



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

June 18, 1997

40-3453

The Honorable Bob Filner
United States House of
Representatives
Washington, D.C. 20515

Dear Congressman Filner:

I am responding to your letter dated May 15, 1997, requesting that I investigate the need to move uranium mill tailings from the Atlas Corporation uranium mill in Moab, Utah. Specifically, you requested that the U.S. Nuclear Regulatory Commission step in to move the mill tailings from their current site to a site 29 kilometers (18 miles) away, and if the owner is unable to finance it, that NRC estimate the cost of moving the tailings, and request such funding from Congress. You cite several reasons for the requested move, stating that it will result in the tailings being farther from the watershed and a fault zone. You note the studies which state that future environmental problems will be negligible, but indicate your understanding that NRC is unsure of the content of the tailings and is concerned that if some got loose in the river it would be dangerous.

Over the past four years, the NRC has been thoroughly reviewing the Atlas Corporation's proposal to reclaim the mill tailings at its current location. NRC's review included two evaluations of Atlas' proposed action. In one analysis, NRC conducted a detailed review of the proposal to determine if the appropriate NRC safety standards for tailings reclamation found in 10 CFR Part 40, Appendix A, would be met. In addition, NRC is preparing an Environmental Impact Statement (EIS) to determine what environmental impacts could be expected if NRC were to find the Atlas proposal acceptable.

NRC has carefully reviewed the Atlas reclamation design and in March 1997 concluded that the proposal for on-site stabilization meets the requirements in Part 40, Appendix A. Among the technical areas NRC reviewed were the possibilities of floods or earthquakes disrupting the tailings pile. NRC's review considered not only floods on the Colorado River, but also floods on Moab Wash, a nearby ephemeral stream, as well as the capability of the pile's drainage system to convey runoff from intense local precipitation, without disturbing the tailings. The staff concluded that Colorado River floods do not present an erosion threat to the tailings because floods in this reach of the river are non-erosive. Floods in Moab Wash present a greater erosion threat to the tailings pile, and the erosion protection design recognizes that. The NRC seismic review concluded that the fault under the site is not seismically active and that the pile will be stable under any earthquake likely to occur during the life of the pile. These findings are documented in NUREG-1532, "Final Technical Evaluation Report for the Proposed Revised Reclamation Plan for the Atlas Corporation Moab Mill." A copy is provided in Enclosure 1.

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In the draft EIS issued in January 1996, NRC found that either on-site stabilization or relocation of the tailings to the alternate site was environmentally acceptable. However, because of the significant difference in costs between the two options, over \$100 million more to move the tailings, the draft EIS found the proposal for on-site stabilization the preferred option. Consideration of costs in determining the environmental acceptability of reclamation of uranium mill tailings is consistent with the direction given NRC by Congress under Section 84(a) of the Atomic Energy Act.

In the preparation of the draft EIS and the current effort to complete the final EIS, NRC has worked closely with the National Park Service (NPS) as a cooperating agency. The NPS also raised issues concerning the characterization of the tailings and the effects of a release of a significant amount of tailings into the Colorado River, similar to those in your letter. As discussed in the draft EIS, NRC considers that the contents of the tailings impoundment are appropriately characterized. This view is based on a number of factors, including: 1) the fact that the tailings solids are locally mined ore with the uranium removed; 2) the process knowledge of how the mill operated and what chemicals were used to extract the uranium; 3) the knowledge that the mill building and other material that could not be sold for scrap were buried with the tailings; 4) an analysis that NRC did, in the late 1980s, of the tailings liquor in the pile; 5) an affidavit from a mill employee documenting that nothing but tailings or mill equipment was placed in the impoundment; 6) analyses done by the licensee, as part of its tailings dewatering program, that identify what types of solids are in the water; and 7) knowledge of what is contained in other mill tailings impoundments--especially as a result of extensive analyses the U.S. Department of Energy (DOE) undertook in its reclamation work at abandoned uranium mills.

The draft EIS also contains a discussion of the effects of a release of a significant amount of tailings to the Colorado River. Because of the robust design of the tailings pile, NRC could not identify a credible event that would result in a large volume of material available for transport in the river. However, because NRC wanted to investigate the consequences of a significant release, we postulated that 20 percent of the tailings material became available at the same time as a major flood event occurred in the river. The assumed flood event was contrived to maximize its ability to transport tailings. Our conclusion is that under such an unlikely, if not virtually impossible, scenario, tailings could be deposited in backwater areas of the river in concentrations that would be harmful to the local biota and would thus have to be cleaned up. Cleanup of tailings would represent a small percentage of the effort to repair the devastation caused by the flood assumed in our hypothetical analysis.

A copy of the draft EIS, NUREG-1531, "Draft Environmental Impact Statement Related to Reclamation of the Uranium Mill Tailings at the Atlas Site, Moab, Utah," is provided as Enclosure 2. The final EIS, which we expect to complete later this year, will include an expanded discussion of the two topics discussed above. We are waiting for the Fish and Wildlife Service (FWS) to prepare a Biological Opinion, under Section 7 of the Endangered Species Act, which is the last piece of information NRC needs to issue the final EIS. At present, FWS is scheduled to provide NRC with a draft Biological Opinion no

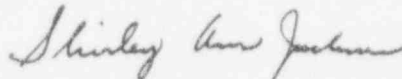
later than mid-June 1997. Once that is received, NRC will work with FWS and Atlas, if appropriate, to develop a final Biological Opinion. NRC will take no action until it completes and issues the final EIS. However, if NRC were to determine that the environmental impacts are acceptable, it would not have any regulatory basis to require Atlas to move the tailings from the site.

I would like to address your point that NRC should request money from Congress for the tailings stabilization if the Atlas Corporation cannot pay the entire cost of moving the tailings. Because NRC is a regulatory agency responsible for the safe use of nuclear material, it must look to the owner of the site--in this case Atlas--as the party responsible for paying for the cleanup of the site. In addition, NRC does not have the statutory authority to undertake any reclamation work at the site. Under Title I of the Uranium Mill Tailings Radiation Control Act of 1978 as amended (UMTRCA), DOE has been tasked by Congress to reclaim 20 abandoned uranium mill sites, but DOE does not have authority to undertake any reclamation work at UMTRCA Title II sites, one of which is Atlas.

In closing, I would like to assure you that NRC has been conducting a complete evaluation of the tailings reclamation proposal submitted by Atlas Corporation. In response to concerns raised by the public, as well as other Federal agencies such as NPS, NRC has undertaken a reevaluation of the entire long-term stabilization plan. To date, NRC has found that the proposed design meets the NRC standards found in Part 40, Appendix A.

I trust this letter responds to your concerns.

Sincerely,



Shirley Ann Jackson

Enclosures: As stated