit a few thousand feet from my property as I mentioned in my General Comments e-mail dated January 6, 2009.

Specific Comments and Questions in opposition to the proposed DEIS for the Bald Mountain Mine

S-10 Air Quality page S-10

G-2 | My property is the closest sensitive receptor to this proposed action. Long Valley road intersects the tip of my property which is less than 1/2 mile east of the proposed expansion of the Mooney Basin leach pad. This section states the air quality will not be noticeable because the nearest residence is more than five miles from the proposed action area. This will not be true when I develop. How will my air quality be protected?

S-11 Noise and Vibration

G-3 | This section states the noise profile would be expected to be unnoticeable or minor with the closest human residence over five miles away. This will not be true when I develop my property. How will the residences be protected?

G-4 | Figure 2-6 Mooney Basin Operational Detail This map shows the proposed expansion of the Mooney Leach Pad getting very near to my property. Section Visual Resource S-10 shows the four key observation points. I believe my property should be added as an observation point to assure that a leach pad at 7195 ft crest elevation will not be seen from my property at 6800 ft altitude, or the Saga RDA stockpile at 7,000 crest elevation being seen from my property. Are reclamation efforts going to remove the leach pad and the Saga RDA after mining is complete?

Page 3-4 Section 3.2.1 Surface Water Affected Environment.

G-5 | It should be noted that Willow Springs is a source of good drinking water year round, and less than 1/2 mile from my property. I have used this spring for twenty eight years and hope to continue to have access.

Water resource page S-3 Drinking Water:

G-6 | Will Willow Spring be protected?

Groundwater page S-3

G-7 | It should be noted of my plans for development and water usage needs, and be determined if my water demand for my development will be impacted.

Land Use and Access page S-9

G-8 | This section states public access would be restricted in areas of active mining and processing for the life of the mine. Myself, and any private landowners in my development will need public access at all times to their property.

Waste Management 2-40

- G-9 | Will the proximity of the landfill site to my property, become a problem for contamination for my water supply for my development?
- G-10 | Ground Water Environmental Consequences 3.2.4 It is true no permitted generator users within five miles currently but if I obtain my development permit will I have enough clean and drinkable water?
- G-11 | Effects on Air Quality for Existing Emission Sources 3-116 This sections states the nearest residence or areas of human activity are ranches in the valleys below the purposed action and at least five miles distant from the mine boundary. My property is about ½ mile from the boundary. The mine site is about the same elevation as my property and therefore could increase the potential for concentration of pollutants on my property. How will the property be protected?
- G-12 | Regulatory Framework 3-117 Will my development be a Class 1 or Class 11 and will mining activity meet the standards with the proximity of my property to the mine boundary?
- G-13 | Air Source Emissions 3-123 This table shows expected emissions. Are these quantities allowable for residences where my property is located?
- G-14 | Access Road Corridors 3-124 My property is intersected by the Long Valley Road and I would be a sensitive receptor in the direct impact area.
- G-15 | Ambient Air Quality Impacts 3-125 Air quality modeling showed all predicted maximum impacts would occur on the Plan of operation boundary. My property is on the boundary and is not miles short of the nearest residence. How will my air quality be protected from these emissions?
- G-16 | Visual Resources Environmental Consequences 3.15.2 Should my property be classified as a visually sensitive land use so the quality of scenic resources would be protected with the Mooney leach pad, Saga RDA and possibly the Saga Pit so near? How will my views be protected during and after mining efforts are complete?
- G-17 | Table 3-14 Page3-102 Should my property be added to the table? NE ¼ NE ¼ Section 5 Township 23 N Range 58 E.
- G-18 | 3.14.2 Air Quality Environmental Consequences If I am a Class I area, will the air pollutant concentrations not be exceeded in ambient air?
- G-19 | Mercury Emissions and other Chemicals listed Table 3-23 What will be done to control these emissions modeled on table 3-23 unto my property? Will my property be modeled?

Table 4-2

G-20 | Should my property should be added to the table listing interactions between resources.

I have stated my opposition with issues and questions I have with this draft of the proposal as written, but offer issues might need to be addressed now that the BLM is aware of the proximity of my property to the mining operation and my plans for development of my property.

As I stated in my general comments on January 6, 2009, I hope my property concerns are addressed within any final draft of the DEIS and that all my property rights for clean air, adequate clean water, land access, and visual impact are addressed and that I my property rights are protected.

Thank You,
Steven T. Tuttle
2044 East 725 South
Springville, Utah 84663

Response No. G-1: See the response to comment F-1. It is noted the property identified in the letter does not border the North Operations Project Plan of Operations border, but is approximately 3,300 feet (0.63 mile) from the project Plan of Operations boundary.

Response No. G-2: A sensitive receptor has been more clearly defined in Section 3.14.1 Sensitive Receptors in the FEIS. The air quality analysis (Section 3.14 of the FEIS) documents that State and Federal ambient air quality standards would be met both at and beyond the project boundary. The average and maximum ambient impact of the Proposed Action would be comparable to those of the existing action, so there would be little to no net increase in impacts.

Current and historic levels of traffic on the Long Valley Road by the referenced property result in a moderate amount of dust per vehicle passage, but very light average impacts because of the infrequent and intermittent traffic levels. The 15% increase in mine-bound traffic will slightly increase the frequency of vehicle passages, but will continue to result in minimal average impacts because traffic would remain light and intermittent. The slight increase in road traffic and associated dust does not change the overall assessments of impacts in the vicinity of the Tuttle property.

The use of the term sensitive receptor and its lack of applicability to an undeveloped and uninhabited parcel are documented in the response to comment G-14.

Response No. G-3: Additional noise analysis has been added to Section 3.16.2 of the FEIS that addresses the noise level at this property.

Response No. G-4: Key Observation Points are selected to provide representative views of the Proposed Action because it is not feasible to discuss potential impacts from all possible viewing locations. When selecting Key Observation Points, emphasis is placed on locations from which the greatest number of people will view the project.

A viewshed analysis of areas visible from the point of highest elevation on the Tuttle property shows that little of the existing and authorized disturbance (Saga Pit and Rock Disposal Area, Horseshoe Pit, and Belmont Pit 2) can be seen from the Tuttle property because of hills west of the property. Under the Proposed Action, virtually all of the Mooney Heap Leach Pad and Saga Rock Disposal Area expansion would be hidden from view (see Response to Comment Figures 1 and 2, which are attached to this response). Specifically, Figure 1 shows what is visible from the Tuttle property now (e.g., shows existing BMM facilities that are visible from the Tuttle property's highest point). Figure 2 shows what existing and proposed BMM facilities will be visible from the Tuttle property's highest point. The viewshed analysis is conservative because it does not account for the effect of pinyon-juniper forest on the hills between the Tuttle property and the Plan of Operations boundary that would tend to further obscure disturbed areas. Project impacts on the view from the Tuttle property are minor and no changes are required to the analysis of visual resource impacts presented in the DEIS.

As the FEIS states, the Mooney Heap Leach Pad and Saga Rock Disposal Area will not be removed but will be reclaimed by grading to final contours and restoring native vegetation.

Response No. G-5: It is assumed the Willow Spring referred to in the letter is located in Section 32, Township 24 North, Range 58 East as shown on Figure 3-2 in the FEIS. This spring is more than one mile north of the Tuttle property. Both Willow springs shown on Figure 3-2 are

located outside of the existing and proposed Plan of Operations boundary; and therefore access to both Willow springs would not be affected by the Proposed Action. Actual use of the spring is governed through water rights managed by the Nevada Division of Water Resources State Engineer. A search of the Nevada Division of Water Resources water rights database indicated Julian Goichechea holds the water rights to use Willow Spring for stock watering.

Response No. G-6: *Willow Spring is discussed in Section 3.2.2 of the FEIS and the analysis shows spring flow and quality would not be affected by BMM because the recharge source is upgradient and from the east.*

Response No. G-7: *Potential project effects to surface water and groundwater, including all valid existing water rights, were analyzed in Section 3.2 of the FEIS. A review of the Nevada Division of Water Resources database does not indicate any water rights held under the name of Tuttle in this area, and any future development plans and associated water needs for this property will need review and approval from the Nevada Division of Water Resources State Engineer.*

Response No. G-8: *Public access would be restricted only to active mining areas within the Plan of Operations boundary. Access to other private property owners in the area, including the Tuttle property, would not be restricted by the Proposed Action.*

Response No. G-9: *Potential project effects to surface water and groundwater were analyzed in Section 3.2 of the FEIS. The proposed additional Class III Waivered landfill to be developed near the Mooney Basin Operations Area would be designed, permitted, constructed, and operated per standards regulated by Nevada Division of Environmental Protection to insure protection of Waters of the State. The Class III Waivered landfill accepts only inert industrial waste, preventing potential contamination of any water supply.*

Response No. G-10: *Potential project effects to surface water and groundwater were analyzed in Section 3.2 of the FEIS. Also see response to G-7 above.*

Response No. G-11: *The air quality analysis (Section 3.14 of the FEIS) documents applicable ambient air quality standards would be met everywhere at and beyond the project ambient air boundary. The average and maximum impacts of the Proposed Action would be comparable to those of the existing action, as there would be little to no net increase in emissions or impacts.*

Response No. G-12: *The Long Valley airshed is Class II. Compliance with applicable air quality standards is discussed in Response G-11.*

Response No. G-13: *Air quality standards are developed to protect public health and welfare. The response to G-11 documents that the applicable ambient air quality standards would be met at and beyond the project boundary.*

Response No. G-14: *Consistent with NEPA guidance and precedent and as described in Section 3.14.1 of the FEIS, properties or areas were considered sensitive receptors in the FEIS only if impacts to those sites could affect existing (or formally and definitively planned) populations or ecological areas especially sensitive to those impacts. That definition eliminates the undeveloped Tuttle property as a sensitive receptor.*

Response No. G-15: See response to G-11.

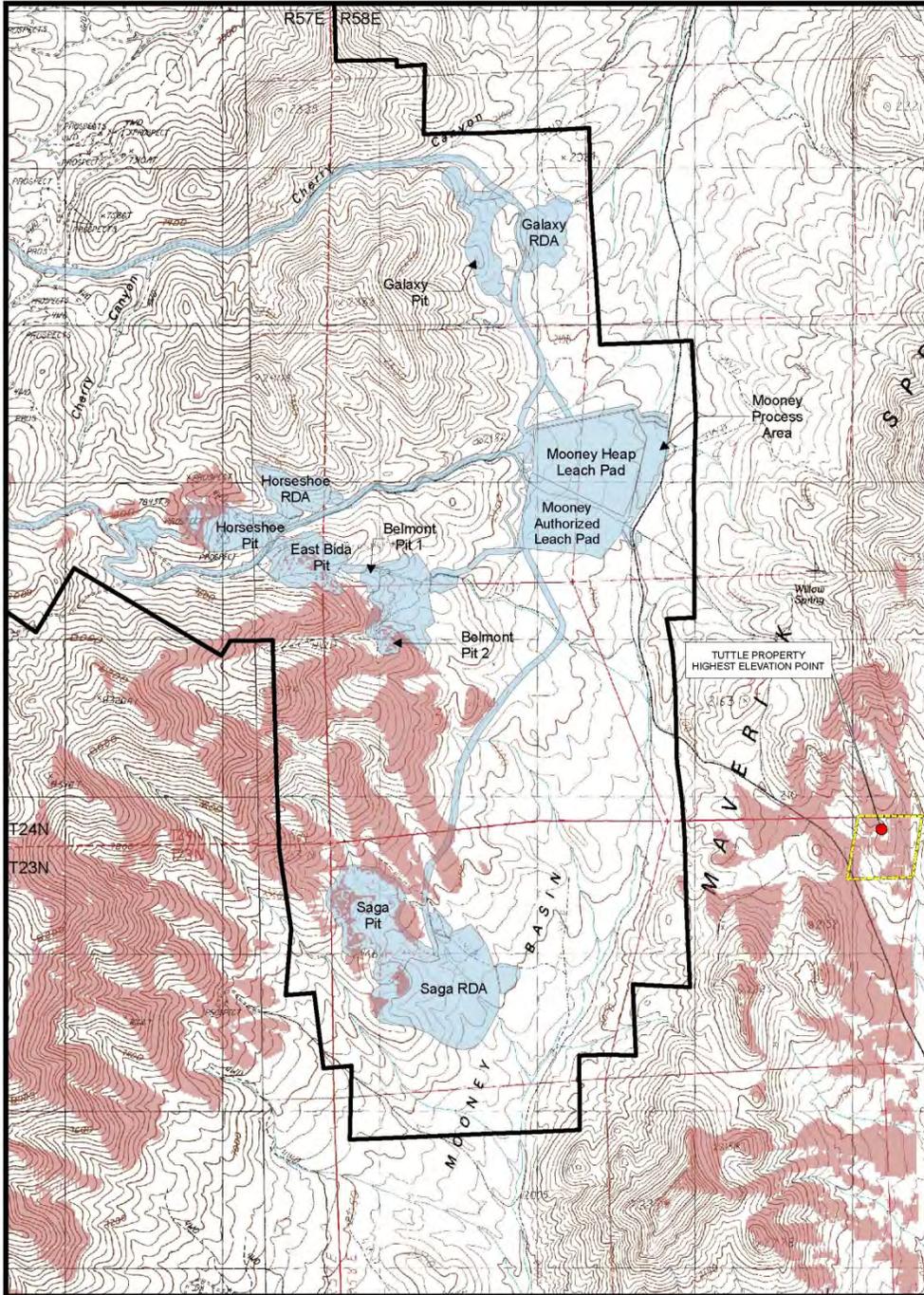
Response No. G-16: Visual resource management designations apply only to public lands. However, additional analysis was performed to assess the visual impact of the project as seen from the Tuttle property (see Response G-4).

Response No. G-17: Table 3-16 lists administrative land use authorizations for public land only. Since the Tuttle property is private land, it is not listed in Table 3-16.

Response No. G-18: Class I and Class II areas are defined in Section 3.14.1 under the Regulatory Framework section of the FEIS. The nearest Class I airshed is the Jarbidge Wilderness near the Idaho border (see Response G-11).

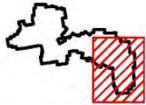
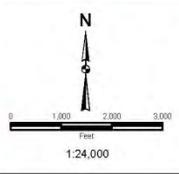
Response No. G-19: As discussed in Section 4.14.2 of the FEIS, mercury air quality impacts and deposition were modeled at the project area and beyond. Mercury impacts associated with the Proposed Action were shown to represent less than 10% of the total natural background mercury deposition in any watershed and less than 1% of natural background mercury deposition rate in any watershed not draining from the project area. Figure 4-3 of the FEIS indicates the percentage of mercury deposition from BMM for the combination of Long Valley and Ruby Valley. The Tuttle property is located in the divide between those two valleys. Also, the facility will install and operate mercury controls that meet Nevada Maximum Achievable Control Technology requirements.

Response No. G-20: Only reasonably foreseeable future actions are included in Table 4-2; potential development of this property is considered too speculative to be considered a reasonably foreseeable future action at this time.



Legend

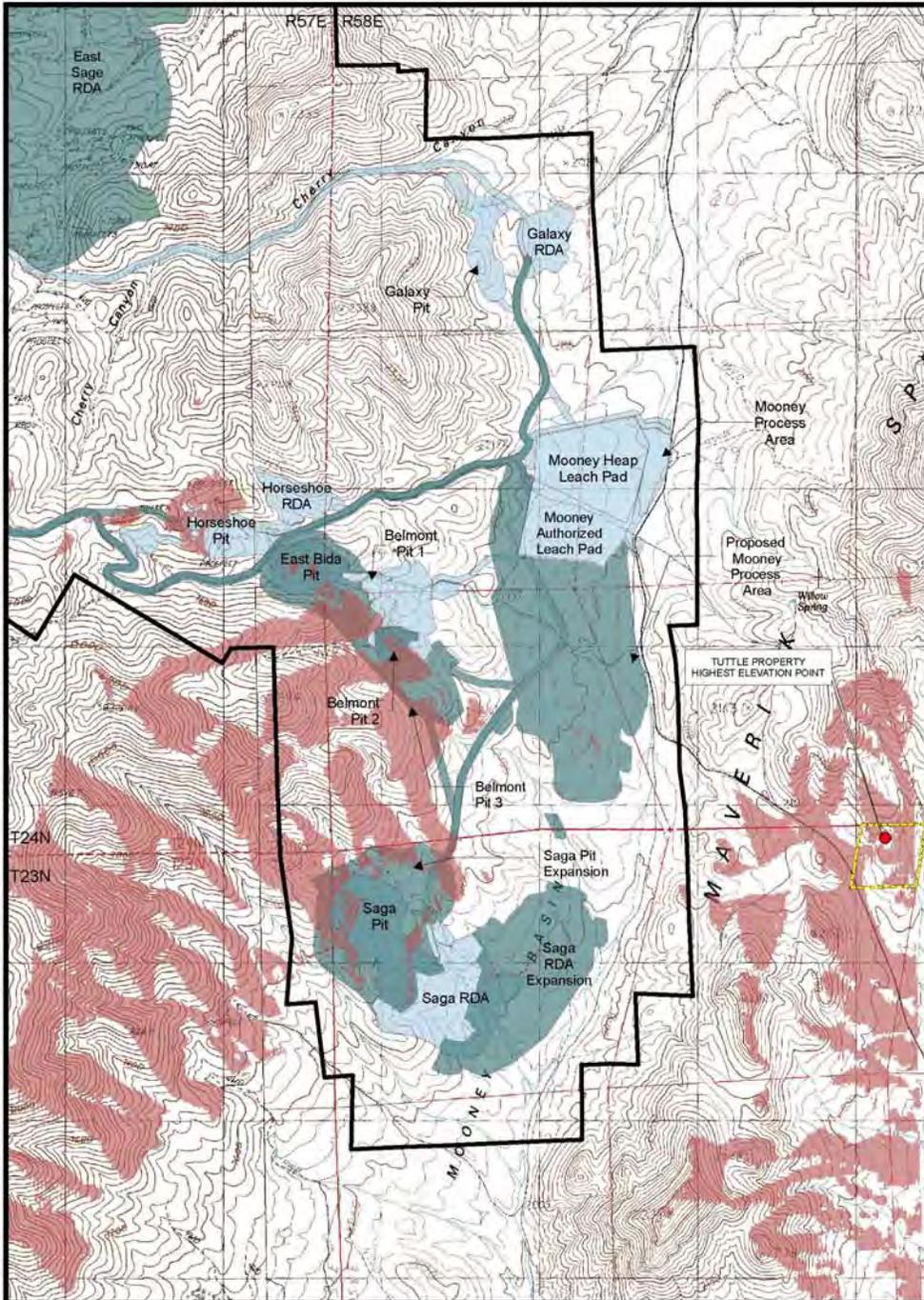
- Viewshed Observation Point
- Not Visible From Tuttle Property
- Visible From Tuttle Property
- NE 1/4 of NE 1/4 T23N R58E Section 5
- Proposed Project Boundary
- Authorized Disturbance Area

**BALD MOUNTAIN MINE
NORTH OPERATIONS AREA PROJECT FEIS**

**RESPONSE TO COMMENT
FIGURE 1
EXISTING AND AUTHORIZED
DISTURBANCE
VIEWABLE FROM TUTTLE PROPERTY**

Base Image: USGS 24k DRG



- Legend**
- Viewshed Observation Point
 - NE 1/4 of NE 1/4 T23N R58E Section 5
 - Not Visible From Tuttle Property
 - Visible From Tuttle Property
 - Proposed Project Boundary
 - Proposed Disturbance Area
 - Authorized Disturbance Area



**BALD MOUNTAIN MINE
NORTH OPERATIONS AREA PROJECT FEIS**

**RESPONSE TO COMMENT
FIGURE 2
AUTHORIZED AND PROPOSED
DISTURBANCE
VIEWABLE FROM TUTTLE PROPERTY**

Base Image: USGS 24k DRG



H Bald Mountain Mine North Operations Area Project Draft Environmental Impact Statement



Draft EIS Public Meeting Comment Form

Informed decisions are better decisions: The Bureau of Land Management (BLM) believes that extensive public involvement will serve to improve communication, develop enhanced understanding of different perspectives, and identify solutions to issues and problems. We look forward to hearing from you.

Where to provide comments: You can hand this form in at a public scoping meeting or mail it in using the address on reverse. **Comments can also be provided via email to: Lynn_Bjorklund@blm.gov.**

Name Kenneth Moss County EIKO
 Title _____ Organization _____
 Mailing Address 550 13th Street
 City EIKO State NV Zip 89801
 Email Ken.moss@yahoo.com
 Date Jan 7 2009 Meeting Location (if applicable) EIKO BLM office

Please check box if you do **not** want your name released when comments are made public.

Please check box if you want to receive a hard copy of the Final Environmental Impact Statement and Record of Decision.

COMMENT (use back side if you need additional space or attach additional sheets)

As I understand this proposal it^{is} for a continuation of an existing ~~project~~ ~~business~~ business. The area has supported mining for several decades -- you might say the area is zoned mining. The jobs will benefit EIKO, White Pine and Eureka counties. My observation of Barrick as a company is that they ~~are~~ ^{consider the} environment~~ly~~ and the inhabitants of the area, both people and animals. I am in favor of allowing the mine to continue and expand its operations.

To Return via US Mail: Fold in thirds so BLM address (on reverse) is showing, add postage, tape bottom of fold, and mail. **Please have comments postmarked by February 2, 2009.**

To provide comments via email: Please email comments to: Lynn_Bjorklund@blm.gov by **February 2, 2009.**

Comments, including names, street addresses, e-mail addresses, and phone numbers (if provided) of respondents will be available for public review at the BLM Ely District Office during regular business hours (7:30 am to 4:30 pm), Monday through Friday, except holidays. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Response No. H-1: Statements noted.



I-1

Bald Mountain Mine North Operations Area Project Draft Environmental Impact Statement



Draft EIS Public Meeting Comment Form

Informed decisions are better decisions: The Bureau of Land Management (BLM) believes that extensive public involvement will serve to improve communication, develop enhanced understanding of different perspectives, and identify solutions to issues and problems. We look forward to hearing from you.

Where to provide comments: You can hand this form in at a public scoping meeting or mail it in using the address on reverse. *Comments can also be provided via email to: Lynn_Bjorklund@blm.gov.*

Name LARSON R. DILL County ELKO

Title SHOSHONE - SOUTH FORK Organization TE-MOAKN, SOUTH FORK WSDP

Mailing Address HR-30 PO, BOX 260

City Spring Creek State NV. Zip 89805

Email _____

Date 1/8/09 Meeting Location (if applicable) ELKO

Please check box if you do **not** want your name released when comments are made public.

Please check box if you want to receive a hard copy of the Final Environmental Impact Statement and Record of Decision.

COMMENT (use back side if you need additional space or attach additional sheets)

I believe that BLM is supposed to be the care takers of the lands of Nevada. also lands that the Shoshone nation owns by a treaty of 1863. Barrick needs not to expand any further because of standing court case. BLM should check out the record of Barricks worldwide, it is not a pretty picture. Nevada's cattle country, some lands are very pretty for outdoor rec. Not for mining at this extent. Barrick will turn Nevada into a wasteland. Every thing of the lands belongs to the Shoshone, and was to be shared. Nevada should keep what is Nevada's. Residents should speak up to save this land. (See Cents action) treaty 1863 - (Animals Birds - Insects ect. People, Cultures, Cattle people, sports men - young children, Babes,

To Return via US Mail: Fold in thirds so BLM address (on reverse) is showing, add postage, tape bottom of fold, and mail. *Please have comments postmarked by February 2, 2009.*

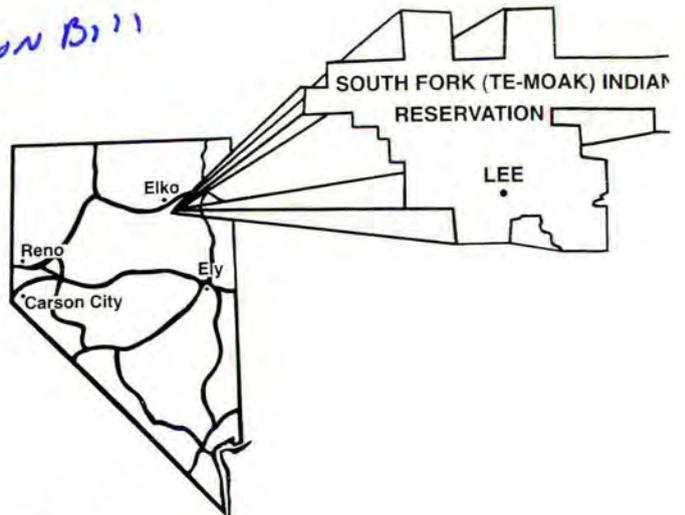
To provide comments via email: Please email comments to: Lynn_Bjorklund@blm.gov by February 2, 2009.

Comments, including names, street addresses, e-mail addresses, and phone numbers (if provided) of respondents will be available for public review at the BLM Ely District Office during regular business hours (7:30 am to 4:30 pm), Monday through Friday, except holidays. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

SOUTH FORK BAND COUNCIL
SOUTH FORK INDIAN RESERVATION
21 LEE, B-13
RING CREEK, NEVADA 89815

775-744-4273 FAX 775-744-4523

Larson Bill



**RESOLUTION OF THE GOVERNING BODY
OF THE
SOUTH FORK BAND INDIAN RESERVATION**

Resolution No. 07-SF-18

BE IT RESOLVED BY THE SOUTH FORK BAND COUNCIL:

WHEREAS, this is a constituent Band of the Te-Moak Tribe, known as the South Fork Band Council, as defined by the Indian Reorganization Act of June 18, 1934, as amended and operates and functions in accordance with the Constitution of Te-Moak Tribe of Western Shoshone Indians of Nevada, and

WHEREAS, the South Fork Band Council is the governing body of the South Fork Indian Reservation, and is empowered by the Constitution to promote and protect the welfare of its members, and to enact all ordinances and resolutions which shall be necessary and proper for carrying into effect the foregoing powers, and

WHEREAS, the South Fork Band Council makes its comment on the proposed mining for molybdenum at Mt. Hope, north of Eureka Nevada, which will affect areas that have many cultural and traditional values to Shoshone people, and

WHEREAS, there will be destruction of pine nut gathering areas, springs for the wildlife and bird life and there are many medicine plants that will be gone and there will be acid rock drainages for a long time, and

WHEREAS, the Shoshone people again will lose part of their heritage and traditional and religious values in this area, and many cattle ranchers will lose good grazing areas, and

WHEREAS, the Bureau of Land Management has again acted on this Mt. Hope Project without prior input from the Shoshone people.

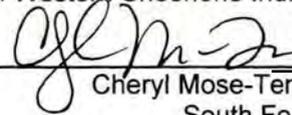
NOW THEREFORE BE IT RESOLVED that the South Fork Band Council hereby opposes the Mount Hope Project in its entirety for the protection of the lands, water, and animal life that exists in the project area and that the BLM and Idaho General Mines

respect the lands of the Shoshone People and not proceed with the project which will cause future destruction to life giving resources for all people.

BE IT FURTHER RESOLVED THAT, the South Fork Band Council encourages the Te-Moak Tribal Council to become more involved in these mining issues on behalf of the Western Shoshone People.

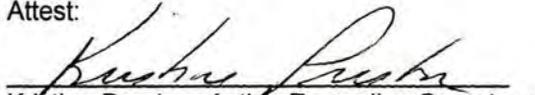
- CERTIFICATION -

I, the undersigned as Chairman of the South Fork Band Council do hereby certify that the South Fork Band Council is composed of seven (7) members, of whom **6** constituting a quorum were present at a Special Meeting duly held on the 26th day of June 2007, and that the forgoing resolution was duly adopted at such meeting by a vote of **6 for, 0 against, and 0 abstentions**, pursuant to Article 4, Section 12 (a) and (b) and Section 13 of the Constitution of the Te-Moak Tribe of Western Shoshone Indians of Nevada.



Cheryl Mose-Temoke, Chairman
South Fork Band Council

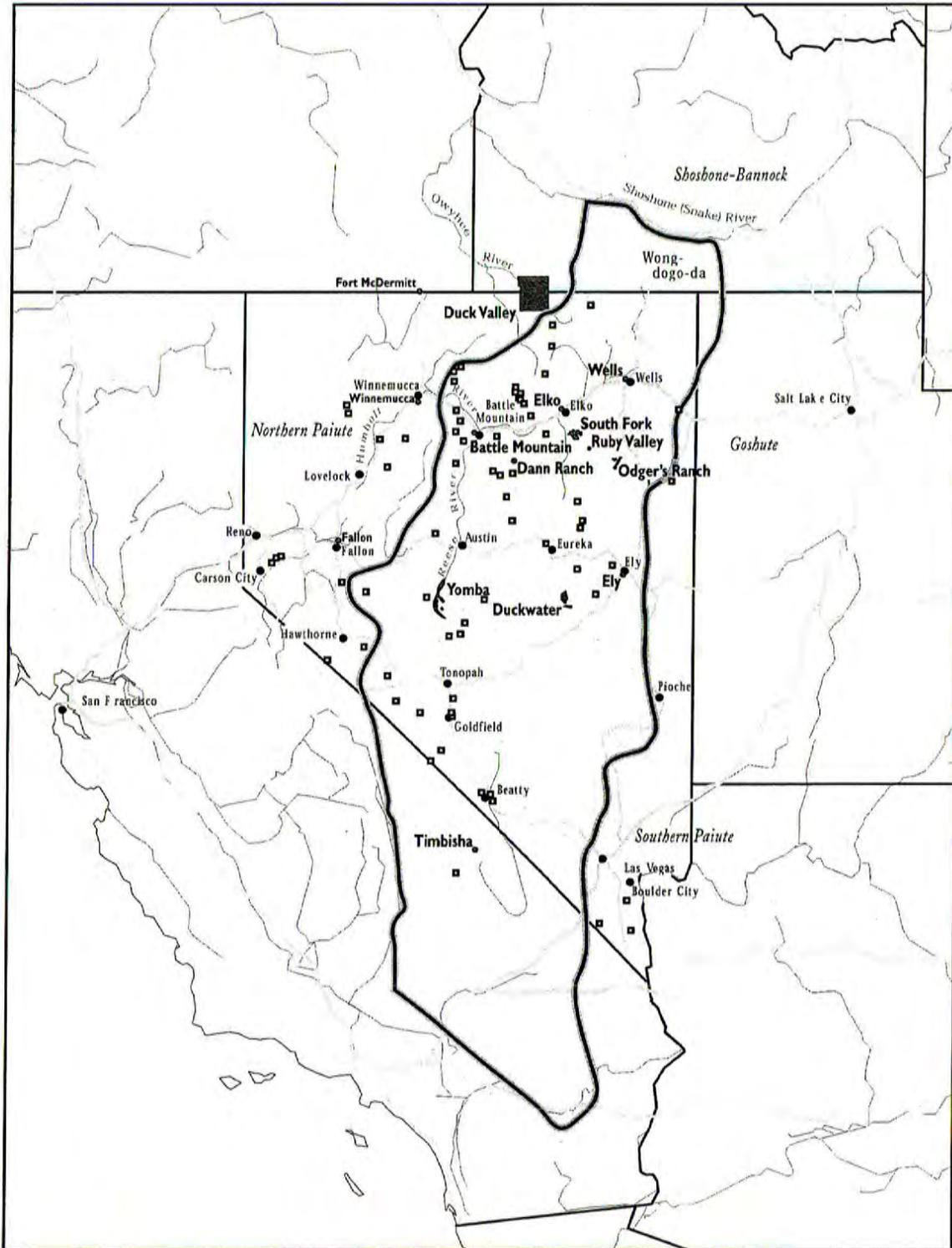
Attest:



Kristine Preston, Acting Recording Secretary

Newe Sogobia and Nevada Gold Mines

[the people's earth mother]



-  Newe Sogobia
(Western Shoshone National Council-1980's*
edited to boundary drawn with assistance from Chief Raymond Yowell)
-  Shoshone Land Base (1994)*
- Timbisha** Shoshone Community
- Winnemucca** Other Native Communities with Shoshone populations
-  Gold Mines

**COMMITTEE FOR THE ELIMINATION
OF RACIAL DISCRIMINATION**

Sixty- eighth session

Geneva, 20 February – 10 March 2006

EARLY WARNING AND URGENT ACTION PROCEDURE

DECISION 1 (68)

UNITED STATES OF AMERICA

A. Introduction

1. At its 67th session held from 2 to 19 August 2005, the Committee considered on a preliminary basis requests submitted by the Western Shoshone National Council, the Timbisha Shoshone Tribe, the Winnemucca Indian Colony and the Yomba Shoshone Tribe, asking the Committee to act under its early warning and urgent action procedure on the situation of the Western Shoshone indigenous peoples in the United States of America.
2. Considering that the opening of a dialogue with the State party would assist in clarifying the situation before the submission and examination of the fourth and fifth periodic reports of the United States of America, due on 20 November 2003, the Committee, in accordance with article 9 (1) of the Convention and article 65 of its rules of procedure, invited the State party, in a letter dated 19 August 2005, to respond to a list of questions, with a view to considering this issue at its 68th session.
3. Responding to the Committee's letter, the State party, in its letter dated 15 February 2006, stated that its overdue periodic reports are being prepared and that they will include responses to the list of issues. The Committee regrets that the State party has not undertaken to submit its periodic reports by a specific date, that it has not provided responses to the list of issues by 31 December 2005 as requested, and that it did not consider it necessary to appear before the Committee to discuss the matter.
4. The Committee has received credible information alleging that the Western Shoshone indigenous peoples are being denied their traditional rights to land, and that measures taken and even accelerated lately by the State party in relation to the status, use and occupation of these lands may cumulatively lead to irreparable harm to these communities. In light of such information, and in the absence of any response from the State party, the Committee decided at its 68th session to adopt the present decision under its early warning and urgent action procedure. This procedure is clearly distinct from the communication procedure under article 14 of the Convention. Furthermore, the nature and urgency of the issue examined in this decision go well beyond the limits of the communication procedure.

B. Concerns

5. The Committee expresses concern about the lack of action taken by the State party to follow up on its previous concluding observations, in relation to the situation of the Western Shoshone peoples (A/56/18, para. 400, adopted on 13 August 2001). Although these are indeed long-standing issues, as stressed by the State party in its letter, they warrant immediate and effective action from the State party. The Committee therefore considers that this issue should be dealt with as a matter of priority.

6. The Committee is concerned by the State party's position that Western Shoshone peoples' legal rights to ancestral lands have been extinguished through gradual encroachment, notwithstanding the fact that the Western Shoshone peoples have reportedly continued to use and occupy the lands and their natural resources in accordance with their traditional land tenure patterns. The Committee further notes with concern that the State party's position is made on the basis of processes before the Indian Claims Commission, ~~"which did not comply with contemporary~~ international human rights norms, principles and standards that govern determination of indigenous property interests", as stressed by the Inter-American Commission on Human Rights in the case *Mary and Carrie Dann versus United States* (Case 11.140, 27 December 2002).

7. The Committee is of the view that past and new actions taken by the State party on Western Shoshone ancestral lands lead to a situation where, today, the obligations of the State party under the Convention are not respected, in particular the obligation to guarantee the right of everyone to equality before the law in the enjoyment of civil, political, economic, social and cultural rights, without discrimination based on race, colour, or national or ethnic origin. The Committee recalls its General recommendation 23 (1997) on the rights of indigenous peoples, in particular their right to own, develop, control and use their communal lands, territories and resources, and expresses particular concern about:

- a) Reported legislative efforts to privatize Western Shoshone ancestral lands for transfer to multinational extractive industries and energy developers.
- b) Information according to which destructive activities are conducted and/or planned on areas of spiritual and cultural significance to the Western Shoshone peoples, who are denied access to, and use of, such areas. It notes in particular the reinvigorated federal efforts to open a nuclear waste repository at the Yucca Mountain; the alleged use of explosives and open pit gold mining activities on Mont Tenabo and Horse Canyon; and the alleged issuance of geothermal energy leases at, or near, hot springs, and the processing of further applications to that end.
- c) The reported resumption of underground nuclear testing on Western Shoshone ancestral lands;
- d) The conduct and / or planning of all such activities without consultation with and despite protests of the Western Shoshone peoples;

- e) The reported intimidation and harassment of Western Shoshone people by the State party's authorities, through the imposition of grazing fees, trespass and collection notices, impounding of horse and livestock, restrictions on hunting, fishing and gathering, as well as arrests, which gravely disturb the enjoyment of their ancestral lands.
- f) The difficulties encountered by Western Shoshone peoples in appropriately challenging all such actions before national courts and in obtaining adjudication on the merits of their claims, due in particular to domestic technicalities.

C. Recommendations

8. The Committee recommends to the State party that it respect and protect the human rights of the Western Shoshone peoples, without discrimination based on race, colour, or national or ethnic origin, in accordance with the Convention. The State party is urged to pay particular attention to the right to health and cultural rights of the Western Shoshone people, which may be infringed upon by activities threatening their environment and/or disregarding the spiritual and cultural significance they give to their ancestral lands.

9. The Committee urges the State party to take immediate action to initiate a dialogue with the representatives of the Western Shoshone peoples in order to find a solution acceptable to them, and which complies with their rights under, in particular, articles 5 and 6 of the Convention. In this regard also, the Committee draws the attention of the State party to its General recommendation 23 (1997) on the rights of indigenous peoples, in particular their right to own, develop, control and use their communal lands, territories and resources.

10. The Committee urges the State party to adopt the following measures until a final decision or settlement is reached on the status, use and occupation of Western Shoshone ancestral lands in accordance with due process of law and the State party's obligations under the Convention:

- a) Freeze any plan to privatize Western Shoshone ancestral lands for transfer to multinational extractive industries and energy developers;
- b) Desist from all activities planned and/or conducted on the ancestral lands of Western Shoshone or in relation to their natural resources, which are being carried out without consultation with and despite protests of the Western Shoshone peoples;
- c) Stop imposing grazing fees, trespass and collection notices, horse and livestock impoundments, restrictions on hunting, fishing and gathering, as well as arrests, and rescind all notices already made to that end, inflicted on Western Shoshone people while using their ancestral lands.

11. In accordance with article 9 (1) of the Convention, the Committee requests that the State party provide it with information on action taken to implement the present decision by 15 July 2006.

A CORPWATCH REPORT

LARSEN BILL

BARRICK'S DIRTY SECRETS

COMMUNITIES WORLDWIDE RESPOND TO GOLD MINING'S IMPACTS



An Alternative Annual Report, May 2007

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- IV. Affected Communities around the world
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- V. Barrick's legacy
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Case study: Marinduque, Philippines (Placer Dome)
- VI. Community Victory: Famatina Says NO to Barrick Gold
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- IX. Conclusion and Recommendations
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Fact:

Mining Enterprises

Use 7-10% world energy

Output < 1% world GNP

Jobs < 0.5% world jobs

SOURCE: "EL EXILIO DEL CONDOR: HEGEMONIA TRANSNACIONAL EN LA FRONTERA. EL TRATADO MINERO ENTRE CHILE Y ARGENTINA" (OLCA), 2004.

BLM -
Read - Review & deny / Revert
Nevada is NOT a waste land.
Look at Nevada as your home on
Back yard for the young.
Look at human Rights Violations.

INTRODUCTION

This report, a profile of Barrick Gold, the world's largest gold mining company, is an illustration of what is wrong with the gold industry today. In these pages, you will find numerous examples in which Barrick's interests and the interests of the communities within which it operates are pitted directly against each other. From avoiding responsibility for the destructive environmental legacy of their projects or aligning itself with corrupt politicians, to employing police who violently suppress (and sometimes kill) mine critics, Barrick's power in these struggles creates a compelling case for intervention.

The community groups fighting Barrick include members ranging from local government and tribal officials, to assemblies of mothers against mining and other grassroots groups that attract thousands of supporters. Their work is courageous and dedicated, as it is dangerous and exhausting; and it serves to illustrate the on-the-ground reality for Barrick and other companies like it. Needless to say, this rarely voiced perspective on mining does not bode well for the industry as a whole, as it comes from the people who are immediately affected by its operations.

This report also serves to illustrate that these issues are not isolated instances of abuse, but are part of a system and framework within which these abuses are inevitable. Canada, where Barrick is based, is home to 60 percent of the world's mining corporations, which run operations across the globe. Despite being a leader in this industry, Canada has not taken the lead on mediating or taking responsibility for the behav-

ior of their corporations abroad.

As a consequence of this negligence, Canada has drawn criticism from around the world, first by environmental, religious and human rights organizations, and now increasingly from international institutions, such as the United Nations. Even the Canadian government has started to recognize the harsh reality accompanying the presence of their mining industry abroad, which is characterized by environmental destruction, political corruption, community struggles, human rights abuses, and massive amounts of water consumption.

2006 marked the year of the first National Roundtables on Corporate Social Responsibility and the Canadian Extractive Industry in Developing Countries, a forum that was organized in reaction to a 2005 Report from Canada's Parliamentary Standing Committee on Foreign Affairs. The standing committee's report admitted that Canada does not have laws ensuring that Canadian mining companies "conform to human rights standards, including the rights of workers and indigenous peoples." But, despite overwhelming evidence that the self-regulation and voluntary measures adopted by mining companies are not sufficient to guarantee these rights, a binding legal framework to ensure these rights has yet to be pursued by the Canadian Government.

We hope that this broad collection of case studies examining Barrick's operations around the world will serve to expose an industry rife with abuse, while supporting the individual community-based struggles against this company worldwide.



ENVIRONMENT:

WATER IS WORTH MORE THAN GOLD

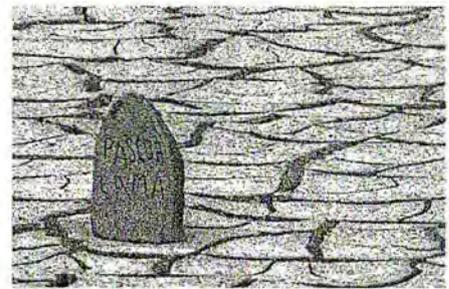
Water depletion is a major negative consequence of gold mining, as you can see highlighted in the Lake Cowal, Pascua Lama, and Western Shoshone case studies. The large amount of water required to run a gold mining operation exacerbates its impact on local communities, many of which are already experiencing drought.

The daily water consumption at Barrick's Lake Cowal mine in Australia is more than of the entire Lismore district (a major regional center in the Northern Rivers region of the state.) Since the mine started operations, the water level near it has dropped from 20 meters to

50 meters below ground level. The mine is licensed to use up to 3,650 million liters a year over the next 13 years and will likely exceed that figure. Meanwhile, the region surrounding the mining site is enduring its eighth year of drought.¹

At its Pascua Lama mine, Barrick is disturbing 10.2 acres of three glaciers², and has called for tunnels to be dug underneath them. The exploration and prospecting phase (1990's) has already been linked to the depletion of glaciers.³ Barrick attempted to blame global warming for the melting, but those claims have been disproved.⁴

In addition to the large-scale melting of the glaciers, Barrick is proposing to extract additional water in Chile to run its mine and factories. The estimated requirement is up to 42 liters per second to be taken from the Estrecho and Toro Rivers.⁵



On average, it takes 79 tons of waste to extract one ounce of gold.

Metals mining produces 96 percent of the world's arsenic emissions.

Acid Mine Drainage and Heavy Metal Contamination

Open-pit mining creates great waste for a small yield. On average, it takes 79 tons of waste to extract one ounce of gold, according to a conservative estimate by the No Dirty Gold campaign, a project of EarthWorks and Oxfam. The process involves grinding up ore, and then exposing it to cyanide in order to extract the gold. Sulfides in the crushed rocks interact with air and water to create sulfuric acid, which in turn creates acid mine drainage (AMD).

In and of itself, AMD is harmful to ecosystems because it makes water too

acidic to support life. Additionally, the sulfuric acid in AMD leaches out other substances from the waste ore, such as arsenic, cadmium, lead and mercury, which can have disastrous health effects, and can contaminate both air and water. Metals mining has been linked to 96 percent of the world's arsenic emissions.⁶

A recent report by the University of Nevada⁷ found startlingly high mercury concentrations in the air around a number of northern Nevada gold mines. The highest concentration was measured at Barrick's Marigold Mine (3120 ng/m³).

Cyanide

Cyanide is the chemical-of-choice for mining companies to extract gold from crushed ore, despite the fact that leaks or spills of this chemical are extremely toxic to fish, plant life and human beings. Cyanide is a deadly chemical, used

in the gas chambers of the Second World War and on death row in the United States between 1930-1980. The chemical has caused havoc in water systems across the world with over 30 spills in the last five years.⁸ (See *Lake Cowal spread* for more information on cyanide)

Cyanide has caused havoc in water systems across the world with over 30 spills in the last five years.

ENVIRONMENTAL SCANDAL:

SAN GUILLERMO WILDERNESS: GOLD MINING IN A WORLD HERITAGE BIOSPHERE RESERVE?

Argentina's first World Biosphere Reserve is the San Guillermo Wilderness, high in the Andes range in northwest province of San Juan, which was given legal protection in 1980 by the United Nations Educational, Scientific and Cultural Organization (UNESCO).⁹ The 900,000 hectare reserve provides crucial ecological services for the entire Southern Andean Steppe bioregion: It provides habitat and mating grounds for hundreds of animal species, such as Andean flamenco, vicuñas, guanaco and ñandu; it is home to many unique and important plant species; it regulates bioregional climate patterns; and most importantly, it is the birthplace of the waters that flow down into an enormous larger region of Argentina and Chile.

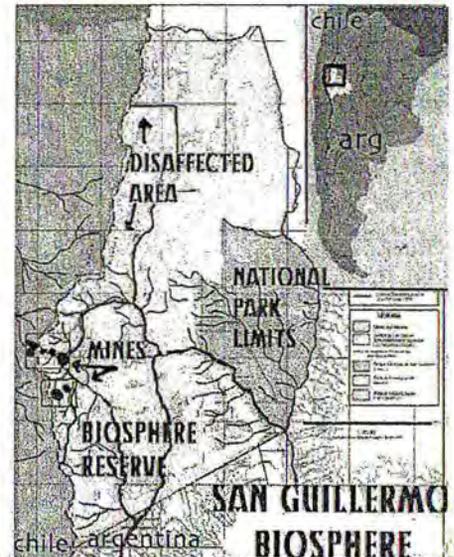
The heart of San Guillermo lies in its glaciers nested in its highest peaks. These glaciers, some brilliant white, others underground and invisible to the eye, regulate the runoff forming the Cura and Jáchal rivers, the only water supply to the delicate desert farmlands of northern San Juan. These same glacier "water factories" also supply and regulate the waters flowing westward to the Pacific through Chile's fertile Huasco Valley. The water supplies created and regulated within San Guillermo are essential to the life of ecological and social systems downstream.

In 1989, the very heart of the San Guillermo World Biosphere Reserve was "cut away," stripped from the UNESCO reserve. In a midnight session of the San Juan legislature, corrupt provincial lawmakers secretly drafted a bill (N°5959/89) "disaffecting" a strip of some 170,000 hectares from UNESCO protection — land that had already been prospected for mining and would later be transferred to Barrick Gold Corporation for its Veladero and Pascua-Lama projects.¹⁰

BELOW: NÁNDUES RUN WILD NEAR PASCUA LAMA. PHOTO: DAVID MORDERSBACH

The change in the law was not announced publicly, provincially or even to UNESCO until ten years later in 1999, after the mapping and initial explorations were completed. During these years, land rights were covertly and often illegally bought for pennies per acre¹¹ by well-connected local officials, who simply signed public land over to subsidiaries of Barrick Gold for handsome profits.¹² They often purchased the land from poor and indigenous peoples.¹³

This 1989 "disaffection" is now the "legal" basis for Barrick's open-pit gold mining operations among the glaciers of San Guillermo World UNESCO Man and Biosphere Reserve.¹⁴ The protests of local and national community and environmental groups, as well as UNESCO, have been completely ignored by provincial authorities. UNESCO also claims it has no power to enforce the respect of the limits of this now gravely endangered Biosphere.¹⁵





POLICE REPRESSION:

WARNING: RESISTANCE TO BARRICK MAY LEAD TO DEATH

On April 11, 2007 Marvin Gonzalez Castillo, a 19 year old boy, was killed by two bullets to his torso. He was a victim of police repression against protests organized by social and ecological organizations, as well as the local government of Ancash, to demand the cancellation of the contracts with the mining firms, Barrick Gold and Antamina*, according to community reports. The police moved in during the blocking of roads. Thirty demonstrators were also detained, most of them construction workers. One woman died of a heart attack after the police tear-gassed protesters.²⁷

This protest was part of a regional 48 hour strike, was part of a series of coordinated actions that included thousands of marchers throughout the Ancash region.

Two days before the shooting, on the first day of actions, a group from the communities of Shecta and Santiago Antunez de Mayolo attacked peaceful demonstrators as they protested against Barrick's continued exploration of the Condorwain mountain area. They were supported by members of the National Police and workers from the Barrick Misquichilca mining company. The confrontation between community members left seven people injured, among them the president of the Campesino community of Cruz Pampa and leaders of other villages near Condorwain.²⁸

Another group of residents of Huaraz met in the center of the city to march in opposition to the mining activities in different locations throughout the Ancash region.²⁹

LONGSTANDING ANGER WITH BARRICK

This isn't the first time that people have died in a confrontation with police at an anti-mining demonstration. On May 5, 2006, Joel Martel Castromonte, a 25 year old agronomy student and Guill-

This isn't the first time that people have died in a confrontation with police at an anti-mining demonstration.

ermo Tolentino Abat, a 42 year old miner were shot dead by police. They were victims of the violence that began when hundreds of community members gathered in Huallapampa to request a salary increase from Barrick Gold. When Barrick officials refused to raise pay, community members used stones and tree trunks to blocked access roads to the mines. Police, called by Barrick, responded with tear gas bombs, and the protesters answered with stones. According to police spokespeople, the mining company employed 30 police agents in its security force.³⁰

Barrick suspended operations until security was reestablished, but not before the injuries and deaths. The following day, thousands of campesinos from the 18 communities in the high reaches of the Sechta mountains where Barrick operates the Gold Pierina Mines, protested. They demanded investigations of the deaths and justice.³¹

One year before in the same area, riot police had clashed with thousands of protesters demonstrating against a court decision allowing Barrick to waive \$141 million in taxes.³²

Police used tear gas to disperse the farmers, teachers, and striking city hall workers who had gathered on the mountain road leading to Barrick's Pierina mine in the Ancash region, authorities said.³³ Twenty people, including two police officers, were injured in the clashes and Ancash Mayor Lombardo Mautino was hurt by a rubber bullet, Ancash city hall official Pelayo Luciano told Reuters.³⁴

**Barrick officials say that this particular death occurred at a protest in Chimbote, a coastal region in the Ancash Region, 500 kilometers away from the mines. It should be noted this protest was part of regional protests that were called for by CORECAMI Ancash (The regional Confederation of Communities Affected by Mining in Ancash), though this particular protest was against large-scale infrastructure projects.*

TITLE PHOTO: ON APRIL 11, 2007 MARVIN GONZALEZ CASTILLO, A 19 YEAR OLD BOY WAS KILLED BY TWO BULLETS TO HIS TORSO. PHOTO: DEMOCRACIA POPULAR BLOGSPOT.COM
BELOW: DURING THE REGIONAL 48 HOUR STRIKE, THOUSANDS OF DEMONSTRATORS MARCHED THROUGHOUT THE ANCASH REGION. PHOTO: @DIN



HUMAN RIGHTS:

LIVES AND LIVELIHOODS IN TANZANIA AND PAPUA NEW GUINEA

Human rights abuse used to be the work of repressive governments, but increasingly corporations are getting into the act. In late 2005, Canada's Parliamentary Standing Committee on Foreign Affairs lamented that "Canada does not yet have laws to ensure that the activities of Canadian mining companies in developing countries conform to human rights standards, including the rights of workers and indigenous peoples."¹⁶

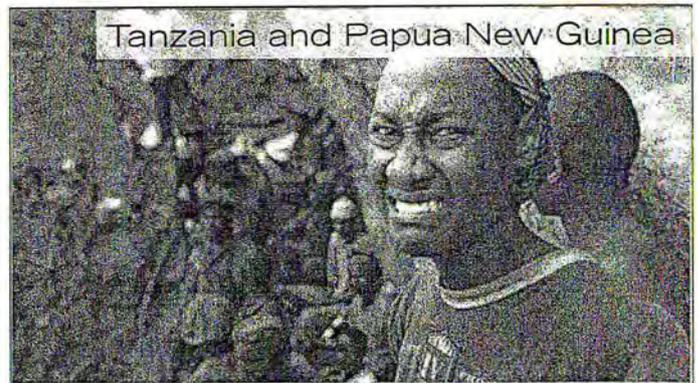
Barrick was linked to a number of these abuses, including the forced evictions of small scale miners and residents,¹⁷ the alleged murder of mine critics at their Bulyanhulu and North Mara gold mines in Tanzania, and the killing of alluvial miners by mine security personnel in Papua New Guinea. Many violent clashes have also occurred between police and activists opposing Barrick's mining operations in Peru, Chile, and Argentina.¹⁹

Some of the abuses at Bulyanhulu mine occurred before Barrick took over. In August 1996, Canada-based Sutton Resources Ltd evicted some 30,000 to 250,000 miners from its Tanzanian operation and allegedly killed more than 50 miners by burying them alive with a bulldozer, according to Tanzanian environmental lawyer Tundu Lissu.²⁰ Barrick bought this mine three years later and has done nothing to bring the perpetrators to justice or to compensate victims' families. After the mass evictions, Lissu claims that hundreds of villagers, including community leaders and prominent locals, were targeted for illegal arrests, criminal prosecutions and long-term imprisonment. (see sidebar)

Lissu's claims are supported by an independent fact finding mission that included representatives of MiningWatch Canada, Friends of the Earth-US, the Dutch NGO Both ENDS, and a Canadian journalist. After visiting the Tanzania in March 2002, the group concluded that "the intensity and seriousness in the telling of the stories of the alleged evictions, the violence and brutality of the police and mining officials, the level of detail, as well as the willingness of the Bulyanhulu residents to take significant risks to their own personal safety to come and speak with us, impressed the members of the mission, as did the willingness of apparently 250 others who waited several hours for us to arrive in Bulyanhulu. The mission members thought that these factors lent weight to the credibility of the allegations."²¹

Subsequently, the Compliance Advisor/Ombudsman of the World Bank issued a report refuting LEAT's claims of mass murder and the number of people displaced, based on evidence supplied by the Tanzanian government and Barrick Gold. LEAT published a detailed response to the CAO report on their website, which challenged this evidence.

Similarly, Barrick's North Mara mine suffered great human rights abuses under its predecessor, Canada's Placer Dome. Lissu, who has been jailed for anti-mining activism, claims that Barrick's security operatives at the North Mara mine have since been linked to six violent deaths and that the killings are part of a strategy to silence mine critics.²²



MEN WHO MOIL FOR GOLD PHOTO: MUSTAJA IROGA

"Mr. Iroga's farm was bulldozed while he himself was serving a 30 months prison sentence for allegedly inciting villagers to re-occupy their farmlands and mine pits in June 2001. In the aftermath of the August 2001 forced evictions by Tanzania security forces, the Iroga brothers, then Kewanja Village Chairman Augustino Nestory Sasi, Chacha Zakayo Wangwe (now elected Member of Parliament for Tarime), John Mang'enyi (then elected Member of Tarime District Council for Kemambo Ward) and Raphael Dede (then Nyabigena Village Chairman) were arrested and charged with inciting the villagers. Mustafa Iroga and Chacha Wangwe would be acquitted in May 2002 but the rest were sent to prison for 30 months. In February last year the High Court of Tanzania annulled the convictions and sentence declaring that there never was any evidence to convict the four community leaders. While serving their sentences, however, Neto Sasi was - with 13 other villagers - charged with a fictitious charge of armed robbery and jailed for 30 years in April 2003. We got them out on appeal to the High Court of Tanzania in December 2004. The latter declared once again that there never was evidence of wrongdoing on the part of the villagers." - Tundu Lissu, Lawyers' Environmental Action Team (LEAT), 2006²⁶

CorpWatch contacted Barrick's Vince Borg to ask for Barrick's response to these allegations, which were made in July of 2006, but Barrick has not yet responded.

In Papua New Guinea, the Akali Tange Association (ATA) emerged in 2004 to address the on-going human rights abuses perpetrated by the Porgera mine security. According to ATA organizer Jeffery Simpson,²³ 39 people have died and 2,000 have been injured, some by unsafe working conditions and others in the chaos resulting from security crackdowns. An additional 3,000 to 4,000 people have been jailed.

Much of the conflict arises over whether the local tradition of alluvial mining became illegal under arrangements and contracts held by the Porgera gold mine. ATA claims that no Ipili agreed to give up traditional rights.²⁴

The company has hired a 400-man security team, which it calls Asset Protection Department, to guard the facility. Over the years, what started as a congenial arrangement has turned into small-scale armed conflict that has caused hundreds of injuries, sometimes 40 to 50 a day, according to the *Ottawa Citizen*.²⁵



CASE STUDY:

SACRED HEARTLAND OF THE WIRADJURI NATION

THE CAMPAIGN

Australia's Lake Cowal, "the Sacred Heartland of the Wiradjuri Aboriginal Nation," is the largest inland lake in New South Wales (NSW). A wetland of national and international significance, the lake also provides habitat for many threatened species and birds listed under the International Convention on Wetlands (the Ramsar Convention).³⁵

For seven years, a community campaign has focused public attention on the cultural and ecological significance of Lake Cowal. Australian organizations supporting the campaign include the Mooka and Kalara Traditional Owners within the Wiradjuri Nation; the Rainforest Information Center; the Indigenous Justice Advocacy Network; the New South Wales Greens Party; Friends of the Earth Australia; Peacebus' Cyanide Watch; and the Coalition to Protect Lake Cowal, an alliance of more than 21 Australian and 40 international groups.

THE LAKE

An ephemeral lake lying 45 km north-east of West Wyalong in the Lachlan River plain within the Murray-Darling Basin, Lake Cowal is full an average of seven out of ten years, but can remain dry as it is now, for many years. During major floods, the lake becomes an inland sea, connecting to the Lachlan River, which flows into the Murrumbidgee and then to the Murray, Australia's largest river, now one of the world's ten most threatened rivers.³⁶ Lake Cowal is included in Australia's Directory of Important Wetlands and listed in the Register of the National Estate.³⁷

THE MINE

The Cowal Gold Project covers approximately 26.5 square kilometers of this environmentally fragile region. In 1996, the

The mine continues to use enormous amounts of water from a region stricken by the worst drought in recorded history, affecting local communities and water sources. Barrick's bore water licences allow it to take up to 17 million liters per day from underground sources.

New South Wales government refused an application from North (WA) Ltd. to mine gold at Lake Cowal on environmental grounds. But in February 1999, despite continuing environmentalists' concerns, a month before a state election and after a second commission of inquiry, the government approved the mine.³⁸ Rio Tinto bought North in 2000 then sold its Cowal Gold Project interest to US-based Homestake. In December 2001 Homestake merged with Barrick Gold of Canada.

On March 27, 2006, the mine, with a projected life of only 13 years, became fully operational. A month later, Barrick poured the mine's first gold. Now, the company is excavating 108 million metric tons of low- to medium-grade ore from an open-cut pit that lies within high water level on the lake's western edge. The final pit needed to extract around 2.7 million ounces of gold will be 1 kilometer long, 825 meters wide, and 325 meters deep.³⁹ The Coalition to Protect Lake Cowal estimates that this pit will be comparable in size to Uluru (Ayers Rock), Australia's largest monolith.

CULTURAL HERITAGE

Wiradjuri traditional lands cover a third of the NSW land mass. Traditional Owners oppose the mine and charge that Barrick and its predecessors ignored demands to protect cultural objects.⁴⁰

Barrick desecrated sacred ground when it cleared the way for the mine and laid water pipes and an electricity transmission line. The company also felled dozens of river red gum trees that had sheltered Wiradjuri people from the elements for hundreds of years, and held generations worth of historic markings. Wiradjuri cultural items and places have been damaged or destroyed including tens of thousands of stone artifacts, ancient ceremonial areas, marked trees, and traditional camp and tool-making sites.

Artifacts hold individual meaning, but piecemeal artifact col-

lection compromises the integrity of the site and the larger landscape of spiritual significance. Independent archaeologists have dated some local Wiradjuri sites to between 2,000 and 4,000 years old—contemporaries of the Egyptian pyramids. Given Lake Cowal's ancient origins, more archaeological work will likely reveal a much older heritage. Barrick has reportedly collected more than 10,000 artifacts from the mine area, but has refused to release details.⁴¹

WATER

The mine's continuing use of enormous amounts of groundwater and now the Lachlan River affects local communities and water sources already enduring the worst drought in New South Wales' recorded history. Barrick's bore water licences allow it to take up to 17 million liters per day from underground sources and up to 3650 million liters in any one year.⁴² A 30-metre groundwater level drop in October 2006 had up to 80 landholders anxiously watching their livestock and domestic supplies. In late 2006 Barrick cut a deal with local irrigators to use water from the Lachlan instead of bore water.⁴³ Barrick is building an onsite dam, but it will be useless unless significant rain falls. On April 19, Australia's Prime Minister announced that Murray-Darling irrigators faced a water shut-off unless it rained within the next two months.⁴⁴ Barrick and the government will not reveal how much water the company is taking from ground and surface water sources combined and whether its deal with irrigators will continue.

CYANIDE

At Lake Cowal, Barrick processes very low-grade ore with minimal residues of gold. Leaching gold from the ore requires 6,613 tons [6,000 metric tons] per year of cyanide and other hazardous chemicals.⁴⁵

The copious waste from this process flows into open pits separated from the lake by an earthen wall or "bund." The mine tailings are stored within the floodplain in unlined dams 3.5 kilometers from the lake. The two tailings ponds, containing highly toxic chemicals, are a tempting habitat for migratory birds.⁴⁶

Another danger comes from transporting the poisonous cyanide. Up to 6,090 metric tons of the chemical travels 1600 kilometers to Lake Cowal every year from Orica's plant in Gladstone, Queensland. Trains and trucks carry the cyanide to Lake Cowal over 20 rivers, through ten national parks, and past 200 towns. The route traverses

PATTERN OF VIOLATIONS

Barrick Gold, which operates nine mines in Australia, has been accused of environmentally unsound practices, mining-related accidents, and safety violations. For example, in January 2003, a 26-year old woman was killed in a pit-wall collapse at a Barrick mine in Western Australia. More recently a man driving a truck to the Lake Cowal mine, to collect used muriatic acid, hit a tree at Bumbaldry, NSW. Workers for Barrick sub-contractors have also complained of poor employment conditions.

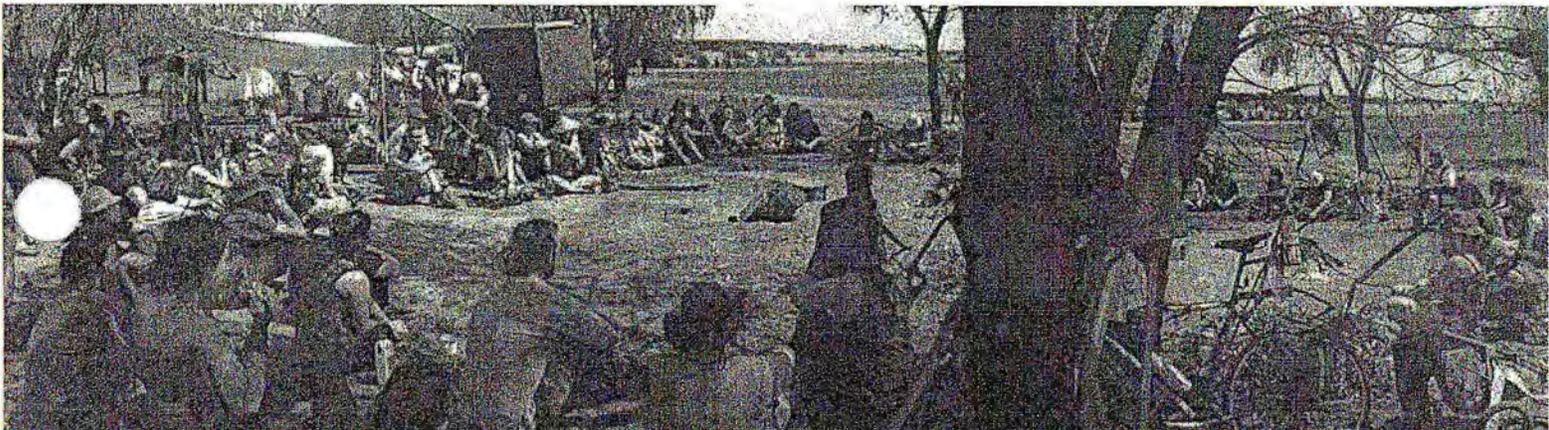
A 2004 Western Australian government's report on the Kalgoorlie Super Pit, a Barrick-Newmont joint venture, found a large area around the Fimiston 1 tailings dam was affected by cyanide and heavy metal contamination, elevated groundwater cyanide levels, and increased salinity. Kalgoorlie Consolidated Gold Mines (KCGM) admitted on July 27, 2005, that the mine's roaster and carbon kilns were emitting five to seven metric tons of mercury per year. In April 2007 the Western Australian authorities fined KCGM \$25,000 for sulphur dioxide emissions that affected Coolgardie residents.⁴⁸

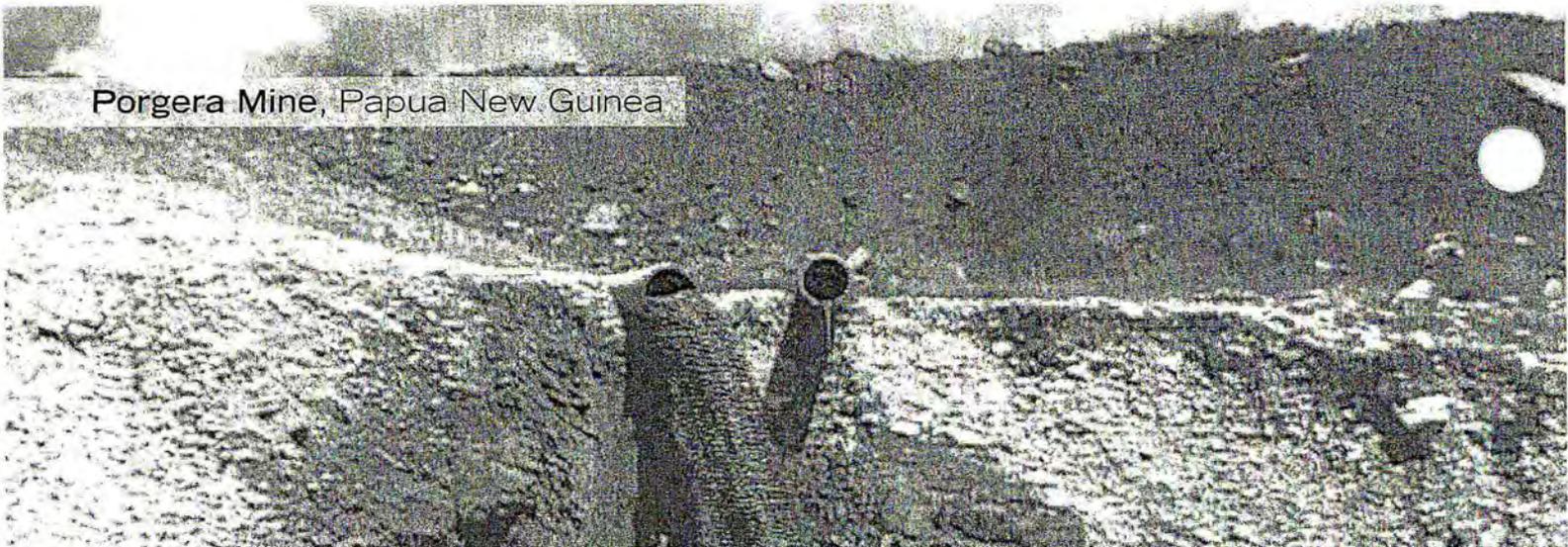
densely populated areas of Australia's largest city, Sydney, and the World-heritage-listed Blue Mountains. A 1992 train crash at a Condobolin, NSW level crossing killed two and spread 40 metric tons of cyanide pellets across the ground.⁴⁷

TITLE PHOTO: PELICANS BY THE FLOCK HUNTING THROUGH THE SHALLOWS OF LAKE COWAL. LAKE COWAL IS AN EPHEMERAL LAKE, IT IS FULL AN AVERAGE OF SEVEN OUT OF TEN YEARS. THIS AREA IS FACING THE WORST DROUGHT IN 100 YEARS. LAKE COWAL HAS BEEN SUBSTANTIALLY DRY SINCE OCTOBER 2001.

SOURCE: WWW.ECOPIX.NET

BELOW: LAKE COWAL SUPPORTERS LISTENING TO WIRADJURI TRADITIONAL OWNERS AT THE GATES OF BARRICK'S MINE AT LAKE COWAL, NSW OCTOBER 2004. PHOTO: NATALIE LOWREY





Porgera Mine, Papua New Guinea

CASE STUDY:

GOLD MINE TRANSFORMS PACIFIC ISLAND

The Ipili people of Papua New Guinea had the misfortune of living on top of a lot of gold. When mining companies arrived in their region and wanted to make a deal to start a gold mine, the locals thought they could work out an arrangement that would grant them benefits from all of the profits that would be made. Unfortunately, things did not work out the way they hoped.

Landmark deal

The agreement reached between the locals and the company was hailed by the industry as a landmark deal because up to that point, landowners had seldom if ever been involved in negotiations at all. Porgera Joint Venture (PJV) company, the entity that Placer Dome created to run the mine, would pay the Porgerans through the PNG government for the use of their land, pay dividends to the families of the original landowners based upon how much gold was mined, and would build a school and other buildings for the town.⁴⁹

Landscape eroded

From the beginning, however, there were allegations of dishonesty. People claim that the signers of the contracts were illiterate at the time, and that they were given alcohol during the negotiations.⁵⁰ Things got worse when in the early 1990, the most accessible veins of ore were depleted. It was then that the company turned to open pit mining, began blasting away the hills, using cyanide to leach gold and other toxins from the rubble, and dumping the poison waste into the local streams. In fact, whereas in 2000, the Porgera mine produced 6.6 tons of waste per ounce of gold produced⁵¹, in 2006, that figure was up to approximately 97.6 tons of waste per gold ounce.⁵²

Although PJV paid villagers to relocate to new houses in the hills above the despoiled valley the homes started sinking into the ground or sliding slowly down the hill as mine debris eroded the landscape. As time passed, the villagers began to measure the deal and their cheap tin houses against the despoiled environment and the wealth the mining company has extracted.

Increasingly the villagers grew to rely on the mine for suste-

nance, whether through wages or lease payments. Many of them are now "reeling from the impact of a cash-for-land deal that has turned their traditions upside-down and their ancestral home into an industrial moonscape patrolled by guards and police," according to an article by the *Ottawa Citizen*.⁵³

Between 8 and 39 people have been killed in fights between company security men and alluvial miners (Placer Gold admitted to eight deaths⁵⁴, while ATA puts the number at 39 mine-related deaths⁵⁵). The company's security men are accused of beatings and rapes against the villagers. Many people search for gold in and around the mine, and as the mine itself has grown bigger and bigger, and the local population exploded, clashes have erupted over access to the precious yellow ore.

When would-be gold collectors have approached company property, guards have fired at them in the past, claims the Akali Tange Association (ATA), an organization that advocates against human rights abuses in the area.⁵⁶

Growing inequity and changing social structures exacerbated dissatisfaction between the mining company and the locals. New arrivals seeking work at the mine, who currently account for 40 percent of the 10,000 people living around Porgera, and relatives of landowning families began demanding a share of the monetary compensation from their kin. This phenomenon is perfectly normal among Papua New Guineans who share any fortune, good or bad, with their tribe and extended family. Typically a group of approved elders make a judgment awarding cash to the injured parties who divide it among their relatives.

Workers organize

Stanley Kaka, a 44-year-old former mineworker and union organizer, embodies a living history of the Porgera region. As a child in the 1970s, he and the other village males slept in a longhouse with hammock-bunks lining the walls. Nearby was a similar building for the women and children. "We would stay up late every night", he recounts, "telling stories, talking. In the morning we all rejoined our families and went to work in the gardens. Everyone wore grass loin cloths and hunted with bows

and spears. And so now we have gone from the Stone Age to the Computer Age in one generation.”⁵⁷

In 1989 Kaka moved to Porgera from a nearby village and started working at the mine. He immediately noticed how unfairly the employees were treated. People worked long hours for low wages and were exposed to toxic chemicals, he says. He and other workers formed the Porgera Allied Workers’ Union with Kaka as its first president. The union won overtime pay, travel compensation for miners who came from distant townships, and special risk pay for the men who worked in the dangerous tunnels deep under Porgera’s hills.

It was during one of the union’s actions, a “sitting protest” inside of a tunnel, that the company security men clashed with the miners and angry workers destroyed a digging machine. Mine officials blamed Kaka for starting the trouble and fired him.

“This is my land”

“I told the company that I will be here until you leave this place. This is my land”, he said. For the last 16 years he has been “not leading, but advising the young generation, the young people who are coming up and saying this is no good. We should at least get maximum benefit out of our resources that the company’s taking out”.

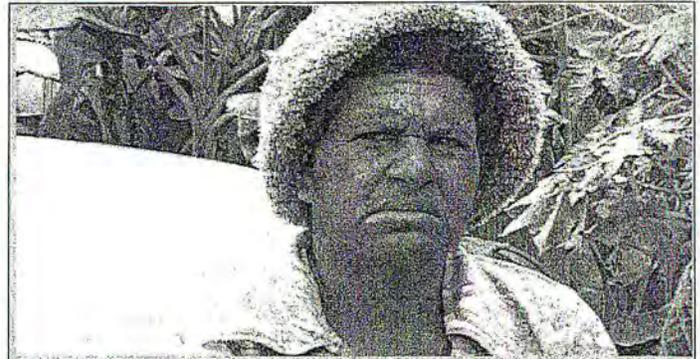
Porgera is a town with one of the world’s largest gold mines and no paved streets. As helicopters ferry wealth overhead, crews of mud-covered young men with picks and orange plastic vests wedge rocks and gravel into deteriorating dirt roads to counter erosion from frequent rains. The overall sense is of an outside corporation extracting what it can at minimum cost, ready to pack up and clear out when the gold supply runs dry.

Rich resources, poor people

Set in the brilliant South Pacific, Papua New Guinea is rich in resources, in ecology, in languages and cultures – and yet the people are poor.

Back in Porgera, local ATA organizers are now working on ways to hold Barrick accountable for a series of incidents in which mine security forces allegedly injured workers.

The company is trying to negotiate a settlement. PJV’s Stephenson told the *Papua New Guinea Post Courier*: “We have reached a stage where we ourselves are also not prepared to accept any



A WOMAN’S PERSPECTIVE:

SUI, A PRINCIPAL LANDOWNER

How has the mine changed life?

Now I have more problem and living a harder life. In the olden days I used to good drink fresh clean water with paste now [I am] drinking tesseness (sic) water. We used to have good bananas, and now we got bananas that is not sweet, and the bananas are not bearing good fruits and even the covers as well. We used to have good kava in the garden, but under the conditions most kavas have gone, and now one type of kava is in the place.

In the olden days before the mining, all the women were being properly protected and secured by the men through the sub clan. But now when the mine came and all things kind of came apart: tribes not living together, women all scattered over, and they are not well-protected. And now that money is scarce and taken the place some ladies have money... and those that don’t have the money they have no place to move to, they’ve got no money to give to bus drivers, they are not living in good house, they are living in a school settlement out in the bushes, and through that and some ladies are caught into sicknesses like AIDS and it is hopeless now.⁵⁹

more deaths. We need to work together to find solutions”.⁵⁸

The men of ATA, however, remain skeptical. “But”, said one man, motioning forcefully with his arms, “if nothing is resolved, we will shut down this mine in less than a day. We can do it anytime we want to and we will.” The Ipili of Porgera are determined to make sure they are not left with just dirt roads and despoiled hills when the gold finally runs out.

TITLE PHOTO: BARRICK DEPOSITS MINE TAILINGS DIRECTLY INTO THE RIVERS. ALL PHOTOS: DAVID MARTINEZ

SIDEBOX PHOTO: SUI, A PRINCIPAL LANDOWNER SHARES HER PERSPECTIVE ON HOW THE MINE HAS CHANGED DAILY LIFE IN PORGERA.

BELOW: A HOUSE SITS ON A COLLAPSING HILLSIDE ABOVE A RIVER OF MINE TAILINGS THAT IS ERODING THE LAND AROUND IT.



Pascua Lama Mine, Chile/Argentina



CASE STUDY:

MEGA MINING PROJECT ENDANGERS NATURAL AND CULTURAL BALANCE

Pascua Lama-Veladero⁶⁰ is a mine project operated by the subsidiaries of the Canadian transnational company Barrick Gold Corporation⁶¹, the Compañía Minera Nevada Ltda. (Chile) and Barrick Exploraciones Argentina S.A. They plan to set up a gold, silver and copper mine in a semi-desert region of the Andean Cordillera, on the Chilean-Argentinean border. This project is located on the source of the Huasco river system on the Chilean side, and of the Cura Valley, on the Argentinean side. In Argentina, the mine lies within the San Guillermo Biosphere Reserve territories (UNESCO, 1981) in the province of San Juan. In Chile, Pascua Lama abuts the southern border of the Atacama Desert, one of driest in the world, and intrudes into ancestral Diaguita indigenous territory.⁶²

Pascua Lama-Veladero mining activities endanger the natural and cultural balance of these valleys, affecting around 70,000 people in Chile⁶³ and 24,000 in Argentina.⁶⁴ Pascua Lama mining directly affects mountain glaciers that are essential water sources for these regions and poses a serious threat to biodiversity.⁶⁵ The affected region is a habitat for condors, eagles, vicunas and other fauna and flora species.⁶⁶

The area has already experienced environmental impacts from the exploration and prospecting phase carried out in the 1990s – a period of multiple free trade agreements that stimulated this kind of project. A report from the Dirección General de Aguas of Chilean Government (the national agency responsible for water management) shows that the activities of this mining project have reduced the volume of glaciers Toro 1, Toro 2 and Esperanza between 50 and 70 percent between 1981 and 2000.⁶⁷ The Conconta glacier in Argentina has already been destroyed.⁶⁸

The quality and the availability of an already precarious water supply will be threatened by the use of toxic materials such as cyanide (its use was denounced by the Declaration of Berlin, 2000) and some heavy metals. Mineral extraction methods will cause dust emissions containing particles of lead, arsenic, uranium, chromium, zinc, asbestos, mercury, sulphur, cobalt, manganese, etc.⁶⁹ Dust deposits on the surface of glaciers will accel-

erate the thawing process. Accumulation of toxic material will pollute the soil and the ground water table. In addition, mining operations require a large amount of water—370 liters per second⁷⁰—increasing the pressure on an area traditionally prone to drought. According to current arrangements, Barrick Gold will get this vital resource for free, since this company owns the water rights and can decide how to use them.⁷¹

Pascua Lama-Veladero disrupts the ecology of the territorial area known for its agricultural and pastoral activities including the production of export grapes, olive oil, brandy, pisco, fruits, vegetables, goat cheese, etc.⁷² On the Argentinean side, mining activities will adversely affect the development of tourist activities, including highly valued thermal baths.⁷³

Also, territorial and ancestral rights of the indigenous Diaguita community in Chile are being violated despite the law focusing on indigenous rights (Law 19,253 of 1993 on Protection, Promotion and Development of Native Peoples of the Department of Planning and Cooperation). But this law does not adequately ensure the protection of the Diaguita's land and its water. Corporate interests have even used this law to trespass on indigenous communities rights.⁷⁴

During the time leading up to the construction of the mine, in 1996, Barrick acquired land rights in Chile and proceeded to set up gates blocking public pathways. This blocked shepherds⁷⁵ from moving their livestock to traditional mountain grazing grounds. Before the arrival of Barrick, this land was the subject of a legal controversy, with the Diaguita claiming that it had been usurped by a private landowner. Although the case is still in Chilean courts, the Pascua Lama project continues.⁷⁶

Territorial appropriation by Barrick Gold includes the construction of a 6 km tunnel through the Chilean-Argentinean border to allow the transport of resources, machines and various materials needed for mining operations.⁷⁷ The tunnel will also provide the means to move mineral products to the Pacific coast where they can enter the international market. The operation of this tunnel does not include a customs system or a border checkpoint, as required by the present local laws.⁷⁸

The Pascua Lama-Veladero project violates the self-determination rights of the local population. This mining project has set up shop through a campaign of charm and pressure on local and national authorities and on the local population. Barrick displays a public image of “a socially responsible mining corporation,” promising to contribute to the progress of the region, pledging large amounts of money, offering gifts, promising job openings and assuring that the environment will be rigorously protected by its “clean” and scientifically controlled mining procedures. However, the history of this company reveals these promises as illusory.⁷⁹

Working conditions at the mine are disturbingly precarious. More than 50 miners have already died on the job and Barrick has released no information about the circumstances related to these fatal accidents.⁸⁰ The work is performed at very high altitudes (5,000 m above sea level) and safety standards and appropriate physical training are insufficient. Despite complaints by local residents, there are no controls to monitor and regulate the movement of many vehicles, trucks, and large machines that pose risks to the local communities living near access routes to the mine.⁸¹

The mining company will generate enormous profits from this project, thanks, in part, to the low cost of the royalties (5 percent in the case of Chile,⁸² 3 percent in Argentina⁸³). The Pascua Lama project is only the beginning of a series of new mining initiatives born with the Mining Integration Treaty (Tratado sobre integración y complementación minera) between Argentina and Chile, signed in 1997, promoted by Barrick Gold Corporation.⁸⁴

The commercial operations of Barrick Gold, as well as those of other big transnational corporations, are negotiated under civic-juridical systems of governments that appear to be democratic and representative, but in fact are manipulated by huge economic national and international interests. These economic interests are dictating a status quo that allows them to continue to increase their privileges, despite harm to the common good.⁸⁵ Opposition to the Pascua Lama project consists of a broad movement of farmers, aboriginal people, church members, district communities, young people, along with organizations dedicated to protecting and researching environmental, indigenous, and human rights. This movement has exhausted the

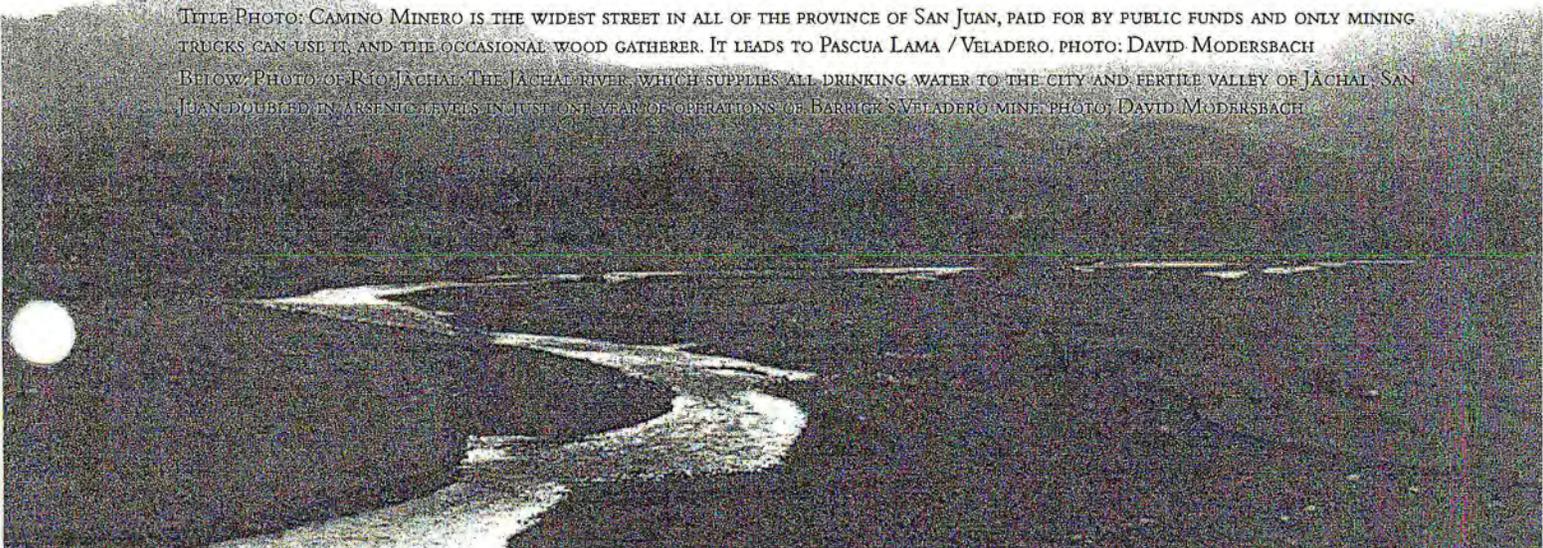
Despite the fact that the Pascua Lama-Veladero project was approved on June 16th, 2006 by CONAMA (the Chilean National Environment Commission), the movement to stop Pascua Lama is still finding ways to denounce the impacts of the project and to demand that it be stopped. Here are some of those activities:

- *Denunciation before the Inter-American Commission of Human Rights (January 2007);*
- *Denunciations before the Seventh Session of the Commission of Environmental Co-operation Chile-Canada (January 2007);*
- *Indictment of Barrick in the Popular Court at the II Social Forum in Chile (November 2006);*
- *Letter from the Diaguita Huasco Altina community's chief to the general manager of Barrick Gold Corporation (November 2006);*
- *Written and oral submissions to the National Roundtables on Corporate Social Responsibility, organized by the Government of Canada (October and November 2006);*
- *Letter from the community Diaguita Huascoaltina to the President of Chile, Michelle Bachelet (August 2006);*
- *Declaration of religious members in defense of the Huasco Valley (August 2006)*

few legal and judicial resources that the Chilean, Argentinean, and international systems offer.⁸⁶ The resistance movement to the Pascua Lama-Veladero project emerged after the first study on environmental impact evaluation in Chile in 2001, bringing to light the fact that Barrick failed to mention the existence of glaciers at the site of the proposed open pit mining project. The project has since been modified with Barrick planning to locate the open-pit mine near the glaciers Toro 1, Toro 2 and Esperanzat.⁸⁷

The Pascua Lama-Veladero project was approved in 2006⁸⁹ by the Chilean and Argentinean governments and construction of the mine is expected to begin in September 2007.⁹⁰

TITLE PHOTO: CAMINO MINERO IS THE WIDEST STREET IN ALL OF THE PROVINCE OF SAN JUAN, PAID FOR BY PUBLIC FUNDS AND ONLY MINING TRUCKS CAN USE IT, AND THE OCCASIONAL WOOD GATHERER. IT LEADS TO PASCUA LAMA / VELADERO. PHOTO: DAVID MODERSBACH
 BELOW: PHOTO OF RIO JACHAL. THE JACHAL RIVER, WHICH SUPPLIES ALL DRINKING WATER TO THE CITY AND FERTILE VALLEY OF JACHAL, SAN JUAN DOUBLED IN ARSENIC LEVELS IN JUST ONE YEAR OF OPERATIONS OF BARRICK'S VELADERO MINE. PHOTO: DAVID MODERSBACH



ON-GOING LITIGATION AGAIN

UNITED STATES

Wilcox Complaint

On September 8, 2004, current or former residents of a rural area near the former Grants Uranium Mill filed a complaint against two Barrick subsidiaries: Homestake Mining Company of California and Homestake Mining Company. The 26 plaintiffs allege that they have suffered a "variety of physical, emotional and financial injuries" as a result of exposure to radioactive and other hazardous substances. The complaint filed in the U.S. District Court for the District of New Mexico seeks an unspecified amount of damages.⁹¹ One year later, results of groundwater sampling by the Grants Uranium Mine tested by the New Mexico Environment Department and U.S. Environmental Protection Agency show contaminants in 33 of 34 residential wells sampled, including elevated levels of uranium in 21 wells.⁹²

Western Shoshone

Mt. Tenabo and Horse Canyon are extremely important spiritual and cultural sites for the Western Shoshone indigenous peoples in Nevada. Nonetheless, Cortez Gold Mine, of which Barrick Gold is a majority owner, is expanding mining expansion in this area. The Western Shoshone and supporter organizations have fought against mining for several decades, first opposing Oro Nevada, then Placer Dome, and now Barrick Gold. In 2005 after numerous cultural resource studies, shareholder actions, and administrative proceed-

ings, the Te-Moak Tribe, the Western Shoshone Defense Project, and Great Basin Mine Watch filed a lawsuit against the U.S. Bureau of Land Management. Then majority owner Placer Dome, filed a motion to intervene, claiming interest in the area and charging that the Western Shoshone did not have significant interest to proceed in the litigation. Barrick Gold has not retreated from the position of its predecessor and is now a party to the lawsuit.

On April 16, 2007, the United States federal court in Reno heard arguments in a case against the Bureau of Land Management's approval of Cortez Gold Mines' gold mining exploration proposal on and around Mt. Tenabo and Horse Canyon. In a room filled with tribe supporters. The defendants are the BLM and Cortez Gold Mines, Inc.

The plaintiffs' case rests on three main issues: 1) BLM violated the National Historic Preservation Act when it failed to adequately consult with the Western Shoshone on the mining exploration project. BLM also failed to adequately protect Western Shoshone cultural and religious uses of and resources in these areas; 2) BLM violated the National Environmental Policy Act (NEPA) when it failed to review the impacts of the massive Pediment/Cortez Hills mine project that Cortez Gold Mines has proposed in the same area; and 3) BLM violated the Federal Land Policy and Management Act (and also NEPA) when it approved the mining exploration without knowing the actual location of roads, drill sites, etc.; it also failed to adequately protect Western Shoshone heritage resources.⁹³

SOUTH AMERICA

Chilean Rodolfo Villar sues over Pascua Lama properties

When Rodolfo Villar sold 20,000 acres to Barrick Gold for its Pascua Lama gold mining project, the mineral speculator signed a contract that he thought would pay him \$1 million. Instead, the contract gave him only \$19, and a fine-print stipulation that if he tried to obtain rights to any other lands in the surrounding area, he would face a \$95,000 fine.⁹⁴

Aided by legal team of 30, including some of Chile's most prominent lawyers, Villar sued Barrick and won. Rather than getting the million dollars, he got his land back and is now asking \$300 million for it. "Literally, we are sitting on a gold mine," remarked one of his lawyers to the *Washington Post*. Barrick is appealing the case.⁹⁵

Villaverde family of Argentina is perusing similar litigation: The family has land claims to an area of a proposed mine, but refuses to sell cheap.⁹⁶

BRAZIL Chilean traditional owners, the Huascoaltonos, sue over land claims

An ancestral indigenous group from northern Chile is accusing Barrick of illegally acquiring land near the mining company's proposed Pascua Lama project. The Diaguita indigenous communities say that historical documents prove that the disputed land is part of their ancestral territory. They filed a lawsuit against the company in 2001, charging that the single group member who signed the contract was not legally entitled to make the deal.

Additionally, on July 25, 2005, the Chilean Consumers' Organization filed a complaint with the Organization of American States (OAS). It alleges that the Pascua Lama project poses a grave risk to the subsistence rights of the Diaguita indigenous communities in the area, and that the Chilean government would be breaking its international commitments if it approves the project. Specifically, the United Nations' International Covenant on Economic, Social and Cultural Rights (ICESCR) and the International Covenant on Civil and Political Rights commit the Chilean government to giving "special protection" to Diaguitas water rights.⁹⁷

1ST BARRICK

PHILIPPINES

The Province of Marinduque v. Barrick Gold Corp.

When the US District Court of Nevada granted the motion of the provincial government to include Barrick Gold Corp. as a defendant in the lawsuit against Placer Dome, the people of this island province of Marinduque expressed much relief. Some 17 months earlier, on October 4, 2005, the province had filed a case against Placer Dome, subsequently bought out by Barrick Gold early in 2006. Now Marinduquenos may have the opportunity to seek legal justice for the extensive environmental and social damages of nearly 30 years of irresponsible copper mining on their small island.⁹⁸ Marinduque suffered what is regarded by many as the Philippines' largest industrial disaster,⁹⁹ polluting the Makulapnit and Boac rivers and the Calancan Bay, while poisoning residents. The fishermen of the Calancan Bay in Marinduque have filed a separate suit, claiming \$900 million in damages.¹⁰⁰

NEW SOUTH WALES, AUSTRALIA

Wiradjuri Native Title Rights

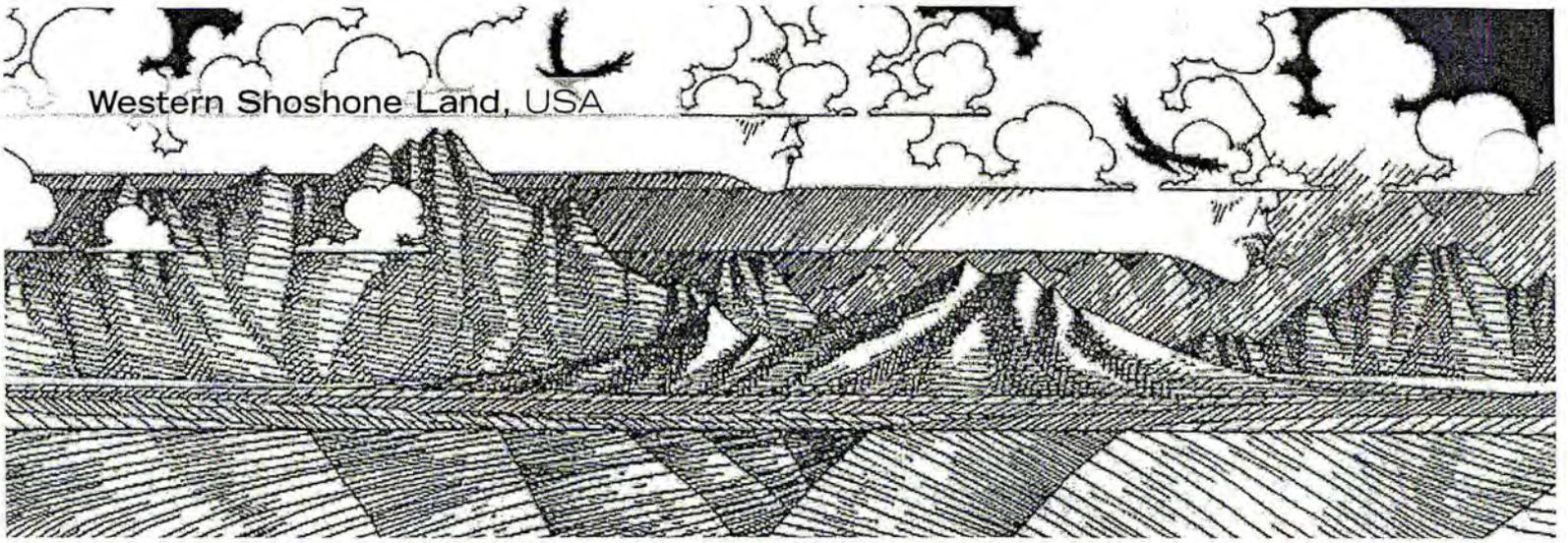
Since 2001, Wiradjuri Traditional Owners, represented by Neville "Chappy" Williams, have waged a protracted and bitter legal battle in the Federal and NSW Land and Environment Courts.¹⁰¹ These Court challenges have focused on the validity of consents issued by the NSW Government permitting Barrick to destroy all cultural heritage sites at Lake Cowal, and on the protection of Wiradjuri Native Title rights.

These challenges have been partially successful. Injunctions have delayed final approvals for the mine and lead to a complete overhaul of how consents to destroy Aboriginal cultural heritage are issued. In 2005, however, the NSW Government passed specific amendments to its planning legislation to prevent the original mine approvals from lapsing, thus thwarting the Land and Environment Court challenges.

The Mooka and Kalara United Families within the Wiradjuri Nation, who are opposed to mining on their sacred lands, have a Native Title claim in the Federal Court. In response to this claim, Barrick and the NSW Government supported the

establishment of a group called the "Wiradjuri Condobolin Native Title Claim Group" made up of five unauthorized Wiradjuri people belonging to the Wiradjuri Council of Elders. This group later changed the name on its Native Title claim to "Wiradjuri People", then withdrew its claim after signing a confidential agreement with Barrick and the NSW Government to allow mining to go ahead at Lake Cowal for an undisclosed financial benefit. The group claims to have bound the entire Wiradjuri nation of more than 30,000 people to this agreement, which still remains confidential.

The Mooka/Kalara United Families' claim group now includes between 3,000 and 4,000 Wiradjuri people. Directions to finalise a hearing and take evidence are about to be set down in the Mooka/Kalara claim. The matter is a precedent in which mining has gone ahead while a Native Title claim over the land in question has yet to be determined. The consequence of this is, that if successful, Traditional Owners may be in a position to sue Barrick and the NSW Government for tens of millions of dollars—enough to make the Lake Cowal Gold Project unviable.¹⁰²



CASE STUDY:

MINING ON SPIRITUAL GROUNDS

The Western Shoshone peoples in the United States are engaged in one of the world's best-known and longest indigenous land rights struggles. For several decades, the Shoshone people have voiced serious concerns that environmental damage resulting from the cumulative effects of the mining activities will severely affect, if not outright destroy, Western Shoshone land, resources, and customs.

Creation stories teach that the Newe, the people, are responsible for the earth, which is a female living being. Carrie Dann, Western Shoshone grandmother said:

We were taught that we were placed here as caretakers of the lands, the animals, all the living things – those things that cannot speak for themselves in this human language. We, the two-legged ones, were placed here with that responsibility. We see the four most sacred things as the land, the air, the water and the sun (l.a.w.s.). Without any one of these things there would be no life. This is our religion – our spirituality – and defines who we are as a people.

In the 1863 Treaty of Peace and Friendship (Treaty of Ruby Valley) with the United States, the Western Shoshone granted the United States access across their lands and permission to undertake certain activities.¹⁰³ In exchange, the United States recognized Western Shoshone land boundaries and agreed to pay compensation.¹⁰⁴

The original conditions of the treaty still hold and the Western Shoshone continue to occupy and use their ancestral lands. Now, however, Washington is undermining those traditional and legal rights and claiming approximately 90 percent of the land base as federal or "public" lands. It is relying on stipulated agency findings of "gradual encroachment" – a procedure that the Inter-American Commission on Human Rights¹⁰⁵ called an "illegitimate" means of claiming title.

In 2002, the Inter-American Commission issued a final report finding the United States in violation of Western Shoshone rights to equality before the law, due process, and property.¹⁰⁶ Rather than abide by this decision, the U.S. conducted an armed

seizure of over 400 Shoshone horses. The United States has been in defiance of not only the findings and recommendations of the Inter-American Commission, but also the recommendations and Final Decision of the United Nations Committee on the Elimination of Racial Discrimination (CERD).¹⁰⁷ CERD noted particular concern regarding:

- a) ... legislative efforts to privatize Western Shoshone ancestral lands for transfer to multinational extractive industries and energy developers.
- b) Information according to which destructive activities are conducted and/or planned on areas of spiritual and cultural significance to the Western Shoshone peoples, who are denied access to, and use of, such areas. It notes in particular ... the alleged use of explosives and open pit gold mining activities on Mount Tenabo and Horse Canyon.
- c) The conduct and/or planning of all such activities without consultation with and despite protests of the Western Shoshone peoples...¹⁰⁸

CERD further ordered the U.S. to "freeze" and "desist" from all activities planned or conducted on the ancestral lands of Western Shoshone, particularly in relation to their natural resources.¹⁰⁹ Barrick Gold was immediately notified of this decision.

The Western Shoshone have brought the issue to international attention as partners in the No Dirty Gold Campaign, a global campaign to educate consumer about the effects of mining. The campaign has developed strong networks among indigenous communities fighting companies including Barrick.

Barrick is the primary actor in the Mount Tenabo and Horse Canyon areas. The Toronto-based company is the majority owner of Cortez Gold Mine, the entity submitting exploration and mining expansion proposals. The mining activities by Cortez Gold Mine are being pushed forward without the free, prior and informed consent of the Western Shoshone nor adequate consideration of the resulting spiritual, cultural and environmental harms. Because of the increased activity in this area, on May

9, 2005, the Western Shoshone Defense Project, the Te-Moak Tribe of Western Shoshone, and Great Basin Mine Watch filed a lawsuit against the U.S. Bureau of Land Management (BLM) challenging the approval of mining activities on Mount Tenabo and Horse Canyon.¹¹⁰ (see on-going litigation: page 12-13)

Operations around Mount Tenabo and Horse Canyon are threatening burial and other historical and spiritual sites as well as despoiling land used for gathering medicinal and food plants, and for hunting. The United States recently recognized some of these sites for listing on the U.S. National Register of Historic Places as Properties of Cultural and Religious Importance.

Since the filing of the lawsuit, the U.S. Department of Interior, BLM, has announced plans by Cortez Gold Mines to further expand its open-pit gold mining and processing operation in the Cortez Hills Expansion Project.¹¹¹

According to the state's public notice, the "disturbance area" associated with this project is 15,242 acres of Western Shoshone traditional land.¹¹² The expansion would entail the destruction of 5,000 acres of Pinyon Forest, a staple Western Shoshone food source; a new open-pit cyanide heap leach mine on the Southern flank of the

mountain; new heap leach pads; and increased dewatering and underground detonations. Barrick has also proposed an expansion through its Underground Project that digs into the east flank of Tenabo wrapping around to the southwest portion of the mountain.

In addition to the immediate threat to the Mount Tenabo and Horse Canyon area from the Cortez mine, Barrick Gold operations are also threatening the current spiritual and ceremonial area of Rock Creek. The rate at which the Betze mine is dewatering the area – upwards of 70,000 gallons per minute¹¹³ could deplete the water source and affect springs used for healing and prayer rituals.

The damage is not confined to Mount Tenabo/Horse Canyon and Rock Creek. Mining activities on Western Shoshone land present a devastating picture of massive dewatering and dangerously high levels of mercury and other toxins.¹¹⁴ In clear violation of CERD's recommendation to desist from such ac-

tivities, Barrick's joint venture Round Mountain Gold Corporation recently announced plans to expand its existing boundary by 3,122 acres and double production capacity from 11,000 to 22,000 tons per day.¹¹⁵ Barrick's Bald Mountain operation announced expansion plans of over 3,500 acres in an area used and occupied by Western Shoshone extended family at the Odger's Ranch.

The mining expansions will mean that Western Shoshone peoples, who already live in the state with the country's highest levels of mercury pollution, will be further exposed to toxins.¹¹⁶ The Environmental Protection Agency reports that northern Nevada gold mines release more than 4,600 pounds of mercury into the air each year. A recent independent study found mercury concentrations in fish collected from Wild Horse Reservoir at levels the U.S. Environmental Protection Agency considers a public health risk.¹¹⁷ A finding of half that level of contamination spurred Idaho to issue a fish consumption advisory warning pregnant women and children under 12 not to eat fish from the reservoir.¹¹⁸

The rate at which the Betze mine is dewatering the area – upwards of 70,000 gallons per minute – could deplete the water source and affect springs used for healing and prayer rituals.

In response to concerns raised at Placer Dome's 2005 annual general meeting, the company initiated quarterly "dialogues" with the Western Shoshone to reportedly address cultural and environmental concerns and human rights issues around the Mount Tenabo area and other areas. However, the dialogue sessions facilitated by a Barrick contractor have not allowed for these discussions to take place. Instead, the dialogues have been used by Barrick to solicit small "community benefits" to individual Shoshone communities and to claim that the participation of Shoshone somehow equates to consent for ongoing operations. Concerns have been repeatedly raised to Barrick and in their most recent response, President Greg Lang openly employed a divide and conquer tactic by claiming that the use of litigation to protect the Mount Tenabo area was expending funds that the Company could otherwise be using to "benefit" Western Shoshone. By this manipulation of the "dialogue" process, Barrick is in fact creating further divisions between Shoshone individuals and communities, exacerbating an already bad situation.

TITLE PHOTO: ART BY SHOSHONE ARTIST JACK MALLOT
BELOW: MT TENABO, TAKEN BY WESTERN SHOSHONE DEFENSE PROJECT





BARRICK'S LEGACY:

MAKING A MESS, LEAVING THE BILL

Despite the fact that Barrick is a Canadian company, it only has two operating projects in Canada: Eskay Creek in northern British Columbia, and the Hemlo Joint Venture on the north shore of Lake Superior in Ontario. It also has a number of closed mines in Canada, such as Renabie, and Golden Patricia.

The environmental impact of these mines is difficult to assess because the laws vary from province to province and regulation is lax. Regulators often depend on self-reporting and self-monitoring by the mining companies themselves, so there is little publicly available information at either the provincial or federal level.

Renabie Mine (1947-1991)

The Renabie Mine is on land that straddles the Arctic and Superior watersheds. It is on the traditional territory of the Mis-sanabie Cree First Nation, who are still fighting for legal recognition of their indigenous land rights.

Renabie was the first gold mine to open after the Second World War (gold mines were required to close during the war because miners were diverted to excavate metals that were more important for war-related production). The mine operated until 1991. Once the ore was depleted, the mine shut down. The present population that lives at the site of the former mine totals about 40.¹¹⁹

Even today the surface water flowing from the property contains elevated levels of zinc, cobalt, iron and copper. In 1995, company reports declared that reclamation work had been completed, except for some re-vegetation of the tailings areas. But in 1998 sink holes began to appear on the site, and in 1999 part of the underground mine collapsed, creating a gaping hole through

Even today the surface water flowing from the property contains elevated levels of zinc, cobalt, iron and copper. In 1995, [Barrick's] reports declared that reclamation work had been completed, except for some re-vegetation of the tailings areas. But in 1998 sink holes began to appear on the site, and in 1999 part of the underground mine collapsed, creating a gaping hole through to the underground workings.

to the underground workings.¹²⁰

Barrick has been trying to get the provincial government to assume responsibility for the mine following the closure and has applied for an "exit ticket" in return for a fee of \$102,290. (The system of "exit tickets" which allow companies to walk away from future liability after paying a fee, was created in Ontario after extensive lobbying by the mining industry in the mid-1990s.)¹²¹

Golden Patricia Mine (1988-1997)

The Golden Patricia Mine in northern Ontario opened in 1988. The mine was on the traditional territory of a number of First Nations indigenous peoples which were organized into the Windigo First Nations Tribal Council. The council signed an agreement in 1988 with the mining company for environmental protection, jobs and other benefits and renewed it three years later.

Barrick bought the mine from Lac Minerals in 1995. Two years later, the ore at Golden Patri-

cia was completely depleted. The Windigo First Nations then discovered that neither Lac Minerals nor Barrick had fulfilled the agreement that they had signed.¹²²

A study by Alan Grant, a law professor at York University, in 1997, paints a dismal picture. There was a clause in the agreement that stated that the parties will "leave the land in as good a condition as regards traditional harvesting pursuits upon completion of the Project as it was before the Project began." Yet the tailings area and waste rock piles are now expected to be toxic in perpetuity. The agreement provided for training and employment, but minimal training was provided. There were no opportunities the indigenous peoples to provide contracted services to the mine and few Windigo members worked at the mine. The council failed to come to any agreement with Barrick about compensation at closure.¹²³

Hemlo Gold Camp (1985-

The Hemlo Gold Camp is located on the north shore of Lake Superior near Manitowadge. In 2001, when Barrick Gold bought Homestake mining company, it acquired a joint venture with Teck-Cominco for two mines – David Bell and Williams – in the Hemlo Gold Camp. The third mine – Golden Giant – is owned by Newmont.

Workers at the mines have reported numerous cases of lung ailments at these mines, including some cases of silicosis and sarcoidosis. The company has fought worker compensation claims for these ailments ferociously.¹²⁴

The First Nations indigenous community that lives downstream from the mine are the Pic River peoples. In 2000, the community reported having to replace their water treatment plant in order to remove cyanide from their drinking water.¹²⁵

The closure plans for the mines do not include appropriate disposal or treatment of massive piles of acid generating/leachate toxic waste rock, nor do they evaluate the risk of groundwater contamination to the area through seeps from the tailings areas and underground workings.

According to Northwatch, an NGO in northern Ontario, who reviewed the company closure plans, at the Hemlo mines, esti-

estimated closure costs and associated financial securities posted by the mining companies, are much lower than real costs are likely to be, as the closure plans for the mines do not include appropriate disposal or treatment of massive piles of acid generating/leachate toxic waste rock, nor do they evaluate

the risk of groundwater contamination to the area through seeps from the tailings areas and underground workings.¹²⁶

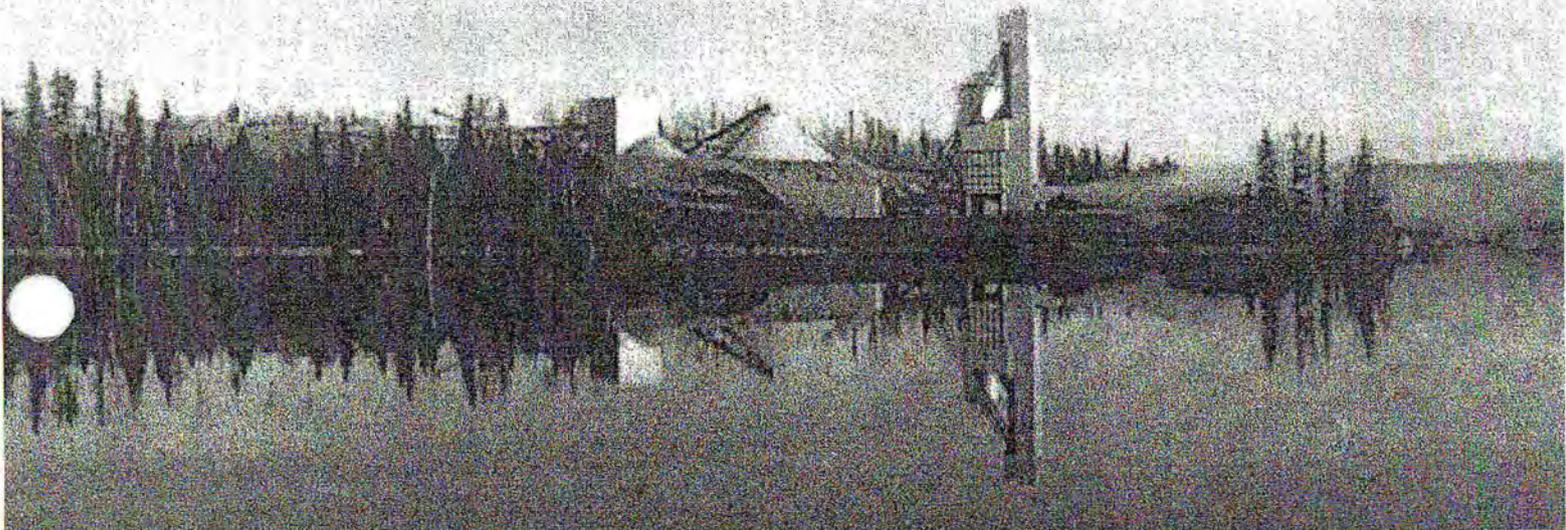
The Eskay Creek Mine (1995-2008)

The Eskay Creek Mine is in the headwaters of the Unuk River in British Columbia the traditional territory of the Tahltan First Nation. Barrick purchased the mine in 2001 from Homestake. It opened in 1995 and will have depleted mineable ore by 2008.

This mine has turned two lakes into tailings impoundments and waste rock dumps: Tom MacKay and Albino Lakes. (This is legal in Canada but severely restricted in other countries like the U.S.)

MiningWatch Canada has expressed increasing concerns about the long term monitoring of the lakes that have been turned into tailings impoundment areas, as there are very high concentrations of antimony, arsenic and mercury contained in the ore.¹²⁷ Unfortunately there is no publicly available data on this as there are no right to know laws in Canada that govern the disposal of toxics to waste rock piles and tailings impoundments. All monitoring on effluents is done by the company itself. Since Barrick's take-over of the mine, the company has rarely reported exceeding government water quality standards.¹²⁸

TITLE PHOTO: AERIAL PHOTO OF THE THREE MINES IN THE HEMLO CAMP: DAVID BELL (FRONT), HEMLO GOLD AND WILLIAMS (REAR). PHOTO: TECK CORP MINE
BELOW: HEADFRAME AND STOCKPILE DOME WITH REFLECTION IN LAKE WILLIAMS MINE, HEMLO GOLD FIELD. PHOTO: TECH CORP MINE



PLACER'S LEGACY:

BARRICK FIGHTS RESPONSIBILITY AND LETS MARINDUQUENOS SUFFER

In the Spring of 2006, when Barrick Gold took over Placer Dome, Inc. it inherited a law suit initiated by provincial authorities on the Philippine island of Marinduque.¹²⁹ The suit, filed on October 4, 2005 in a Nevada court, charged that 27 years of irresponsible mining by Placer Dome (1969-1996) had caused immense damage to the island of Marinduque and its people. Placer Dome was 39.9 percent owner of the Marcopper Mining Corporation and managed the two Marcopper copper mines that destroyed one bay and two major river systems on the island of Marinduque.¹³⁰ Rather than settle the case, compensating Marinduquenos for lost livelihood and funding efforts to rehabilitate the damaged eco-systems, Barrick is waging an expensive and lengthy legal battle to avoid responsibility.

The now abandoned Marcopper mines and waste dumps sit in the Province of Marinduque, a small heart-shaped island near the middle of the Philippine archipelago, where they continue to contaminate the soil, air and water of the island. Most of the island's 200,000 citizens are fishers and farmers, and many rely for their daily food on what they can harvest from their rivers, sea, and land.

Nearly three decades of Placer Dome's management of the Marcopper mines created one mining-related environmental disaster after another.¹³¹

Calancan Bay – Since 1975 the food security and health of 12 fishing villages around the bay has been severely affected by mining activities. For 16 years, from 1975 to 1991, Placer Dome oversaw the surface disposal of more than 200 million tons of mine tailings directly into the shallow waters of Calancan Bay. The dumping covered corals, seagrasses and the bottom of the bay with 80 square kilometers of tailings. A large portion of the waste – exposed in a tailings causeway in the bay and by low tides – regularly blows into nearby villages. The tailings also leach metals into the bay and are suspected of causing lead poisoning in local children. In 1998, the Philippine Government declared a state of calamity for health reasons for Calancan Bay villages because of lead contamination.

Mogpog River - In 1991, Marcopper built an earthen dam in the mountainous headwaters of the Mogpog River to keep



silt from a waste dump for the new San Antonio mine, from flowing into the river. The townspeople of Mogpog had vigorously opposed the dam project, fearing impacts on the river they use for food, for water for themselves and their animals, and for washing. In 1993, when the dam burst, flooding destroyed houses, water buffalo and other livestock, and crops. Two children were swept to their deaths. Marcopper's resident manager, Placer Dome's Steve Reid, denied responsibility, blaming unusually heavy rainfall from a typhoon.¹³² The Mogpog River remains heavily contaminated with acid and metals from mine waste that continues to seep through the faulty dam.

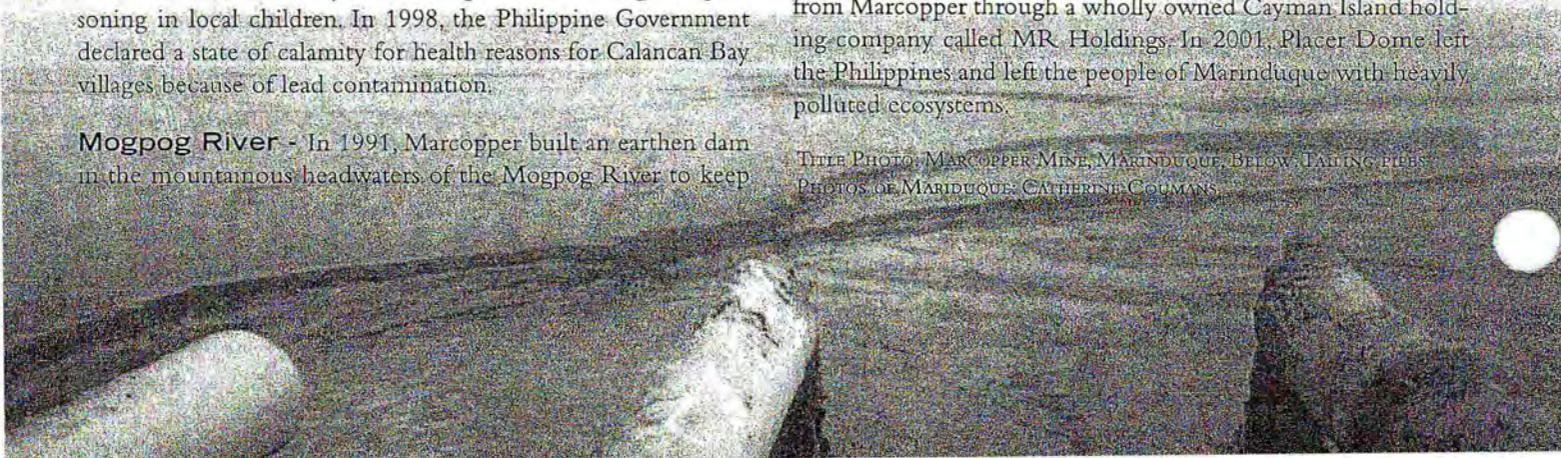
The Boac River Tailings Spill Disaster of 1996

On March 24, 1996, another massive tailings spill at the Marcopper Mine filled the 26-kilometer-long Boac River on Marinduque with 3-4 million tons of metal-enriched and acid-generating tailings. The spill happened when a badly sealed drainage tunnel at the base of the Tapian Pit burst. The mined-out pit, high in the central mountains of the island, had been used since 1992 as to store tailings from the adjacent San Antonio mine. An investigative team from the United Nations visited the island shortly after the tailings spill and noted: "it is evident that environmental management was not a high priority for Marcopper."¹³³

Placer Cuts and Runs

Following the Boac River disaster, Placer Dome promised to plug the tunnel, clean up the river and the seashore, and compensate the affected people. But in 1997, Placer Dome divested from Marcopper through a wholly owned Cayman Island holding company called MR Holdings. In 2001, Placer Dome left the Philippines and left the people of Marinduque with heavily polluted ecosystems.

TITLE PHOTO: MARCOPPER MINE, MARINDUQUE, BELOW TAILING PILES
PHOTOS OF MARINDUQUE: CATHERINE COUMANS



COMMUNITY VICTORY:

FAMATINA SAYS NO TO BARRICK GOLD

This year, in the Argentine province of La Rioja, a small group of dedicated neighbors took on Barrick Gold, forcing it to suspend operations on the Famatina range. Their efforts led as well to the ouster of a corrupt pro-mining provincial governor closely tied to Barrick Gold. The activists were fighting to save their mountain range from open-pit mining exploitation.

In early 2006, Barrick Gold had announced a new gold mining project high on Mt. Famatina in the province of La Rioja. The provincial governor, Ángel Maza, was the mining firm's key ally and a supporter of the neoliberal reforms of the 1990s. He and other officials worked alongside former President Carlos Menem, mining companies, and international finance organizations to privately rewrite the country's mining codes, thereby handing transnational mining companies incentives, tax breaks, legal protection, and environmental impunity for their extractive projects.¹³⁶

While he was supporting these policies, Maza became co-owner of the YAMIRI, a mineral exploration and development company, and the mining concessions on Mt. Famatina. He would later pass that property, which had been state-owned, to Barrick Gold.¹³⁷

When Barrick SUVs began to ply the dusty roads of La Rioja, community members grew nervous. A group of four women met in the town of Famatina in March 2006 and formed the "Self-Organized (Autoconvocados) Neighbors of Famatina for Life." They opted for "horizontal" grassroots organizing with shared decision-making, a structure that had been used effectively in many community struggles in Argentina. Soon a series of smaller, inclusive groups sprang up in towns and villages around Mt. Famatina. Autoconvocados from Famatina, Chile-

Destruction of Evidence

When the La Rioja legislature formally suspended Governor Maza for corruption and called for a prohibition on open-pit mining, ex-Gov. Maza hunkered down in his office in the capitol building, refusing to leave. While mining industry spokespersons spoke out to defend him and Barrick Gold, Maza and his party hired thugs and security guards to pose as Maza supporters and demonstrate and riot in the streets.

When provincial police dispersed the "supporters" with tear gas and escorted the ex-governor out, it became clear what happened during the night: the Maza administration had carried out a systematic destruction of all paperwork, burning the Maza machine's computers and files along with all documents linking him to Barrick Gold and other improprieties. Maza also caused bureaucratic mayhem by maliciously burning paperwork for many health and school public employees.¹⁴⁰



ASSEMBLY OF MOTHERS AGAINST MINING IN JÁCHAL, SAN JUAN ARE FIGHTING FOR CLEAN WATER FOR THEIR CHILDREN AND EXPOSING THE CORRUPT POLITICIANS RESPONSIBLE FOR MINING CONTAMINATION. PHOTO: DAVID MODERSBACH

cito, Pihuil, Chañarmuyo, Los Sauces and others villages joined forces, putting politics aside and concentrating on the important issues at hand: learning about and spreading the word on the environmental, social, cultural and economic consequences of open-pit mining.¹³⁸

Word was passed through community meetings, local newspapers, flyers, tabling, and town hall meetings. Residents gathered with agricultural producers, tourism guides, teachers, and local political officials to talk about mining threats to the delicate glacier systems. They discussed sustainable development and promoting the health of Famatina. These producers, teachers, and workers met in turn with their organizations and took their message to the capital of La Rioja: "If the mines are built, we cannot produce, and what little we do produce will be contaminated and we will not be able to sell it."

Legislation to Ban Open-Pit Mining

It was not long before allegations of corruption surfaced. Vice Governor Beder Herrera, in abrupt change of heart, introduced a bill in the provincial legislature to prohibit open-pit metals mining in the province. Approved by the legislature, it called for a binding public referendum on the question of open-pit mining to be held on July 29, 2007.

The autoconvocados, emboldened but mistrustful of the entire political process, decided to blockade the mining road at Peñas Negras, some 9,300 feet up Famatina, forcing Barrick to suspend activities on March 14, 2007. The blockade continues to this date (4/24/07), and according to activists, will continue until Barrick Gold and the threat of open-pit mining are gone from La Rioja.

The Fall of Governor Maza

Governor Maza said he would veto the bill, but he never got his chance. On the weekend of the blockade, the legislature passed an extraordinary measure to suspend Maza and bring him to trial for corruption.¹⁴¹

ACCOUNTABILITY:

UN to Canada: HOLD YOUR CORPORATIONS ACCOUNTABLE FOR HUMAN RIGHTS ABUSES

In March 2007, the United Nations Committee on the Elimination of Racial Discrimination (CERD) issued a formal recommendation to Canada. It called on Canada to better regulate and monitor its mining corporations abroad when they are operating on indigenous lands and to complete a report within the next 12 months on corporate activities. This ground-breaking recommendation marks the first time a United Nations Treaty Body has formally urged government accountability for corporate behavior outside Canadian boundaries.

In its recommendation, the committee based its concerns on "reports of adverse effects of economic activities connected with the exploitation of natural resources in countries outside Canada by transnational corporations registered in Canada on the right to land, health, living environment, and the way of life of indigenous peoples living in these regions ...:

...the Committee encourages the State party to take appropriate legislative or administrative measures to prevent acts of transnational corporations registered in Canada which negatively impact on the enjoyment of rights of indigenous peoples in territories outside Canada. In particular, the Committee recommends to [Canada] that it explore ways to hold transnational corporations registered in Canada accountable. The Committee requests [Canada] to include in its next periodic report information on the effects of activities of transnational corporations registered in Canada on indigenous peoples abroad and on any measures taken in this regard. (Para. 17, Concluding Observations on Canada)

The CERD recommendation followed on the heels of reports by several indigenous organizations and communities on the behavior of Canadian mining companies, in particular, Barrick Gold. The reports emphasized that this was not the first time Canada had undergone scrutiny for the behavior of its corporations. In its 14th Report, adopted on June 26, 2005, Canada's Standing Committee on Foreign Affairs and International Trade had condemned Canada's mining corporations acting abroad.¹⁴²

The Standing Committee issued a number of recommendations to Canada to reign in its corporate behavior abroad. To date, neither Canada nor companies including Barrick have implemented these recommendations.

In 2003, before the Standing Committee review and recommendations, the UN Special Rapporteur on Toxic Waste and Products had made special note of Canadian corporate behavior and lack of accountability. The report also noted that illicit movement and dumping of toxic and dangerous products and wastes by Canadian corporations had adversely impacted human rights.¹⁴³ The rapporteur recommended "that particular attention is paid to allegations relating to threats to the traditional lifestyles and rights of indigenous groups"¹⁴⁴ and called on "the Canadian and other Governments to explore ways of establishing extraterritorial jurisdiction over human rights violations, committed by companies operating abroad."¹⁴⁵



UNITED NATIONS

**ADVANCE UNEDITED
VERSION**

CERD

International Convention on the Elimination of all Forms of Racial Discrimination

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COMMITTEE ON THE ELIMINATION OF RACIAL DISCRIMINATION
Seventieth session
19 February - 9 March 2007

CONSIDERATION OF REPORTS SUBMITTED BY STATES PARTIES UNDER ARTICLE 9 OF THE CONVENTION

Concluding observations of the Committee on the Elimination of Racial Discrimination

CERD/C/CAN/CO/18
page 4

15. The Committee notes with regret the lack of substantial progress made by the State party in its efforts to address residual discrimination against First Nations women and their children in matters relating to Indian status, band membership and matrimonial real property on reserve lands, despite its commitment to resolving this issue through a viable legislative solution (articles 2 and article 5 d)).

The Committee urges the State party to take the necessary measures to reach a legislative solution to effectively address the discriminatory effects of the Indian Act on the rights of Aboriginal women and children to marry, to choose one's spouse, to own property and to inherit, in consultation with First Nations organisations and communities, including aboriginal women's organisations, without further delay.

While noting that section 718.2 of the Criminal Code establishes racial discrimination as an aggravating circumstance in sentencing offenders, the Committee is concerned: i) about the absence of legislation that criminalizes and punishes acts of violence, as required by Article 4 (a) of the Convention; and ii) that under the Criminal Code, criminal liability cannot be established on the basis of the nature of racist intentions (article 4).

The Committee recalls its general recommendation 15 (1993) on article 4, according to which all provisions of article 4 of the Convention are of mandatory character, and recommends that the State party amend or adopt relevant legislation in order to ensure full compliance with article 4 of the Convention.

The Committee notes with regret that the State party has not yet implemented the recommendations contained in its previous concluding observations.

RESPONSIBLE INVESTMENT:

HOW ETHICAL ARE ETHICAL SCREENERS AND “ETHICAL FUNDS”?

The socially responsible, or “ethical,” investment industry is growing by leaps and bounds. In the US this market was estimated at 2.37 trillion Canadian dollars in December 2005. In Canada it is worth approximately 500 billion Canadian dollars.

Investors who are looking for a responsible way to invest their money rely on specialized research firms to screen companies on their social and environmental performance. This research is then used by ethical fund companies who market shares to their investors.

Soon after Barrick Gold took over Placer Dome, Jantzi Research reviewed the company and found it “ineligible” as an ethical investment (June 6, 2006).¹⁴⁶ The reasons for this decision were very good indeed. Jantzi’s noted, among other things: massive outstanding environmental, economic and human health impact legacies at the disastrous Marcopper Mine in the Philippines, which Jantzi’s said Barrick Gold should address rather than fight legally; a history of lack of consultation with the Western Shoshone in the U.S., which Jantzi’s said Barrick should address by engaging with the Western Shoshone and addressing their concerns; environmental concerns including Riverine Tailings Disposal at the Porgera Mine in Papua New Guinea, which Jantzi’s said Barrick should commit to not doing at future mines without the strong support of local communities; human rights concerns related to the killings of at least eight civilians by security guards at the Porgera Mine, which Jantzi’s said Barrick should avoid through management systems and programs and reporting on its performance; the local opposition to Barrick’s proposed Pascua Lama mine in a sensitive glacier area in Chile.

In spite of Jantzi’s determination that Barrick did not pass muster as an “ethical” company, Ethical Funds, which relies in part on Jantzi’s research, continued to advise investors that Barrick was a responsible company to hold in their portfolios. Before Barrick’s Annual General Meeting in 2006, Ethical Funds sponsored a shareholder resolution that asked Barrick Gold to commission an independent third party review of the level of support for its Pascua Lama project.¹⁴⁷ As Barrick agreed to commission a review, Ethical Funds withdrew the proposal and

continues to sell Barrick to its customers.¹⁴⁷ The review Barrick commissioned sets out what Barrick has done in the way of consultation. However, it does not indicate the level of support for the project.

In February of 2007, Jantzi Research decided that Barrick has sufficiently pulled up its socks to now meet the eligibility requirements of a responsible company.¹⁴⁸

In spite of Jantzi’s determination that Barrick did not pass muster as an “ethical” company, Ethical Funds, which relies in part on Jantzi’s research, continued to advise investors that Barrick was a responsible company to hold in their portfolios.

How did Barrick manage that in less than one year? Jantzi Research says that the company has “made progress” in addressing some of Jantzi’s concerns and that other areas of concern have been “substantially mitigated” by “additional information” the company provided to Jantzi Research. Among other things, Jantzi Research found that: Barrick is now engaging with the Western Shoshone as stakeholders; Barrick has agreed to revise the Pascua Lama project – a condition of the Chilean Government – by now mining under the glaciers, and

has agreed to monitor its impacts; Barrick is also constructing a fence around its Porgera Mine and is reviewing its security guidelines and policies.

While Barrick has successfully mitigated its image for the time being, time will tell how these ethical investment groups respond to the fact that the affected Western Shoshone communities continue to oppose Barrick’s presence in their communities, or the fact that Barrick’s activities near the proposed Pascua Lama mine have been linked to between 50 and 70 percent decreases in the mass of the three glaciers¹⁴⁹, while this project is still met with much local resistance. Meanwhile, Jantzi Research notes that it still has concerns over the issues at the Marcopper Mine and Riverine Disposal, among others things.

For now, Jantzi Research appears to have buckled under the pressure of the mighty dollar. Jantzi regularly compares the performance of its ethical picks (Jantzi Social Index) to the S&P/TSX composite Index and the S&P/TSX 60, and on May 11 and September 15 of 2006, Jantzi Research noted that not including Barrick Gold had “hurt the [Jantzi Social Index] most.”¹⁵⁰ The Ethical Funds Company is happy to continue selling Barrick shares.

CONCLUSION AND RECOMMENDATIONS

The stories told in this report reflect the dirty side of gold mining: massive water depletion, indigenous struggles, government repression, waste, pollution, and poverty. These situations also reveal a story other than of environmental devastation, that of community resistance, grassroots organizing, and courageous leadership.

As the world's largest gold mining company, Barrick represents not just the abuses of one company, but the abuses of an entire industry.

In light of these facts, we recommend that Barrick meet with affected communities and negotiate in full faith with them, recognizing their rights to the land, and accepting local jurisdiction over environmental and human rights conflicts and abuses. Barrick should also compensate victims of past abuses for which it is responsible.

We also recommend that the Canadian government create measures to hold corporations accountable. In particular, we recommend that Canada:

- **establish standards and reporting obligations for Canadian companies;**
- **references international human rights standards and provides for the creation of human rights guidelines for the application of these standards;**
- **incorporates these standards into binding legislation so that compliance is mandatory;**
- **includes provisions for withholding government services from companies in cases of serious non-compliance; and**
- **creates an ombudsperson's office of independent international experts to receive complaints regarding the operations of Canadian companies worldwide and to assess corporate compliance with the standards.**

NOTE: THESE ARE THE RECOMMENDATIONS OF CORPWATCH AND NOT NECESSARILY THOSE OF THE ASSOCIATE GROUPS

Appendix



RESISTANCE:

OTHER ORGANIZED ACTIONS AGAINST BARRICK

Barrick's operations have destroyed livelihoods and the environment around the world, as the numerous examples in this report illustrate. Communities from Argentina to Papua New Guinea have organized to demand their basic human rights and resist the exploitation of their natural resources.

They use strategies like grassroots organizing, lawsuits, formal declarations, and protests to communicate their dissatisfaction to the world.

This report is being released on the occasion of Barrick's 2007 annual meeting, which has been declared an International Day of Action Against Barrick Gold by affected communities in six countries.

Nor is this the first time that groups have protested against the company. A few such past protests include:

ARGENTINA: October 20, 2004: The Madres Jachaleras Autoconocados and four other groups in Jachal, Argentina, held its first Congress in Defense of Natural Resources. It also featured a "No a la Mina" ("No to Mining") rock festival, attracting hundreds of youth.

CHILE: June 4, 2005: An estimated 2,500 people protest against the Pascua Lama Project in Vallenar, Chile. On the same day, a thousand people marched in Santiago, while solidarity events were held in Barcelona, London, and Cambridge.

November 11, 2005: Citizens presented a letter with over 18,000 signatures to the President of Chile, but were met with police violence when they tried to place chunks of ice in front

of the La Moneda government palace. The next day, more demonstrations were held in Vallenar and Santiago.

January 25, 2007: 80 people peacefully close an intersection of the roads in Alto del Carmen, to stop mining trucks going to Pascua Lama.

PERU: April 11-12, 2007: A 48 hour "unemployment strike" was held to demand the cancellation of contracts with Barrick's Pierina Mine, Peru. While this protest was supported by the president of the Ancash region, Caesar Alvarez, that did not stop the police from violently repressing the protesters, and killing a nineteen year old boy. This is the third year in row that police have violently clashed with thousands of protesters at a Barrick protest in the Ancash region. (see page 4)

AUSTRALIA: Community opposition to the Lake Cowal gold mine dates back 12 years. Wiradjuri activists and supporters have been protesting against the mine for seven years. Actions at Barrick's Australian and Canadian headquarters and mine site convergences since 2002 have attracted Australian and international demonstrators. In 2006 and 2007, protestors shut down the mine, resulting in arrests.

PNG: April 24, 2007: Local landowners blocked the access route to the mine and forced operations to stop at Barrick's Porgera gold mine.

TITLE PHOTO: MARCH AGAINST BARRICK IN VALLENAR, CHILE JUNE 2005. PHOTO: LUIS MANUEL CLAPS

Transnational Mining Tribunal: The Case of Barrick Gold Corporation in Latin America (Chile, Argentina and Peru)

On November 25, 2006, a panel of judges from civil society groups ranging from Amnesty International Chile, to religious and indigenous rights groups, heard testimonies from civil society and traditional communities from Chile, Argentina, and Peru at the Transnational Mining Tribunal in Santiago, Chile. The panel judged "that the mining firm Barrick Gold Corporation is responsible for serious environmental, social, cultural, and economic affronts as a product of its policies, programs and actions against the territories and peoples of Argentina, Chile, and Peru." The judges sentenced Barrick "to immediately pay just restitution to the victims of its policies, programmes and actions, and to restore the ecosystems affected by its mining investments." PHOTO: ISABEL ORELLANA



Published May, 2007 by CorpWatch

With contributions from: David Modersbach, Joan Kuyek, Julie Fishel, Catherine Coumans, Grupo No A Pascua Lama (Isabel Orellana, Marie-Ève Marleau, Juan Carlos Chirgwin, Jimena Campos, Gloria Pereira-Pabenburg and Rolando Labraña), Coalition to Protect Lake Cowal Members (Natalie Lowrey, Jane Morrison, Ellie Gilbert, Ruth Rosenhek, Al Oshlack, Binnie O'Dwyer, and Mia Pepper), Sakura Saunders, David Martinez, and Luis Manuel Claps.

Special thanks to: Asaf Zulah, Assembly of the City of La Rioja Against Open-Pit Mining, Azibuike Akaba, Beatriz Vignoli, Brunswick Theatre, Carrie Dann, Christian Peña, Clive Shirley (Global Aware), CONACAMI, David Jay, David Taylor, Jamie Cao, Javier Rodriguez Pardo, Jeb Tankersley, Karina Roitman, Liam O'Donoghue, Lucio Cuenca, Momoko Saunders, Naomi Klein, Natalie Cadranel, Observatorio Latinoamericano de Conflictos Ambientales (OLCA), Poonam Whabi, Amy with Radical Designs, Rights Action, Sarolta Jane, Sister Maria Jose, Madres Autoconvocados, The Movimiento Ciudadano Anti Pascua Lama, Tim Simons, Tracy Glynn, and Tundu Lissu.

This report was edited by Terry Allen, Sakura Saunders, and Pratap Chatterjee.



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A CORPWATCH REPORT

WWW.CORPWATCH.ORG

in association with:

Western Shoshone Defense Project www.wsdp.org

MiningWatch Canada www.miningwatch.ca

Mines and Communities www.minesandcommunities.org

Friends of the Earth, Australia www.foe.org.au

Coalition to Protect Lake Cowal www.savelakecowal.org

Rainforest Information Center www.rainforestinfo.org.au

Observatorio Latinoamericano de Conflictos Ambientales www.olca.cl

Grupo No A Pascua Lama, Montreal

BARRICK'S DIRTY SECRETS

COMMUNITIES WORLDWIDE RESPOND TO GOLD MINING'S IMPACTS

Response No. I-1: Statements noted. Regarding reference to the Treaty of 1863, please refer to Response O-16 for additional information.

Response No. I-2: Statement noted.

Response No. I-3: Statement Noted.

Response No. I-4: Statement Noted.

Response No. I-5: Statement noted.

JIM GIBBONS
Governor

STATE OF NEVADA

ANDREW K. CLINGER
Director



DEPARTMENT OF ADMINISTRATION

209 E. Musser Street, Room 200
Carson City, Nevada 89701-4298
(775) 684-0222
Fax (775) 684-0260
<http://www.budget.state.nv.us/>

February 3, 2009

Lynn Bjorklund
US Department of the Interior
Bureau of Land Management
Ely District Office
HC 33 Box 33500
702 No. Industrial Way
Ely, NV 89301-9408

Re: SAI NV # **E2009-172**

Reference:

Project: **Bald Mountain and Mooney Basin North Operations Area DEIS**

Dear Lynn Bjorklund:

Enclosed are comments from the agencies listed below regarding the above referenced document. Please address these comments or concerns in your final decision.

Division of Water Resources

State Historic Preservation Office

The following agencies support the above referenced document as written:

Commission on Minerals

This constitutes the State Clearinghouse review of this proposal as per Executive Order 12372. If you have questions, please contact me at (775) 684-0213.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. Tietje".

R. Tietje
Nevada State Clearinghouse

Nevada State Clearinghouse

From: Sue Gilbert
Sent: Wednesday, December 24, 2008 9:49 AM
To: 'clearinghouse@budget.state.nv.us.'
Subject: E2009-172

From: Nevada State Clearinghouse
Sent: Monday, December 22, 2008 9:00 AM
To: Robert K. Martinez
Subject: E2009-172 Bald Mountain and Mooney Basin North Operations Area DEIS - Bureau of Land Management

1-1



NEVADA STATE CLEARINGHOUSE
Department of Administration, Budget and Planning Division
209 East Musser Street, Room 200, Carson City, Nevada 89701-4298
(775) 684-0213 Fax (775) 684-0260

TRANSMISSION DATE: 12/22/2008

Division of Water Resources

Nevada SAI # E2009-172

Project: Bald Mountain and Mooney Basin North Operations Area DEIS

Follow the link below to download an Adobe PDF document concerning the above-mentioned project for your review and comment.

[E2009-172](#)

Please evaluate it with respect to its effect on your plans and programs; the importance of its contribution to state and/or local areawide goals and objectives; and its accord with any applicable laws, orders or regulations with which you are familiar.

Please submit your comments no later than Thursday, January 29, 2009.

Use the space below for short comments. If significant comments are provided, please use agency letterhead and include the Nevada SAI number and comment due date for our reference.

[Clearinghouse project archive](#)

Questions? Reese Tietje, (775) 684-0213 or clearinghouse@state.nv.us

No comment on this project Proposal supported as written

AGENCY COMMENTS:

All waters of the state belong to the public and may be appropriated for beneficial use pursuant to the provisions of Chapters 533 and 534 of the Nevada Revised Statutes and not otherwise. All use of drilling water and/or dust control water shall be pursuant to waiver or permit granted by the state engineer. A waiver to drill a temporary water source well to support mineral exploration may be granted by the state engineer upon request and a show of good cause. All boreholes or wells shall be plugged and abandoned in compliance with Chapter 534 of the Nevada Administrative Code (NAC). If flowing water is encountered it shall be controlled as required in NRS § 534.060 (3).

If existing water Permits are to be utilized, verify that the point of diversion, place of use and manner of use are still consistent with proposed usage. If not, contact the Division of Water Resources for additional permitting assistance.

Signature: Diana Lefler

Date: 12/23/2008

Response No. J-1: *Statement noted. The 43 CFR 3809 regulations require that operators comply with all requirements of all agencies that have authority to regulate mine activities.*

1/13

Rebecca Palmer

From: Nevada State Clearinghouse
Sent: Monday, December 22, 2008 9:00 AM
To: Rebecca Palmer
Subject: E2009-172 Bald Mountain and Mooney Basin North Operations Area DEIS - Bureau of Land Management



NEVADA STATE CLEARINGHOUSE
Department of Administration, Budget and Planning Division
209 East Musser Street, Room 200, Carson City, Nevada 89701-4298
(775) 684-0213 Fax (775) 684-0260

TRANSMISSION DATE: 12/22/2008

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[E2009-172](#)

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Please submit your comments no later than Thursday, January 29, 2009.

Use the space below for short comments. If significant comments are provided, please use agency letterhead and include the Nevada SAI number and comment due date for our reference.

The SHPO reviewed the subject document. In general, the SHPO supports the document as written with one exception. On page 3-149 please correct the last sentence in the second paragraph. Surveys over 10 years in age should be evaluated for their adequacy in accord with the existing statewide Protocol Agreement between this office and the Bureau of Land Management or the existing Programmatic Agreement for the subject undertaking. This office does not make such determinations. If you have any questions concerning this correspondence, please contact me by phone at (775) 684-3443 or by e-mail at Rebecca.Palmer@nevadaculture.org.

Rebecca Palmer

1/8/09

Response No. K-1: This correction has been made in Section 3.19 of the FEIS.

From: [Nevada State Clearinghouse](#)
To: [Lowell Price](#)
Subject: E2009-172 Bald Mountain and Mooney Basin North Operations Area DEIS - Bureau of Land Management
Date: Monday, December 22, 2008 8:59:42 AM

NEVADA STATE CLEARINGHOUSE

 Department of Administration, Budget and Planning Division
209 East Musser Street, Room 200, Carson City, Nevada 89701-4298
(775) 684-0213 Fax (775) 684-0260

TRANSMISSION DATE: 12/22/2008

Commission on Minerals

Nevada SAI # E2009-172

Project: Bald Mountain and Mooney Basin North Operations Area DEIS

Follow the link below to download an Adobe PDF document concerning the above-mentioned project for your review and comment.

[E2009-172](#)

Please evaluate it with respect to its effect on your plans and programs; the importance of its contribution to state and/or local areawide goals and objectives; and its accord with any applicable laws, orders or regulations with which you are familiar.

Please submit your comments no later than Thursday, January 29, 2009.

Use the space below for short comments. If significant comments are provided, please use agency letterhead and include the Nevada SAI number and comment due date for our reference.

[Clearinghouse project archive](#)

Questions? Reese Tietje, (775) 684-0213 or clearinghouse@state.nv.us

No comment on this project Proposal supported as written

AGENCY COMMENTS:

Signature:

Lowell Price

Digitally signed by Lowell Price
DN: cn=Lowell Price, o=Nevada Division of Minerals, ou=Commission on Mineral Resources, email=lprice@govmail.state.nv.us, c=US
Date: 2008.12.23 16:11:39 -0800

Response No. L-1: Statement noted.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
 Nevada Fish and Wildlife Office
 1340 Financial Blvd., Suite 234
 Reno, Nevada 89502
 Ph: (775) 861-6300 ~ Fax: (775) 861-6301

February 2, 2009
 File No. 2009-FA-0057

Memorandum

To: District Manager, Ely Field Office, Bureau of Land Management, Ely, Nevada

From: Field Supervisor, Nevada Fish and Wildlife Office, Reno, Nevada

Subject: Comments on the Draft Environmental Impact Statement for the Bald Mountain Mine North Operations Area Project

Thank you for the opportunity to comment on the Draft Environmental Impact Statement (DEIS) for the proposed Bald Mountain Mine North Operations Area Project (Project), located approximately 65 miles northwest of Ely, Nevada in White Pine County. The Project proposes to expand current mining operations including open pits, rock disposal facilities, heap leach facilities, and haul roads. The expansion will result in a total of 8,080 acres of disturbance within the new boundary encompassing both private and public lands.

The U.S. Fish and Wildlife Service (Service) has reviewed the DEIS and is providing the following comments pursuant to the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*), Migratory Bird Treaty Act (MBTA), 16 U.S.C. 703, and the Bald and Golden Eagle Protection Act, 16 U.S.C. 668. We recommend protection of wetlands pursuant to Executive Orders 11990 (wetland protection) and 11988 (floodplain management), as well as section 404 of the Clean Water Act. Other fish and wildlife resources should be considered pursuant to the Fish and Wildlife Coordination Act, as amended (48 Stat. 401, 16 U.S.C. 661 *et seq.*), and the Fish and Wildlife Act of 1956, as amended (70 Stat. 1119, 16 U.S.C. 742a).

General Comments

Based on the information in the DEIS, direct impacts to greater sage-grouse (*Centrocercus urophasianus*) leks are not anticipated as no leks are known to occur within the Project boundary. However, because leks have been documented within a few miles of the Project boundary, greater sage-grouse likely use portions of the Project area as nesting, brood rearing and wintering habitat. The Service is currently conducting a status review for the species for

M-1

potential listing under the Act. We recommend the DEIS analyze the impacts that authorization of this Project may have on local and range-wide sage-grouse populations as well as other sagebrush obligate species such as the pygmy rabbit (*Brachylagus idahoensis*).

- M-2 We are also concerned with the heap leach ponds and their potential impacts to migratory birds through acute cyanide toxicity. In semiarid areas, these ponds attract migratory birds to certain death if they are not appropriately monitored to ensure exclusionary devices work. Finally, we strongly recommend that existing and proposed above-ground power lines be retrofitted or constructed in accordance with *Suggested Practices for Raptor Protection on Power Lines - The State of the Art in 2006* (Edison Electric Institute/Raptor Research Foundation). Information can be found at <http://www.aplic.org/>
- M-3

Specific Comments

- M-4 1. Page 2-38, Section 2.3.9, Support Facilities: The DEIS states that a new power line would be constructed from a substation near the Mooney Basin process facility to the Top/Sage Pit Complex area. The Service urges you to take strong precautionary measures to protect raptors by raptor-proofing power lines. Two primary causes of raptor mortality are electrocutions and collisions with power lines. Therefore, power lines should be designed, constructed or retrofitted in accordance with Edison Electric Institute/Raptor Research Foundation (2006).
- M-5 2. Page 3-67, Section 3.8.2, Wildlife Environmental Consequences: The DEIS states that process ponds containing cyanide and other hazardous chemicals would be fenced and covered with polyurethane balls; therefore, impacts to wildlife from hazardous chemicals are not expected. The Service commends the Bureau of Land Management (BLM) for requiring measures to prevent migratory bird and other wildlife contact with potentially lethal chemicals in the pond solution. However, the effectiveness of the fencing and polyurethane balls can only be ensured through monitoring. We recommend that the mine develop and implement a process pond monitoring plan. The BLM and its applicants are obligated under the MBTA to prevent migratory birds from entering these ponds.
- M-6 3. Page 3-73, Section 3.8.4, Migratory Birds Environmental Consequences: The DEIS states that land-clearing activities would be conducted outside of the avian breeding season (April 15 to July 15). It also states that if land clearing during the nesting season is necessary, a qualified biologist would survey for active nests and signs of nesting and, if necessary, buffers would be created around active nests until young have fledged. The Service commends the BLM and its applicant for taking actions to minimize impacts to migratory birds. In addition to these measures, we recommend annual avian surveys in areas proposed for development as well as areas under development to determine avian use. This information is valuable during early project planning to ensure compliance with the MBTA.

Field Manager

File No. 2009-FA-0057

We look forward to working with you throughout the planning process for this project. If you have further questions regarding our comments or your responsibilities under the Act or other policies mentioned please feel free to contact me or James Harter at 775-861-6300.


for Robert D. Williams

cc:

Project Leader, Ruby Lake National Wildlife Refuge, Nevada

Reference

Edison Electric Institute and the Raptor Research Foundation. Suggested Practices for Raptor Protection on Power Lines - The State of the Art in 2006. Washington, D.C.

Response No. M-1: Impacts to the sage grouse and pygmy rabbits have been discussed in Section 3.8.6 of the FEIS. Consultation with NDOW confirms the area surrounding the North Operations Area Project has limited use as sage grouse brood rearing habitat because of the lack of water. Additionally, because this project is an expansion of an existing large-scale operation, these species tend to avoid the area because of the level of human activity.

Response No. M-2: Section 2.3.5 Design and Operation of the FEIS discusses the exclusionary methods for heap leach ponds that BMM currently use. These procedures would continue to be used with additional ponds for the North Operations Area Project. Any incidents involving migratory birds are recorded and reported to NDOW.

Response No. M-3: The construction and/or retrofitting of power lines to meet the criteria in the Suggested Practices for Raptor Protection on Power Lines has been added to Table 2-13 of the FEIS as a design feature.

Response No. M-4: See Response M-3.

Response No. M-5: See Response M-2.

Response No. M-6: The BLM has previously established the avian breeding season for the period of nest building and egg-laying through fledging of young birds. The applicant, in conducting nesting bird surveys during the avian breeding season, meets the requirements established by the BLM. Surveys during this period would be sufficient to ensure compliance with the Migratory Bird Treaty Act.

N



EUREKA COUNTY BOARD OF COMMISSIONERS

J.P. "Jim" Ithurralde, Chairman
Leonard Fiorenzi, Vice Chairman
Mike Page, Member

P.O. Box 677
10 South Main Street
Eureka, Nevada 89316

Phone: (775) 237-5262
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Bureau of Land Management
JAN 29 2009

January 27, 2009

RECEIVED

Lynn Bjorklund
Bureau of Land Management, Egan Field Office
HC 33 Box 33500
Ely, Nevada 89301-9408

RE: 380910 NV040, N82888

Dear Ms. Bjorklund:

Other than as noted in the comments below, the Eureka County Board of Commissioners supports the proposed action of the DEIS for the Bald Mountain Mine North Operations Area Project. We ask that the following comments be considered and addressed in the final EIS:

1. 3.10.2 Page 3-94—states that the loss of grazing lands and AUMs would “have a negligible effect on grazing.” This assertion may carry more weight in this particular circumstance because the grazing permit is held by Barrick Gold and Barrick Gold is in the business of mining. Regardless of whom holds the grazing permit, any loss of AUMs is detrimental to the majority of permittees who rely upon these forage resources as a way of life. These impacts can add up substantially over the long-term and these impacts can be quantified (i.e. forage values, loss of livestock production). What may be “negligible” to one grazing permittee may prove substantial to another. It is these grazing lands that have provided and will continue to provide a stable socioeconomic base to rural Nevada counties. In order to avoid setting a negative precedent, any impact to grazing should be quantified, addressed, and mitigation outlined within the final EIS.

2. 3.11.1 and 3.11.2 Page 3-99—reports that AML of the Triple B HMA is “between 250 and 518” and summarizes the number of horses gathered since 1997 in order to “achieve appropriate management levels.” 3.11.2 states that “The BLM’s final allotment decisions and control of the number of wild horses in the herd area would maintain wild horse populations at the appropriate carrying capacity of the range.” What assurances can be made in keeping the herd at AML when the number of wild horses present in the Triple B HMA is already above the high end AML (555 in July 2008)? An estimate of wild horse numbers currently in the Triple B HMA should also be included in the EIS to allow for full disclosure and understanding of the degree of impact upon wild horses. The DEIS does a fine job in addressing the impacts to wild

horses but does nothing to address the impacts of wild horses upon other resources. Additional impacts upon forage and water resources in adjacent HMAs (e.g. Diamond Complex) and grazing allotments will undoubtedly occur as wild horses are displaced to these areas. If livestock numbers must be reduced (see comment 1) then wild horse numbers must be reduced as well. Placing stipulations upon grazing permittees without similar stipulations for reducing wild horse numbers is unreasonable. Specific language should be included in the EIS which assures that the BLM will reduce the number of horses in the HMA and keep the HMA at the low AML.

- N-4 3. 3.17—the DEIS reports that 14 percent of BMM employees currently live in Eureka. It is anticipated that the same percentages will continue with the proposed action of adding approximately 110 new employees. Page 3-145 states that the total population could increase by approximately 330 people. If 14 percent of 330 people choose to live in Eureka, this would add 46 new people to Eureka. While this number represents only about 3 percent of the total population of Eureka County, these people would live in southern Eureka County thereby increasing the impact disproportionately. Further, page 3-140 states that the County is considering leasing properties for development of residential facilities in preparation of the expected housing demands of the Mt. Hope Project. It should be noted that 10 percent of the 200+ units in this proposed development will be available for the general public. Also, many developers have recognized the lack of quality housing in Eureka County and have bought land in speculation of future development and some have even had parcels approved. It is reasonably foreseeable that more housing will become available within the very near future and with Eureka being the nearest residential area to BMM, more BMM employees would choose to live in Eureka. Perhaps analysis could be included in the EIS which has a range of impacts that Eureka County can anticipate such as if percentages stay as they are now or if an additional 20-40 housing units become available within the next couple of years.
- N-5
- N-6

We appreciate the opportunity to comment on this DEIS and again express our support of the project with any caveats noted in the comments above.

Respectfully,



J.P. "Jim" Ithurralde, Chairman
Eureka County Board of Commissioners

Response No. N-1: *Statement noted.*

Response No. N-2: *The impacts to grazing have been identified for the allotment and not for the current permittee. Impacts have been addressed in Section 3.10.2 of the FEIS.*

Response No. N-3: *The current estimated size of the Triple B Herd Management Area is 555 horses. The initial Appropriate Management Level for the Triple B Herd Management Area, as discussed in the Ely District Approved Resource Management Plan, ranges between 250 and 518 animals. This information has been added to Section 3.11.1 of the FEIS. When adjusting the Appropriate Management Level, the BLM will take into account the available resources in the herd management area.*

Response No. N-4: *Section 3.17.2 of the FEIS discussed the lack of available housing in Eureka and therefore it is anticipated that the majority of the additional employees would choose to live in Ely or Elko. The current trend is for fewer people to live in Eureka. At a rate of 14% with 110 new employees, the increase in population in Eureka is expected to be 15 people.*

Response No. N-5: *Statement noted.*

Response No. N-6: *Statement noted.*



**Great
Basin
Resource
Watch**

February 2, 2008

85 Keystone Ave., Suite K
Reno, NV 89503
775-348-1986
www.gbrw.org

Our mission is to protect the health and well being of the land, air, water, wildlife, and human communities of the Great Basin from the adverse effects of resource extraction and use.

ATTN: Lynn Bjorklund
Environmental Protection Specialist/Minerals
Bureau of Land Management
Ely Field Office
HC 33 Box 33500
Ely, Nevada 89301-9408

Re: comments on the *Draft Environmental Impact Statement for Bald Mountain Mine North Operations Area Project, BLM/NV/EL/ES-GI08/05+1793*

Board of Directors

Bob Fulkerson, Chair

Glenn Miller, Ph.D,
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Aimee Boulanger

Julie Ann Fishel

Larson Bill

Nicole Rinke

Staff

Dan Randolph
Executive Director

Vanessa Conrad
Program Assistant

John Hadder
Staff Scientist

Water related issues

According to the draft Environmental Impact Statement (DEIS) dewatering for pit expansion is not anticipated, and only perched aquifers may be intersected.

- O-1 | Therefore, the impacts to groundwater are minimal. GBRW does note the potential impact to the Cherry Spring due to loss of recharge areas. The DEIS does not list any mitigation measure for this impact. GBRW recommends that the BLM investigate mitigation options. Perhaps the Sage Flat Rock dump should not be expanded with the waste rock handled elsewhere; to be eventually part of the backfill for the pits assuming that it is not acid generating.
- O-2 |

- O-3 | GBRW does support the proposal to backfill pits where it is clear that potential water infiltration will not react unfavorably with the waste rock backfill. The DEIS indicates that complete backfilling of the pits was rejected from further analysis due to economic reasons. There should be some data to support this rejection. The environmental argument presented by BLM for partial backfilling is certainly even more true for full backfilling. The final EIS should provide more economic analysis information.
- O-4 |
- O-5 |

- O-6 | The Waste Rock Management Plan (WRMP)¹ states that the rock is generally of oxide type with low sulfide content, and goes on to say that “*Although trace sulfides are present, and available alkalinity for acid generation is limited, acid generation does not occur.*” In referring to Appendix A of reference 1, “Quarterly Waste Rock Monitoring Report,” indeed this statement is supported. However, more recent acid/base static testing done in 2007 shows a net acid generating capacity². The RBMWF-1 and RBMWF-S samples show that for the 1st Quarter AGP > ANP. It should also be noted that within the same reports the previous reporting quarter, 3rd Quarter 2006, the AGP < ANP. This shows the variation in waste rock as mining proceeds, but it may also indicate the range possible within the realm of static testing. In general, there needs to be further testing to get a more accurate

¹ Placer Dome U.S. Bald Mountain Mine, *North Operations Area: Bald Mountain Mine (N-68193)/ Mooney Basin (N46-94-010P) Amendment to Plan of Operations, Appendix D*, Elko NV, September 2006.

² NDEP form 0090 MWMP/ABA, RBMWF-1 and RMBWF-S.

- O-6 | prediction of acid generation, and so kinetic testing needs to be done as well. The draft EIS does not contain a plan to handle acid generation should it occur. In particular, Appendix D of the DEIS (which is out of order in the document) does show acid generation characteristics with little to no neutralizing capacity for the BIDA pit rock. It is not clear how the potentially acid generating rock from this pit is to be handled. In our experience, predictions are often far off the mark, so detailed plans are needed for public review to assure that the Bald Mountain Mine will be able to mitigate in the event of acid generation.
- O-7 | The DEIS does not contain a map showing water monitoring across the site, and anticipated locations of future monitoring wells as the new facilities are developed. It is important for public transparency to reveal the monitoring regimen to assure that it is effective and protects groundwater resources including perched aquifers.
- O-8 | In the reclamation plan included within in the Plan of Operations (PoO) under the section “Chemical Stabilization” section states: *“Site data indicates that recirculation or rinsing beyond the point in time where economic gold recovery is no longer achieved provided no additional benefits to long-term chemical stability.”*³ Indeed, this is a fortuitous finding for the Bald Mountain. The data and analysis referred to here was not included in the draft EIS and should be. The PoO goes on to state that *“... rinsing is not expected to be beneficial or required to detoxify the heaps...”*⁴ GBRW understands these statements to mean that neither recirculating leach fluid or rinsing with fresh water is beneficial. The draft EIS does not, and should, fully explain how this conclusion was reached including supporting data.

Land related issues

- O-9 | Clearly there are significant impacts to migratory animals, in particular, the mule deer routes go right through the project area. There are a few suggestions in the DEIS to allow for better mobility of the deer across haul roads, pg. 3-68. GBRW suggests that BLM explore more aggressive measures including different haul road routing to avoid known deer trails or other structures like tunnels or overpasses.
- O-10 | GBRW is very concerned about the loss of Piñon/Juniper forest areas, and strongly recommends the BLM to work with Barrick gold U.S., Inc. to develop an approach to decrease the number of impacted acres.

Air related issues

- O-11 | The DEIS does not, and should give information as to the mercury content in the ore for reference.
- O-12 | The State of Nevada Mercury Control Program is mentioned in the DEIS, but there is no discussion of the type of mercury controls that are in place or anticipated controls. Ore samples need to be analyzed for mercury content, and there should be a plan for continued ore testing for mercury as mining proceeds.

³ Ref. 1, pg. 3-7.

⁴ Ref. 1, pg. 3-7

Cultural/community related issues

- O-13 | The DEIS in the “cultural resources” section, pp. 3-148-3-149, fails to discuss the significance of “pine-nutting” in the general area by Native Americans. The loss of Piñon as discussed in the DEIS is likely to impact this cultural activities and it must be addressed in the EIS.
- O-14 | There is also no mention of the resolution by the South Fork Band of the Western Shoshone that is in opposition to the project. The EIS needs to address the issues raised in their resolution. Find the resolution attached.
- O-15 | The negative impacts of the “boom and bust” nature of mining on the local communities is under addressed. The EIS should look at the historical record here and discuss impacts from that vantage point as well as the current economic climate.
- O-16 | The project is within land outlined in the Treaty of Ruby Valley, between the United States and the Western Shoshone Nation, so mineral rights were reserved and therefore continue to belong to the Western Shoshone Nation. The use of “gradual encroachment” is not a legally valid method of title transfer or extinguishment under existing federal law or recognized standards of human rights. Between February 20 and March 10, 2006 the United Nations Committee for the Elimination of Racial Discrimination, issued a decision of an “Early Warning and Urgent Action Procedure” handed down to the United States of America.⁵ The decision pertains to US lands and therefore BLM or Forest Service public lands on which the project may in part be located. The relevant aspect of this decision is that the U.S. is to “freeze any plan to privatize Western Shoshone ancestral lands for transfer to multinational extractive industries and energy developers, and desist from all activities planned and/or conducted on the ancestral lands of Western Shoshone or in relation to their natural resources, which are being carried out without consultation with and despite protests of the Western Shoshone peoples.” Thus, the project must seek consultation and permission from the Western Shoshone on their lands.

⁵ United Nations, International Convention On the Elimination Of all Forms of Racial Discrimination, CERD/C/USA/DEC/1 11 April 2006, “COMMITTEE FOR THE ELIMINATION OF RACIAL DISCRIMINATION, Sixty- eighth session, Geneva, 20 February – 10 March 2006.”
[http://www.unhchr.ch/tbs/doc.nsf/898586b1dc7b4043c1256a450044f331/25eeac288211bee9c1257181002a3cfb/\\$FILE/G0641251.pdf](http://www.unhchr.ch/tbs/doc.nsf/898586b1dc7b4043c1256a450044f331/25eeac288211bee9c1257181002a3cfb/$FILE/G0641251.pdf)

Please feel free to contact John Hadder if you have any questions or concerns.

Sincerely,

A handwritten signature in black ink that reads "John Hadder". The signature is written in a cursive style with a large, looping initial "J" and a long horizontal stroke that underlines the name.

John Hadder
Staff Scientist
Great Basin Mine Watch

Larson Bill
Western Shoshone Defense Project

cc:
Roger Flynn, Western Mining Action Project

Response No. O-1: *Monitoring of Cherry Spring conducted by Barrick has indicated large fluctuations in the water level at the spring over the last couple of years (Section 3.2, Table 3.2). The reasons for these fluctuations are unknown, but given that there are no developed mine features currently within the Cherry Springs recharge basin, it appears they are likely due to several years of below average precipitation conditions in the region. Because of these recent fluctuations in the water level at Cherry Spring, determining potential impacts based on activities associated with the mine would be difficult. No mitigation is warranted at this time due to the current conditions of the spring and the uncertainty associated with potential impacts to the spring. Barrick will continue to monitor Cherry Spring. It should be also noted the BLM's preferred alternative will result in the removal of 94% of the proposed disturbance in the Cherry Spring recharge basin.*

Response No. O-2: *The BLM selected preferred alternative results in the partial backfill of Sage Flat Pit. This partial backfill would reduce the size of the proposed Sage Flat Rock Disposal Area. This reduction in the proposed Rock Disposal Area in turn reduces the acres within the Cherry Spring recharge area that would be covered by waste rock. The acres of the Cherry Spring recharge area covered by waste rock under the BLM preferred alternative would be 9 acres, which is approximately 52.1 acres less than the Proposed Action and represents only 10% of the recharge area. With the reduction, impacts are anticipated to be negligible. Appropriate changes have been incorporated into the FEIS.*

Response No. O-3: *Statement noted.*

Response No. O-4: *The Partial Backfill Alternative was economically viable because one pit could be backfilled with material from a nearby pit during active operations. This eliminates the need to double-handle waste rock to backfill the pits. Double-handling of material increases fuel needs and therefore combustion emissions, involves effectively doubling the amount of fugitive dust and particulate emissions, requires more water resources, extends the period of time for re-establishing vegetation, and does not decrease disturbance due to the need to stockpile material until mining has been completed in the pit. Additionally, to completely backfill the pits would add significant additional costs to the project. According to the BMM, based on current operating costs of approximately \$1.00/mined ton at the site, to double-handle the 631 million tons of material associated with the preferred alternative would cost at least an additional \$631,000,000; thus making the project uneconomic. This would result in the Proposed Action not meeting either BLM's or Barrick's purpose and need as stated in Section 1.3 of the FEIS.*

Response No. O-5: *See Response O-4.*

Response No. O-6: *A Waste Rock Management Plan (Plan) has been prepared for the Proposed Action in accordance with BLM guidelines and Nevada Division of Environmental Protection regulation to evaluate waste rock characteristics. Meteoric Water Mobility Procedure, Acid Base Accounting testing, kinetic testing, and mineralogic and geologic assessments were performed and documented in the Plan Section 2.3.4. Additional static and kinetic testing has also been conducted and is reported in Schafer (2009). Findings indicate that the rock types are net neutralizing. As required by Nevada Division of Environmental Protection regulation and BLM guidelines, quarterly Meteoric Water Mobility Procedure, acid base accounting and kinetic*

(where indicated) testing will be performed on the actual mined waste rock material to insure that the predictions made in the Plan are consistent with actual results.

Response No. O-7: *Existing monitoring well locations are shown on Figure 3-4 as Bald 1, Bald 2, MWW 1, MWW 1R, MWW 2, and MWW 3. Proposed monitoring locations are discussed in Section 2.3.6 of the FEIS and shown on Figure 2-12. Additional monitoring locations associated with the heap leach expansion would be determined as part of the permitting process with Nevada Division of Environmental Protection, Bureau of Mining Regulation and Reclamation.*

Response No. O-8: *Rinsing of heap leach pads is no longer an industry standard procedure. Rinsing with freshwater only increases the amount of solution to be managed during draindown. As part of the heap leach closure, leach solution will be recirculated during process fluid stabilization. In addition to recirculation of leach solution, active evaporation would be used to reduce the total volume of solution. Once the solution inventory has been reduced to a level that evapo-transpiration cells could handle, recirculation and active evaporation would be halted. Additional details on the heap leach reclamation and process fluid stabilization are provided in the Plan of Operations (BMM, 2009), which is available for review at the BLM Ely District Office.*

Response No. O-9: *BMM has operated properties within the Plan of Operations boundary since 1983. During this time in operation, even during recent mining activity, no substantial impediments to deer movements have been observed on or near the mine; and deer mortalities on the haul road during the existing operational period are very low. The proposed mine plan used existing routes where possible with limited addition of new roads. The installation of berm gaps along haul roads are a recommendation from the NDOW. The BLM has agreed with this recommendation, with the applicant including this as part of the Proposed Action. Based on this recommendation, the BLM does not believe additional mitigation measures are needed.*

Response No. O-10: *The BLM developed and analyzed two alternatives to the proponents Proposed Action that would decrease the surface disturbance created by the mining activity.*

Response No. O-11: *Based on information received from BMM, the weighted average of mercury content from drill hole data from mining zones for 2008 is 3.16 ppm. This information has been added to Section 3.14.2 of the FEIS.*

Response No. O-12: *Table 3-21 in Section 3.14.2 shows the current mercury controls. The proposed mercury controls are expected to be compliant with the Nevada Maximum Achievable Control Technology or a proposed federal maximum achievable control technology for mercury. See response to O-11 regarding ore mercury content.*

Response No. O-13: *Section 3.12.1 notes pine nut gathering is a current land use and an important part of Native American traditions. Section 3.12.2 notes the impacts from the Proposed Action would be minimal because the current level of pine nut gathering in the area is light and vast amounts of pinyon forest on public land would remain available.*

Response No. O-14: *The BLM only became aware of the June 26, 2007, resolution when it was included with comments to the FEIS. All resources identified in the South Fork Band Resolution No. 07-SF-19 (such as grazing, water resources, pine nut areas, etc.) have been identified and addressed in the FEIS document. Please refer to Responses C 1-3 for additional information.*

Response No. O-15: *The FEIS acknowledges that mining has been a major economic force in the study area since the mid-1800s and the economies of the three counties tend to follow the cycles of hard rock mining activity even today. The 10-year range of county unemployment rates cited in the FEIS show the degree to which economic activity can fluctuate in a relatively short time. Estimating economic impacts is always imprecise because so many factors cannot be predicted; however, the by-county discussion of current economic conditions and IMPLAN modeling results presented in Section 3.17.1 of the FEIS would be sufficient to judge the project's likely economic impact.*

Response No. O-16: *The Indian Claims Commission determined Western Shoshone title had been extinguished. This issue and the associated compensation issues have been the subject of numerous lawsuits. While all courts addressing the issue have rejected Western Shoshone claims to continued ownership of these lands, some Western Shoshone still maintain title to their ancestral lands has not been extinguished. The U.S. State Department has responded to the U.N. Committee on the Elimination of Racial Discrimination (CERD) decision--see the Periodic Report of the United States of America to the U.N. Committee on the Elimination of Racial Discrimination concerning the International Convention on the Elimination of All Forms of Racial Discrimination, April 2007. Consultation with Western Shoshone and other potentially affected tribes is ongoing. As noted, the U.S. State Department has disputed the CERD decision and BLM is not required to seek permission for this or other actions on public lands managed by the agency.*

P

----- Forwarded by Lynn Bjorklund/EYFO/NV/BLM/DOI on 01/07/2009 09:51 AM

"Larry Kibby"
<lkibby1@citlink.net>
To: <Lynn_Bjorklund@nv.blm.gov>
cc: 01/07/2009 06:05 AM
Subject: Expansions of Bald Mountain and Mooney Basin mines

Tuesday, January 6, 2008

To: Lynn Bjorklund
BLM Ely District Office
HC 33 Box 33500
Ely, NV 89301

From: Larry Kibby
Elko Indian Colony
1581 Pinenut Circle
Elko, Nevada 89801

| Regarding the proposed expansion of Bald Mountain and Mooney Basin

P-1 | mines,
my main concerns and interest are:

- (A) Water & Ranching Water Right's
- (B) The Preservation and Protection of American Indian Cultural and Natural Resources
- (C) The Preservation & Protection of Wildlife and Wildlife Habitat
- (D) The Preservation & Protection of Natural Resources

The aforementioned concerns and interest are valid respects that must be regarded with all due care in any proposed "Expansion" on-going activity in which Water, Land, Natural and Cultural resources are impacted and I would hope that "Truth and Honesty" will be utilized in the formation of the EIS by the Bureau of Land Management.

P-2 | The Non-Indian and American Indian Ranching communities have suffered at various times cut-back's in AUM's due to Drought and Rangeland Fire conditions. The lack of moisture vital to refurbishing land, water areas and vegetation has been minimal for many years, this has had a great impact not only on the Ranching communities but as well as mining projects.

P-3 | American Indian Cultural and Natural Resources are abundant and historically, there have been incidents recorded by archaeology that indicate that there are area's significant to the history, culture and belief's of the American Indian, which is to state, that there must be valid and genuine discussions developed with the American Indian Tribe that is associated with the area in question.

Present day location of an American Indian Tribe often is not viewed with respect to past association with area's being established for projects and or certain activity that has impacts to land, water, cultural and natural resources, this is not only reckless but is insignificant and can lead to critical removal of Traces of the Past, which is why it is imperative for

direct contact with the American Indian Tribe that has a past history with the area.

P-4 Wildlife and Wildlife Habitat must be preserved and protected with utmost concern. In the past, areas vital for survival for Wildlife have been pushed aside, or so it seems and this type of action is no longer acceptable in that a serious portion of Wildlife Habitat is distorted and destroyed that also has a critical impact on the lives of Wildlife.

P-5 The environment is serious business, more so such is the preservation and protection of the environment and every feasible effort must be made to address all concerns, interest and issues.

P-6 The Bureau of Land Management must not make invalid excuses to further distort, destroy or desecrate areas for any project, but must provide the General Public with direct and sincere "Facts." Thank you.

Sincerely,
Larry Kibby
Elko Indian Colony
1581 Pinenut Circle
Elko, Nevada 89801

(775) 738-4147

Response No. P-1: Statement noted.

Response No. P-2: Range resources have been addressed in Section 3.10.2 of the FEIS. With the implementation of the Proposed Action, 98 AUMs would be lost. This loss would be temporary as once reclamation has been completed, these areas would be available for grazing again and provide vegetation more suitable for grazing. A permanent loss of 13.5 AUMs would result from the construction of pits and pit berms that would not be reclaimed. Drought and Fires were addressed as interrelated projects in Table 4-2.

Response No P-3: Consultation has been conducted and is ongoing with several tribes in the area of the Proposed Action. This consultation is discussed in Section 3.20.

Response No. P-4: Potential project impacts on wildlife and wildlife habitats are discussed in Section 3.8.2.

Response No. P-5: Statement noted.

Response No. P-6: Statement noted.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105-3901

March 23, 2009

John F. Ruhs, Manager
Ely District Office
Bureau of Land Management
HC33 Box 33500
Ely, NV 89301

Subject: Draft Environmental Impact Statement for the Bald Mountain Mine North Operations Area Project, White Pine County, Nevada [CEQ # 20080518]

Dear Mr. Ruhs:

The U.S. Environmental Protection Agency (EPA) has reviewed the above referenced document. Our review and comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) NEPA Implementation Regulations at 40 CFR 1500-1508, and our NEPA review authority under Section 309 of the Clean Air Act. We appreciate the extensions BLM has granted us on the comment due date for this Draft Environmental Impact Statement (EIS).

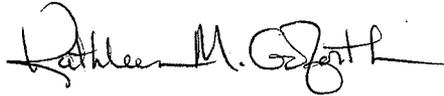
EPA has rated this Draft EIS as EO-2 – Environmental Objections - Insufficient Information (see enclosed “Summary of Rating Definitions and Follow-Up Action”). The proposed project would expand and combine the existing Bald Mountain and Mooney Basin gold mines into one project area to be administered under one Plan of Operation called North Operations Area. Our rating is based on indications, from the limited geochemical characterization in the Draft EIS, that waste rock from several pits could generate leachate with high concentrations of metals and metalloids, and degrade water quality if the leachate should reach groundwater or surface waters, or if pit lakes would form. Such significant impacts must be avoided in order to provide adequate protection for the environment. We also have concerns regarding the project’s potential impacts to air quality, and potential impacts associated with a lack of suitable soil for reclamation. The Draft EIS does not contain sufficient information for us to fully assess the environmental impacts that should be avoided in order to fully protect the environment. We recommend the Final EIS include additional information regarding geochemical characterization of waste rock, potential impacts to water and air resources, mitigation and monitoring, and closure and reclamation.

In addition to the proposed action, the Draft EIS evaluates the Partial Backfill Alternative (Alternative A), the Mooney Basin Heap Leach Pad Alternative

(Alternative B), and No Action. Relative to the proposed action, BLM's preferred alternative, Alternative A, would significantly reduce the disturbance footprint of several waste rock disposal areas. If a pit lake would form in the Top Pit and cause an adverse ecological risk or degradation of adjacent groundwater, EPA recommends that Alternative A also include backfilling of the Top Pit to preclude the formation of a pit lake. In addition, it appears from the Draft EIS that combining Alternative B with Alternative A would further reduce the disturbance footprint. EPA recommends BLM consider combining these two alternatives to benefit resources in the project area. Furthermore, we recommend that BLM evaluate a conveyor alternative in more detail and consider incorporating this into the project if resources would be better conserved and/or protected. Our detailed comments are enclosed.

We appreciate the opportunity to review this Draft EIS, and request a copy of the Final EIS when it is filed with our Washington, D.C. office. If you have any questions, please call me at (415) 972-3843, or have your staff contact Jeanne Geselbracht at (415) 972-3853.

Sincerely,

A handwritten signature in black ink, appearing to read "Enrique M. Manzanilla". The signature is fluid and cursive, with a long horizontal stroke at the end.

so Enrique Manzanilla, Director
Communities and Ecosystems Division

004963

Enclosures: EPA's Summary of Rating Definitions and Follow-Up Action
EPA's Detailed Comments

Cc: David Gaskin, Nevada Division of Environmental Protection
Christine Hansen, U.S. Army Corps of Engineers, Reno

SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

Bald Mountain Mine North Operations Area Draft EIS
EPA Comments – March, 2009

Water Resources

Water Quality Impacts

The Draft EIS (p. 3-33) states that the waste rock would not leach waters that are high in acidity or metals content. However, neither the Draft EIS nor the *Baseline Geochemical Assessment for the Proposed Bald Mountain Mine North Operations Area Expansion* (Schafer, 2008) referenced in the Draft EIS provides sufficient information regarding waste rock geochemistry to support this conclusion. In addition, some information in the Draft EIS appears to contradict it.

Q-1

For example, the Draft EIS (p. 3-15) states that there would be no impacts to surface water quality from the Top Pit waste rock. However, Meteoric Water Mobility Procedure (MWMP) results in Appendix D indicate that numerous Top Pit samples exceeded water quality standards for several metals and metalloids, and two samples were above 10 times the drinking water standard for mercury. In addition, several samples from the Bida Pit also exceeded water quality standards for several metals. One sample exceeded the mercury drinking water standard by 40 times, and one sample exceeded the copper aquatic life standard by 80 times. Some Saga pit samples also exceeded water quality standards, and nickel exceeded the drinking water standard by more than 20 times in one sample. Some samples from these pits also indicate some potential for acid generation. However, the Draft EIS does not provide mass balance information for each pit and waste rock disposal area to indicate whether there is sufficient acid neutralizing material in each of these areas to adequately neutralize and isolate any acid generating waste rock. The waste rock dumps must be properly designed to prevent generation of leachate, but it is unclear how this will be accomplished.

Q-1

Recommendation: The Final EIS should describe how the waste rock dumps will be designed to prevent generation of leachate that could degrade surface water or groundwater quality. (See also our comment on appropriate growth medium below). Individual plans should be specifically developed for waste rock from those pits with higher potential for acid generation and metals leaching. The Final EIS should specify how and where waste rock from these pits would be disposed, specify the acid neutralization potential the surrounding waste rock would need to meet for this purpose, and clarify whether sufficient neutralizing material would be available when it would be needed for this purpose. The Final EIS should also describe how waste rock facilities would be designed to ensure against leaching of contaminants that are mobile under non-acidic conditions.

Recommendation: The Final EIS should include a map showing the location of pits and waste rock facilities (indicating areas with higher contaminant leaching potential) and intermittent streams and areas with shallow groundwater.

Q-1

Recommendation: The Final EIS should describe all surface water and groundwater monitoring that would be required for this project, as well as mitigation measures that would be implemented if water quality is degraded.

The Draft EIS (2-33) states that the open pits would not encounter the deeper groundwater aquifer because the current pit configurations lie above the potentiometric surface. However, the 7000-foot potentiometric surface appears to bisect the Top Pit, which would be excavated to an elevation of 6,500 feet above mean sea level (Draft EIS, Table 2-6). It appears, therefore, that a deep pit lake would form here. Test results from a number of Top Pit samples indicated low neutralization potential and generated leachate with high concentrations of arsenic, mercury, nickel, zinc, and other pollutants.

Q-2

Recommendation: The Final EIS should provide a detailed discussion, including an ecological risk assessment, regarding the potential for, and impacts of, a post-mining pit lake in the Top Pit. The discussion should address the chemistry of Top Pit wall rock and how it would affect pit water quality. The Final EIS should identify measures to mitigate all potential adverse impacts of a pit lake in the Top Pit. If a pit lake would potentially adversely affect biological resources, EPA recommends the FEIS thoroughly evaluate an alternative that involves backfilling the pit with appropriate waste rock to preclude the formation of a pit lake. The discussion should identify waste rock specifications (e.g., geochemistry, amount, depth, cap/cover) for backfilling and justify such specifications.

Recommendation: The Final EIS should discuss whether pit water would flow through the pit into adjacent groundwater. If pit water would degrade groundwater, the Final EIS should describe how groundwater would be affected, and identify effective mitigation measures.

The potentiometric surface (7,000 to 7,500 feet above mean sea level) also appears to bisect the Sage Flat Pit, which would be excavated to an elevation of 7,150 feet above mean sea level. This pit would be backfilled under Alternative A. However, it is unclear from the Draft EIS whether it would be backfilled to above the potentiometric surface, precluding pit lake formation.

Q-3

Recommendation: The Final EIS should provide the specifications for backfilling the Sage Flat Pit and indicate whether a post-mining pit lake is expected to form above the backfill. If so, the Final EIS should provide a detailed discussion, including an ecological risk assessment, regarding the impacts of a pit lake in the Sage Flat Pit. The discussion should address the chemistry of Sage Flat Pit wall rock, how it would affect pit water quality, and whether water would flow through the pit into groundwater. If pit water would affect groundwater, the Final EIS should describe how groundwater would be affected and how impacts would be mitigated. If a pit lake would potentially adversely affect biological resources, EPA recommends the Final EIS thoroughly evaluate backfilling the pit to preclude the formation of a pit lake.

Geochemical Characterization

The Draft EIS and Schafer (2008) provide limited information on geochemistry within the project area. No mineralogic information is presented, which causes uncertainty about the acid generating potential (AGP) and acid neutralizing potential (ANP) of the material. Furthermore, the mineralogic sources of contaminants of concern, including arsenic, antimony, copper, and zinc, are unknown. Additional information is needed to more reliably predict the long-term leaching ability of the mined materials. There may be relationships between the results of kinetic tests, acid-base accounting (ABA) tests, MWMP, and whole rock analysis that could help establish methods for easily identifying high contaminant leaching materials in the field. However, several questions exist regarding geochemical characterization of the waste rock, which need to be answered before these relationships can be identified.

Q-4

Kinetic Tests. The results of the ABA testing (Schafer, 2008, Appendix B) suggest that the vast majority of samples have high neutralizing ability and low acid generation potential. However, the kinetic testing was conducted on samples within only a narrow range of ABA values, so the long-term leaching ability of all rock types or geochemical test units is unknown. Only three composite samples were subjected to kinetic testing, and the tests lasted for only 20 weeks. Samples with both low ANP and low AGP can take substantially longer to generate acid than rocks with more moderate ANP and AGP values. Very low amounts of sulfate were released compared to the amount of pyritic sulfur in the samples (Schafer, 2008, p. 29). This result demonstrates that much more acid generation could have occurred if the samples had been run for longer than 20 weeks. Longer kinetic testing would help determine the longer-term leaching ability of contaminants of concern and the longer-term acid-generation potential of mined materials at the project site. The results of the kinetic tests are also not addressed in the Draft EIS.

Recommendation: Kinetic tests should be run on the full range of rock types and ANP:AGP ratios in the project area. Tests may need to be run for one year or longer. Concentrations of contaminants of concern should be measured to assess the long-term ability of the materials to produce acid and leach contaminants. This information should be used to verify and update the relationships between the results of kinetic tests, ABA tests, MWMP, and whole rock analysis to establish more reliable methods for easily identifying high contaminant leaching materials in the field.

ABA Tests. It appears that Schafer (2008) used the modified Sobek method for calculation of AGP. However, it is unclear whether the modified Sobek or the original Sobek method was used for determination of ANP. If the original Sobek method was used, the neutralization potential is likely overestimated. The exact method used to calculate ANP needs to be clarified. In either case, the mineralogic basis for the ANP was not evaluated. In addition, Schafer (2008) usually presented the ABA results in terms of net neutralization potential (NNP) rather than ANP:AGP ratios. ANP:AGP ratios are preferred because they apply over a wider range of values. In addition, Schafer (2008)

Q-5

used the Net Carbonate Value (NCV) test to assess acid-generation potential, but did not conduct NCV and Sobek methods on any of the same samples to determine whether the conversion factor used was appropriate.

Q-5

Schafer (2008, p. 13) states that the NCV results showed that of the 1,547 samples tested, 51 had NNP values less than 0, and 55 had ANP/AGP ratio less than 1.2:1. It is unclear why BLM standard categories for NNP and ANP/AGP screening were not used (i.e., uncertain range for NNP is -20 to +20 kg/t as CaCO₃, and for ANP:AGP ratio is 1:1 to 3:1). Using the too-low cutoff values, 28.5% of the Saga waste rock had low NNP (Schafer, 2008, p. 13). If more appropriate cutoff values were used for net neutralizing material, for example, a higher percentage of the Saga material would be considered potentially acid-generating than is estimated in the Draft EIS.

Recommendation: The Final EIS and Schafer report should clarify the method used to calculate neutralization potential. If the modified Sobek method was not used, the values for ANP and NNP are likely overestimated, and the AGP is higher than reported. The ABA results (using the Sobek method) should also be presented in ANP:AGP ratios. A number of split samples should be subjected to both the Sobek (modified for ANP calculation) and NCV tests to determine whether application of the conversion factor between Sobek and NCV results is valid.

MWMP. Results from the MWMP tests showed that a number of samples leached elevated concentrations of arsenic, antimony, and mercury under neutral pH conditions. MWMP results also showed that metals that were less enriched (such as copper, zinc, and sometimes lead) were more mobile than the results of the whole rock analysis might suggest (DEIS, Appendix D; Schafer, 2008, Appendix B). Schafer (2008) states that the mobility of metals is low at Bald Mountain because of the low rainfall, pervasive alkaline conditions, and the abundance of iron, which can adsorb oxyanions such as arsenic and antimony (p. 22). However, the results from the MWMP and kinetic tests (Schafer, 2008, Appendices B and C) show that iron leachate values are low, with many values below detection and very few values above 1 mg/L. Therefore, iron may not provide much adsorption capability. There seems to be very little relationship between the ABA results and the MWMP metal/metalloid values. Therefore, the results from static ABA testing may not provide a good indication of the contaminant leaching potential and the need for special handling for this part of the project.

Q-6

Whole Rock Analysis. The results from the whole rock analysis and MWMP tests show that all rock types are especially enriched in arsenic, antimony, and mercury, all of which can easily leach under neutral pH conditions, and that metals such as copper, zinc, and lead can be mobile and at high concentrations in certain areas. Saga and Top areas have higher concentrations of arsenic, antimony, and mercury than other areas. For example, approximately 50% of the samples from these pit areas had mercury concentrations above 1 mg/kg, and concentrations reached as high as 10 to 50 mg/kg (background or unenriched values are ~0.07 to 0.35 mg/kg for all rock types) (Schafer, 2008, p. 26). Carbonates were highly enriched in antimony (over 100 times higher than background

values); arsenic, tellurium, cobalt, mercury, thallium (between 10 and 99 times higher than background); and somewhat enriched in elements such as niobium, selenium, and copper (two to ten times higher than background) (Schafer, 2008, Figure 21 and Appendix B). Clastic rocks were highly enriched in antimony (1,000 times background), highly enriched in arsenic (almost 300 times background), and somewhat enriched in cobalt, mercury, and nickel (between three and 10 times background) (Schafer, 2008, Figure 23 and Appendix B). Elements enriched in intrusive rocks included arsenic and antimony (over 100 times background), selenium, tellurium (between 10 and 100 times background), and mercury and thallium (between two and 10 times background) (Schafer, 2008, Figure 25 and Appendix B).

Q-6

Recommendation: The Final EIS should include additional geochemical analysis on the mineralogy of the mined material, the availability of acid-generating and acid-neutralizing minerals, and the material's ability to leach contaminants. The percent of calcite, dolomite, and siderite should be determined in samples from all waste rock and pit locations (or geochemical test units). All test data should be made available electronically (e.g., in Excel or Access), and relationships between leachate concentrations and ABA, sulfide, or other measurements made easily in the field should be evaluated.

Recommendation: The Final EIS should include a map and cross-sections depicting the locations of static and/or kinetic test samples, and should describe and discuss the extent to which they are representative of the pits and proposed pit expansion areas. The Final EIS should provide a more detailed characterization of waste rock geochemistry, including a mass balance of waste rock from each pit and existing waste rock dump identifying how much is potentially acid generating, potentially acid neutralizing, or inert.

Existing Water Resources

According to the Draft EIS (3-13), most springs in the area meet Nevada water quality standards with the exception of arsenic, which exceeds standards in most springs. The Draft EIS (3-28) presents data from 2005 through 2007 to demonstrate background arsenic values in various groundwater monitoring wells. However, neither referenced water quality data from 1994 and 1995 nor earlier (1980's) data are not provided as a comparison to the 2005 to 2007 data to verify that impacts are not the result of mining.

Q-7

Recommendation: The Final EIS should provide earlier monitoring data to substantiate that present background arsenic concentrations were not caused by previous mining activities. Similarly, other potential contaminants (e.g. antimony, mercury, selenium, nitrates) should be evaluated comparing early data with more current data to demonstrate whether or not impacts from previous mining have occurred.

Q-8

According to the Draft EIS (3-33), impacts to groundwater quality as a result of the proposed action are not anticipated, based on no detected impacts under the current

operations. Schafer (2008) also notes that seepage or flow has not been observed from the existing waste rock dumps since inception of operations in the early 1980's. However, data are insufficient to support this conclusion because efforts have not been made to detect and monitor waste rock seepage beyond that of visual observations.

In addition, the Draft EIS (3-16) states that Cherry Spring has recently exhibited water levels well below ground surface although there was flow in the past, and the current water level and cause of the decrease are not known at this time. The proposed project would cover 65.1 acres of the 130.5 acre recharge area for Cherry Spring.

Q-8 **Recommendation:** The Final EIS should provide and evaluate all water monitoring data for the entire mine area to distinguish baseline conditions versus any water quality and quantity impacts from mining thus far. A map should be provided showing the monitoring locations, and trend analysis should be conducted. The adequacy of the existing monitoring system to detect leachate and impacts to water resources should be evaluated and modified as necessary, and this should be addressed in the Final EIS. Additional leachate collection features may be needed, for example at the toe of rock disposal areas, along with additional surface water/stormwater and groundwater monitoring in drainages potentially affected by those areas.

With the exception of Cherry Spring, it is difficult to discern the juxtaposition of water resources and mine facilities in the Draft EIS. A map that depicts existing and proposed mine facilities, including run-on/run-off channels and diversions, and water resources as they would look before, during, and after the proposed mining operations would facilitate an understanding of the various alternatives' potential impacts to water resources.

Q-9 **Recommendation:** The Final EIS should include a large-scale map that includes existing and proposed mine facilities as well as water resources as they would look before, during, and after the proposed mining operations.

Clean Water Act Section 404

The Draft EIS (p. 3-3) indicates there may be no waters of the U.S. in the project area, and a survey of surface waters in the area has been submitted to the U.S. Army Corps of Engineers for concurrence and approval.

Q-10 **Recommendation:** The Final EIS should provide the results of the U.S. Army Corps of Engineers' jurisdictional delineation for the project site.

Q-11 If it is determined that there are jurisdictional waters within the project area, a Clean Water Act (CWA) Section 404 permit will be necessary for any discharges of dredged or fill material into these waters, including wetlands and other special aquatic sites, and EPA will review the project for compliance with *Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Materials* (40 CFR 230), promulgated pursuant to Section 404(b)(1) of the CWA. Any permitted discharge into waters must be the Least

Environmentally Damaging Practicable Alternative available to achieve the project purpose.

Q-11

Recommendation: If, under the proposed project, dredged or fill material would be discharged into waters of the U.S., the Final EIS should discuss alternatives to avoid those discharges and demonstrate the project's compliance with the 404(b)(1) Guidelines. In addition, the Final EIS should identify and commit to any required mitigation for impacts to waters of the U.S.

Soil Resources

Q-12

The Draft EIS (p. 3-51) indicates that approximately 7.7 to 12.8 million cubic yards of growth medium would be available for salvage from the 3,920 acres of proposed disturbance. The document also indicates, however, that 91 percent of the proposed action area contains soil associations that are not suitable for growth medium. It is unclear how much suitable and highly suitable soil will be available for reclamation, how much additional soil amendment may be needed to improve growth medium to a suitable condition, where additional soil amendment would be obtained if needed, and the impacts associated with using this additional material (e.g., borrow area locations and acreages, etc.).

Recommendation: The Final EIS should clarify how much suitable and highly suitable soil will be available for reclamation and how much additional soil amendment may be needed to improve growth medium to a suitable condition, as well as identify where additional soil amendment would be obtained if needed.

Q-13

Although evaporation and transpiration can be employed with the goal of zero-discharge, it is difficult to achieve this if the appropriate amount and type of cover and growth medium are not used. The Draft EIS indicates that 6 to 12 inches of growth medium would be placed on facilities during reclamation. It is unclear that this is an adequate thickness for a cover that would not only accommodate successful revegetation, but act as a store-and-release cover as well. In light of the geochemistry data provided in Appendix D, it appears meteoric water should be precluded from infiltrating waste rock dumps and leach pads to the extent possible.

Recommendation: The Final EIS should discuss how the appropriate thickness of growth medium was determined and whether it will effectively preclude meteoric water from infiltrating waste rock dumps and leach pads. We recommend growth medium be of sufficient thickness to accomplish this. The Final EIS should identify how much growth medium will be needed for this purpose and discuss whether it will be available.

Air Resources

Mercury Emissions Controls

Table 3-19 in the Draft EIS (p.3-122) identifies existing mercury emissions controls for each thermal unit at the mine, as well as the proposed Nevada Maximum Achievable Control Technology (NvMACT) for mercury for these thermal units. The Draft EIS states that installation of these NvMACT controls would reduce mercury emissions from 57.4 pounds/year to 14.2 pounds/year. Fugitive sources at the mine would also contribute 0.27 pounds/year. In a discussion of unavoidable adverse impacts on page 3-165, the Draft EIS states that these fugitive and thermal sources at the mine would emit 57.7 pounds/year of mercury. It is unclear when the identified controls would be installed and the estimated 43.2 pounds/year reduction would be realized.

Q-14

Recommendation: The Final EIS should indicate when the additional mercury controls would be installed and the estimated mercury reductions realized.

Particulate Emissions Mitigation Measures

The Draft EIS provides direct and indirect criteria air pollutant emissions estimates associated with the mine. We recommend BLM consider including measures to reduce emissions of diesel particulate matter (DPM) from fugitive sources at the mine.

Recommendation: We recommend the following DPM emission reduction measures.

- Use particle traps and other appropriate controls to reduce emissions of DPM and other air pollutants. Traps control approximately 80 percent of DPM, and specialized catalytic converters (oxidation catalysts) control approximately 20 percent of DPM, 40 percent of carbon monoxide emissions, and 50 percent of hydrocarbon emissions;
- Use diesel fuel with a sulfur content of 15 parts per million or less, or other suitable alternative fuel, which substantially reduces DPM emissions. This standard will be required after June 2010. (See <http://www.clean-diesel.org/nonroad.html>);
- Minimize construction-related trips of workers and equipment, including trucks and heavy equipment;
- Lease or buy newer, cleaner equipment (1996 or newer model);
- Employ periodic, unscheduled inspections to ensure that construction equipment is properly maintained at all times and does not unnecessarily idle, is tuned to manufacturer's specifications, and is not modified to increase horsepower except in accordance with established specifications.

Q-15

Closure, Reclamation and Post-Closure

Q-16

According to the Draft EIS (p. 2-19), post-closure fluid monitoring would continue for a minimum of five years for each closed component. However, the Draft EIS (p. 2-49) also states the period needed to manage draindown solutions ranges from several years to 20 years. While it is helpful to know the minimum monitoring requirements, it is most important to determine the maximum requirements for the purpose of determining long-term treatment; corresponding operations, maintenance, and monitoring requirements; and respective bonding.

Recommendation: EPA believes a conservative approach to long-term requirements should be adopted by BLM. This would include requirements for monitoring and treatment as necessary as long as draindown solutions or leachate is discharged, and would assume this is required for up to 20 years for the purposes of closure planning and bond determination.

Q-17

According to the Draft EIS (pp. 2-49, 2-50), information from the site closure studies of five closed heaps within the mining district has been used to determine that the heaps can be safely closed. At four of the five mines, this included vadose zone infiltration systems for residual drain down solutions, and this approach appears to be intended for closure of the existing and proposed leach pads. The Draft EIS indicates that the ore and waste rock that would be excavated under the proposed project are similar to material currently being mined. Therefore, it should be feasible to make a reasonable prediction of the residual heap leach draindown chemistry now, rather than waiting until two years before heap closure.

Recommendation: The Final EIS should provide a reference for information on leach pad closures in the district and make it available for evaluation. The Final EIS should also provide a detailed description of the subsurface in the vicinity of the Bald Mountain and Mooney Basin leach pads and discuss the predicted interactions of residual draindown in the subsurface.

Q-18

It is unclear from the Draft EIS what post-operation surveillance would be required to ensure that neutralization and/or stabilization of mining waste sites has been effective.

Recommendation: We recommend that the Final EIS discuss commitments for post-operation surveillance to ensure that neutralization and/or stabilization of mining waste sites has been effective. Describe the mitigation actions that would be taken should destabilization or contamination be detected, and identify who would be responsible for these actions.

Q-19

The EIS provides the public the opportunity to weigh in on the adequacy of the bond amount. The viability of the bond can be a critical factor in whether or not a project is environmentally acceptable. Therefore, this information should be disclosed in the EIS.

Q-19

Recommendation: The Final EIS should identify the bond amounts for each closure and reclamation activity at all of the proposed project facilities. Identify who would be responsible for any post-closure cleanup actions should they be necessary.

The Draft EIS does not discuss whether long-term post-closure operations and maintenance or monitoring may be necessary for this project.

Q-20

Recommendation: The Final EIS should discuss whether long-term post-closure operations and maintenance or monitoring may be necessary, describe these activities, indicate the projected costs for these activities, and discuss any requirements BLM would impose on the mine operator to establish a trust fund or other funding mechanism to ensure post-closure care, in accordance with 43 CFR 3809.552(c). The financial assurance necessary to fund post-closure activities must be kept current as conditions change at the mine, and BLM should ensure that the form of the financial assurance does not depend on the continued financial health of the mine operator or its parent corporation. If a trust fund would be needed, the Final EIS should include a general description of the trust fund. The mechanics of the fund are critical to determining whether sufficient funds would be available to implement the post-closure plan and reduce the possibility of long-term contamination problems.

Project Alternatives

Q-21

Relative to the proposed action, BLM's preferred alternative, Alternative A, would significantly reduce the disturbance footprint of several waste rock disposal areas. It appears from the Draft EIS that combining Alternative B with Alternative A would further reduce the disturbance footprint, which would result in the disturbance of fewer acres of pristine habitat in the Mooney Basin.

Recommendation: EPA recommends BLM consider selecting a combination of Alternatives A and B as its preferred alternative to benefit resources in the project area.

Q-22

The Draft EIS (p. 2-69) states that conveyors to transport ore were eliminated from further analysis because the disturbance from conveyors would be the same as, or greater than, the disturbance from the Proposed Action and, therefore, conveyors offer no additional benefit. We do not believe the short discussion in the Draft EIS supports this conclusion. For example, it is unclear why maintenance roads along the conveyors would disturb as many acres as mining haul roads. In addition, the Draft EIS does not evaluate nor compare the energy use and air emissions of haul roads versus conveyors. This information is needed to determine if incorporating this alternative into the project would further reduce resource impacts.

Q-22

Recommendation: The Final EIS should describe acreages that would be needed for maintenance roads along conveyors and compare them to acreages of haul roads the conveyors would replace. A map depicting the conveyors and the roads they would replace would be useful. The Final EIS should also estimate and compare the energy consumption and air pollutant emissions, including greenhouse gas emissions, associated with using haul roads versus conveyors to transport ore to processing facilities. If resources would be better conserved and/or protected with a conveyor alternative, we recommend BLM consider incorporating this into the project.

Q-23

The differences between leach pad configurations and sizes under the proposed alternative and Alternative B are not discernable from the maps in Chapter 2 of the Draft EIS.

Recommendation: The Final EIS should clarify how the leach pads would be reconfigured and downsized under Alternative B.

Response No. Q-1: *An addendum to the Baseline Geochemistry Report (Schafer, 2009)(available in the Administrative Project File) has been prepared which includes additional information regarding the potential for the various materials to produce acid or leach metals. The additional testing focused on the pit areas that showed the potential for acid generation during the previous testing. These areas include the Saga and Bida pits. The results of the subsequent testing showed results very similar to results obtained in previous sampling and analysis. The estimated average net neutralizing potential for the LJ Ridge, North Pit 1 through 3, Rat, and Top/Sage pits at BMM were shown to range from 365.4 to 720.6 kilograms per ton as calcium carbonate. Based on this data and analysis, there is little risk acidic conditions would form within the rock disposal areas for these pits particularly when utilizing the comingled rock placement currently in place at the mine that results in mixing alkaline limestone and dolomite with rocks containing higher sulfide content. However, upon reviewing these concerns, additional measures have been added to the plan of operations and reclamation plan to assure that the potential for environmental impacts from acid generation will be minimized. Description of reclamation, closure, and monitoring are in Section 2.3.14 of the FEIS. Post reclamation topography is shown on Figure 2-13 of the FEIS and monitoring locations are shown on Figure 2-12 of the FEIS. A specific waste rock sampling and blending program at the Saga and Bida pits will include the following measures:*

- The waste rock will be sampled from the drill blast holes. The samples will be tested for acid generating potential and acid neutralizing potential using the net carbonate value method.*
- Any waste rock with net neutralization potential values less than 0 kilogram per ton will be considered to be potentially acid generating and will be segregated and routed to the rock disposal area for blending with non-potentially acid generating material.*
- The test results and the waste rock tonnages requiring special handling and blending will be reported to BLM and Nevada Division of Environmental Protection on a quarterly basis.*

In addition, an evaluation of the mass balance of waste rock amounts and average net neutralizing potential values has been conducted and is included in the FEIS (Table 3-2). The information from this analysis shows that while some of the individual formations may have low net neutralizing potential values, they are greatly outweighed by the limestone materials that are also available. The net neutralizing potential values for the pits of concern (Saga and Bida) average between 150 and 200 kilograms per ton. The pits also have acid neutralizing potential:acid generating potential ratios which greatly exceed the 3:1 ratio of concern recommended by the BLM.

The comment also identifies concerns about leaching of metals from the Saga, Bida and Top rock disposal area's under neutral conditions. The available data and analyses indicate that the potential for impacts from metals leaching is small because of several factors that serve to limit or minimize mobilization of metals within the rock disposal areas. These factors include placement of topsoil covers and revegetation during closure to reduce net infiltration of meteoric water, neutralization of acidity along flow pathways in the rock disposal areas, formation of secondary precipitates along flow pathways that will reduce iron, aluminum and base metal mobility in the rock disposal areas, underlying unconsolidated sediments and bedrock having large neutralization and attenuation capacity and sorption and other attenuation mechanisms

that will reduce mobility of arsenic, antimony, mercury and other soluble base metals along flow pathways in the rock disposal areas.

While the potential for impacts is expected to be small, additional measures have been incorporated into the plan of operations and reclamation plan to further reduce potential impacts from leaching of metals. The measures include:

- The reclamation plans for the Saga, Bida and Top rock disposal area's have been modified so that there will be no large, flat surfaces on the tops of the facilities that would allow water to pond after reclamation and closure. The revised reclamation plan will require adequate placement of material at closure so that the top of each rock disposal area will be "rounded" to promote surface runoff from the top of the rock disposal area.*
- After final grading of the Saga and Bida rock disposal area's during reclamation, there will be 6 to 12-inchs growth media (depending on availability) cover placed on the rock disposal areas prior to seeding with the approved BLM seed mixture. This soil/vegetative cover will reduce the infiltration of meteoric water and enhance evapotranspiration.*
- The side slopes of the Saga, Bida and Top rock disposal area's will be modified to steepen the slope angles to a nominal 2.5 horizontal to 1 vertical. This change will reduce the residence time of water on the rock disposal area face and increase the runoff rate, further reducing the potential for infiltration.*
- The engineering design for the drainage channel network for the Saga, Bida and Top rock disposal area's will be modified to account for the slightly higher flow rates resulting from the steepening of the side slopes and to prevent erosion.*

Response No. Q-2: *The potentiometric map provided in the DEIS was incorrect. A corrected map is provided as Figure 3-4 in the FEIS. The original potentiometric maps were prepared electronically using data that was given a weighted importance based on the assumed validity of the water level information. Exploration drilling has always indicated these pits would be dry. Additional borehole data produced a contour map which more accurately represents the conditions at the Proposed Action. The corrected map shows that the water table is located below both the Top and Sage Flat pits. Neither the proposed action nor BLM's preferred alternative is expected to intersect the water table in either pit.*

Response No. Q-3: *See Response Q-2.*

Response No. Q-4: *The composition of the geologic materials at BMM is discussed in Section 3.3 and shown on Figure 3-7. The rock in the Top, LJ Ridge, North Pits 1 through 3, and Rat Pit areas include minerals formed from circulation of low-sulfur, reduced hydrothermal fluids associated with the emplacement of the Bald Mountain pluton. The mineralization occurs in zones around the contact area, which is centered on the Top Pit area. The Saga and Bida pit areas were mineralized later with silica- and pyrite-rich fluids. The gold mineralization in this area is confined to favorable strata, especially the Pilot Shale.*

Whole rock analysis has also been completed as part of the Schafer (2009) report (available in the Administrative Project File). The analyses utilized the whole rock analyses as a surrogate

for estimating acid neutralizing potential. If neutralization capacity is purely dependent upon calcite and dolomite, the acid neutralizing potential values should correlate with the total calcium and magnesium in the rock. The correlation worked well for younger and less altered materials. For rocks that were highly altered, the surrogate acid neutralizing potential method overestimated the acid neutralizing potential values. It is assumed this is due to the calcium and magnesium being altered to skarns and hornfels where some of the original calcite and dolomite have been converted to other minerals.

The kinetic testing program was based on the results of the static tests and focused on the lower Net Neutralizing Potential material. The kinetic program was developed in accordance with BLM's Acid Rock Drainage Policy. Results from the kinetic tests indicate that the rate of sulfur oxidation is low with low levels of sulfate and some metals observed. This supports the conclusion in the FEIS that acid generation from these rock disposal areas is not expected due to the effects of mixing alkaline rock from the Guilemette formation, slow sulfide reactivity, and hydrologic and climatic factors that minimize the movement of water into and through the RDA's. The additional measures added to the Plan of Operations and Reclamation Plan, as described in responses Q1 and Q2, will further reduce the potential of acid generation from the rock disposal areas.

There are currently six ongoing kinetic tests from the following four borehole samples and two quarterly composites: SG-1054 (195-220 feet), SG-1054 (355-380 feet), SG-1009 (50-100 feet), SG-1043 (40-80 feet), B3WF_INT_OX (1st quarter 2009), and SWF_SED_OX (1st quarter 2009). In response to the comment, these kinetic tests will be continued for a total of 52 weeks. Additional data from the extended tests will be evaluated.

Response No. Q-5: *A detailed comparison of the modified Sobek method and the net carbonate method has been included in Schafer (2009) (available in the Administrative Project File). The Sobek test employed boiling nitric acid to improve the efficiency of the sulfide digestion. No change in the Sobek acid neutralizing potential method was used. The acid neutralizing potential for the net carbonate value static test is based on LECO carbon determined in raw samples and samples digested with hydrochloric acid to remove carbonate minerals. The acid neutralizing potential is therefore distinguishing carbonate minerals in all but the most altered rocks. The two methods (Sobek and net carbonate value) correlated very strongly with an r^2 value of 0.99.*

The acid neutralizing potential:acid generating potential ratios have been added to Section 3.2.2 of the FEIS for the waste rock material balance discussion. A kinetic test indicated that while samples with very low net neutralizing potential (<-20 kilograms per ton) might form acid, most samples in the range of net neutralizing potential between -20 and +20 kilograms per ton did not form acid. As a result, a net neutralizing potential value of 0 (neutralizing potential ratio=1) was utilized as the potentially acid generating cutoff. Use of different potentially acid generating criteria does not have a large effect on the calculated potentially acid generating abundance in BMM samples. Increasing the neutralizing potential ratio from 1.0 to 1.2 or 3.0 increases potentially acid generating abundance by 0.25% and 2.55%, respectively. If a net neutralizing potential of +20 kilograms per ton was used, the PAG abundance would increase from 3.26% (for net neutralizing potential=0) to 9.96%. Humidity cell tests suggest that a potentially acid generating cutoff of net neutralizing potential=0 is conservative because samples with negative net neutralizing potential did not become acid or release sulfate in kinetic tests.

Response No. Q-6: Arsenic and antimony are not anticipated to have high mobility. The previous column analyses at the Little Bald Mountain Mine, arsenic, antimony, and mercury were sorbed onto soils located near the leach pad. Iron is not anticipated to leach since iron is relatively insoluble under oxidizing conditions with neutral to alkaline pH. The immobility of the iron also makes it an effective sorbent for arsenic and antimony. Under neutral-oxidizing conditions, iron oxide compounds will persist and provide attenuation capacity. Iron has been shown to be present in soils, sediments and bedrock underlying the rock disposal areas.

While the whole rock analyses indicate elevated arsenic, antimony, and lead, it is important to remember that elemental abundance in whole rock assays seldom correlate well with soluble levels, which are highly dependent upon pH. The neutral to alkaline conditions occurring at Bald Mountain would reduce the mobility of these elements.

A detailed description of the mineralogy of the Bald Mountain area is provided in Shafer (2009). The BLM and Nevada Division of Environmental Protection both receive copies of waste rock analyses as part of the existing (and future) Water Pollution Control Permits to include acid base accounting, Meteoric Water Mobility Procedure and sulfur speciation test results.

The borehole sample locations are shown on Figures 2-3, 2-4, 2-5, and 2-6. Static and kinetic test results from previous Bald Mountain mining areas are representative for the FEIS because the proposed mine expansion areas are all within the same rock formations that have been mined previously. This is discussed and shown in Sections 2.3.3 and 2.3.4 of the FEIS. Reclamation and closure including closure monitoring, are described in Section 2.3.14 of the FEIS.

Response No. Q-7: Samples from the 1980s were sampled for major ions and general chemistry. Metals were not analyzed at that time. The samples obtained in 1994, as part of the previous EIS in 1995, included metals analyses. All available sampling data has been included in the FEIS. Although there are no metals data from the 1980s, examination of the data presented in Table 3-1 shows no significant differences to concentrations of the major ions in the local springs.

Response No. Q-8: BMM plans the installation of additional monitoring wells to track groundwater quality throughout the life of the mine and post-closure period to determine the presence or absence of changes to the groundwater. There are eight additional groundwater monitoring locations proposed at this time. These locations include three near the Mooney Leach Pad, two near the toe of the Sage Rock Disposal Area, one near the toe of the East Sage Rock Disposal Area, and two at the toe of the North 1 Rock Disposal Area. The locations of these monitoring wells are shown on Figure 2-12 of the FEIS.

The selection of Alternative A as the preferred alternative will result in a significant reduction in disturbance of the Cherry Spring recharge area. This reduction in disturbance is a result of using the waste rock planned for the Sage Flat Rock Disposal Area expansion for pit backfill. A discussion of this reduction in disturbance is provided in Section 3.2.2 of the FEIS and in Response O-2. The reduction of disturbance in the Cherry Spring recharge area is shown on Figure 3-3.

Best management practices for stormwater are addressed in the Stormwater Pollution Prevention Plan and the Stormwater General Permit NVR300000, State of Nevada, Division of Environmental Protection, General Permit for Stormwater Discharges Associated with Industrial Activity from Metals Mining Activities.

Response No. Q-9: *As described in the FEIS (Section 3.2.1), there are very few surface water resources within the proposed Plan of Operations boundaries. All drainages within the boundary are ephemeral and are shown on Figure 3-9. Figure 1-2 shows the topography of the project area in relation to the existing facilities. Figure 1-3 provides the topography of the project area in relation to the proposed operation. Figure 2-12 provides the topography of the project area in relation to the post-mining configuration. In addition to these figures, Figures 2-2 through 2-7 show detailed topography of each of the disturbance areas. From these figures, all ephemeral drainages can be identified in relation to current, proposed, and post-mining configurations.*

The only springs within the boundary are Cherry Spring, Mill Spring, and South Water Canyon Spring. These spring features are shown on Figures 3-2, 3-3, and 3-4. In addition, Figure 2-13 (post-mining topography) of the FEIS has been revised to show springs. Mill Spring and South Water Canyon Spring are shown on Figure 2-5 in the FEIS. Cherry Spring is the only one of the three springs that could potentially be impacted by the proposed operation. As discussed in Section 3.3.2 of the FEIS, the impact would be associated with disturbance to the recharge area. The existing and proposed operations (including Alternative A), in relation to Cherry Springs, is shown in detail on Figure 3-3. It should be noted that with implementation of Alternative A (BLM preferred alternative), the potential impacts would be reduced significantly as the BLM preferred alternative would disturbed 52.1 acres less than the Proposed Action in the Cherry Spring recharge area. This is discussed further in Response O-2.

The Stormwater Pollution Prevention Plan (SWPPP), Appendix E of the Plan of Operations, addresses run-on and run-off associated with the mine facilities. Figure 4 of the SWPPP identifies the locations of Best Management Practices for sediment and erosion control.

Response No. Q-10: *BMM is currently waiting for the Corps to issue the concurrence letter for the drainages associated with the proposed expansion. If this concurrence letter is received prior to issuance of the FEIS, the letter will be included.*

Response No. Q-11: *If the Corps does not concur, BMM must comply with all applicable federal regulations regarding dredge and fill material, and would be expected to modify the proposal or apply for and obtain any necessary permits.*

Response No. Q-12: *The FEIS states that 91 percent of the soils are characterized either as extremely stony, very gravelly, very cobbly, or very stony material. Also indicated in the FEIS, the soils that are characterized as extremely gravelly, stony or cobbly are not included in the calculation of salvageable growth medium. The Pioche soil type would be the only soil type eliminated from salvaging due to the extremely stony nature of the material. Table 3-8 in the FEIS indicates that most of the soils to be disturbed are rated as "Poor" for use as reclamation. However, this does not preclude the use of these materials as growth medium. These same soils currently support the vegetation that existed prior to disturbance. These same soils, which have been salvaged from the existing disturbance areas, are currently being used for concurrent reclamation.*

The reclamation plan does not require soil amendments. Successful reclamation, according to the Nevada Guidelines for Successful Revegetation, is not based on the type of soil but the success of revegetation. The reclamation plan requires that Barrick meet the requirements of

these guidelines. If revegetation is not successful with the salvaged soil, then amendments may be needed, but this would only occur if necessary to meet the requirements of these guidelines. Based on current stockpiled growth medium and estimated future stockpiling (7.3 to 11.7 million cubic yards), there will be sufficient growth medium to provide a 24-inch cover on the heap leach pad and a minimum of six inches of cover on the waste rock disposal areas and other disturbance. Reclamation monitoring at the BMM and other area mines has been conducted to identify the methods that achieve the best reclamation results as indicated in Section 2.3.13 of the FEIS. These monitoring efforts will continue to identify and improve techniques for successful reclamation. Barrick will implement appropriate reclamation methods to achieve the reclamation standards set forth by the BLM and Nevada Division of Environmental Protection.

Response No. Q-13: *The 24 inches of soil cover on the heap leach pad is provided as an evapotranspiration cover to reduce infiltration into the heap leach pad; thus resulting in less drain down to be managed over the short- and long-term. During preparation of the Plan of Operations (Barrick 2009 as referenced in the FEIS) for the Proposed Action, several previous studies were reviewed. These studies are referenced in the Plan of Operations. These studies analyzed between 18 and 36 inches of cover on the leach pads. The studies indicated no additional benefit is realized beyond 24 inches of cover on the leach pads.*

Based on current reclamation monitoring at the BMM, the amount of cover material to be placed on the other disturbance (rock disposal area, roads, etc.) would be sufficient to meet the reclamation standards set forth by the BLM and Nevada Division of Environmental Protection. As the geochemistry in Chapter 3 of the FEIS indicates, there is no need to reduce infiltration through the rock disposal areas, therefore a cover thickness was determined to be sufficient to establish vegetation growth, similar to other disturbed areas on the mine site.

As discussed in Response Q-12, there would be sufficient growth medium resources to accommodate 24 inches of growth medium on the heap leach pads and a minimum of six inches of growth medium on other disturbance areas.

Response No. Q-14: *The FEIS states mercury reduction will occur under the proposed action. However, Barrick installed the mercury controls (listed in Table 3-21 of the FEIS) in January 2009 for existing operations; the Proposed Actions would use the same controls. The FEIS describes the current reductions and that the proposed action would realize the reductions immediately upon operation.*

Response No. Q-15: *Barrick already uses low-sulfur fuel for their existing operations and will continue to do so for the proposed action. Barrick also currently minimizes construction-related trips for both cost and efficiency reasons, through both bulk transport and detailed scheduling. All of Barrick's mobile equipment is newer and regularly maintained, to include tuning and appropriate emission controls to maintain specifications. At this time, it is not known whether Barrick intends to purchase vehicles with particulate traps.*

The FEIS has been revised to reflect Barrick's use of low-sulfur fuel, minimization of trips, use of newer equipment, and regular maintenance of vehicles. Trap control is not necessary to include in the FEIS because vehicles will be required to be certified to any Environmental Protection Agency transportation emission standards prior to being sold in the United States market. Traps will be included by vehicle manufacturers if necessary to meet diesel particulate matter standards.

Response No. Q-16: *The post-closure fluid monitoring, as indicated in the FEIS, is for monitoring after all closure activities have occurred, including fluid management of the heap leach facility. Therefore, if managing draindown solutions requires five years before solution can be managed through the use of evapotranspiration cells, the five-year post-closure monitoring would begin after that five-year period. This would result in 10 years of monitoring for that individual facility following cessation of mining or processing operations.*

Response No. Q-17: *The infiltration studies discussed in Section 2 of the FEIS are in relation to infiltration of meteoric precipitation through the cover of the heap leach pad system. The studies are prepared to assist with water balance calculations during closure and post-closure. References for these cover studies are provided in the Plan of Operations (Barrick, 2009).*

The information provided in the DEIS regarding previous closure of heap leach pads using vadose zone infiltration is misleading and has been removed from the FEIS. This information is misleading because the current closure plan of the BMM and Mooney Basin heap leach pads is for zero discharge with the implementation of either evapo-transpiration cells or evaporation cells.

Solution from both currently active heap leach pads would be managed through recirculation and active evaporation until draindown from the pads can be managed long-term through the use of evapo-transpiration cells as discussed in Section 2.3.14 of the FEIS. With the use of evapo-transpiration cells for managing long-term draindown of leach solution, no discharges would occur to the subsurface environment. Because there will be no planned discharge to the subsurface, a detailed description of the subsurface in the vicinity of the leach pads, including a discussion of the interactions of draindown solutions with the subsurface materials is not necessary.

Response No. Q-18: *Several existing permits require post-closure monitoring including the Water Pollution Control Permit and Reclamation Permit. At a minimum, the Water Pollution Control Permit requires five years of post-closure monitoring of groundwater and surface water. It is the responsibility of the operator to address issues that arise following closure of the mine.*

The reclamation permit also requires post-closure monitoring prior to release of the reclamation bond. Post-closure requirements under this permit include monitoring the stability of all reclaimed areas and monitoring for vegetation success as discussed further in Section 2.3.14 of the FEIS. If facilities become unstable during the post-closure monitoring period or do not meet the revegetation guideline requirements, the operator would be responsible for addressing these issues.

Waste rock characterization data indicates that exposure of waste rock to precipitation would not result in degradation of water resources. In addition, the bulk of draindown from the heap leach pads would be actively or passively evaporated prior to long-term management in a contained evapo-transpiration cell. Given that the risk of water resource degradation is a low, the most likely post-closure issues would be associated with erosion and revegetation success. If these issues are realized during post-closure monitoring, the operator would be responsible for mitigating these concerns. Mitigation for erosion issues could include regrading of areas and installation of additional best management practices.

Response No. Q-19: *It is not the BLM's policy to include the reclamation cost estimate for financial assurance in NEPA documents. The reclamation and closure plans, measures and techniques are presented in the FEIS to allow for public review and comment on their adequacy. Reclamation and closure costs are time-sensitive, which is why the BLM Authorized Officer has the authority to review and require cost updates at any time to ensure bond adequacy.*

The operator would be responsible for any post-closure clean-up actions, as indicated in the response to Q-18.

Response No. Q-20: *A description of the post-closure monitoring for the facilities is provided in the Water Pollution Control Permit and Reclamation Permit. The water pollution control permit provides for a minimum of five years of post-closure monitoring. Additional monitoring may be required at the discretion of Nevada Division of Environmental Protection, Bureau of Mining Regulation and Reclamation.*

Specific requirements of the BLM and Nevada Division of Environmental Protection during each phase of closure and reclamation will be met prior to release of any bond amount. As discussed in Response Q-18, the risk of water resource degradation is low during operation and following closure of the mine. Thus, post-closure activities would most likely include addressing stability issues and revegetation of the mine site. The BLM would retain a sufficient bond amount to address any post-closure stability issues and/or revegetation success issues. BLM also retained the authority to review and require cost updates at any time to assure bond adequacy. The operator would be responsible for addressing any post-closure issues before the bond would be released.

Response No. Q-21: *The BLM has selected Alternative A as the agency preferred alternative. In combining Alternative A with Alternative B, there would be a slight overall decrease in the quantity of surface disturbance over selecting only Alternative A. The actual reduction in disturbance acres by combining Alternatives A and B would only be 14 acres, since the majority of the required expansion needed at of the BMM heap leach pad to accommodate the additional ore would occur on undisturbed land, that has been previously authorized for disturbance. Accordingly, the actual difference in the amount of disturbance would be negligible. However, to accommodate haulage of ore to the BMM leach pad, the haul distance to transport the ore would be longer resulting in additional fuel consumption, greater vehicle emissions, and more maintenance cost for vehicles.*

Response No. Q-22: *The use of conveyors was eliminated without further analysis for several reasons. The first is the majority of road disturbance for transport of ore has already occurred with the current authorized operations. To minimize additional disturbance, the conveyor system would be constructed on existing roads where possible. In addition, only 159 acres of the proposed 3,920 acres of disturbance are for new roads. The Proposed Action is primarily an expansion of existing facilities, since haul roads for ore and waste transport already exist to most of the facilities. From a disturbance standpoint, there would be very little benefit in using conveyors versus existing and proposed roads.*

Second, the mine currently transports and places run-of-mine ore on the leach pad for processing. Run-of-mine ore is material that goes directly from the pits to the leach pads without further size reduction from a crusher. Run-of-mine ore is typically too large to be transported on a conveyor system; as a result, a crusher would be required. Barrick would need

to install a centralized crusher prior to placement on a conveyor system. Electrical power use would increase significantly with the use of a crusher and ore haulage would still be required to transport the ore from the pits to the crusher.

Third, the use of a crusher and ore transfer points on the conveyor system would likely increase the fugitive dust emissions from the mine site. Additionally, energy consumption is likely to increase as a result of power needs for the crusher and the conveyor system. Although fuel consumption may be reduced as a result of a short haul, this would likely be offset by the electrical power use.

Response No. Q-23: *Figures 2-14 and 2-18 have been changed in the FEIS to clarify the changes in the leach pad under Alternative B.*