



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

March 30, 2001

Mr. William Abington, Trustee  
Moab Mill Reclamation Trust  
PricewaterhouseCoopers LLP  
1201 Louisiana Street  
Houston, Texas 77002

SUBJECT: ACTIVITIES DURING THE TRANSITION PERIOD AT THE MOAB MILL

Dear Mr. Abington:

Enclosed please find a hard copy of the letter, dated March 23, 2001, from the U.S. Fish and Wildlife Service (FWS) that was FAXed to you on that date (Enclosure 1). The letter responded to the U.S. Nuclear Regulatory Commission's (NRC's) March 21, 2001, letter requesting informal consultation on proposed activities to be carried out at the Moab Mill Reclamation Trust's site under NRC Materials License Number SUA-917. In its March 23<sup>rd</sup> letter, FWS concurred that activities identified by NRC will not effect threatened or endangered species. FWS also stated that the water depletions identified in NRC's March 21 letter as up to 60 acre-feet from the Colorado River, are addressed in a programmatic biological opinion dated May 2, 2000. That biological opinion determined that recovery actions completed by the Upper Colorado River Basin Endangered Fish Recovery Implementation Program offset cumulative impacts from these depletions.

As a result, we conclude that you can perform the activities identified in the enclosure to the March 21<sup>st</sup> letter (Enclosure 2), as well as the routine activities, identified in our February 9, 2001 letter, which are required by the license. We note that your letter of March 2, 2001, identified some activities required by the license that you believed you could perform, as well as other activities you stated you will not perform in light of the February 8, 2001, letter in which FWS withdrew its biological opinion and incidental take provisions. We conclude that the FWS March 23<sup>rd</sup> letter removes the impediment to your performing all the activities identified in our March 21<sup>st</sup> letter. Notably, however, PWC should not engage in activities disturbing the tamarisk area between the tailings pile and the river without further NRC consultation with FWS regarding that activity.

In a telephone conversation on March 29, 2001, you stated that PWC would like to carry out the activities identified in Enclosure 2 to this letter. However, you stated that three attorneys consulted by PWC believe the March 23<sup>rd</sup> FWS letter does not afford PWC adequate protection under the Endangered Species Act to engage in these activities. Your attorneys are attempting to obtain additional documentation from the U.S. Department of the Interior that they believe would provide PWC with that protection. You also agreed to call us with that information by April 3, 2001.

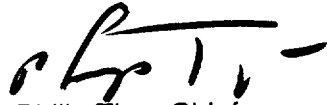
March 30, 2001

- 2 -

W. Abington

With that information, in addition to the no effects determination in the FWS March 23<sup>rd</sup> letter, you stated you would have enough information to determine your willingness to perform the proposed activities. Please respond by April 5, 2001, of your intentions with respect to carrying out the responsibilities of the license as identified in our February 9<sup>th</sup> letter, and to implementing the measures identified in Enclosure 2 to this letter. If you have any questions, please contact Dr. Myron Fliegel, the NRC project manager for this site who can be reached at (301) 415-6629.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'P. Ting', followed by a horizontal line and a dash.

Philip Ting, Chief  
Fuel Cycle Licensing Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

Enclosures: 1. FWS letter dated March 23, 2001  
2. Activities for Transition Period

cc: see attached list

W. Abington

March 30, 2001

- 2 -

With that information, in addition to the no effects determination in the FWS March 23<sup>rd</sup> letter, you stated you would have enough information to determine your willingness to perform the proposed activities. Please respond by April 5, 2001, of your intentions with respect to carrying out the responsibilities of the license as identified in our February 9<sup>th</sup> letter, and to implementing the measures identified in Enclosure 2 to this letter. If you have any questions, please contact Dr. Myron Fliegel, the NRC project manager for this site who can be reached at (301) 415-6629.

Sincerely yours,

151

Philip Ting, Chief  
Fuel Cycle Licensing Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

Enclosures: 1. FWS letter dated March 23, 2001  
2. Activities for Transition Period

cc: see attached list

DISTRIBUTION (w/encl):

File Center	FCLB r/f	PUBLIC	L. Carlson, RIV	B. Spitzberg, RIV
CNWRA	ACNW	FCSS r/f	NMSS r/f	M. Schwartz, OGC
M. Nordlinger, OGC		<del>A. Norris, BMDA</del>		M. Weber

ADAMS ACCESSION NUMBER:

DOCUMENT: G:\FCLB\Uranium Recovery Section\Moab Mill\interimmeasures.wpd

☒ Publicly Available    ☐ Non-Publicly Available    ☐ Sensitive    ☒ Non-Sensitive

OFFICE	FCLB MF	FCLB	OGC	FCLB	
NAME	MFliegel:kv	YChen	NLO e-mail JGray	PTing	
DATE	03/30/2001	03/30/2001	03/30/2001	03/30/2001	

OFFICIAL RECORD COPY



United States Department of the Interior  
FISH AND WILDLIFE SERVICE

UTAH FIELD OFFICE  
LINCOLN PLAZA  
145 EAST 1300 SOUTH, SUITE 404  
SALT LAKE CITY, UTAH 84115

In Reply Refer To

(CO/KS/NE/UT)

March 23, 2001

Phillip Ting, Chief  
Fuel Cycle Licensing Branch  
Division of Fuel Cycle Safety and Safeguards  
Office of Nuclear Materials Safety and Safeguards  
United States Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Dear Mr. Ting,

In response to your March 21, 2001 letter and attachment "Activities for Transition Period" regarding consultation on proposed activities during transition period at the Moab Mill, we provide the following. In summary, the activities as described in your letter have been divided into two groups. Group 1 includes activities that directly contribute to protection of the public health and safety. Group 2 activities are intended to continue preparations in support of site reclamation and would enhance protection of the environment, including endangered species and their habitat. Specific activities include:

Group 1: Activities to advance temporary cover over the central slimes on the tailings pile and erosion mitigation efforts, site security, passive maintenance, and environmental monitoring.

Group 2: Completion of a groundwater investigation report, completion of a tailings leachate disposal system, and restoring electrical power to former de-watering wells.

As part of activities to control transport of dust on site, your letters concludes that you may require withdrawal of up to 60 acre-feet of water from the Colorado River in 2001. As part of an interstate, interagency agreement in 1988, Federal and state agencies within the upper Colorado River basin have determined that water depletions from the upper basin of the Colorado River are likely to jeopardize the continued existence of the endangered fish species. A programmatic Biological Opinion for Elimination of Fees for Water Depletions of 100 Acre-Feet or Less from the Upper Colorado River Basin (May 2, 2000) addresses the impacts of these small depletions and has determined that recovery actions completed by the Upper Colorado River Basin Endangered Fish Recovery Implementation Program offset cumulative impacts from these depletions. Therefore, any impact to endangered fish species due to proposed water withdrawal of 60 acre-feet has been addressed pursuant to the small depletions biological opinion.

Enclosure 1

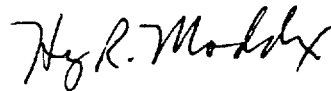
00 20 01 FAX 301 501 5001

The Service concurs with the no effect determination for threatened or endangered species including southwestern willow flycatcher, Colorado pikeminnow, razorback sucker, humpback chub and bonytail, and their critical habitat for the activities as they are proposed. As the US Fish and Wildlife Service (Service) has previously discussed with you, we do not anticipate any take of threatened or endangered species from the proposed activities. Impacts from proposed water depletions are addressed in an existing programmatic biological opinion as described above.

Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

Thank you for your interest in conserving threatened and endangered species. If you have any questions, please feel free to contact me or Yvette Converse at (801) 524-5001.

Sincerely,



Henry R. Maddux  
Utah Field Supervisor

cc: Bob McCue, Region 6, Denver, CO

Gina Guy, Solicitor's Office, Denver, CO

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

Dianne Nielson, Executive Director, Department of Environmental Quality, State of Utah, 168 North 1950 West, Box 144810, Salt Lake City, UT 84114-4810

## 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:

- 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.

Addressees for Letter Dated: March 30, 2001

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  
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

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

Dan O'Laurie Museum  
118 East Center Street  
Moab, Utah 84532

Ray Plienness  
U.S. Department of Energy  
Grand Junction Office  
2597 B<sup>3</sup>/<sub>4</sub> Road  
Grand Junction, Colorado 81503

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, Arizona 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

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

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

**From:** Maria Schwartz  
**To:** Myron Fliegel  
**Date:** 3/30/01 12:08PM  
**Subject:** Letter to PWC

Mike,

Joe Gray reviewed the draft letter for which I asked him to provide OGC's NLO and has no problems with it.

Maria