

March 21, 2001

Mr. Ray Plienness  
U. S. Department of Energy  
Grand Junction Office  
2597 B $\frac{3}{4}$  Road  
Grand Junction, Colorado 81503

William J. Sinclair, Director  
Division of Radiation Control  
Department of Environmental Quality  
State of Utah  
168 North 1950 West  
P. O. Box 144850  
Salt Lake City, Utah 84114-4850

SUBJECT: ACTIVITIES DURING TRANSITION PERIOD AT THE MOAB MILL

Dear Messrs. Plienness and Sinclair:

The purpose of this letter is to document discussions that the U.S. Department of Energy (DOE) and the State of Utah Department of Environmental Quality (DEQ) have had recently with the U.S. Nuclear Regulatory Commission (NRC) regarding activities at the Atlas mill tailings site (Site), near Moab, Utah. Activities at the Site are conducted under NRC Materials License Number SUA-917 which is held by the Moab Mill Reclamation Trust (Trust). William B. Abbington, in his capacity as a partner of PricewaterhouseCoopers LLP (PWC) of Houston, Texas, is the Trustee for the Site. In turn, PWC operates the Atlas site and has been reclaiming the Site under the authority of the NRC license and an NRC Order which transferred the license from a bankrupt Atlas Corporation to the Trust.

Two recent events have affected reclamation activities at the Site:

- 1) The October 30, 2000 enactment of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001, Public Law 106-398 (Act), transferring the site on or before October 30, 2001, to the Department of Energy and requiring NRC consultation with DOE for activities related to the Site but not directly specified in the legislation; and,
- 2) The February 8, 2001, withdrawal of the U.S. Fish and Wildlife Service's (FWS), Biological Opinion regarding the NRC-approved reclamation plan for the Site, as well as its Incidental Take statement.

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In response to the first event, the NRC and DOE entered into discussions to prepare for and support a smooth transition to DOE jurisdiction at the Site. NRC and DOE extended these discussions to include DEQ and PWC. After a site visit on January 24, 2001, NRC, DOE and PWC tentatively agreed on certain activities that would be reasonable for the Trustee to continue under the NRC license and the recently enacted legislation for the interim period before the site is transferred to DOE. These activities were prioritized in terms of furthering stabilization of the Site before transfer to DOE, and, after transfer, DOE's ongoing remediation of the Site.

In a February 8, 2001, meeting that preceded a more formal stakeholders' En Libro meeting held in Salt Lake City, Utah, NRC, DOE, DEQ, and PWC agreed to develop a work plan reflecting permissible activities for the transition period for the Site. The work plan, given the time-frame involved and the remaining Trust funds available to PWC, would include the activities tentatively agreed to by the NRC, DOE, and DEQ as of that date, with an estimate of the time involved for each activity broken down into its elements, and the estimated cost of each activity if it could be completed within an estimated time frame.

In response to the second event, NRC, DOE, and DEQ decided to continue to develop a transition work plan and explore the activities (in addition to site security, passive maintenance, and environmental monitoring) that should be considered at the Site in the interim period before the Site is transferred to DOE. However, the agencies were aware that any proposal would also have to take into consideration FWS' February 8 letter.

The activities that NRC, DOE, and DEQ have agreed can be performed are described in the Attachment to this letter. The activities can be divided into two groups; the first, which includes providing 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, directly address protection of the public health and safety; the second, which includes completing a groundwater investigation report, completing a tailings leachate disposal system and restoring electrical power to former de-watering wells, enhance site stabilization and would enhance protection of the environment, including the endangered species potentially affected by activities at this Site and their habitat.

The NRC concludes that the activities described in the Attachment are authorized by the NRC license and allowed by the recent legislation. In addition, the NRC concludes that these activities are consistent with activities identified in FWS' February 8 letter. However, FWS' stated belief that the activities can be accomplished without take of endangered species was predicated on the assumption that no water would be withdrawn from the Colorado River. As some of the activities identified in the Attachment may require the use of water from the river, the NRC would request FWS' views on the acceptability of these activities before PWC should be expected to undertake the activities.

Messrs. Plienness and Sinclair

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If you have any questions or would like to discuss this further, please contact me or Dr. Myron Fliegel, the NRC project manager for this site. I can be reached at (301) 415-7212 and Dr. Fliegel at (301) 415-6629.

Sincerely,

**/RA/**

Michael F. Weber, Director  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

Attachment: Activities for Transition Period

cc: See attached list

Messrs. Plieness and Sinclair

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Sincerely,

**/RA/**

Michael F. Weber, Director  
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Office of Nuclear Material Safety  
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Attachment: Activities for Transition Period

cc: See attached list

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Addressees for Letter Dated: March 21, 2001

William Abington, Partner  
PricewaterhouseCoopers LLP  
1100 Louisiana Street, Suite 4100  
Houston, Texas 77002

Sylvia Barrett  
Metropolitan Water District of  
Southern California  
700 Moreno Avenue  
LaVerne, California 91750

Richard Blubaugh  
Atlas Corporation  
2323 S. Troy Street  
Suite 5-210  
Aurora, CO 80014-1900

R. L. Christie, ATL  
P. O. Box 1366  
Moab, Utah 84532

John E. Cook, Reg. Dir.  
Rocky Mountain Region  
National Park Service  
U. S. Department of the Interior  
12795 Alameda Parkway  
P. O. Box 25287  
Denver, Colorado 80225-0287

Walt Dabney, Superintendent  
Canyonlands National Park  
National Park Service  
2282 S. West Resource Blvd.  
Moab, Utah 84532

Susan Daggett  
Earthjustice Legal Defense Fund, Inc.  
1631 Glenarm Place, Suite 300  
Denver, Colorado 80202

John Darke  
P. O. Box 603  
Moab, Utah 84532-0603

Keith Eastin, Director  
Financial Advisory Services  
PricewaterhouseCoopers LLP  
1100 Louisiana Street, Suite 4100  
Houston, Texas 77002

Dale Edwards  
Radiation Protection Coordinator  
Moab Mill Reclamation Trust  
P. O. Box 1207  
Moab, Utah 84532

Sarah M. Fields  
P. O. Box 143  
Moab, Utah 84532-0143

Grand County Administrator  
125 East Center  
Moab, Utah 84532

Grand County Library  
25 South 100 East  
Moab, Utah 84532

Dan Kimball, Chief  
Water Resources Division  
National Park Service  
U.S. Department of Interior  
1201 Oakridge Drive, Suite 250  
Fort Collins, Colorado 80525

William Lamb  
Associate State Director  
Bureau of Land Management  
324 South State Street  
Salt Lake City, Utah 84111-2303

Milton K. Lammering  
U.S. Environmental Protection Agency  
Region VIII  
999 18th Street, Suite 500  
Denver, Colorado 80202-2405

James P. Langley  
Project Director  
Moab Mill Reclamation Trust  
PricewaterhouseCoopers LLP  
1100 Louisiana Street, Suite 4100  
Houston, Texas 77002

Bart Leavitt  
Grand County Council  
125 East Center  
Moab, Utah 84532

Al McLeod  
Grand County Council  
125 East Center  
Moab, Utah 84532

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

Dave Mathes  
EM-45  
U. S. Department of Energy  
19901 Germantown Road  
Cloverleaf Building  
Germantown, MD 20874-1290

Harvey Merrill  
925 South Rowena Court  
Moab, Utah 84532

Marcia Moore  
W0760  
Bureau of Land Management  
1849 C Street, NW  
Washington, DC 20240

Ralph Morganweck  
Regional Director  
U.S. Fish and Wildlife Service  
Post Office Box 25486  
Denver Regional Center  
Denver, Colorado 80225-0486

Kerry Moss  
National Park Service  
Mining and Minerals Branch  
P.O. Box 25287  
Denver, Colorado 80236

Dianne Nielson  
Executive Director  
Department of Environmental Quality  
State of Utah  
168 North 1950 West  
Salt Lake City, Utah 84114-4810

Vijai Rai  
Senior Environmental Review Officer  
Office of Environmental Policy and  
Compliance  
U S. Department of the Interior  
1849 C Street, NW  
Mail Stop 2340  
Washington, DC 20240

Steve Rauzi  
416 West Congress#100  
Tucson. AZ 85701

Robert M. Reed, Supervisor  
Environmental Analysis and  
Assessment Section  
Oak Ridge National Laboratory  
Bethel Valley Road  
P.O. Box 2008  
Oak Ridge, Tennessee 37831-6200

Larry Shanks  
U.S. Fish and Wildlife Service  
Region 6  
P. O. Box 25486  
Denver Federal Center  
134 Union, Suite 400  
Lakewood, Colorado 80225-0486

Gabrielle Sigel  
Jenner & Block  
One IBM Plaza  
Chicago, Illinois 60611

Anthony J. Thompson  
Shaw, Pittman, Potts & Trowbridge  
2300 N Street, N. W.  
Washington, DC 20037-1128

Christine Turk, Chief  
Branch of Compliance  
National Park Service  
12795 W. Alameda Parkway  
P.O. Box 25287  
Denver, Colorado 80225

Wes Wilson  
U. S. EPA - Region III  
999 18th Street, Suite 500  
Denver, Colorado 80202-2405

## **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 to be 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. All of 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 directly related to protecting 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 several reasons: first, they would ensure additional protection of the environment, including the endangered species potentially affected at the Site and their habitat; second, they would contribute to a more stabilized Site for transfer to DOE; and third, they will provide information on groundwater that will be useful to DOE in its control and remediation of the site. 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:

Attachment

- 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.