

March 21, 2001

Mr. Henry Maddux  
U.S. Fish and Wildlife Service  
Lincoln Plaza, Suite 404  
145 East 1300 South  
Salt Lake City, Utah 84115

SUBJECT: INFORMAL CONSULTATION ON PROPOSED ACTIVITIES DURING  
TRANSITION PERIOD AT THE MOAB MILL

Dear Mr. Maddux:

By letter dated March 1, 2001, the U.S. Nuclear Regulatory Commission (NRC) wrote to the U.S. Fish and Wildlife Service (FWS) describing the ongoing activities that PricewaterhouseCoopers LLP (PWC), in its capacity as trustee for the Moab Mill Reclamation Trust, is responsible for carrying out under NRC Materials License Number SUA-917, to protect public health and safety and the environment. NRC has continued to consult with the Utah Department of Environmental Quality (DEQ) and the U.S. Department of Energy (DOE) to identify additional site activities. This letter amplifies on NRC's March 1st letter by describing in detail the additional activities that should be carried out at the site between now and the time that the DOE accepts custody of the Moab site for reclamation and long-term stabilization.

In a letter to NRC on February 8, 2001, FWS identified actions that FWS believes can be performed at the site without adverse impacts to, or take of, the endangered species or adverse modification of the designated critical habitat. Thus, the NRC would like to confirm through informal consultation, that the activities and their elements included in the Attachment to this letter, are those FWS envisioned and determined could be performed at the Moab site without adverse impacts in the February 8<sup>th</sup> letter. This confirmation would allow the Trustee to proceed with the interim actions at the site before it is transferred to DOE.

The activities described in the Attachment were developed and agreed upon by NRC, DOE, and DEQ, through a series of discussions commencing after enactment of the Floyd D. Spence Defense Authorization Act for Fiscal Year 2001, on October 30, 2000. Because this legislation transfers the site to DOE on or before October 30, 2001, and provides a consultative role for DOE for many of the actions authorized by the NRC license, NRC and DOE entered into discussions to facilitate a smooth, effective, and efficient transition.

On January 24, 2001, NRC and DOE conducted a visit of the site. At that time, NRC, DOE, and PWC tentatively agreed on certain activities that would be reasonable for PWC to perform given the amount of time before transfer of the site and available trust funds. These activities were developed to protect the public health and safety and the environment. This was followed by discussions and, on February 8, 2001, by an informal meeting attended by NRC, DOE, DEQ and PWC, at which agreement was reached to develop a work plan for the site.

The agreed upon activities are described in the Attachment to this letter. The activities can be divided into two groups. The first group of activities includes advancing a temporary cover over the central slimes on the tailings pile and erosion mitigation efforts, in addition to activities such as site security, passive maintenance, and environmental monitoring. These activities directly contribute to protection of the public health and safety. The second group of activities, which

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includes completing a groundwater investigation report, completing a tailings leachate disposal system, and restoring electrical power to former de-watering wells, are intended to continue preparations in support of site reclamation and would enhance protection of the environment, including the endangered species and their habitat. It is estimated that the activities identified in the Attachment, including activities to control transport of dust from the site, may require the withdrawal of up to 60 acre-feet of water from the Colorado River. NRC understands that the licensee previously secured FWS approval to withdraw water from the river to support reclamation activities at the site in accordance with the Final Biological Opinion of June 29, 1998.

The NRC concludes that the activities described in the Attachment are authorized by the NRC license, the Atomic Energy Act, and the Floyd D. Spence Defense Authorization Act for Fiscal Year 2001. In addition, the NRC concludes that these activities are consistent with activities identified in the FWS February 8<sup>th</sup> letter. Based on these conclusions and FWS' statements regarding the effects of these activities, we conclude that the activities will not result take of endangered species.

The NRC requests that you confirm that the activities identified in the Attachment, along with those identified in my March 1<sup>st</sup> letter, and the withdrawal of up to 60 acre-feet of water from the Colorado River, will not result in adverse impacts to or take of, the endangered species or adverse modification of the fishes' designated critical habitat.

If you have any questions or would like to discuss this further, please contact me or Myron Fliegel, the NRC project manager for this site. I can be reached at (301) 415-6045 and Dr. Fliegel at (301) 415-6629.

Sincerely yours,

**/RA/**

Phillip Ting, Chief  
Fuel Cycle Licensing Branch  
Division of Fuel Cycle Safety and Safeguards  
Office of Nuclear Materials Safety and Safeguards

Attachment: Activities for Transition Period

cc: see attached list

March 21, 2001

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**/RA/**  
Phillip Ting, Chief  
Fuel Cycle Licensing Branch  
Division of Fuel Cycle Safety and Safeguards  
Office of Nuclear Materials Safety and Safeguards

Attachment: Activities for Transition Period

cc: see attached list

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## ACTIVITIES FOR TRANSITION PERIOD

The activities included in this transition work plan are those agreed upon by the Nuclear Regulatory Commission (NRC), the Department of Energy (DoE), and the State of Utah Department of Environmental Quality (DEQ) in discussions regarding activities conducted at the Atlas mill tailings site, near Moab, Utah, under NRC license SUA-917 and subject to the requirements in the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001, Public Law No. 106-398. The prospective activities are those above and beyond simple site security, passive maintenance, and environmental monitoring already being undertaken by PricewaterhouseCoopers, LLP. (PwC), for the Trustee for the site. These activities are authorized by the NRC license and allowed by the legislation.

The activities included in this plan can be divided into two groups. Activities 1 and 2, are activities that are necessary to protect the public health and safety. Activities 3, 4, and 5, are those that while not directly involved with protection of the public health and safety, are efficacious for two reasons: first, they would ensure additional protection of the environment, including the endangered species potentially affected at the Site and their habitat; and second, they would contribute to a more stabilized Site for transfer to DoE. The activities and their work elements are summarized below:

1. Temporary Soil Cover, Slimes Area - a temporary cover over the central slimes area on the tailings pile topslope would be advanced in two stages: the first, to allow access to the sump pipe along the western side of the exposed slimes area for purposes of completion of the sump pump and piping system; and the second, to complete covering the exposed tailings slimes at all other topslope areas. Soils used for this purpose would be placed at a nominal thickness of three feet and would be obtained from locations within the mill site area approved by the NRC in consultation with DoE.
2. Erosion Mitigation Efforts - the following erosion mitigation efforts would be completed:
  - A. Sideslope Erosion and Dust Controls - native grass seed and polymer encrusting agents would be applied to the tailings sideslope areas to control and prevent stormwater erosion and fugitive dust emissions.
  - B. Topslope Dust Control - a water truck would be used to spray leachate collected from the wick drain de-watering system to control fugitive dust emissions from the tailings pile topslope area.
  - C. West Drainage Ditch - hay bales or silt fences would be constructed across the centerline of the west drainage ditch to prevent erosion.
3. Groundwater Investigation Report - the groundwater investigation report initiated by Shepherd Miller Incorporated (SMI) would be completed. This report would document all groundwater related site characterization conducted at the Atlas Site since formation of the Trust.
4. Tailings Leachate Disposal System - a tailings leachate disposal system for the removal and control of wastewater generated by the wick drain de-watering system, and for topslope dust control, would be completed. Said disposal system would include the following elements and activities:

Enclosure

- A. Evaporation Pond - including construction of a single lined flexible membrane evaporation pond in the northwest section of the topslope area. This system would also include installation of a pump in the existing wick drain collection sump and piping therefrom to the evaporation pond.
  - B. Wastewater Application for Dust Control - including a dedicated water truck for removal of leachate wastewaters from the evaporation pond and disposal thereof onto the topslope area for dust control purposes.
5. Restore Electrical Power to Former De-watering Wells - electrical power would be restored to the former Atlas de-watering wells found across the tailings pile topslope. Thereafter, the de-watering wells would be operated to remove leachate from the tailings pile.

The estimated costs and estimated completion dates for the activities in the work plan are provided in the following table:

Summary of Activities in the Transition Work Plan Efforts

Activity / Elements	Estimated Budget	Estimated Completion Dates <sup>(1)</sup>
1. Temporary Slimes Cover (3 foot nominal thickness)	\$194,000	
a) Advance soil cover to de-watering sump	included	April 30, 2001
b) Advance soil cover across remaining slimes area.	included	June 30, 2001
2. Erosion Mitigation / Dust Control		
a) Hydroseed native grass seed & polymer fixing agent across sideslope areas (~ 30 acres).	\$67,000	April 30, 2001
b) Provide water truck & apply leachate for topslope dust control.	see Item 4b, below	see Item 4b, below
c) Install hay bales / silt fences on west ditch centerline.	\$10,000	April 30, 2001
3. Complete SMI Groundwater Investigation Report	PwC <sup>(2)</sup>	March 31, 2001
4. Tailings Leachate Disposal System		
a) Construct 3,000,000 gallon evaporation pond for storage and disposal of wick drain leachates (single 60 mil FML liner, 240' W x 340' L x 6' D, and deer fence)	\$119,000	May 31, 2001
b) Provide water truck, pumps, hoses, and labor for application of leachate wastewater to topslope area for dust control purposes (for 6 months)	\$55,000	May 31, 2001 <sup>(3)</sup>
5. Restore Electricity to Former De-watering Wells	\$5,000	May 31, 2001
Estimated Total Cost:	\$450,000	

Footnotes:

- 1) Estimated completion dates apply to the elements listed under each activity, unless noted otherwise.
- 2) Costs for Shepard-Miller Incorporated groundwater investigation report already included in PwC budget.
- 3) Leachate disposal will be an ongoing process. May 31, 2001 date reflects the availability of labor and equipment for PwC to begin this disposal and dust control.