

December 17, 2009

MEMORANDUM

To: Ken Gardner, Russ Bjorklund, Lynne McWhorter, Steve Heaton, Joe Larsen, Greg Martinez, Bert Doughty
From: Brian Buck, Stephanie Lauer, Dave Kikkert
RE: Results of TCM EIS Internal Scoping Meeting held November 24, 2009

An internal scoping meeting for the Thompson Creek Mine (TCM) Environmental Impact Statement (EIS) was held on November 24, 2009 in Challis, Idaho. The purpose of the meeting was to solicit and collect comments from state and federal agencies with jurisdiction or interest in the proposed Thompson Creek Mine land exchange and Amended Plan of Operations (APOO). A copy of the attendance sheet for the meeting is provided as Attachment 1.

During the meeting the proposed action description was presented to the attendees who were then able to ask questions about the APOO and land exchange. TCM representatives were present at the beginning of the meeting to answer questions from the agency attendees. The balance of the meeting was used to collect comments and recommendations from the agency attendees on the scope of the analysis for the EIS. Scoping comments were also submitted by agency personnel that were not able to attend the meeting. A summary of the agency scoping comments received, including suggestions for alternatives to the Proposed Action and mitigation measures, is provided below in Table 1 and Table 2.

The agency scoping comments will be combined with comments collected during the public scoping process to develop action alternatives to the Proposed Action and guide the analysis in the EIS.

Table 1. Summary of Agency Scoping Comments – Thompson Creek Mine EIS

General
What impact would the land exchange have on financial assurances and the effectiveness of bonding measures pertaining to reclamation, particularly long-term water management?
How would oversight of the selected lands change once they transitioned from public to private?
What is the rationale for the size of the selected lands (i.e., why are the selected lands so large)?
More information on the power line is needed (i.e., what roads would be necessary, will wetlands be impacted, etc.).
Human Health: potential impact (direct or indirect) of injury or death of people at the mine due to rockfall, industrial accidents, etc. Describe impact using past data for the mine and relevant statistics (perhaps driving to work on highway has the greatest risk)
If the potential TCMC-USFS land exchange occurred in the future, the USFS mining regulations (30 CRF 228) would no longer apply to the mine, i.e. potential cumulative impact.
Summarize reclamation plan for EIS and highlight key changes, such as cast blasting pit walls, long-term water management, benching tailings embankment face, final contour of reclaimed facilities (map or photo simulations would be good).

The preferred alternative should identify and evaluate selected land (in public or private ownership) that could be used as borrow areas for mine closure.
Under the proposed APOO the mine would cease production in approximately 2025, but substantial reclamation work, and its associated natural and economic impacts, would occur for X years, with a minor amount of reclamation work occurring for the foreseeable future. Extend long-term impact analysis for all resources beyond 2025 to include reclamation work.
Air Quality and Noise
Ongoing mining operations will release greenhouse gases.
Assess fugitive dust, blasting, vehicle traffic, etc. emissions from the operations and their impacts on other resources.
Assess air quality in terms of HUMAN HEALTH AND SAFETY for employees of the mine and surrounding communities
Point source air emissions that remain unchanged and are already permitted are an insignificant issue.
Cumulative Impacts: Global Warming/Climate Change <ol style="list-style-type: none"> 1. Greenhouse gas emissions: evaluate current levels produced from mine as compared to the alternative, compare alternatives, and evaluate on a global scale (if reasonable) 2. Evaluate air quality to include emissions form vehicle traffic related to the mine such as employees commuting and the hauling of the Mo concentrate to Pennsylvania. Evaluate alternative locations for hauling (other plants?) 3. Some assessment of climate predictions for the mine locality should be made to determine if such predictions merit some sort of consideration when evaluating impacts to water quality, vegetation, soil (i.e. sediment loss), etc.
Assess impacts to local air quality and describe if meaningful (Key pollutants: fugitive dust (PM ₁₀), CO, CO ² , NO _x , HC, and SO ²).
Compare SO ² emissions from the mine to other industrial sources and evaluate the potential “acid rain” impact for the administrative record (and, if meaningful, in the EIS)
Visual and Aesthetic Resources
Is there anything planned to reduce the visual impacts or improve the main access road cut such as blasting and-or vegetation?
Geology, Minerals, and Physiography
Asses short-term and long-term stability of expanded tailings dam, expanded waste dumps, open pit, both under static and seismic conditions, including all reasonably foreseeable seismic conditions
FS doesn’t have slope stability standards, so go with industry standards
Will adequate dewatering of tailings be possible under the proposed expansion, dewatering is critical for slope stability
The FS would want to see design submittal for any road realignments
If exchanged, the selected land would no longer be available for salable, locatable, or leasable minerals entry under Federal laws and regulations.
Irreversible, permanent impacts would occur: XXX million pound of MO would be irreversibly removed (XXX=total Mo removed since mine inception) from public land (Ken has data from start of mine to present)
Check for known graptolite fossil localities (see Churkin 1963)
Soils
Assess restoring site productivity with soil resources.
Assess soil erosion and loss of productivity.
Disclose potential for soil contamination from petroleum or other chemical spills.

New disturbance will disrupt soil textures and destroy biological soil crusts.
Vegetation, Forest Resources, and Invasive and Non-Native Species
Forest resources (services provided by forest vegetation, such as water uptake, soil stabilization, etc., are more valuable than the timber due to poor timber quality and steep slopes) would be lost due to mine expansion (waste rock facilities and tailings storage) <i>Mitigate timber loss through 1:1 reclamation/replacement (on site or off site).</i>
Loss of carbon sequestration would occur due to timber loss. <i>Mitigate loss through 1:1 reclamation/replacement (on site or off site).</i>
Trees would likely establish naturally on reclaimed areas identified as unsuitable for tree cover. <i>Mitigate by increasing cap depth to inhibit tree recruitment and growth.</i>
Reclamation should be analyzed in the EIS.
The land exchange should include conservation agreements on Selected Lands to protect resource values (e.g., forest resources, fisheries, etc.).
There would be additional impacts to 1 st order streams and riparian vegetation. <i>Mitigate through conservation easements on riparian areas (including Thompson Creek).</i> <i>Mitigate through 1:1 reclamation/replacement (on site or off site).</i>
Reclamation seed mix should be reviewed (reclamation should reflect current science).
Change in vegetation patterns would occur.
Range Resources
Grazing permittees on the Squaw Creek allotment need access to water. <i>Mitigate by allowing access at critical points.</i>
The land exchange would lead to the loss of access to long-term vegetation measurement stations on the Selected Lands (an upland and riparian station on Thompson Creek, 1 riparian station on Squaw Creek) <i>Mitigate by allowing continued BLM access for monitoring.</i>
Cattle currently have access to private (TCM) land. <i>Mitigate by installing cattle-guards</i>
AUMs need to be lowered due to decreased acreage because of mine development.
How would the land exchange impact access for public and grazing permittees on Thompson Cr. and Squaw Cr.?
A portion of Broken Wing Ranch would become part of a horse and burro herd management area.
Provide access to the Saturday Mountain Pasture via the road leading past the core facility.
Wildlife Resources
Wildlife habitat (TES and general) habitat would be lost due to mine expansion. <i>Mitigate through reclamation/replacement (1:1 – on site or off site), dependent upon type of habitat affected.</i> <i>Alternatively, TCM could fund wildlife/TES studies.</i>
Migration routes for big game could be impacted by mine expansion. <i>Mitigate through reclamation/replacement (1:1 on site or off site).</i>
Land exchange should include conservation agreements on Selected Lands to protect resource values (e.g., wildlife, TES, fisheries, etc.).
Fencing of the Selected Land (after the land exchange) could impact wildlife.
Following the land exchange, the Selected Lands would function as wildlife refugia (due to TCM's policy of no hunting on TCM land), which could lead to wildlife impacts on habitat and vegetation. <i>Mitigate through some form of depredation.</i>
Direct injury or death of wildlife from mining operations is not a meaningful impact.
Impacts from blasting on wildlife should be assessed.

Water Resources
Assess groundwater impacts from tailings seepage, overburden fills, and pit lake and connection to surface water regime.
Describe site water balance for tailings, overburden fills, and open pit.
Assess adequacy of water treatment plant and water management systems for long-term (post-mining) conditions.
Assess effects of operations on surface water quality and quantity.
Water rights are an insignificant issue.
Assess adequacy post-closure financial assurance for restoring site productivity and maintaining long-term water quality.
Assess adequacy of the reclamation/closure plans for maintaining site stability and long-term water quality.
TCMC must still follow regulations and laws pertaining to water quality as appropriate. For example, if the new waste rock facility would require a new or modify the existing 404 permit, the appropriate analysis (wetland delineation) would ensue.
What is the financial responsibility of TCMC for water quality?
Describe the effect of the filling of the pit on local hydrology (quantity and quality) in the short and long terms.
Assess the untreated pit water for alternative uses such as an emergency, such as fire fighting or surges to local drainages and the Salmon River under extreme low flow conditions?
Wetlands, Riparian Areas, and Floodplains
Quantify LF of streams impacted by proposed operations.
Quantify area of wetlands, riparian areas and floodplains impacted by proposed operations.
Estimate cumulative LF of streams already impacted by existing operations.
Assess stability of the tailings facility cover and potential impacts on WUS (design of Bruno Creek channel).
Assess impacts of existing and proposed facilities on jurisdictional waters (upstream and downstream of NPDES outfalls).
Describe mitigation of impacts to wetlands disturbed at the mine.
Assess affects of land exchange on wetlands.
Offsite 404 wetland mitigation would be nice in the Broken Wing meadow, but would need to occur on private property, i.e., not acquired Federal land. Any such mitigation could affect the fair market value of the land.
Fisheries and Aquatics
Fisheries could be impacted by project activities through the loss of first order streams, reduction in water quality, reduction in CPOM input, etc. <i>Mitigate by increasing water in Squaw Creek (retire existing water shares)</i> <i>Mitigate through habitat reclamation/replacement.</i>
Water quality (selenium) in Thompson Creek could impact fisheries.
What would be the impact to Salmon River fisheries from discharge at NPDES outfall 005 (as opposed to discharging at 001 and 002)?
What would be the impacts to water quality and fisheries if the No Name waste rock dump is developed?
Under the land exchange, BLM/USFS would not be able to manage fisheries/fisheries habitat in Thompson Creek and Squaw Creek. <i>Mitigate by include conservation agreements for management in the land exchange.</i>
Would there be any impacts to fishing along sections of Thompson Creek under the proposed land exchange?

Recreation and Land Use
Assess public access issues related to giving away BLM lands.
What are the Mine's requirements for safety and access for precluding public access.
Thompson Creek and Squaw Creek Roads – would there need to be an easement to allow public access if the Mine gets the exchange lands?
BLM and FS lands are used for hunting, hiking, camping, photography etc. via Thompson Creek, concern is that hunting would no longer be allowed on these lands.
EIS must compare current recreation use to what would be available after the exchange.
How would the newly acquired lands be promoted for recreation opportunities?
BLM and FS staff can provide user information regarding recreation use.
Suggestion: Locate the boat ramp downstream of the L and W mine, on the highway side of the river.
Suggestion: Convert the East Fork campground into a day use area and create a new campground near the boat ramp (downstream of the L and W mine, on the highway side of the river)
What is the mine going to do differently with the selected lands?
EIS should include a scale of reasonable development options the mine could take with the selected lands. What is reasonable limit of what EIS should look at?
Look at 9 th Circuit court case (No. 07-16423, Center for Biological Diversity et al v. BLM and ASARCO, 2009) involving mine and land exchange. What is the “highest and best use”, as defined by BLM, of the selected lands? Is it mining? How does the BLM or Mine tell the public that they won't be mining that acreage if mining is the “highest and best use” of the selected lands?
If exchanged, the selected land would no longer be available for salable, locatable, or leasable mineral entry under federal laws and regulations.
Why is it reasonable to say TCM would keep the current management, financial reasons?
Will TCM subdivide the proposed lands? Will the mine decide to expand operations onto these lands once they are private?
Land exchange may affect fire management of the proposed lands, will TCM protect those lands like the BLM/FS do now? Would mining operations increase/decrease the risk of wildfire?
How will protective management change?
Make sure EIS covers what would become public domain (e.g., the ranch could be subdivided by the BLM.
Maintain the main ranch house for use as seasonal housing, conferences, etc.
How will landscape be affected by the land exchange for both offered and proposed lands?
The land exchange acreage ratio is very high in favor of the Proponent, how are the values (economic, natural resource, extraction) compared?
The BLM would lose \$60,000 in annual mining claim revenue paid by the TCMC for mining claims on the selected land.
Would the current main access road be reclaimed once it is no longer in use?
Would land exchange affect access to private Twin Apex property?
<i>Mitigation to potential impacts along Thompson Creek (e.g. fishing, public access, environmental concerns) under the land exchange could include some sort of conservation and public access easement</i>

<p>Access to the Saturday Mountain Pasture to the Squaw Creek Allotment is difficult, and it would be best for the permittees on the allotment to be allowed - via some form of written agreement- to trail their cattle up on the road leading by the core facility (I think that is what it is). The portion of the road that is on private is located at T 11 N, R 17 E , Sec.28 NE corner and Sec. 21 SE corner. Another route of access to the Saturday Mountain Pasture is up a draw in T 11 N, R 17 E, Sec. 16 SW corner, but I believe cattle trespass on a bit of private property when utilizing this route. After crossing the creek on the state section cattle were typically driven up the draw that is nearly parallel and adjacent to the south end of section 16, to a trough and over then over a ridge to the main portion of the pasture. The previously listed road access by the core facility would be the best way for cattle to access the pasture as it has a gentler slope, follows a road, would not interfere with private fencing and so would be easier to trail along.</p>
<p>Special Management Areas</p>
<p>Expansion up Bruno and Buckskin will come close to Squaw Creek IRA, needs to be overlaid in GIS to see if those boundaries overlap.</p>
<p>Wild Horse and Burro Management Area may be affected by the offered lands, this SMA adjoins and overlaps the Broken Wing Ranch. The management has to adhere to the management plan for the WHBMA.</p>
<p>Socio-economic Factors</p>
<p>No Action alternative would have a socioeconomic effect on local community.</p> <ol style="list-style-type: none"> 1. Property taxes 2. Electricity rates 3. Jobs 4. Tax revenue 5. Property values
<p>BLM could get out of management of the selected lands, and TCMC owns the minerals anyway.</p>
<p>Change “LOM” in the EIS to “Phase 8” to avoid misleading public. This is a general comment pertaining to all future documents.</p>
<p>The proposed land exchange would remove the mine from the BLM surface management regulations, including those governing financial guarantees (“bonding”). What financial guarantees would be held by which agencies under the preferred alternative?</p>
<p>CUMULATIVE IMPACT: The no action alternative would cause a spike for 1-2 years in world Mo prices because the mine contributes approximately 5 percent of the total world Mo supply. However, in the longer term world Mo production will match supply, i.e., no net reduction in world Mo production.</p>
<p>Native American Religious Concerns/Tribal Treaty Rights and Interests</p>
<p>Tribal scoping: make sure the tribes have an opportunity to comment, government to government, make sure it’s done right. Tim Canaday needs to be kept in the loop on what has been done as Responsible Official (lead).</p>
<p>Conversation with Shoshone-Bannock has occurred between BLM and Shoshone-Bannock and was recorded (almost verbatim).</p>
<p>Water quality impacts to Treaty Rights, Tribal hunting rights, access rights to tribes will be key.</p>
<p>Broken Wing Ranch – RAC recommends tearing down Muraffiolo house, if the action is to manage the property, this property needs to be assessed for heritage values, a condition assessment needs to be done on entire ranch before management plans are laid</p>
<p>Ranch is an historic landscape, EIS needs to assess and show to public</p>
<p>The Garden Creek property is within ceded lands of the Fort Hall Indian Reservation</p>
<p>Environmental Justice</p>
<p>Not an issue, because there are no affected populations.</p>
<p>Cultural Resources</p>
<p>Bruno Millsite is just outside operations, check to see if it could be impacted now or in the future by the operations, or by the public, especially after mine shuts down will it still be protected?</p>

The buildings on the Broken Wing Ranch should be inspected for historic significance and a historic buildings report prepared. The results of this report should be used in the EIS analysis.
Prime and Unique Farmlands
No comments were received.
Transportation and Access
More information on roads and other infrastructure is needed. Specifically, what roads would be needed for expansion, what roads would be needed post-closure, what roads would be reclaimed post-closure?
Hazardous and Solid Wastes
Transportation of hazardous materials has the potential to impact water quality, fisheries, wildlife, soils, etc.
Assess the potential for contamination from petroleum or other chemical spills

Comments received providing direct mitigation suggestions provided in italics

Table 2. Suggested Alternatives – Thompson Creek Mine EIS

Land Exchange
Selected lands should be reduced to include only those lands needed to conduct Phase 8 activities proposed in APOO.
Maintain federal control over stream corridors.
As an alternative to the proposed Broken Wing Management Plan, consider developing a public interpretation site(s) of early homesteading at the ranch, and stabilization of one or two of the older log structures.
APOO
Develop an alternative that would include not developing areas, currently permitted, that are not necessary for the mining operation. (However, not sure if such areas could be excluded from development, as they were previously approved). The permits for the permitted areas that aren't going to be used should be withdrawn as an agreement, e.g. Upper Pat Hughes.
Include the overburden facility on No Name drainage, as originally proposed by Mine, for an action alternative.
Assess alternate reclamation and closure methods.

Attachment 1

**Thompson Creek Mine EIS
Internal Agency Scoping Meeting Attendance Sheet**

THOMPSON CREEK MINE EIS SCOPING MEETING ATTENDANCE

DATE 24 November LOCATION Challis Middle School Page 1 of 2
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Please print legibly so we can read your name and address clearly. Thank you.

Name	Agency/Resource
Ken Gardner	BIM, geology, minerals, air quality, social-economics etc.
KENT WATSON	VP/GM THOMPSON CREEK MINE
Bert Daugherty	Env. Mgr. Thompson Creek Mine
MICHAEL HARVIE	CHIEF ENGINEER THOMPSON CREEK MINE
Piper Goessel	Geologist USFS
Russell Bjorklund	Minerals Program Leader Salmon-Challis NF
BETSY KIEFFENBERGER	HYDROLOGIST / WATER RESOURCES SALMON-CHALLIS N.F.
STEVE HEATON	IDEQ
TROY SAFFIE	DEQ
Greg Painter	IDFG
Lynne McWhorter	US EPA, NEPA Review
Erik Peterson	EPA, NEPA Review
Dave Tomten	EPA, Geologist

Lorraine Edmond	EPA, geologist, ground water
Greg Martinez	USACE, streams, wetlands, surface water
Holly Ambrose	Forest Service, Env. Eng., Geotech
Dana Perkins	BLM-Challis F.O., Ecologist forest resource, veg. issues
Kris Martenson	FS, District Ranger, Challis Yankee Fork RD
Stephanie Lauer	PBS&J/JBR Asst. PM Land Use/Rec.
Bart Zwetzig	BLM Challis F.O. wildlife Biologist
Jan Parmenter	BLM, Idaho Falls District
ROGER CHILSON	FOREST SERVICE, FORESTER CHALLIS-YANKEE FORK R.D.
JAKE STROHMEYER	Forest Engineer SALMON-CHALLIS NF, Salmon, ID
Kristin Coons	BLM, Range Mgmt. Specialist Challis Field office
JOHN ROSE	SOUTH BEND ARCHAEOLOGIST SALMON-CHALLIS N.F.
DAN SMITH	ID PARKS & RECREATION LAND OF THE YANKEE FORK STATE PARK & HISTORIC AREA
DAVID ROSENKRANCE	BLM CHALLIS FIELD MANAGER
Clif Tipton	BLM(CFO) Fisheries Biologist