Section 4

Results of the Scoping Process

The comments received during the scoping process have been summarized into major issues. Copies of the written comments are provided in Appendix F. This section presents the major issues and identifies those that will be carried forward for further evaluation in the EA. Issues that will not be carried forward were eliminated because of technical impracticability. Although issues may have been eliminated from further evaluation, they will still have an impact on the EA process because of the background information and community insight they provided.

4.1 Issues Raised During the Scoping Process

Issues raised during the scoping process are summarized by major topic area in Sections 4.1.1 through 4.1.6. The topic areas are:

- Water Quality
- Cover Source Materials
- Impoundment Stability
- Buried Drums
- Subsidence
- Other

4.1.1 Water Quality

Water quality issues and concerns identified during the scoping activities include:

- Mine Water –Will there be increased flows to the impoundment area? What are the potential impacts of increased flows on water quality, the toe ponds, etc? What is the level inside the mine that water would reach (at a "sustainable" rate) using portal plugs? Why not replicate the decant ponds at the mill site and remove the seven-plus miles of tailings pipelines?
- Groundwater Protection How does the Reclamation Plan address long-term seepage/groundwater discharge to Lake Creek? Why is groundwater an issue at this time, after 20 years of water being diverted to the decant ponds? Sealing mine openings is not reasonable; may pose future threat of releasing contaminated water should structural failure occur. Toe ponds leak directly into Lake Creek. Discharges from the mine have begun to appear in the vicinity of Ross Creek. An MPDES permit should be required for discharge of mine water.



- Long Term Prognosis/Monitoring What will copper concentrations be in the future? Will copper reach Lake Creek? If so, when? The monitoring proposed in the Revised Reclamation Plan is inadequate in every respect; monitoring "in perpetuity" is impossible.
- Water Treatment Can mine water be treated in the service adit prior to discharge? Is there any treatment of discharged mine water? Several comments stated a preference for treatment water now rather than long-term (indefinitely). Perpetual discharge of polluted water is a poorly conceived idea.

4.1.2 Cover Source Materials

- The impacts would be lessened if the topsoil stockpiles at the toe ponds are not disturbed, but where would cover material come from?
- Comment to use topsoil stockpiles at toe ponds instead of disturbing a new area.

4.1.3 Impoundment Stability

- How will continued discharge of mine water affect the stability of the tailings impoundment?
- Stability of the tailings impoundment is tied to its dewatering; sinkholes and recent field reports indicate inherent instability features that should be investigated.
- Instability of the impoundment and failure of the dam may negatively impact operation of the Northern Lights dam; this should be assessed and mitigated.

4.1.4 Buried Drums

- Are the buried drums addressed in the revised Reclamation Plan?
- Will the buried drums be unearthed and sampled?

4.1.5 Subsidence

- How would hydrology be affected by future occurrences of subsidence?
- How will future occurrences of mining-related subsidence be addressed?
- A bond commensurate with the possibility of further incidents and their mitigation should be considered.
- Closure of the mine will result in a small underground lake; further faulting in the area may produce blowouts or rupture the mine plugs, causing discharges of polluted water to surface waters.

4.1.6 Other

Other issues and concerns identified during the scoping process that do not concern the other primary disciplines include:



- Request for Forest Service to require an Environmental Impact Statement, as an Environmental Assessment is not adequate to cover Genesis' proposal.
- A cash bond should be required to cover all obvious and potential problems that could be associated with reclamation and perpetual maintenance, including mandatory review at ten-year intervals.
- Request for copies of the Reclamation Plan to be placed at Heron Library, Noxon High School Library, and Libby Library.
- No reclamation other than tree planting should occur the mine should be left open to be used as an educational resource and a tourist attraction.
- Comment stating concern regarding blowing dust from the tailings impoundment area.
- Releasing water down pipelines to tailings impoundment provides water needed for revegetation.
- Discharge of mine water to tailings impoundment would provide incentives for wise development and re-use of tailings area.
- The Northern Lights Dam at the mouth of Lake Creek traps sediment; it has been dredged twice, but no analysis of sediments has been conducted to determine extent of contamination from Troy Mine operations.
- The milling process uses iron, but occurrences of 'iron flock' have been attributed to natural processes; fate and transport of iron should be studied as carefully as copper.
- The amount of topsoil currently stockpiled is unsubstantiated, as some of the stockpile was used in creation of toe ponds, which hide violations of the Clean Water Act.

4.2 Issues Considered But Not Recommended For Further Evaluation

The scoping process has provided opportunities for the public to present concerns and issues to be considered during the EA process. Most of the technical issues raised will be carried forward for further consideration in the EA process. However, several issues were not recommended for further evaluation by consensus during the IDT meetings. These issues will be discussed and summarized in the EA, but no additional analysis is anticipated for these issues which are described below.

In December 2002 the Cabinet Resource Group (CRG) initiated a lawsuit against ASARCO and Sterling Mining Company (now Revett Silver Company) that alleged that barrels of hazardous waste were buried within the tailings impoundment during ASARCO's operation of the Troy Mine. CRG also claimed that barrels containing solvents and waste oil and grease were buried in the tailings impoundment. The allegations were never substantiated, and in July 2006, U.S. District Court Judge Donald Molloy dismissed the case without prejudice.



ASARCO has admitted to burying the drums but has also stated that the drums did not contain contaminants. The DEQ has reviewed water quality data and determined that CRG claims were not substantiated. The water quality analysis to be conducted for this EA will provide additional data to determine whether there is any merit to the claim of contamination in the buried drums.

Blowing dust from the impoundment area would only be a concern during operation of the mine. Once the mine has closed and ceases to place additional lifts of tailings in the impoundment, the area will be covered with topsoil and seeded with native plant species. The revegetated areas will be irrigated during the first growing season to ensure plant growth. Establishment of vegetation will control erosion and blowing dust.

The suggestion to leave the Troy Mine open as a tourist attraction does not meet the purpose and need for the reclamation project. Public health and safety, water quality concerns, and habitat for wildlife and threatened and endangered species would not be improved by leaving the Troy Mine open.

Subsidence has been addressed in previous technical reports. Previous occurrences of subsidence have been dealt with operationally, and a bond is in place for any future occurrences. The EA will discuss the potential environmental consequences of future occurrences, but the issue would not be included in the Reclamation Plan.

The purpose of the environmental assessment process is to determine whether significant impacts are likely to occur. The preparation of an EA for the Troy Mine Revised Reclamation Plan does not preclude the preparation of an Environmental Impact Statement (EIS). The EA will assist the agencies in identifying any potential impacts that should be considered and analyzed in more detail. Should significant impacts be identified during the EA process, an EIS will be prepared to assess the impacts, identify mitigation measures, and involve the public in resolution of adverse effects.

4.3 Issues to be Considered in the EA

Issues not dismissed for technical reasons will be addressed during the alternatives evaluation process in the EA. They are:

- Mine Water Should hydraulic plugs be used to close adits? How much water will be held in the mine when it floods, and where will mine water drain to?
- Groundwater Protection Will the copper attenuation process continue to function indefinitely? Will groundwater be protected from elevated copper levels, and for how long? Will continued transmission of mine water through the tailings lines to the tailings impoundment/decant ponds cause any environmental impacts after the mine ceases operations?
- Long Term Water Quality Prognosis/Monitoring what will copper concentrations be in the future? Will copper reach Lake Creek? If so, when? Will the toe ponds continue to drain



to Lake Creek? What are the effects to Ross Creek? How long can/should monitoring realistically be continued?

- Water Treatment Can mine water be treated in the service adit prior to discharge? Is there any treatment of discharged mine water? Why not replicate the decant ponds at the mill site and remove the seven-plus miles of tailings pipelines? Will an MPDES permit be required and obtained?
- Cover Source Materials Are the impacts of using the stockpiled topsoil greater than using another source of cover material?
- Impoundment stability How will continued discharge of mine water affect the stability of the tailings impoundment? How will future placement of additional tailings lifts affect stability?

