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State of Utah DEPARTMENT OF ENVIRONMENTAL QUALITY

59FR 14912)

DIVISION OF RADIATION CONTROL



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May 12, 1994

Secretary U.S. Nuclear Regulatory Commission Washington, D.C. 20555 ATTN:Docketing and Services Branch

Dear Mr. Secretary,

Attached are written comments from the State of Utah Department of Environmental Quality concerning the scope of the Moab, Utah Atlas Tailings Environmental Impact Statement. We urge the NRC to conduct periodic public meetings throughout the Atlas EIS process with allowance for as much public review time as possible.

We appreciate the opportunity to provide comments on the scope of the Atlas EIS and hope that our comments are addressed in the EIS document. If you have any questions, please do not hesitate to contact me.

Sincerely,

William J. Sinclair, Director Utah Division of Radiation Control

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> Atlas EIS Public Scoping Written Comments submitted by the Division of Radiation Control Utah Department of Environmental Quality May 12, 1994

The State of Utah applauds the decision of the Nuclear Regulatory Commission (NRC) to reexamine the reclamation options for the Atlas Mill Tailings through the process of performing an Environmental Impact Statement (EIS). We appreciate the opportunity to submit comments on the scope of the EIS. We look forward to working with the NRC and other agencies involved on a continuing basis to facilitate the process as much as possible. Specific comments on the scope of the EIS are listed below.

Comment 1 - Proposed Timetable

The Federal Register notice of March 30, 1994 lists a proposed completion date of October 1994 for completion of a draft EIS and April 1995 for the final EIS. The proposed dates are unrealistic and do not allow enough time to perform a thorough EIS. More time should be allowed for conducting the various studies and for gathering the pertinent data that is necessary for a thorough EIS. The process should take as much time as needed rather than being rushed to meet artificial deadlines. Furthermore, the process should include as much public review time as possible.

Comment 2 - Detailed Site Selection of Viable Off-Site Locations

The EIS should contain a rigorous comparison of viable alternative sites, with the primary alternatives being: 1) Relocating the tailings to an "ideal" site with a significant thickness of Mancos Shale beneath the site (such as the airport site), and 2) Capping the tailings in-place. Serious consideration of the "box-canyon" site would not be productive, and it is suggested that the available resources be focused on a more detailed examination of the main alternatives.

For the off-site alternative, the chosen site should be specifically identified. Once a site is selected, land ownership concerns can be addressed. Suitable sites near the Moab airport will probably be owned by the BLM or the State of Utah, and the appropriate agency should be contacted to investigate land use concerns that may arise at a given site. A specific site location will also aid in proper cost estimation of site specific items such as the transportation route of the tailings, a conceptual embankment design, any site characterization needed, surface drainage requirements, groundwater monitoring requirements, etc. Specific permits and approvals

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(archeological clearances, BLM or county permits, etc.) will also need to be identified; these will depend on the actual location of the chosen site.

Comment 3 - Identification of Rip-rap Source

Similarly, the riprap source for each alternative should be specifically identified. Land ownership concerns at the riprap site should be addressed, and the appropriate agency should be contacted to investigate land use concerns. A specific site location will also aid in proper cost estimation of site specific items such as the transportation route of the riprap, reclamation that may be needed, etc. Specific permits and approvals (archeological clearances, BLM or county permits, State permits, etc.) will also need to be identified; these will depend on the actual location of the chosen site.

Comment 4 - Detailed Cost Estimates of Transportation Alternatives

For the off-site alternative, detailed cost estimates of transportation to the proposed reclamation site should be done. The transportation options could include rail, truck, and slurry pipeline, with the emphasis on the most cost-effective option (probably rail). This will require that a detailed transportation plan be formulated, with the appropriate engineering considerations.

Comment 5 - Detailed Total Cost Estimates of Each Alternative Action

The EIS should contain a rigorous cost comparison of the viable alternative actions. Each of the primary alternatives should receive a comprehensive and thorough engineering cost analysis. Each primary alternative should receive a sound technical analysis consistent with the intent and specifications of 10 CFR 40 Appendix A. Careful consideration should be given to cost estimates of the following items:

- 1) Any groundwater remediation or other groundwater monitoring costs should be included in the total costs for each alternative. Costs for on-site groundwater modeling should also be included in order to formulate remediation strategies. The entire existing groundwater monitoring system may need to be upgraded or replaced to ensure that the site is being monitored properly. This may even require new well placements; these costs should be included in the on-site reclamation option. Any costs for groundwater monitoring at an off-site location should also be addressed.
- 2) Riprap costs will be significant, and riprap quantities should be carefully estimated.
- 3) The clay for the on-site cover will be imported Mancos Shale, and again will be relatively expensive compared to on-site material. Quantities should be carefully estimated.
- 4) The potential value of the Atlas property should be taken into consideration in the costbenefit analysis. The Atlas site has much potential value if cleaned up, due to its prime location in relation to the Moab Valley, Arches National Park, and the Colorado River. The site has obvious potential value as a future commercial or industrial development, or could be developed to the public benefit of Grand County, the city of Moab or Arches

National Park. The fact that the site is currently owned by Atlas is irrelevant to its potential future value if cleaned up, and the EIS should recognize the site's potential future value as an economic benefit to relocating the tailings off-site.

5) Due to the in-place tailings embankment being situated adjacent to the Colorado River and in Meab Wash, the erosion potential of an in-place tailings embankment will be quite high. Long-term maintenance will most likely be required (especially as compared to an off-site location). Costs for this purpose should be included in the in-place reclamation option; the off-site alternative should have less maintenance costs and this should be reflected in the cost analysis.

The cost estimating work should be reviewed or separately calculated by a third party consultant hired by the Nuclear Kegulatory Commission. This will either confirm or dispute the numbers to be provided by the Atlas consultant.

Comment 6 - Assessment of Impacts to Colorado River Ecosystem

It was noted that the proposed scope of the EIS states "Extensive water monitoring has identified no contamination in the Colorado River; therefore, there are no effects on river biota, and they will not be assessed."

According to Peter Haney of Grand County, there are dead tamarisk visible downgradient from the Atlas tailings near the Colorado River bank. This is visible evidence that detrimental impacts are occurring to biota near the Colorado River. The probable localized contamination of the near-shore river bank on the Atlas side of the river should be characterized through proper sampling of vegetation, soils, sediments, and terrestrial and aquatic biota. Localized grow dwater sampling or sediment pore water sampling just adjacent to the river are also needed to fully characterize the extent of any existing contamination.

This section of the Colorado River has been designated an Area of Critical Concern by the U.S. Fish and Wildlife Service for endangered fish species. The U.S. Fish and Wildlife Service should be consulted for an assessment of any impacts to endangered species. Directly across the river from Atlas lies the Matheson Wetlands Preserve. The EIS should assess the potential for negative impacts on the biola of the Matheson Preserve, which most probably will become a destination center for future visitors interested in wildlife viewing. If the conclusion of the EIS is truly that there are no impacts to the biola, then there should be ample scientific evidence presented in the EIS to support that claim.

Comment 7 - Assessment of Impacts to Colorado River Water Quality

The groundwater contaminant flux from the Atlas tailings site to the Colorado River has not been adequately quantified. This flux should be modeled to determine over time the amount of incremental degradation that will occur to the water quality of the Colorado River, particularly for TDS. The amount of incremental degradation should be assessed in light of the extensive Federal programs and requirements in place to desalinize the Colorado River.

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It is also possible that the continuing contaminant flux from the tailings will have a much more significant impact on the river and river biota during low flow conditions when there is not as much dilution; an assessment of this possibility should be included in the EIS.

Comment 8 - Comparative Risk Assessment

Based on the various data obtained, the EIS should contain a thorough, impartial analysis and evaluation of the relative risks and relative benefits (including both long-term and short-term benefits and risks) to public health, safety and the environment associated with each alternative. The risks of moving the tailings, which will be mainly short-term risks (transportation accidents, potential for temporary increased radon exposure, etc.) should be compared to the long-term risks of leaving the tailings in-place (potential for incremental increase in long-term radon exposure, potential for major increase in radon exposure due to long-term erosion of the cover or other catastrophic event).

In addition to the risks to human health, the EIS should also assess the long-term risk to local river biota due to existing and future groundwater contamination and any residual sediment contamination.

Comment 9 - Population Estimates

The effective population in the vicinity of the Atlas tailings is much greater than the 4,050 residents shown for Moab in the 1990 census. In addition to the resident population, which has grown substantially since 1990, during the tourist season there is a tourist and visitor population in and around Moab of approximately 20,000 people. There are an estimated 1.2 million visitors to Arches/Canyonlands National Parks annually. The EIS should include population estimates that reflect the current reality, and the EIS should recognize the potential for an extended period of growth in the area, adding even more permanent residents.

Comment 10 - Impacts to Tourism and the Local Economy

The EIS should include an assessment of the impacts of each alternative on tourism and the local economy. If the tailings are capped-in-place, there is a potential for a long-term decrease in tourist visitation in Moab due to the negative perception caused by the Atlas tailings residing at the "gateway" to Moab Valley and Arches National Park. If the tailings are moved, there may also be temporary negative impacts on tourism (increased highway traffic near Atlas, potential dust, etc.). These potential impacts should be addressed in the EIS.

Comment 11 - Seismic Analysis

The potential seismicity of the Atlas site should be carefully assessed and documented in the EIS. The geotechnical stability of an in-place embankment should be documented for the design basis seismic event. Information that the NRC and Atlas has obtained from the recent work by the Utah Geological Survey on the potential for ground movement at the site should be included in the EIS.

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Comment 12 - Erosion Control

For the capping in-place alternative, the EIS should document that the embankment design could withstand the erosive forces of both the Colorado River and Moab Wash. The potential of the Colorado River eventually meandering so that it directly flows adjacent to or against the embankment should be addressed. The ability of the embankment to withstand a Probable Maximum Flood (PMF) in both Moab Wash and the Colorado River should be documented in the EIS.