

**RESPONSE TO FREEDOM OF
INFORMATION ACT (FOIA) / PRIVACY
ACT (PA) REQUEST**

99-377,00-219,00-257

12

RESPONSE
TYPE☐

FINAL

☒

PARTIAL

DATE

JUL 28 2000

REQUESTER

Ms. Kimberly Boggiatto

PART I. -- INFORMATION RELEASED

- ☐ No additional agency records subject to the request have been located.
- ☐ Requested records are available through another public distribution program. See Comments section.
- ☐ APPENDICES
Agency records subject to the request that are identified in the listed appendices are already available for public inspection and copying at the NRC Public Document Room.
- ☒ APPENDICES
T Agency records subject to the request that are identified in the listed appendices are being made available for public inspection and copying at the NRC Public Document Room.
- ☐ Enclosed is information on how you may obtain access to and the charges for copying records located at the NRC Public Document Room, 2120 L Street, NW, Washington, DC.
- ☒ APPENDICES
T Agency records subject to the request are enclosed.
- ☐ Records subject to the request that contain information originated by or of interest to another Federal agency have been referred to that agency (see comments section) for a disclosure determination and direct response to you.
- ☒ We are continuing to process your request.
- ☐ See Comments.

PART I.A -- FEES

- AMOUNT * ☐ You will be billed by NRC for the amount listed. ☐ None. Minimum fee threshold not met.
- \$ ☐ You will receive a refund for the amount listed. ☐ Fees waived.
- * See comments for details

PART I.B -- INFORMATION NOT LOCATED OR WITHHELD FROM DISCLOSURE

- ☐ No agency records subject to the request have been located.
- ☐ Certain information in the requested records is being withheld from disclosure pursuant to the exemptions described in and for the reasons stated in Part II.
- ☐ This determination may be appealed within 30 days by writing to the FOIA/PA Officer, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Clearly state on the envelope and in the letter that it is a "FOIA/PA Appeal."

PART I.C COMMENTS (Use attached Comments continuation page if required)

SIGNATURE - FREEDOM OF INFORMATION ACT AND PRIVACY ACT OFFICER

Carol Ann Reed

APPENDIX T
RECORDS BEING RELEASED IN ENTIRETY

<u>NO.</u>	<u>DATE</u>	<u>DESCRIPTION (PAGE COUNT)</u>
1.	Undated	Moab Public Meeting Summary composed by Fliegel. (6 pages).
2.	10/19/98	E-mail from Sinclair to Holonich on Atlas Conference Call, (1 page)
3.	11/02/98	Email from Fliegel to Holonich on Telcon with Atlas. (1 page).
4.	05/21/99	Email from Paperiello to Holonich on Newspaper Article on State of Utah Becoming Atlas Trustee (1 page).
5.	04/15/99	Fax sheet from Blubaugh to Stablein on License Amendment Condition #41. (1 page)
6.	09/24/99	Ltr from Nielson to Surmeier confirming the concurrence of the state of Utah in the Atlas bankruptcy agreement. (1 page)
7.	09/24/99	Ltr fm Holonich to Webster on Status on NRC's implementation of the Biological Opinion for the Atlas Tailings Reclamation. (18 pages)
8.	09/27/99	Ltr fm Surmeier to Farrell informing him that the NRC, and the State of Utah have chosen Dames & Moore to become the Trustee for the Atlas Corp. (15 pages)
9.	10/04/99	Email from Surmeier to Schwartz on cost information on Atlas Trustee. (3 pages)
10.	11/16/99	Email from Fliegel to Surmeier, Gray and Holonich on Time Estimates II. (3 pages)
11.	11/17/99	Email from Gray to Burns attaching an email from Fliegel to Gillen, Gray, Holonich on Telcon with Keith Eastin. (2 pages)

12. 11/19/99 Email from Holonich to Surmeier, Gray, Schwartz on time Estimates II. (1 page)
13. 11/23/99 Email from Fliegel to Clark on Atlas Hearing. (1 page)
14. 12/27/99 Ltr from Kane to Abington on Order Transferring License for the Atlas Corporation Mill Site near Moab, Utah. (26 pages) e
15. 02/17/00 Email from Fliegel to Essig on update from Atlas Trustee. (1 page)
16. 02/24/00 Email from Gray to Burns enclosing and Email from Fliegel to Nordlinger on Atlas dates. (2 pages)
17. 03/31/00 Email from Gray to Burns enclosing an Email from Fliegel to Cordes, Greeves, and Gray on Telcon with FWS on Atlas. (2 pages)
18. 04/04/00 Email from Gray to Burns enclosing an Email from Fliegel to Greeves, Holonich and Essig on Telcon with Atlas Trustee. (2 pages)
19. 04/04/00 Email from Gray to Burns enclosing an Email from Greeves to Morgenweck on Atlas. (3 pages)
20. 04/04/00 Email from Fliegel to Greeves, Gray, Holonich on Atlas Newspaper article. (1 page)
21. 04/05/00 Email from Fliegel to Cordes, Greeves, Gray on Atlas Newspaper Article - more info. (1 page)
22. 04/26/00 Email from Gray to Burns enclosing an Email from Essig to Gray and Schwartz on Plateau Resources Proposal on Moab Tailings. (2 pages)
23. 07/27/95 Letter to R. Blubaugh from J. Lieberman, re: Acknowledgement of Check, (1 page)

Moab Public Meeting Summary

The U.S. Nuclear Regulatory Commission (NRC) staff met with citizens of the Moab, Utah, area on Thursday, January 13, 2000, at the Grand County High School in Moab. The meeting began at 7:30 p.m., with approximately 60 individuals in attendance.

The purpose of the meeting was to provide an update of actions completed or underway relative to the disposition of tailings resulting from former operations at the Atlas uranium mill near Moab. The staff also used the opportunity to introduce a representative from PricewaterhouseCoopers LLP (PWC), the recently named trustee for implementation of the tailings site reclamation plan. The license had been transferred from Atlas Corporation to the Moab Mill Reclamation Trust (or simply, the Trust) on December 30, 1999.

Following the staff's presentation (slides attached), questions were received from those in attendance. Approximately 40 questions were asked, about half of which were in three categories.

The first of these categories was related to PWC's role and future activities at the tailings site. The PWC representative noted that since the transfer of the license on December 30, 1999, a solicitation of interest was prepared and sent to approximately 28 firms. Responses were received from 17 of those contacted. The PWC representative noted that the site reclamation work had been sub-divided into six tasks and that it would be determined whether these could be most efficiently accomplished by a single contractor or two (or more) contractors. The representative further stated (in response to a question) that local firms would be used in a sub-contractor capacity whenever possible. The PWC representative estimated that a contract for the initial phase of site remediation would be in place within 60-90 days.

The next most frequently asked category of questions was related to the amount and timing of funds available for site remediation. The PWC representative stated that \$5.25 million has been received thus far from the Atlas bankruptcy and has been placed in an interest-bearing account. The status of other funds, totaling approximately \$3 million, is being investigated. In response to questions regarding the timing of the Department of Energy's (DOE's) contribution, the PWC representative stated that DOE was responsible for reimbursing 56 percent of the cleanup costs (based on the percentage of total uranium produced that was purchased by the Federal government). It was further stated that DOE's contribution to site remediation costs would be in response to specific expenditures of Trust monies. A scenario describing an ultimate total funding of nearly \$20 million was discussed, while recognizing (in response to a question) the timing of DOE's contribution was dependent on budget authority, the number of mill tailings sites undergoing remediation at the time, and other factors. The staff and the PWC representative stated that this material would be placed in the tailings pile and the site cleaned up to EPA standards.

The third most frequently asked category of questions was related to concerns about radioactive materials which may be present onsite or near-site, but outside of the tailings pile. The staff and the PWC representative noted that the existence of such materials would be further defined

Enclosure
T/11

based on various sources of information, including a screening radiation survey which will be performed under the supervision of PWC in the near future.

Other categories of questions related to the adequacy of environmental transport models, the use of sample analysis results, the extent to which currently planned work would be impacted by the DOE-proposed efforts to relocate the tailings, pile dewatering and capping plans and procedures, and the status of current court cases and hearings regarding the Atlas tailings. In response to these questions, the staff agreed that sample analysis results are an integral part of the environmental assessment process and that models alone cannot be relied upon in support of the environmental impact decision-making process. The PWC representative and the staff noted, with regard to task sequencing, that work accomplished during the next 2-3 years would emphasize pile dewatering and groundwater cleanup, followed by site characterization and cleanup activities. It was noted that these preliminary actions would be necessary whether or not the pile was relocated to an alternate site.

The meeting concluded at approximately 10:15 p.m.

Mr. William Abington, Partner
PricewaterhouseCoopers, LLP
1201 Louisiana, Suite 2600
Houston, TX 77002-5678

SUBJECT: PUBLIC MEETING IN MOAB, UTAH

Dear Mr. Abington:

On January 13, 2000, staff from the U.S. Nuclear Regulatory Commission (NRC) held a public meeting in Moab, Utah, to discuss the status of reclamation at the Moab Mill Reclamation Trust's uranium mill tailings site formerly owned by Atlas Corporation. As a partner of PricewaterhouseCoopers, LLP, you serve as trustee for the Trust. Enclosed is a copy of the staff's summary of that meeting.

If you have any questions, please contact me at (301) 415-7238, or the NRC project manager, Dr. Myron Fliegel, at (301) 415-6629.

Sincerely,

Thomas H. Essig, Chief
Uranium Recovery and
Low-Level Waste Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 40-3453
License No. SUA-917

Enclosure: Moab Public Meeting Summary

cc: See attached list

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(Initials)

(Date)

Mr. William Abington, Partner
PricewaterhouseCoopers, LLP
1201 Louisiana, Suite 2600
Houston, TX 77002-5678

SUBJECT: PUBLIC MEETING IN MOAB, UTAH

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Sincerely,

Thomas H. Essig, Chief
Uranium Recovery and
Low-Level Waste Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 40-3453
License No. SUA-917

Enclosure: Moab Public Meeting Summary

cc: See attached list

Addressees for Letter Dated: _____

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Grand County Administrator
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Dave Mathes
EM-45

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Moab, Utah 84533

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Denver, Colorado 80236

Dianne Nielson
Executive Director
Department of Environmental Quality
State of Utah
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Wes Wilson
U.S. EPA - Region III
999 18th Street, Suite 500
Denver, Colorado 80202-2405

2

From: "Bill Sinclair" <bsinclair@deq.state.ut.us>
To: TWD2.TWP7(JJH1)
Date: Mon, Oct 19, 1998 5:15 PM
Subject: Re: Atlas conference call -Reply

B. Clark will probably attend

Our attorneys are interested in ¹how actively the NRC is going to review whether or not the Atlas asset picture is real - is there more money than the \$22 million for cleanup - does the \$22 million include the Title X monies ²is anyone from the NRC going to attend the bankruptcy "open house" for a lack of a better term later in the month in Denver where questions can be asked regarding the status of the Atlas Corporation ³Has NRC bought off on an accelerated schedule to finalize the EIS to accomodate the bankruptcy? ⁴Do "we" want to agree to a capping plan that has no funding for groundwater cleanup? Those are some of the questions. Atlas did conference call with us last Friday to explain where they were in the process and try to solicit our cooperation in getting the millsite closed "their way" in "their time frame". It is a difficult situation - almost a "take what you can get" or "get nothing" Look forward to the call on Weds.

>>> Joseph Holonich <JJH1@nrc.gov> 10/19 1:25 PM >>>
Bill,

Thanks for the heads up. Could you give me a little more background on what the interests our in the state. I suspect you want to get general information on what the situation is. However, are there other specific issues or questions that you have.

We will also have two lawyers from the Office of the General Counsel. Also, we are seeing if the U.S. Attorney representing us in Denver can participate.

Joe

>>> "Bill Sinclair" <bsinclair@deq.state.ut.us> 10/19/98 03:20pm >>>
Joe, there is significant interest in the Atlas bankruptcy issue from a state perspective - on the call will be Dianne, our two attorneys. Fred Nelson and Denise Chancellor, and several representatives from DRC and DWQ. Just giving you a heads up. Looking forward to it, will call you from here at 8:30 AM MDT (10:30 AM EDT) on Wednesday. Thanks

T/2

From: Myron Fliegel
To: Joseph Holonich
Date: Mon, Nov 2, 1998 11:14 AM
Subject: Telcon with Atlas

Richard Blubaugh called and discussed his meetings with Utah officials on Thursday.

Atlas first met with Ted Stuart from the Governor's office. Blubaugh described that meeting as disappointing. The Governor wants the tailings moved, at no expense to Utah, but his final decision on what actions to take is awaiting recommendation from Diane Nielson, Director of Utah DEQ. The Governor and Interior Sec Babbitt are planning to visit the site within the next few weeks. Blubaugh called Molly McUsic of Babbitt's office. Molly was aware of the Atlas bankruptcy filing but not of the bankruptcy timetable. Molly said that the trip may be rescheduled but Blubaugh did not know if that meant scheduling it sooner or later.

Atlas also met with Diane Nielson and her staff, but other than one question from the AG office, staff was quiet. AG wanted to know if the creditors committee was willing to let the Atlas plan to remediate site using Emsource, go forward. Atlas told them that thus far creditors comm satisfied.

Blubaugh's impression was that Nielson understood that if Atlas does not succeed, the State will become involved. Blubaugh said that under some instances, the State is required to pay 10% or more for a Superfund cleanup and Nielson was aware of that as she brought up the Midvale situation. (Tailings pile - not radioactive but heavy metals, on Jordan? River. EPA concluded OK to stabilize in place - Utah unhappy - got estimate to move - \$150M but \$30M in place - EPA told Utah to pay the difference if wanted moved - pile stabilized in place.) Blubaugh thinks that Nielson does not want to be responsible for derailing the process.

CC: Maria Schwartz, Michael Layton

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From: Joseph Holonich
To: Carl Paperiello
Date: Fri, May 21, 1999 2:57 PM
Subject: Newspaper Article on State of Utah Becoming Atlas Trustee

Folks,

Just wanted to let you know that the Moab Times-Independent this week, it's only a weekly, had an article on Utah becoming the Atlas trustee. The paper interviewed Diane Nielson, Executive Director of the Utah Department of Environmental Quality. In the interview, Diane said that the State was evaluating the trustee role right now. She went onto say:

"The state is committed to finding a solution to the pile. The state doesn't trust that the Nuclear Regulatory Commission is going to take care of this problem."

Not sure what she means, since we're looking to work with the state to solve this problem. She further stated that the state is ready to see some movement on the issue, and that it was time to clean up this mess.

Mike Fliegel has a copy of the article if you want it.

Joe

CC: Charlotte Abrams, Dan Martin, Frank Miraglia, J...

T/4

370 - 17th Street, Suite 3140
Denver, CO 80202
Phone: (303) 629-2436
Fax: (303) 629-2445

Joe
FXX
K

Atlas Corporation

Fax

To: N. King Stablein
NRC

From: RICHARD BLUBAUGH

Fax: 301-415-5397

Date: April 15, 1999

Phone: 301-415-7238

Pages: 3

Re: License Amendment

CC: Harvey Sender

License Condition # 41

Tony Thompson

☐ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

King Stablein:

Please let me know immediately if the enclosed letter is unsatisfactory. Otherwise, I will look forward to receiving soon the amended license.

R. Blubaugh *RB*

Maria/Stuart,
We welcome
any observations
you might care to
make.
Ling

Ling,
Does C.C.C. have
any thoughts?
Joe

T/5



State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY OFFICE OF THE EXECUTIVE DIRECTOR

Michael O. Leavitt
Governor

Dianne R. Nielson, Ph.D.
Executive Director

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September 24, 1999

John Surmeier, Chief
Uranium Recovery Branch
Division of Waste Management
Nuclear Regulatory Commission
Washington DC 20555-0001

Dear Mr. Surmeier:

This is to confirm the concurrence of the state of Utah, as stipulated in the Atlas bankruptcy agreement, with the choice of Dames and Moore as the Trustee for the Atlas Uranium Mill Tailings Site in Moab, Utah. This concurrence is given in conjunction with the State's approval of the revised language in the Trust Agreement which was forwarded to the State on August 6, 1999.

We appreciate the cooperative effort of your staff to work with us to come to this concurrence. We look forward to working with the NRC and Dames and Moore to conduct appropriate interim measures that will lead to eventual cleanup of the site.

Best regards,

Dianne R. Nielson, Ph.D.
Executive Director

cc: Fred Nelson, Attorney General's Office



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

September 24, 1999

Mr. Joseph Webster
Deputy Regional Director
U.S. Fish and Wildlife Service
Post Office Box 25486
Denver Regional Center
Denver, CO 80225-0486

SUBJECT: STATUS ON U.S. NUCLEAR REGULATORY COMMISSION'S
IMPLEMENTATION OF THE BIOLOGICAL OPINION FOR THE ATLAS
TAILINGS RECLAMATION

Dear Mr. Webster:

By letter dated May 20, 1999, the U.S. Fish and Wildlife Service (FWS) wrote the U.S. Nuclear Regulatory Commission (NRC) with respect to the final biological opinion (FBO) issued July 29, 1998, for the Atlas uranium mill tailings reclamation. In that letter, FWS requested the NRC to reinstate consultation in a timely manner in the event that it concluded that compliance with the FBO cannot be assured. As you will recall, the NRC orally agreed with the FWS request and further acknowledged the obligation to initiate consultation on any revised plan to clean up existing ground-water contamination. We have proceeded on that understanding, and because we have not come to a conclusion that the reasonable and prudent alternative and reasonable and prudent measures contained in the FBO cannot be met, we did not reply further. This week, on September 21, 1999, FWS, NRC, and the U.S. Department of Justice participated in a telephone conference on the status of the FBO. At that time FWS noted that it would be helpful to them to receive a letter outlining what has been done to date by NRC on the FBO, and what future actions are planned. That information follows.

During the preparation of the FBO those involved were aware of the precarious financial position of the Atlas Corporation, the NRC licensee for the Moab site. Since issuance of the FBO in July 1998, the Atlas Corporation filed for Chapter 11 bankruptcy protection. Although this bankruptcy could have the potential to affect securing adequate funds for the completion of reclamation activities, as discussed later, the NRC does not have any information to date that would show the FWS recommendations in the FBO are unattainable. In fact, at present, the NRC has aggressively taken a number of steps to ensure complete implementation of the FBO. These steps include the following.

1. Following receipt of the FBO, the NRC conducted additional independent analyses needed to support publication of the Final Environmental Impact Statement (FEIS), including whether the proposed reclamation could be found acceptable. This work was started in August 1998, and was completed in December 1998.

T/7

J. Webster

-2-

2. After completing the analysis discussed above, the NRC moved forward on issuing the FEIS. The FEIS was published in March 1999, and incorporated discussion of the reasonable and prudent alternative and reasonable and prudent measures' requirements.
3. After waiting the mandatory 30 days for the U.S. Environmental Protection Agency to review the FEIS, the NRC issued the final agency action on the proposal in May 1999. This action was an amendment to the Atlas license approving the surface reclamation work consistent with the application submitted by Atlas but with several additional requirements imposed. Included are several requirements from the FBO related to the cleanup of existing ground-water contamination and other issues relevant to endangered species. These additional requirements include: (a) dewatering of the tailings, with a plan to be submitted by December 1999; (b) submission of a revised ground-water corrective action program by May 2000; (c) submission of an analysis showing that the Colorado River standard for ammonia will be met (the submittal to be completed before the start of placement of the final radon barrier which will not occur for several years); (d) submission of a design, for NRC approval after consultation with FWS, for the reconfiguration of Moab Wash; and (e) compliance with FBO requirements related to protection of the southwestern willow flycatcher. A copy of the amended license is enclosed for your information.
4. In parallel to the technical work described above, the NRC has been cooperating with the Assistant U.S. Attorney in Denver, Colorado on the Atlas bankruptcy. As part of this effort, the NRC and the Assistant U.S. Attorney negotiated a settlement that brings \$5.25 million of cash and additional assets that could amount to several million dollars into a reclamation trust fund. This fund will be used by a trustee, selected by the NRC and concurred upon by the State of Utah. The trustee will become responsible for site reclamation and will be able to receive reimbursement funds from the U.S. Department of Energy for work completed to accomplish this goal.
5. Early this summer, the NRC accepted proposals from organizations desiring to become the trustee for the Atlas site. On August 5, 1999, the NRC selected the trustee in consultation with the State of Utah, and NRC is ready to move expeditiously to appoint that trustee. On September 24, 1999, NRC received concurrence on the trustee from Utah, and we have begun the process of finalizing the selection. Until we received the formal concurrence from the State of Utah, the NRC was unable to officially appoint the trustee, a corporation which, alone, can begin addressing the technical activities such as dewatering the tailings and revising the ground-water corrective action program that will benefit the endangered species in the Colorado River. The NRC, like the FWS, is anxious to get the actions started that will protect the fish. Until the process of naming a trustee for the site is complete, Atlas Corporation remains the NRC licensee and the organization nominally responsible for site reclamation. Once the trustee is selected, it can begin to work on the most important near term activity to protect the endangered species, tailings dewatering, with the aim of completing it by July 2002, as required in the license.

J. Webster

-3-

Future actions the NRC has planned will continue to show our commitment to fulfilling the recommendations in the FBO. First, after we receive formal concurrence from the State of Utah on our trustee selection, we will finalize the trust agreement. In addition, we will issue an order to the trustee outlining what must be done at the site. This order will impose those conditions from the Atlas license that the NRC concludes should be required to ensure acceptable site reclamation. The conditions imposed through the order will include the recommendations adopted from the FBO.

Second, upon receiving the tailings dewatering plan from the trustee, the NRC will evaluate that to determine if it is acceptable. Consistent with the FBO, the NRC staff recognizes the need to complete dewatering in 30 months. Third, upon receiving the revised ground-water corrective action plan from the trustee, the NRC will review that revised plan to determine if it is acceptable in terms of both NRC regulations and the reasonable and prudent alternative and reasonable and prudent measures. Because that effort represents a new federal action, the NRC expects to consult with the FWS. As we agreed in our meeting on May 22, 1998, this consultation could be simply an exchange of letters if the revised ground-water plan is consistent with the reasonable and prudent alternative and reasonable and prudent measures. Once the revised ground-water plan is received, the NRC will have a better understanding of the situation related to ground-water cleanup. This includes a determination of whether sufficient resources would be available to achieve cleanup consistent with the time frames in the FBO.

Until we receive the revised plan, NRC has no basis to conclude that the reasonable and prudent alternative and reasonable and prudent measures cannot be met, and thus concludes that a reinitiation of consultation is unnecessary at this time and may be counterproductive in that it will divert scarce resources from other needed activities with no beneficial outcome likely.

I trust that this letter provides you with a sufficiently comprehensive update on the Atlas situation. In order to ensure a continued flow of information between NRC and FWS, I would suggest that you and I talk monthly on the status. If you have any questions, please feel free to contact either me or John Surmeier, Chief, Uranium Recovery and Low-Level Waste Branch. I can be reached at (301) 415-6708, and Mr. Surmeier can be reached at (301) 415-7238.

Sincerely,



Joseph J. Holonich, Deputy Director
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosure: Atlas license

cc: See attached list

J. Webster

-4-

Addressees for Letter Dated: _____

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Paul Boudreaux
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U.S. NUCLEAR REGULATORY COMMISSION

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

1. Licensee Atlas Corporation 370 17th Street, Suite 3140 Denver, Colorado 80202-5631 [Applicable Amendment: 9]	3. License Number SUA-917, Amendment No. 31 4. Expiration Date Until terminated 5. Docket or Reference No. 40-3453	
6. Byproduct, Source, and/or Special Nuclear Material Natural Uranium	7. Chemical and/or Physical Form Any	8. Maximum Amount that Licensee May Possess at Any One Time Under This License Unlimited

9. Authorized place of use: The licensee's uranium milling facility located at Moab, Utah.

10. The licensee is hereby authorized to possess byproduct material in the form of uranium waste tailings and other uranium byproduct waste generated by the licensee's milling operations authorized by this license.

11. For use in accordance with statements, representations, and conditions contained in Sections 4.2.4, 5, and 7 (except 5.5.10 and 5.5.11), Appendices 5.3, 5.5.6, and 6.0 of the licensee's renewal application dated May 31, 1984, and submittals dated December 17, 1984, January 18, and June 5, 1985, and September 16, 1992. The mill site organizational structure shall be maintained as presented by submittal dated May 13, 1991, as revised by letter dated March 5, 1993.

Whenever the word "will" is used in the above referenced sections, it shall denote a requirement.

[Applicable Amendments: 12, 15, 18, 20]

12. DELETED by Amendment No. 18.

13. DELETED by Amendment No. 18.

14. The licensee is hereby exempted from the requirements of Section 20.1902(e) of 10 CFR 20 for areas within the mill, provided that all entrances to the mill are conspicuously posted in accordance with Section 20.1902 and with the words, "Any area within this mill may contain radioactive material."

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15. The results of sampling, analyses, surveys and monitoring; the results of calibration of equipment; reports on audits and inspections; all meetings and training courses required by this license; and any subsequent reviews, investigations, and corrective actions, shall be documented. Unless otherwise specified in NRC regulations, all such documentation shall be maintained for a period of at least 5 years.

16. DELETED by Amendment No. 18.

17. The licensee shall implement a compliance monitoring program containing the following:

A. Sample wells AMM-1, AMM-2 and AMM-3 on a quarterly frequency for chloride, nitrate, sodium, sulfate, pH, TDS and water level, and on a semiannual frequency for chromium, gross alpha, lead, molybdenum, nickel, radium-226 and 228, selenium, silver, uranium and vanadium. Additionally, the upper completion of well ATP-2 shall be sampled on a quarterly frequency for chloride, nitrate, sodium, sulfate, pH, TDS and water level.

B. Comply with the following ground-water protection standards at point of compliance wells AMM-2 and AMM-3, with background being recognized as well AMM-1.

chromium = 0.08 mg/l, gross alpha = 33 pCi/l, molybdenum = 0.05 mg/l, nickel = 0.06 mg/l, radium-226 and 228 = 5 pCi/l, selenium = 0.01 mg/l, vanadium = 0.04 mg/l and uranium = 4.0 pCi/l.

C. Implement a corrective action program that includes pumping dewatering wells PW1, PW4, PW6, PW7, PW8, PW9, and PW12 during periods of nonfreezing weather. Sufficient data shall be collected, for the constituents listed in Subsection A, to determine the mass of constituents that have been recovered by the corrective action program.

The licensee shall on a semiannual frequency, submit a ground-water monitoring report as well as submit a corrective action program review by December 31, of each year, that describes the progress towards attaining ground-water protection standards.

[Applicable Amendments: 3, 4, 8, 11, 13, 19]

18. Released equipment or packages from the restricted area shall be in accordance with the document entitled, "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of License for Byproduct or Source Materials" dated September, 1984. [Applicable Amendment: 18]

19. DELETED by Amendment No. 18.

20. The licensee shall conduct and document at least five inspections of the tailings embankment per week (one per day, 5 days per week) and shall immediately notify the NRC, by telephone and telegraph, of any failure to the tailings dam which could result in a release of radioactive materials and/or of any unusual conditions which if not corrected could lead to such failure. This requirement is in addition to the reporting requirements of 10 CFR 20.

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[Applicable Amendment: 18]

21. A. The licensee shall decommission the Moab Mill facilities in accordance with policy and procedures described in submittals dated November 27, 1987, and March 29, and May 13, 1988.
- B. The licensee shall submit soil sampling criteria, including radium-226/gamma correlations at least 60 days prior to conducting soil sampling as a part of the mill decommissioning process.
- C. The licensee shall submit decontamination and decommissioning reports within 60 days of completion of the decontamination and decommissioning activities.
- D. The reports required by this condition shall include, as a minimum, the following information:
- (1) Employee exposure records including internal exposure time weighted calculations.
 - (2) Bioassay results.
 - (3) Inspection log entries and inspections.
 - (4) Training program activities, including safety meetings.
 - (5) Radiological survey and sampling data.
 - (6) Cross section drawings of all disposal areas and the proposed interim cover.

[Applicable Amendments: 3, 15]

22. Occupational exposure calculations shall be performed and documented within 1 week of the end of each regulatory compliance period as specified in 10 CFR 20.103(a)(2) and 10 CFR 20.103(b)(2). Routine samples taken in airborne ore dust and yellowcake areas shall be analyzed in a timely manner to allow exposure calculations to be performed in accordance with this condition.

Non-routine samples taken in ore dust and yellowcake areas shall be analyzed and the results reviewed by the Radiation Control Coordinator (RCC) within 2 working days after sample collection.

23. Standard written procedures shall be established and maintained for all activities involving radioactive materials that are handled, processed or stored. Written procedures shall be established for nonoperational (nonprocessing) activities to include in-plant and environmental monitoring, bioassay analyses, and instrument calibrations. Up-to-date copies of all written procedures shall be kept in the applicable work stations to which they apply.

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All written procedures, shall be reviewed and approved in writing by the RCC before implementation and whenever a change in procedure is proposed to ensure that proper radiation protection principles are being applied. The RCC shall perform a documented review of all existing procedures at least annually.

[Applicable Amendment: 18]

24. The personnel contamination surveys conducted, in accordance with Section 5.5.5.2 of the application, shall be documented and maintained. In addition, the licensee (RCC or qualified alternate) shall perform spot personnel surveys for alpha contamination at least quarterly on employees leaving the restricted area.
25. The licensee shall use a Radiation Work Permit (RWP) for all nonroutine work not covered by an existing procedure where the potential for significant exposure to radioactive materials exists. The RWP shall be approved by the RCC or an alternate, qualified by way of specialized radiation protection training, and shall at least describe the following:
- A. The scope of work to be performed and the potential radiological hazards.
 - B. Any precautions necessary to minimize worker exposure to radioactive materials.
 - C. The radiological monitoring and sampling necessary prior to, during, and following completion of the work in order to assess any potential exposures.
26. Notwithstanding the representations in Appendix 5.3 to the renewal application, the licensee shall develop and implement procedures to ensure that visitors and contractors receive instruction and training in accordance with Section 19.12 of 10 CFR 19, prior to entering any restricted area.
27. The existing on-site catchment basin west of the S-X units shall be maintained in a condition and with enough remaining available capacity to assure the collection of any spillage of chemicals from hazardous chemical storage tanks within the graded area. Any storage tanks containing hazardous chemicals which are not located within the graded area shall be surrounded by individual containment dikes capable of containing all leakage.
28. Notwithstanding the representations in Section 5.5.5 of the licensee's application, the licensee shall conduct weekly alpha contamination surveys of lunch rooms and monthly surveys of change rooms, shower facilities and offices when they are in use.
- [Applicable Amendment: 18]
29. A copy of the report documenting the annual ALARA audit in accordance with Section 5.1.4 of the renewal application dated May 31, 1984, shall be submitted to the NRC, for review within 30 days of completion of the audit report.

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30. In addition to the tailings embankment surveillance and inspection program specified in Section 4.2.4 of the licensee's renewal application dated May 31, 1984, the licensee shall comply with the following:
- A. Notwithstanding any statements to the contrary, the professional responsible for the annual technical evaluation report shall ensure that all field inspectors are trained to recognize and assess signs of possible distress or abnormality.
 - B. All routine inspection reports shall be dated and maintained on file at the mill site for use in developing the annual report.
 - C. The results of ground-water sampling and piezometer and pond level measurements shall be maintained in graphical form and on file at the mill site for use in developing the annual report. The licensee shall adhere to commitments made in their July 8, 1991, submittal modifying the number of piezometers monitored.
 - D. The annual technical evaluation report shall include an assessment of the hydraulic and hydrologic capacities, water quality and structural stability of the tailings impoundment.
 - E. A copy of each annual technical evaluation report shall be submitted to the NRC, within one (1) month of its completion.
- [Applicable Amendment: 15]
31. In addition to the requirements in Section 5.2 of the renewal application, the Radiation Control Coordinator (RCC) shall have the minimum education, training, and experience as detailed in Section 2.4.1 of Regulatory Guide 8.31 dated May 1983. [Applicable Amendment: 18]
32. Radiation survey instruments shall be calibrated at least semiannually or at the manufacturer's suggested interval, and after each repair, whichever is sooner. All radiation survey instruments shall be checked for proper operation using a radiation check source prior to each day's use. Portable air sampling equipment shall be calibrated after repair and at least quarterly or at the manufacturer's suggested interval, whichever is sooner. Flow rates on portable samplers shall be checked and documented prior to each day's use. Fixed continuous air samplers shall be calibrated after repair and at least quarterly or at the manufacturer's suggested interval, whichever is sooner. Flow rates on fixed continuous air samplers shall be checked each time the sampling head is changed.
33. The licensee shall implement an interim tailings stabilization program as specified in the March 16, 1987 submittal. In addition, this program shall include written procedures which are of sufficient detail to describe inspection methodologies, management notifications and implementation of corrective actions to assure compliance to Criterion 8 of 10 CFR 40, Appendix A. As a minimum,

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the licensee shall perform at least weekly, a documented inspection to assure the effectiveness of the control methods used. Corrective actions taken shall be documented in response to inspection findings. Corrective actions shall be completed within 30 days unless a longer period is approved in writing by the NRC.

34. The licensee is authorized to dispose of byproduct material contaminated solid wastes generated at the Moab Mill in the sump collection pond as described in the licensee's submittal dated February 29, 1984.

35. Notwithstanding representations made in Section 4.3 of the renewal application the licensee shall not dispose of materials other than uranium mill tailings, spent resins, raffinate, vanadium waste residues, liquids or residues contained in the catchment basin described in Condition No. 27, or liquid sanitary wastes in the tailings pond, without the specific authorization of NRC. If liquid sanitary wastes are discharged to the tailings pond, written authorization shall first be obtained from the Utah Bureau of Water Pollution Control. A copy of the written authorization shall be submitted to NRC prior to the discharge of the liquid sanitary waste.

The licensee shall be permitted to discharge as necessary any liquids or solids to the tailings impoundment from the catchment basin as described in License Condition No. 27 that are generated during the decommissioning phase of the mill.

[Applicable Amendment: 18]

36. DELETED by Amendment No. 18.

37. Reclamation phase modifications to Moab Wash shall be as specified in the "Pilot Channel" option of the licensee's submittal dated October 13, 1983 with the following modifications:

- A. The pilot channel bottom shall be sloped at a 1% grade away from the tailings pile (i.e., to the north).
- B. Excavation material shall be used to backfill the entire length of the existing Moab Wash channel, with the fill sloped away from the tailings pile. Any remaining excavation material shall be used to construct a berm on the south side of the pilot channel to increase channel capacity.

In addition, operational phase modifications to Moab Wash shall be maintained in accordance with the licensee's submittal dated October 26, 1982.

38. Mill tailings other than samples for research shall not be transferred from the site without specific prior approval of the NRC. The licensee shall maintain a permanent record of all transfers made under the provisions of this condition.

39. Atlas shall, in accordance with submittals dated February 25 and June 29, 1987, develop methods and procedures prior to reclamation, to ensure that:

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- A. The entire area of contaminated soil southeast of the tailings impoundment, consisting of approximately 6.6 acres with an estimated volume of 25,000 cubic yards, is placed in the tailings pond and otherwise ensure that the entire area is decontaminated consistent with 10 CFR Part 40, Appendix A, Criterion 6.
- B. The entire area west of State Highway No. 279 identified as exceeding Ra-226 levels provided in 10 CFR Part 40, Appendix A, Criterion 6, shall be removed and placed in the tailings pond prior to final reclamation. By our letter dated February 25, 1987, background for the area west of State Highway No. 279 is 5.5 pCi/gm Ra-226.
- C. Records of all surveys and soil analyses of the section southeast of the tailings impoundment and west of State Highway No. 279 shall be maintained until the NRC authorizes their disposal.
40. DELETED by Amendment No. 18.
41. The licensee shall reclaim the tailings disposal area in accordance with the October 1996 submittal entitled "Final Reclamation Plan, Atlas Corporation Uranium Mill and Tailings Disposal Area" and revisions thereof, with the following modifications:
- A. The licensee shall commence dewatering the tailings in conformance with the U. S Fish and Wildlife Service final biological opinion (FBO) of July 1998, Terms and Conditions 1.a. The licensee shall provide a design for the dewatering by December 31, 1999. The design should be such that dewatering can be completed by July 1, 2002.
- B. The licensee shall provide, by May 1, 2000, a revision to the corrective action program identified in license condition 17.C. that will meet ground-water standards within 7 years from the date of approval by NRC.
- C. Before commencing construction of the final radon barrier, the licensee shall provide analyses, appropriately supported by necessary data, showing that the ammonia standards identified in item 2. of the reasonable and prudent alternative of the FBO will be met over the design life of the reclamation.
- D. Before commencing the reconfiguration of Moab Wash, the licensee shall provide a design that NRC, after consultation with FWS, finds acceptable to compensate for the loss of 0.5 acre of critical habitat, in conformance with item 5. of Terms and Conditions of the FBO.
- E. Comply with item 6. of Terms and Conditions in the FBO by:
- (1) Monitoring for southwestern willow flycatcher
 - (2) Implement construction activities in such a way as to minimize loss of southwestern willow flycatcher habitat and revegetate disturbed area with willow plantings.
- F. Before commencing construction activities, the licensee shall obtain NRC approval of a plan to implement the following mitigative measures identified in the FEIS:

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- (1) Minimization of emissions of fugitive dust during reclamation (Section 4.1.7).
- (2) Spill prevention and control and erosion control applicable to the Atlas site and borrow areas (Section 4.5.2.6).
- (3) Interception and storage of sediment-and contaminant-laden runoff through use of adequate drainage control, retention, and treatment ponds, silt fences, and other means as necessary (Section 4.5.2.6).
- (4) Avoidance of major earth-moving operations (such as the relocation of Moab Wash) during periods of high thunderstorm potential where and when feasible (Section 4.5.2.6).
- (5) Avoidance of siting potential borrow areas immediately adjacent to streams (Section 4.5.2.6).
- (6) A survey by a qualified botanist to determine if Jones cycladenia is present in the vicinity of the proposed Kane Creek quarry site before any activities are initiated at the site. If the species is present, the licensee would be required to develop appropriate mitigative measures in consultation with the FWS to ensure that populations are protected from disturbance (Section 4.6.4.1).
- (7) Limitations on the use of the Potash quarry site to the December through February period to avoid impacting recreational use of the Potash boat ramp (Section 4.7.3.2).
- (8) Topographic and vegetative restoration of borrow areas as required by the State of Utah Division of Oil, Gas and Coal Mining (Section 4.5.2.6 and 4.7.4.3).

[Applicable Amendment: 18, 30]

42. The licensee shall maintain an NRC-approved financial surety arrangement, consistent with 10 CFR 40, Appendix A, Criteria 9 and 10, adequate to cover the estimated costs, if accomplished by a third party, for decommissioning and decontamination of the mill and mill site, for reclamation of any tailings or waste disposal areas, ground-water restoration as warranted and the long-term surveillance fee. Within 3 months of NRC approval of a revised reclamation/decommissioning plan, the licensee shall submit, for NRC review and approval, a proposed revision to the financial surety arrangement if estimated costs in the newly approved plan exceed the amount covered in the existing financial surety. The revised surety shall then be in effect within 3 months of written NRC approval.

Annual updates to the surety amount, required by 10 CFR 40, Appendix A, Criteria 9 and 10, shall be submitted to the NRC at least 3 months prior to the anniversary date which is designated as December 31 of each year. If the NRC has not approved a proposed revision to the surety coverage 30 days prior to the expiration date of the existing surety arrangement, the licensee shall extend the existing surety arrangement for 1 year. Along with each proposed revision or annual update, the licensee shall submit supporting documentation showing a breakdown of the costs and the basis for the cost estimates with adjustments for inflation, maintenance of a minimum 15 percent contingency fee, changes in engineering plans, activities performed, and any other conditions affecting estimated costs for site closure. The basis for the cost estimate is the NRC approved reclamation/decommissioning plan or NRC approved revisions to the plan. The

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previously provided guidance entitled, "Recommended Outline for Site Specific Reclamation and Stabilization Cost Estimates," outlines the minimum considerations used by the NRC in the review of site closure estimates. Reclamation/decommissioning plans and annual updates should follow this outline.

Atlas' currently approved surety instrument, Performance Bond No. 5652 issued by the Acstar Insurance Company of New Britain, Connecticut in favor of the NRC, shall be continuously maintained in an amount no less than \$6,500,000 for the purpose of complying with 10 CFR 40, Appendix A, Criteria 9 and 10, until a replacement is authorized by the NRC.

The Licensee shall maintain a Standby Trust (Trust) arrangement for the benefit of NRC. The currently established Trust is with Norwest Bank of Colorado N.A.

[Applicable Amendments: 5, 14, 16, 22, 24]

43. Prior to termination of this license, the licensee shall provide for transfer of title to byproduct material and land, including any interests therein (other than land owned by the United States or the State of Utah), which is used for the disposal of such byproduct material or is essential to ensure the long term stability of such disposal site to the United States or the State of Utah, at the State's option.
44. DELETED by Amendment No. 18.
45. Before engaging in any activity not previously assessed by the NRC, the licensee shall prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity may result in a significant adverse environmental impact that was not assessed, or that is greater than that assessed in the Final Environmental Statement (NUREG-0453), the licensee shall provide a written evaluation of such activities and obtain prior approval of the NRC for the activity.
46. Prior to disturbing any presently undisturbed soils for mill related activities (including borrow areas for tailings reclamation cover) in the future, the licensee shall have an archeological survey conducted of the site(s) to be disturbed. The Utah State Department of Development Services and the U.S. Department of the Interior shall be contacted by the licensee prior to the survey to provide assistance or comment in planning such a survey. The completed survey shall be submitted to the NRC for review and approval to proceed prior to any disturbance of presently undisturbed areas.
47. The licensee shall conduct an annual survey of land use (grazing, residence, wells, etc.) in the area within two miles of the mill and submit a report of this survey annually to the NRC. This report shall indicate any differences in land use from that described in the licensee's previous annual land use report. The report shall be submitted by March 31 of each year.
48. The results of the effluent and environmental monitoring programs required by this license shall be reported in accordance with 10 CFR 40, Section 40.65 with copies of the report sent directly to the NRC. Data from the effluent and environmental monitoring program shall be reported in accordance with the format in the previously provided guidance entitled, "Sample Format For Reporting Monitoring Data."

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49. The licensee shall conduct an environmental and effluent monitoring program as specified in the renewal application in accordance with Table 5.5-8 during normal operations and Table 5.5-9 during periods of extended shutdown with the following modifications:
- A. Air particulate samples shall be analyzed for U-nat, Ra-226 and Th-230, quarterly.
 - B. The analysis of quality control samples shall be in accordance with Section 3 of Regulatory Guide 4.15.
 - C. Lower limits of detection utilized for sample analysis shall be in accordance with Section 5 of Regulatory Guide 4.14.
 - D. Soil and vegetation sampling shall be analyzed annually for Ra-226 and Pb-210.
 - E. Notwithstanding the ground-water monitoring specified in Tables 5.5-8 and 5.5-9, the licensee shall monitor the ground water as described in License Condition No. 17.
 - F. DELETED by Amendment No. 23.
- [Applicable Amendments: 1, 3, 4, 11, 23]
50. The licensee shall conduct a bioassay program in accordance with Section 5.5.4 of the renewal application with the following additions:
- A. Laboratory surfaces used for in-house bioassay analyses shall be decontaminated to less than 25 dpm alpha-(removable)/100 cm² prior to analysis of samples.
 - B. Anytime an action level of 15 ug/l uranium for urinalysis is reached or exceeded, the licensee shall document the corrective actions which have been performed in accordance with Revision 1 of Regulatory Guide 8.22, dated January 1987. This documentation shall be submitted to the NRC as part of the semiannual report required by 10 CFR 40.65 and Condition No. 48 to this license.
 - C. Anytime an action level of 35 ug/l for two consecutive specimens or 130 ug/l uranium for one specimen for urinalysis is reached or exceeded, the licensee shall document the corrective actions which have been performed in accordance with Revision 1 of Regulatory Guide 8.22. This documentation shall be submitted to the NRC, within thirty (30) days of exceeding the action level.
51. DELETED by Amendment No. 6.
2. A. Construction of a roadway toward the center of the tailings impoundment for use by mobile equipment in the application and inspection of binding agents for dust control and to provide access during initial reclamation activities, shall be in accordance with submittals dated July 14 and August 19, 1988.

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- B. Any proposed changes to the roadway or its uses, as described in the licensee's July 14 and August 19, 1988 submittals, shall require prior approval of the NRC, in the form of a license amendment.

[Applicable Amendment: 2]

53. The licensee shall conduct fence line inspections on a monthly basis in accordance with their submittal dated March 22, 1989.

[Applicable Amendments: 7, 18]

54. The licensee shall implement the program for radon attenuation specified in the submittal dated July 19, 1989.

[Applicable Amendment: 10]

55. The licensee shall complete site reclamation in accordance with the approved reclamation plan. The ground-water corrective action plan shall be conducted as authorized by License Condition No. 17 in accordance with the following schedules.

- A. To ensure timely compliance with target completion dates established in the Memorandum of Understanding with the Environmental Protection Agency (56 FR 55432, October 25, 1991), the licensee shall complete reclamation to control radon emissions as expeditiously as practicable, considering technological feasibility, in accordance with the following schedule:

- (1) Windblown tailings retrieval and placement on the pile - December 31, 2000.
- (2) Placement of the interim cover - Complete.
- (3) Placement of final radon barrier designed and constructed to limit radon emissions to an average flux of no more than 20 pCi/m²/s above background - December 31, 2000.

- B. Reclamation, to ensure required longevity of the covered tailings and ground-water protection, shall be completed as expeditiously as is reasonably achievable, in accordance with the following target dates for completion.

- (1) Placement of erosion protection as part of reclamation to comply with Criterion 6 of Appendix A of 10 CFR Part 40 - December 31, 1999.
- (2) Projected completion of ground-water corrective actions to meet performance objectives specified in the ground-water corrective action plan - July 31, 2006.

- C. Any license amendment request to revise the completion dates specified in Section A must demonstrate that compliance was not technologically feasible (including inclement weather, litigation which compels delay to reclamation, or other factors beyond the control of the licensee).

NRC FORM 374A
(7-94)

U.S. NUCLEAR REGULATORY COMMISSION

PAGE

OF

PAGES

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number SUA-917, Amendment No. 31

Docket or Reference Number 40-3453

D. Any license amendment request to change the target dates in Section B above must address added risk to the public health and safety and the environment, with due consideration to the economic costs involved and other factors justifying the request such as delays caused by inclement weather, regulatory delays, litigation, and other factors beyond the control of the licensee.

[Applicable Amendments: 21, 25, 26, 27, 28, 29, 30]

56. Notification to NRC under 10 CFR 20.2202, 10 CFR 40.60, and specific license conditions should be made as follows:

Required written notice to NRC under this license should be given to: Chief, Uranium Recovery and Low Level Waste Branch, Division of Waste Management, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

Required telephone notification to NRC should be made to the Operations Center at (301) 816-5100.

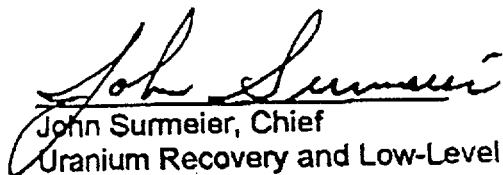
[Applicable Amendment: 24, 30]

57. The licensee and Mid-Atlantic Pipeline Company are authorized to cleanup a corridor up to 150 feet wide and 1400 feet long prior to laying pipe in the pipeline right-of-way and install the new gas pipeline within the restricted area in conformance with submittals dated April 20, 1999 and May 14, 1999, with the following restrictions and modifications:

- A. The NRC shall oversee and/or direct work in accordance with licensee radiation control procedures to ensure ALARA and radiation safety to all individuals in the restricted area.
- B. All contaminated material will be consolidated in the old ore storage area as a low profile pile, compacted, and stabilized with a cover of at least one foot of clean soil.
- C. Only clean fill material (5 pCi/g Ra-226 above background or less) will be used to backfill the pipeline trench. Prior to placement of the clean trench material as backfill, a gamma survey of the pile of fill material (i.e., the clean soil) will be conducted.

FOR THE NUCLEAR REGULATORY COMMISSION

Dated: 6/24/99


John Surmeier, Chief
Uranium Recovery and Low-Level
Waste Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards



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

September 27, 1999

Mr. Thomas Farrell
Vice President, General Manager
DOE - East
Dames & Moore
1 Blue Hill Plaza, Suite 530
Pearl River, NY 10965

Dear Mr. Farrell:

This is to inform you that the U.S Nuclear Regulatory Commission (NRC), with the concurrence of the State of Utah, has chosen Dames & Moore to become the Trustee for the Atlas Corporation's uranium mill site near Moab, Utah. The Trust is being created to administer the oversight, reclamation, and cleanup of the Atlas site. The creation of the Trust, however, is contingent upon approval by the United States Bankruptcy Court for the District of Colorado. NRC's decision to choose Dames & Moore is based primarily on your submittal of July 9, 1999, and representations made therein.

We are enclosing a copy of the Trust Agreement which has been modified slightly to accommodate some concerns raised by the State of Utah as the other beneficiary of the Agreement. We do not envision any further modifications to this document. We will contact you to finalize arrangements in the near future. In the interim, if you have any questions, please contact me or Myron Fliegel, the NRC project manager for the Atlas site. I can be reached at (301) 415-7238 and Dr. Fliegel at (301) 415-6629.

Sincerely,

A handwritten signature in cursive script, reading "John J. Surmeier", is written over the typed name.

John J. Surmeier, Chief
Uranium Recovery and
Low-Level Waste Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Encl: Trust Agreement

cc: Edward Jennrich, D&M
William Sinclair, State of Utah

T/8

MOAB MILL RECLAMATION TRUST FUND AGREEMENT

THIS MOAB MILL RECLAMATION TRUST AGREEMENT (the "Moab Reclamation Trust"), made this ____ day of _____, 1999, is entered into by and between Atlas Corporation (hereinafter referred to as "Atlas"), a Delaware corporation, as Trustor, and Dames & Moore, Trustee, for the benefit of the United States, on behalf of the U.S. Nuclear Regulatory Commission (NRC), and the State of Utah.

RECITALS

1. Atlas currently holds title to the Moab Mill Site, located in Grand County, Utah, on the northwest shore of the Colorado River, at the southern terminus of the Moab Canyon. The site is surrounded on the north and west sides by high sandstone cliffs; to the north and east is Moab Wash; to the east and south is the flood plain of the Colorado River; and, across the River, is Moab Marsh. The Moab Mill Site is currently subject to the requirements set forth in NRC Source Materials License No. SUA-917 (License). Decommissioning of the mill began in 1988.
2. On May 28, 1999, the NRC issued an Amendment to the License, which approves a final reclamation plan for the Moab Site. The Amendment includes license conditions to satisfy reasonable and prudent alternatives (RPAs) and reasonable and prudent measures (RPMs) outlined in the U.S. Fish and Wildlife Service final biological opinion (FBO) dated July 29, 1998, as required under the Endangered Species Act, 16 U.S.C. 1531 et. seq..
3. On September 22, 1998, Atlas filed a petition for relief under Chapter 11 of the Bankruptcy Code and since that date has been operating as a Debtor in Possession. The NRC has filed a claim in bankruptcy for estimated costs associated with further reclamation of the Moab Mill Site. The State filed a claim in bankruptcy for natural resource damage to the surface water and groundwater. In order to satisfy claims in bankruptcy arising from the Moab Mill Site, Atlas has entered into an agreement, "Moab Uranium Millsite Transfer Agreement" (hereinafter referred to as "Settlement Agreement"), with the NRC, the State of Utah, ACSTAR, and the Official Unsecured Creditors Committee. Pursuant to the Settlement Agreement, Atlas agrees to transfer the Moab Mill Site, along with other real and personal property and certain identifiable funds pursuant to the Settlement, to the Moab Reclamation Trust.
4. The Trustor intends that this Moab Reclamation Trust shall create a "qualified settlement fund" within the meaning of Section 1.468B of the Treasury Regulations.

NOW, THEREFORE, in consideration of the foregoing and the covenants and agreements provided herein: the Trustee and the Trustor agree as follows:

ARTICLE I

DEFINITIONS

Certain capitalized terms, which are not elsewhere defined herein, shall have the following meaning in the Moab Mill Reclamation Trust:

1.01 Capitalized Terms. For all purposes of this Trust, the following terms shall have the meanings set forth below:

"Code" shall mean the Internal Revenue Code of 1986, as amended, or any future codification of the federal revenue laws.

"Court" shall mean the Bankruptcy Court for the District of Colorado (or if no federal court has jurisdiction over the matter, a state or other court of competent jurisdiction).

"Atlas Corporation" or "Atlas" shall mean, for purposes of this Trust Agreement only, Atlas Corporation and its divisions, subsidiaries, affiliates, and successors (including any reorganized company under the Plan of Reorganization), and their respective directors, officers, employees, agents, and attorneys.

"Owner" shall mean the Trustee in his or her capacity as Trustee.

"Licensee" shall mean the Trustee, who will oversee the reclamation activities and be responsible for monitoring the Moab Mill Site pursuant to NRC Materials License No. SUA-917, the License Transfer Order, and this Trust Agreement.

"License" shall mean NRC Source Materials License No. SUA-917, originally issued by the Atomic Energy Commission to the Uranium Reduction Company in 1955 and modified, acquired by Atlas Corporation in 1962, attached as Exhibit A.

"Moab Mill Site" shall mean all that certain tract of land in Grand County, Utah, more fully described in Exhibit B, attached hereto and made a part hereof.

"Settlement Agreement" shall mean the "Moab Uranium Millsite Transfer Agreement" submitted to the court for approval on April 29, 1999, in In Re Atlas Corporation, Case Number 98-2331-DEC, (U.S. Bankruptcy Court, District of Colorado).

"License Transfer Order" shall mean the order issued by the NRC that transfers the License No. SUA-917 for Reclamation of Atlas Corporation Moab Mill, Utah, site.

"Trust" shall mean the Moab Mill Reclamation Trust.

"Trust Agreement" or "Agreement" shall mean this agreement establishing the Moab Mill Reclamation Trust.

"Trust Estate" shall mean all right, title and interest of the Trustee in and to any and all real or personal property held by the Trustee pursuant to this Trust, including without limitation the Moab Mill Site, Atlas' rights to water at the Moab land (listed as 6.3cfs from the Colorado River, Grand County, Utah, Water Right No. 01-40, Application 30032, Certificate 60111), and any and all notes, securities, cash, funds and/or other liquid assets or real property transferred to the Trustee by Atlas Corporation pursuant to the terms of the Settlement Agreement, or by any other person or entity, including without limitation any income or profits derived therefrom.

"Trust Fund" shall mean the Trust Estate (together with the income and/or interest therefrom) exclusive of real property, water rights and other interests in real property.

"Trust Real Property" shall mean the interest in real property transferred from Atlas to the Trustee, consisting of approximately 430 acres, located in Grand County, Utah, along with all buildings, structures, improvements, appurtenances, fixtures and easements transferred to the Trust pursuant to the Settlement Agreement.

"Title X Funds" shall mean funds reimbursed from the Department of Energy pursuant to Title X of the Energy Policy Act of 1992.

"State" shall mean the State of Utah.

1.02 Incorporation of Certain Definitions. Capitalized terms used herein without definition shall have the meanings ascribed to them in the Settlement Agreement.

ARTICLE II

NAME AND PURPOSE OF TRUST

2.01 Name. This Trust shall be known as the "Moab Mill Reclamation Trust."

2.02 Beneficiary. The Trust's receipt, holding and management of the Trust Estate shall be exclusively for the benefit and protection of the United States on behalf of the NRC, and the State, which shall be the sole beneficiaries of this Trust.

2.03 Trust Purposes.

(a) This Trust relates to the Moab Mill Site in Grand County, Utah. The purpose of this Trust is to permit final site closure and license termination consistent with Section 83 of the Atomic Energy Act (AEA) as amended 42 U.S.C. § 2113 and NRC regulations at 10 CFR Parts 20 and Part 40, including Appendix A, in anticipation of Atlas' inability to comply with these statutory and regulatory requirements. The purpose of this Trust is also to permit Atlas to

resolve the NRC's and the State's claims submitted in the bankruptcy proceeding for costs associated with reclamation of the Moab Mill Site pursuant to these requirements.

(b) This Trust is created and shall be operated exclusively to protect public health and safety and the environment and to carry out reclamation of the Moab Mill Site pursuant to the License, License Transfer Order and this Trust Agreement. In carrying out these purposes, the Trust shall comply with all Federal, State and local laws applicable to any entity operating within the State.

(c) Nothing in this Trust Agreement shall derogate from the NRC's or State's authority to have access to and take responsive action with regard to the Moab Mill Site as specified in the Settlement Agreement or as otherwise provided by law.

ARTICLE III **DUTIES OF THE TRUSTEE**

3.01 Trust Estate. The Trustee shall establish and administer the Trust Estate for the purposes set forth herein and as required by this Agreement.

3.02 Duties of the Trustee. The Trustee shall:

(a) receive and hold title to the Trust Real Property;

(b) implement the reclamation plan as contained in the License and License Transfer Order, pursuant to the following terms:

(1) Before undertaking any reclamation activity, the Trustee shall notify the NRC and the State of its intention to engage in such activity and provide an estimate of funds needed to perform the activity.

(2) The Trustee shall notify NRC and the State by certified registered mail no later than 180 days prior to the anticipated date that all contractual and other projected obligations will have reasonably exhausted the Trust Fund.

(3) When the Trust Fund is depleted the Trustee shall terminate all activities pending further order of the NRC pertaining to termination of the Trust and License and disposition of the Moab Mill Site pursuant to Section 83 of the AEA, 42 U.S.C. § 2113.

(c) to the extent deemed prudent by the Trustee, employ reasonable measures to control access to and prevent unauthorized entry upon, use of, or damage to the Trust Real Property;

(d) to the extent deemed prudent by the Trustee, insure the Trust Real Property against loss due to casualty or third party liability;

(e) receive all remaining assets of the Trust Estate distributed by Atlas pursuant to Section 3C of the Settlement Agreement, and use all reasonable efforts to secure all reimbursements of Title X Funds from the Department of Energy to which it is legally entitled, in accordance with the Settlement Agreement and the License Transfer Order.

(f) make distributions of monies in the Trust Fund as permitted under the Settlement Agreement, License Transfer Order, and this Agreement;

(g) consistent with the terms of the License, License Transfer Order and this Trust Agreement, enter into contracts for services with contractor(s) for the purpose of achieving final site closure, including but not limited to services pertaining to technical studies, regulatory analyses and submissions, reclamation activities, maintenance activities, and/or monitoring of the Moab Mill Site;

(h) invest and reinvest the assets of the Trust Fund pursuant to Article V of this Trust Agreement;

(i) comply with all relevant provisions of the Settlement Agreement and License Transfer Order.

(j) endeavor to use Trust Funds in the most efficient way possible. To that end, whenever it is feasible, the Trustee shall develop plans that will satisfy both NRC and State requirements to avoid waste and duplication of effort; and.

(k) engage in reclamation activities in order to achieve compliance with Federal and State requirements. Consistent with the terms and priorities of the License in license condition 41, the Trustee shall prepare and submit a revised groundwater corrective action program that addresses NRC and State requirements. The Trustee shall begin any groundwater corrective action activities that the NRC determines are needed to protect public health and safety and to fulfill the reasonable and prudent alternatives and the reasonable and prudent measures found in the U.S. Fish and Wildlife Service's final biological opinion. To the extent that Trust Funds are available after completion of surface reclamation and the above groundwater corrective action activities, the Trustee shall implement the remaining portions of the groundwater corrective action program.

ARTICLE IV

TRUSTEE'S POWERS

The Trustee shall have, in addition to those powers conferred by law or specified elsewhere herein and the general powers of the office, and without leave of court, the following powers, which powers shall be exercised in a fiduciary capacity, in the best interest of this Trust and in the sole discretion of the Trustee unless otherwise specified:

4.01 Reclamation of Moab Mill Site. Pursuant to the License Transfer Order, the Trustee is the licensee of the Moab Mill Site for the purposes of performing reclamation at said site. The Trustee has all powers necessary to carry out the terms of the License and the License Transfer Order, including the acceptance of any cash or property to be received from the Department of Energy for claims arising pursuant to Title X of the Energy Policy Act of 1992, and the acceptance of any cash or property from the sale of the Moab Mill Site water rights or uncontaminated or decontaminated portions of the Moab Mill Site, or funds or property from other sources provided without restrictions.

4.02 Payment of Expenses of Administration. To incur and cause to be paid any and all charges, taxes and expenses upon or connected with this Trust in the discharge of its fiduciary obligations.

4.03 Extension of Obligations and Negotiation of Claims. To renew or extend the time of payment of any obligations, secured or unsecured, payable to, or by this Trust, for as long a period or periods of time and on such terms as the Trustee shall determine; and to adjust, settle, compromise, abandon, contest and arbitrate monetary claims or demands in favor of or against this Trust, including claims for taxes, upon such terms as it deems advisable. Responsibility for the satisfaction of any judgments against the Trust resulting from conditions at or relating to the Trust Real Property which stem from the conduct of any former owner, tenant or licensee of the Trust Real Property shall rest solely with the Trust.

4.04 Additional Powers. The Trustee shall have the following powers which may be exercised without court approval:

- (a) To execute and deliver all appropriate instruments:
- (b) To sell at public or private sale, to exchange or otherwise dispose of any property, real or personal, for such consideration, in cash or on credit, with or without security and upon such other terms and conditions as the Trustee shall deem appropriate, without application to any court.
- (c) To record in the appropriate registry any instrument, including any certificate acknowledged by the Trustee as to any fact concerning the Trust Real Property; and any person without actual knowledge to the contrary may rely conclusively on the genuineness of any such instrument and on the correctness of any such certificate;
- (d) To make, execute, or acknowledge, and deliver any and all documents of transfer and conveyance and any other instruments that may be necessary or appropriate to carry out the powers herein granted:
- (e) To register any securities held in the Trust Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine

certificates representing such securities with certificates of the same issued held by the Trustee in other fiduciary capacities or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve Bank, but the books and records of the Trustee shall at all times show all such securities are part of the Trust Fund;

(f) To deposit any cash in the Trust Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(g) To compromise or otherwise adjust all claims in favor or against the Trust Estate and to participate in administrative proceedings and other litigation affecting the interests of the Trust, except that NRC Staff shall, to the extent permitted by law and regulation, participate in any lawsuits, requests for hearings or other proceedings challenging the issuance or implementation of the License or License Transfer Order.

4.05 Powers of Trustee to Continue. The Trustee may exercise any of such powers until such time as the Trust is terminated in accordance with Article IX of this Trust Agreement.

4.06 Persons Dealing with Trust. No person dealing with this Trust shall be required to see to the application of any money or property delivered to the Trustee, or to see that the terms and conditions of this Trust have been complied with. Every instrument executed or action taken by the person or entity appearing to be the Trustee shall be conclusive evidence that this Trust was in full force and effect when the instrument was delivered or the action was taken; that such person or entity was the Trustee; and that such instrument or action was valid and legally binding.

4.07 Reliance of Purchasers and Others. Every agreement, deed, or other instrument or document executed or action taken by the Trustee or any successor or additional Trustee, shall be conclusive evidence in favor of every person relying thereon or claiming thereunder that at the time of the delivery thereof or of the taking of such action this Trust was in full force and effect and that such instrument or document or action is valid, binding and legally enforceable. Any person dealing with the Trust Estate or the Trustee may always rely without inquiry on a certificate signed as aforesaid as to who is the Trustee or Trustees or the beneficiaries hereunder, or as to the authority of the Trustee to act, or as to the existence or nonexistence of any fact or facts which constitute conditions precedent to acts by the Trustee or which are in any other manner germane to the affairs of the Trust.

ARTICLE V
ESTABLISHMENT OF TRUST FUND

5.01 Establishment of Trust Fund. The Trust Fund shall be established upon receipt of assets by the Trust from Atlas pursuant to the Settlement Agreement.

5.02 Disbursements from the Trust Fund.

Disbursements from the Trust Fund are authorized:

- (a) for payment on a monthly basis of compensation to the Trustee as provided in Article VII of this Trust Agreement;
- (b) to make any tax payment required by law;
- (c) for administration of the Trust, including those activities required under the License, any amendments thereto, and the License Transfer Order, and to comply with all Federal, State and local laws applicable to any entity operating within the State;
- (d) for the purchase of comprehensive general liability insurance or other insurance naming the Trust as the sole beneficiary and of insurance covering the Trustee in his or her personal capacity for liability arising with respect to the Trust other than for gross negligence or breach of fiduciary duty on the part of the Trustee;
- (e) for payment of reasonable attorneys fees in the event that the Trustee is required to seek legal advice in order to implement the terms of this Trust, the Settlement Agreement or the License Transfer Order;
- (f) for payment of attorneys fees or other litigation expenses and costs of the Trustee in the event that the Trustee is sued in his or her personal capacity with regard to the Moab Mill Site or this Trust, but only to the extent that an existing insurance policy does not otherwise provide for payment or reimbursement of such fees, expenses or costs;
- (g) to employ attorneys, custodians, engineers, clerks, and other necessary agents or employees (including any firm or entity in which the Trustee may have an interest), as are reasonable in view of the scope and purposes of this Trust; and
- (h) for any other purpose requested by the Trustee and expressly approved in writing by the NRC and the State.

5.03 Preservation of Principal. Notwithstanding any other provision in this Agreement, until disbursement the assets of the Trust Fund shall at all times be held, managed and invested in a manner designed to preserve the principal of the Trust Fund. To this end, the assets of the Trust Fund shall be invested in the following investments:

(a) United States government obligations, whether invested in directly, or in the form of securities of, or other interests in, any open-end or closed-end investment company registered under the provisions of the Federal Investment Company Act of 1940, 15 U.S.C. § 80a-1 *et seq.*, if (i) the portfolio of the open-end or closed-end investment company is limited to direct obligations of the United States government and to repurchase agreements fully collateralized by United States government obligations, and (ii) the open-end or closed-end investment company takes delivery of that collateral, either directly or through an authorized custodian.

(b) Shares, share-free accounts, certificates of deposit, or investment certificates of any insured financial institution, *i.e.*, any bank, trust company, savings institution, or credit union chartered and supervised under state or federal law.

The application of any "prudent person" or "prudent investor" rule, and any duty to diversify, are hereby expressly waived to the extent inconsistent with Section 5.03.

ARTICLE VI

REPORT OF ACTIVITIES AND FILING OF TAX RETURNS

6.01 Bi-Annual Report. By January 15 and July 15 of each year, the Trustee shall render a written report to the NRC and the State of his or her activities for the prior six months. The report shall include a detailed itemization of all expenses paid in the prior six months, as well as a detailed report of the Trustee's activities with respect to the Trust Estate.

6.02 Reclamation Report. Upon reasonable request of either the NRC or the State, the Trustee shall render oral and/or written reports detailing the status of reclamation of the Moab Mill Site and the implementation of the License Transfer Order.

6.03 Copies of Reports. The Trustee shall provide copies of the bi-annual report to any person or entity who requests it in writing. The Trustee shall be entitled to recover from any such persons or entities (other than the NRC, the State, or Atlas, or its successors or assigns) the cost of providing copies of such reports, and the Trustee shall have no obligation to deliver such copies until such person or entity has reimbursed the Trustee for such costs.

6.04 Right to Compel Accounting. The NRC and the State, in their joint discretion, shall have the power to compel an accounting of the Trustee for the performance of the Trust.

6.05 Tax Treatment. Atlas intends this Trust to be construed as a non-grantor trust and a taxable entity to the extent any tax may be payable on income of the Trust. Atlas further intends for the Trust to be taxed as a qualified settlement fund under Section 468B of the Code and the regulations promulgated thereunder. Atlas recognizes that the United States has taken no position as to whether this trust is a qualified settlement fund. Notwithstanding the foregoing, the Trustee shall pay to Atlas an amount equal to any federal, state or local income taxes imposed on Atlas with respect to gains realized by or income of this Trust, and the Trustee shall make such payments to Atlas in ample time for Atlas to pay such additional taxes.

6.06 The Trustee shall file all necessary federal and state tax returns relating to gains and income earned in connection with trust assets, and shall file such information as is required pursuant to applicable Treasury Regulations.

ARTICLE VII

CONDITIONS OF TRUSTEE'S OBLIGATIONS

The Trustee accepts the Trust imposed upon him or her but only upon and subject to the following express terms and conditions:

7.01 Limitation of Liability. The Trustee's liability shall be limited pursuant to Article X of this Trust Agreement.

7.02 Reliance on Documentation. The Trustee shall be protected in acting in accordance with the provisions of this Trust upon any notice, requisition, request, consent, certificate, order, affidavit, letter, telegram or other paper or document reasonably believed by the Trustee to be genuine and to have been signed or sent by the proper person or persons.

7.03 Right to Demand Documentation. Notwithstanding anything else in this Trust, in the administration of the Trust, the Trustee shall have the right to demand before disbursing any cash or in respect of any action whatsoever within the purview of this Trust, any showings, certificates, opinions, appraisals, or other information, or action or evidence thereof, in addition to that required by the terms hereof which the Trustee reasonably believes to be necessary or desirable.

7.04 Trustee's Compensation. The Trustee shall receive reasonable compensation for his or her services hereunder from the Trust Fund as agreed in writing between the Trustee, the NRC and the State.

ARTICLE VIII

SUCCESSOR TRUSTEES

8.01 Resignation of Trustee. Any Trustee may resign by giving not less than 120 days written notice to the NRC and the State and such resignation shall take effect upon the

appointment of a successor Trustee. If any individual Trustee becomes mentally or physically unable to serve, a certificate so stating from such Trustee's then attending physician submitted to the NRC and the State shall constitute such Trustee's resignation. If any Trustee shall be dissolved or in the course of dissolution or liquidation, or otherwise unable to continue to act as Trustee, as finally determined by the NRC and the State, a certificate so stating from the NRC and the State shall constitute such Trustee's resignation. The Trustee's resignation shall be recorded with the Registry immediately prior to the recording of the successor Trustee's acceptance or upon the effective date of resignation, whichever is earlier.

8.02 Appointment of Successor Trustee. If the Trustee or any successor Trustee ceases to serve as Trustee, a successor Trustee may be appointed by the NRC and the State, pursuant to the procedures for the selection of a Trustee set forth in the Settlement Agreement, by an instrument in writing, signed by the NRC and the State, and delivered to the successor Trustee. In the event that no appointment of a successor Trustee shall be made pursuant to the foregoing provisions of this Article within sixty days after a vacancy shall have occurred, any interested person and/or any retiring Trustee may apply to the Court for the appointment of a successor Trustee, and the Court may thereupon, after such notice, if any, as it shall deem proper, prescribe or appoint a successor Trustee. Each successor Trustee shall qualify upon written acceptance attached hereto and recorded with the Registry and thereafter shall have the same powers, immunities and discretions as the original Trustee.

8.03 Transfer to Successor Trustee. Upon any successor Trustee's qualification, as provided in Article 8.02, such successor Trustee, without any further act, deed, or conveyancer shall become fully vested with all the estates, rights, powers, trusts, duties and other obligations hereunder of its predecessor; but such predecessor shall nevertheless, upon written request of the successor Trustee, execute and deliver an instrument transferring to such successor Trustee all the estates, rights, powers, and trusts of such predecessor; and every predecessor Trustee shall deliver all property of any kind held in trust by it to its successor; provided, however, that before any such delivery is required or made, all reasonable, customary and legally accrued fees, advances and expenses of any such predecessor Trustee shall be paid in full.

8.04 Merger or Consolidation of Trustee. Any corporation or association into which the Trustee or any successor Trustee may be merged or converted, or with which the Trustee or any successor Trustee may be consolidated, or any corporation or association resulting from any merger, conversion, or consolidation to which the Trustee or any successor Trustee shall be a party, shall be a successor Trustee under this Agreement without the execution or filing of any paper or any other act on the part of any of the parties hereto, notwithstanding anything to the contrary herein.

8.05 Performance of Trustee's Duties During Vacancy. If for any reason the Trustee's position should become vacant, the duties of the Trustee hereunder shall be carried out by an entity approved by the NRC, for a period not to exceed 180 days, pending the appointment of a

successor Trustee or the termination of the Trust, but the NRC and the State shall not during this period be deemed to be the Trustee.

8.06 Termination of Trustee by NRC and State. The NRC and the State may jointly terminate the Trustee at any time upon 21 days written notice. The Trustee will be paid all reasonable costs and fees incurred in the conclusion of its activities as a Trustee.

ARTICLE IX

DISTRIBUTION OF TRUST PROPERTY AND TERMINATION OF TRUST

9.01 Transfer of the Trust Real Property. The Trustee may, at any time and with the approval of the NRC in writing, transfer exclusively for public purposes all or any portion of the Trust Real Property or water rights, provided that the transferee agrees in writing to accept the transfer.

9.02 Termination of Trust. This Trust shall terminate under either of the following conditions:

(a) This Trust and the Trust Fund shall terminate upon the earlier of: (i) the date that is twenty-one (21) years after the date of the death of the last to die of a class consisting of the descendants of the members of the Utah State Legislature who served at any point during the Legislature's 1999 General Session who shall be living on the date this Trust is executed or (ii) the transfer of all of the Trust Real Property and water rights pursuant to Article 9.01 above and the Trustee's having complied with all of the relevant provisions of the Settlement Agreement, subject to the approval of the NRC and the State (which approval shall not be unreasonably withheld). Any balance of the Trust Estate, less final trust administration expenses, shall be distributed to a trust approved by the NRC and the State for use as the NRC and the State shall direct; or

(b) In the event that the Trust Real Property is not transferred and the Trust Fund has been exhausted, the Trust shall terminate.

ARTICLE X

LIABILITY TO THE TRUSTEE

10.01 No Liability. Notwithstanding anything else appearing herein, neither the United States, the State, nor Atlas shall be liable to the Trust, the Trustee, or any person claiming to be a beneficiary of this Trust, for any damages or other payments whatsoever arising out of matters related to the Trust or the Trust Estate (including without limitation the Trust Real Property), and the Trustee shall not have the power to sue the United States, the State, or Atlas in any forum except for the purpose of enforcing the terms of this Trust Agreement or the Settlement Agreement.

10.02 Personal Liability. The Trustee shall not be personally liable pursuant to this Trust Agreement except for gross negligence or willful acts or omissions in relation to the Trustee's duties hereunder.

10.03 Limitation on Financial Liability. No provision of this Trust shall require the Trustee to expend or risk his or her own individual funds or otherwise incur any financial liability in the performance of any of the duties of the Trustee hereunder, or in the exercise of any of the Trustee's rights or powers, nor to take any action pursuant to this trust, which in the reasonable judgment of the Trustee may conflict with any rule of law or with the terms of this Trust or with the terms of the Settlement Agreement or License Transfer Order and License.

ARTICLE XI

MISCELLANEOUS

11.01 Particular Words. Any word contained in the text of this Trust shall be read as a singular or plural and a masculine, feminine or neuter as may be applicable or permissible in the particular context. Unless otherwise specifically stated the word "person" shall be taken to mean and include an individual, partnership, association, trust, company or corporation.

11.02 Severability of Provisions. If any provision of this Trust or its application to any person or entity or in any circumstances shall be held to be invalid and unenforceable, the application of such provision to persons or entities and in circumstances other than those as to which it is invalid or unenforceable, and the other provisions of this Trust shall not be affected by such invalidity or unenforceability.

11.03 Governing Jurisdiction. This Trust shall be under the continuing jurisdiction of the United States Bankruptcy Court for the District of Colorado. Subject to the provisions of the Settlement Agreement, the validity, interpretation and performance of this Trust shall be governed by the laws of the State of Colorado, except that with regard to real property, water rights and other interests in real property that are located in the State of Utah, the validity, interpretation and performance of the Trust shall be governed by the laws of the State of Utah.

11.04 Modification. Atlas intends this Trust Agreement to be irrevocable; provided, however, that the Trustee may modify this Trust Agreement with the written approval of the NRC and the State, to the extent necessary (i) to comply with the provisions of 468B of the Code and the regulations thereunder, and (ii) to fulfill the purposes of this Trust as set forth in Article II.

11.05 Construction of Terms. In the event of any ambiguity or contradiction in the terms of this Trust, such terms shall be construed so as to conform to the provisions of the Settlement Agreement, where applicable, and so as to fulfill the purposes of this Trust.

ARTICLE XII
EFFECTIVENESS

12.01 Effectiveness. This Agreement shall not be deemed effective unless and until the United States Bankruptcy Court for the District of Colorado approves the Settlement Agreement. The effective date of this Trust Agreement shall be consistent with the effective date provisions of the Settlement Agreement.

IN WITNESS WHEREOF, Atlas Corporation, by its duly authorized officer, hereby sets its hand and seal as Trustor and Dames & Moore, by its duly authorized officer, hereby sets its hand and seal as Trustee.

ATLAS CORPORATION

By: _____ (Print Name and Title)

Date: _____

TRUSTEE

By: _____ (Print Name and Title)

Date: _____

From: John Surmeier
To: Maria Schwartz
Date: Mon, Oct 4, 1999 11:46 AM
Subject: Cost Information re Atlas Trustee

*Steve -
Some cost estimates 13
for Atlas reclamation*

Per your e-mail of 10/1/99, Joe Gray asked for some information related to the costs-fees for the Atlas trustee.

1. Reasonable (annual?) fee (profit) for the Atlas trustee to administer the trust

The June 22, 1999, letter sent to potential trustees asked for "an estimate of the costs for administering the trust on an annual basis." There were no detailed requirements on how that should be provided. Remember, we were directed to send out the letters quickly and not go through NRC contacting procedures or the specificity required in an RFP.

The responses varied - some specifically identified an administrative fee, while others provided total estimated costs per year. Dames & Moore did the latter, estimating \$245,000 for the first year and \$210,000 for subsequent years. The submittal identifies as costs for the first year of administration, costs associated with the establishment of the trust, investment of trust funds, establishment of trust operating procedures, and other miscellaneous start up activities. Costs for subsequent years include management of funds in the trust, assignment and oversight of technical work, disbursement of funds, preparation and submission of Title X claims, and working with DOE on Title X claims.

The Dames and Moore submittal does not explicitly identify a fee for acting as a trustee and when reviewing the submittal, We assumed that NRC would be billed for D&M time and expenses, much like law firms bill. We would expect that the hourly rates billed would be the standard D&M rates that have profit built in.

Maria, do you agree with the above characterization?

2. Estimates of costs of performing various activities

OGC asked for this in the spring. By e-mail of April 2 to Joe Gray, Mike Fliegel provided OGC a spreadsheet showing estimated costs and duration for various activities. There is no basis to change those estimates. The spreadsheet prepared by staff is attached.

John

CC: Daniel Gillen, Joseph Holonich, Myron Fliegel

T/9

Atlas Trustee tasks to be accomplished before initiating rec plan construction					
Item	Duration (months)	Cost (\$K)			
AMMONIA STD IN RIVER					Mike L
procure consultant	1	3			
orientation & data quantity/quality needs	1	25			
collect data	8	100			
develop & run model	2	50			
prepare report	2	50			
obtain NRC approval	1	10			
Total	15	238			
TAILINGS DEWATERING					Dan
procure consultant	1	3			
prepare design	2	15			
obtain NRC approval	1	10			
dewater pile	27	3900	15500	range	
prepare settlement report	1	10			
obtain NRC approval	1	10			
Total	33	3948			
GW CAP REVISION					Mike L
procure consultant	1	3			
orientation & data quantity/quality needs	2	50			
collect data	8	190			
develop & run model	3	75			
prepare CAP revision proposal	3	75			
obtain NRC & FWS approval	2	25			
Total	19	418			

[illegible]

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From: Myron Fliegel
To: John Surmeier, Joseph Gray, Joseph Holonich, Ma...
Date: Tue, Nov 16, 1999 12:00 PM
Subject: Re: Fwd: Time estimates II

Recognize that the half million through mid June does not include any technical work or analysis, nor does it include the expense of maintaining a presence at the site. Work that I would expect to be done in the first 6 months are preparation of a dewatering plan and initiation of dewatering construction, and data collection and initial analysis for the ground-water CAP revision and for the analysis of long-term ammonia in the river. Atlas estimated the cost of maintaining the site to be about \$325K per year.

Also, I put Eastin's figures on a spreadsheet and also put in rates from the GSA schedule. See attached.

Also, I spoke to contracts - they think it is reasonable to expect the labor rate for a category of staff (e.g., a principal or a senior manager) to remain constant regardless of the work. I am now in the process of discussing this with GSA. The MOBIS schedule does not encompass some of the tasks we would have PWC perform as a trustee, but again the labor rates for various categories of staff should not change.

>>> Stephanie Martz 11/16 10:53 AM >>>

Attached is the time estimate I received from Keith Eastin. As you will see, this looks like a huge chunk of money in a relatively short time frame.

T/110

Trustee Costs from July 1999 Submittals

CIMA Energy Corp.

Cost to administer Trust:

\$336,000 per year

Time and Cost to come up to speed:

1 month and \$28,000

Dames and Moore

Cost to administer Trust:

\$245,000 First year

\$210,000 subsequent years

Time and Cost to come up to speed:

8 weeks and \$120,000

Environmental Technologies Inc.

Cost to administer Trust:

\$92,500 per year plus direct costs

Time and Cost to come up to speed:

2 weeks and \$16,500

Harding Lawson Associates

Cost to administer Trust:

\$175,000 - \$200,000 per year (estimate of time and materials)

Time and Cost to come up to speed:

0 time and \$ (can begin immediately)

PricewaterhouseCoopers LLP

Cost to administer Trust:

To be negotiated but consistent with fees charged by other firms for similar services

Time and Cost to come up to speed:

Not provided

Pricewaterhouse Coopers 11/16 e-mail Costs

Cost to administer Trust:

\$53,360 per month or \$640,320 per year based Feb - June costs

Time and Cost to come up to speed:

2 months and \$288,000

Pricewaterhouse Coopers 11/16 e-mail hours and GSA rates

Cost to administer Trust:

\$37,580 per month or \$450,960 per year based Feb - June costs

Time and Cost to come up to speed:

2 months and \$183,370

IS

From: Joseph Gray
To: SGB1
Date: Wed, Nov 17, 1999 12:08 PM
Subject: Fwd: Telcon - Keith Eastin

T/11

From: Myron Fliegel
To: Daniel Gillen, Joseph Gray, Joseph Holonich, Ma...
Date: Wed, Nov 17, 1999 11:15 AM
Subject: Telcon - Keith Eastin

Eastin called me - he wanted some clarification on lawsuits in order to determine if he had to do anything soon. I gave him a brief summary of the status of the lawsuit against NRC & FWS, the lawsuit on 2.206, and the hearing petition. Eastin concluded PWC did not have to immediately get involved in any of them.

Eastin said that his experience with Sierra Club (Earthjustice) attorneys has been that their work is spotty. He also said that they are very concerned about winning and thus getting attorneys' fees paid and that they can become concerned about spending too much effort that might not be reimbursed.

He asked about the status of the trust agreement. I referred him to OGC. He said that he had sent cost estimates to Stephanie. I told him I had seen them but said nothing about our internal discussions of hourly rates or fee estimates.

I told Eastin of our plans to do an inspection the week of Dec 13 and have a public meeting in Moab Jan 12. Eastin said he will block out the time on his calendar. He said he was meeting with Diane Neilson, Utah DEQ director, tomorrow.

Eastin is also working on finding an RSO and hoped to have that settled by the end of the week. He is trying to talk to Dale Edwards (the current RSO), will consider Bob Pattison (who Blubaugh also suggested), and had gotten a call from Ken Baker of Environmental Restoration Group, who said that his company could supply a qualified RSO.

CC: Lisa Clark, Marjorie Nordlinger

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From: Joseph Holonich
To: John Surmeier, Joseph Gray, Maria Schwartz, Myr...
Date: Fri, Nov 19, 1999 11:54 AM
Subject: Re: Fwd: Time estimates II

Folks,

I just talked with Bill Sinclair from Utah. He said that the PWC estimates were not out of line with what he has seen in his contracting experience in solid waste disposal. I have yet to hear from EPA Denver, but will make another contact.

Joe

>>> Myron Fliegel 11/16 3:21 PM >>>

When we wrote to potential trustees in June, we asked for estimates of costs to administer the trust and the time and cost to come up to speed. All but PricewaterhouseCoopers provided that information. Attached are excerpts from my notes, which were created when I was reviewing the submittals. I have also added information based on the PWC e-mail using the hourly costs quoted and another version using the hourly rates from the GSA schedule. Based on comparisons to what the other submittals estimated for costs, I conclude that the PWC estimates are unreasonably high.

>>> Joseph Gray 11/16 1:51 PM >>>

It does look like a lot of money to get acquainted with the problem but some up front costs are to be expected in a "fresh-start" operation. What are the staff's views on the reasonableness of these estimates?

>>> Stephanie Martz 11/16 10:53 AM >>>

Attached is the time estimate I received from Keith Eastin. As you will see, this looks like a huge chunk of money in a relatively short time frame.

T/12

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From: Myron Fliegel
To: Lisa Clark
Date: Tue, Nov 23, 1999 3:16 PM
Subject: Atlas hearing

Lisa:

A suggestion was made that we request a delay in the hearing. Atlas Corp. has not been participating in the hearing because of the bankruptcy. A trustee (PricewaterhouseCoopers) has recently been named and the license should be transferred to PWC next month. PWC will have to live with whatever decisions come out of the hearing. It can be argued that PWC should have the opportunity to review the situation and decide if it wants to participate in the next phase of the process, and if so, to what extent. In order to do that, an extension for the next filing would have to be granted to allow PWC to review the hearing record, consult with counsel and make a decision. I would think at least 30 days and, if possible, 60 days would be reasonable.

Mike

CC: Daniel Gillen, Dennis Dambly, Joseph Holonich, ...

T/13



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

December 27, 1999

Mr. William Abington, Partner
PricewaterhouseCoopers, LLP
1201 Louisiana, Suite 2600
Houston, TX 77002-5678

SUBJECT: ORDER TRANSFERRING LICENSE NO. SUA-917 FOR THE ATLAS
CORPORATION MILL SITE NEAR MOAB, UTAH

Dear Mr. Abington:

Enclosed please find an Order from the U.S. Nuclear Regulatory Commission (NRC), transferring license number SUA-917 to the Moab Mill Reclamation Trust (Enclosure 1). As the trustee, you will be responsible for implementing the requirements of the Order and the license. The license is being reissued to reflect the change in the named licensee.

Enclosure 2 is the reissued license. If you have any questions, please contact me or Thomas Essig, the NRC Branch Chief responsible for this site. I can be reached at (301) 415-7800 and Mr. Essig can be reached at (301) 415-7238.

Sincerely,


William F. Kane, Director
Office of Nuclear Material Safety
and Safeguards

Enclosures: 1. Order transferring license
2. License

cc: See attached list

T/114

Addressees for Letter Dated December 27, 1999

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

Richard Blubaugh
Vice President of Environmental
and Government Affairs
Atlas Corporation
370 Seventeenth Street, Suite 3140
Denver, Colorado 80202

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

Keith Eastin, Director
Financial Advisory Services
PricewaterhouseCoopers LLP
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Dale Edwards
Radiation Protection Coordinator
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Grand County Library
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Moab, Utah 84532

Reed Harris
U.S. Fish and Wildlife Service
Lincoln Plaza, Suite 404
Salt Lake City, Utah 84115

Dave Hutchenson
Grand County Administrator
125 East Center
Moab, Utah 84533

Dan Kimball, Chief
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National Park Service
U.S. Department of Interior
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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
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Bart Leavitt
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Moab, Utah 84533

Al McLeod
Grand County Council
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Dave Mathes
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Harvey Merrill
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Marcia Moore
W0760
Bureau of Land Management
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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, Arizona 85701

Robert M. Reed, Supervisor
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Assessment Section
Oak Ridge National Laboratory
Bethel Valley Road
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Gabrielle Sigel
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William J. Sinclair, Director
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Joe Webster
U.S. Fish and Wildlife Service
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Denver Federal Center
134 Union, Suite 400
Lakewood, Colorado 80225-0486

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

ENCLOSURE 1

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)

ATLAS CORPORATION)
(Moab Mill Site, Utah))

License No. SUA-917)

Docket No. 40-3453

ORDER TRANSFERRING LICENSE NO. SUA-917
FOR THE MOAB MILL SITE

I.

Atlas Corporation (Atlas) is the holder of License No. SUA-917, which authorized the milling of uranium ore at Atlas' Moab Mill Site located in Moab, Utah. In accordance with Amendment No. 31 of the license, the license will not expire until the NRC terminates it.

II.

Atlas acquired the Moab Mill Site in 1962 from the Uranium Reduction Company (URC) which built milling facilities and began operations at the site in October 1956. The site is located in Grand County, Utah, on the northwest shore of the Colorado River, 5 km (3 miles) from the center of Moab, and can be accessed from U.S. Highway 191 north of Moab. The site encompasses 162 hectares (400 acres) on the outside bend of the Colorado River, at the southern terminus of the Moab Canyon. The site is surrounded on the north and west sides by

high sandstone cliffs. to the north and east is Moab Wash. to the east and south is the flood plain of the Colorado River; and, across the river, is Moab Marsh. The site generally slopes toward the Colorado River and Moab Wash. The uranium tailings from the Moab milling operations occupy about 53 hectares (130 acres) of land about 230 m (750 ft) from the Colorado River. Mill operations ceased in 1984. Decommissioning of the mill began in 1988. Construction of an interim cover for placement over the tailing disposal area began in 1989 and was completed in 1995.

III.

On September 22, 1998, Atlas filed a petition for relief under Chapter 11 of the U.S. Bankruptcy Code and since that date has been operating as a Debtor in Possession. After filing for relief, Atlas entered into settlement discussions with the U.S. Nuclear Regulatory Commission (NRC), the State of Utah, and other parties to the bankruptcy proceeding regarding the reclamation and disposition of the Moab Mill Site. Those discussions resulted in the development of the Moab Uranium Millsite Transfer Agreement (Settlement Agreement) which provides for transfer of the Moab Mill Site and the NRC license to a trust, the trustee of which would carry out remediation of the site pursuant to the terms and conditions of NRC License SUA-917, as amended on June 24, 1999. The terms and conditions of NRC License SUA-917 include the reasonable and prudent alternatives (RPAs) and reasonable and prudent measures (RPMs) in the U.S. Fish and Wildlife Service's final biological opinion (FBO) dated July 29, 1998 (included in the NRC's "Final Environmental Impact Statement Related to Reclamation of the Uranium Mill Tailings at the Atlas Site, Moab, Utah," (FEIS) NUREG-1531, published in March 1999), as well as mitigative measures developed by the NRC staff.

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The NRC, which had filed claims in bankruptcy against Atlas totaling about \$44 million, entered into the Settlement Agreement described in the preceding paragraph rather than involve the NRC in a protracted legal dispute over the limited funds that would be available for site remediation from the liquidation of the Atlas Corporation. The NRC believes that measures taken pursuant to the Settlement Agreement will permit remediation of the Moab Mill Site to proceed in a more timely manner and will maximize the amount of private funding available for remediation of the Moab Mill Site. The Settlement Agreement was submitted to the United States Bankruptcy Court for the District of Colorado for approval on April 29, 1999. On December 1, 1999, the Court issued an Order confirming the second amended plan of reorganization of the Atlas Corporation, which includes the Settlement Agreement.

Consistent with the terms of the Settlement Agreement, the NRC and the State of Utah undertook to identify a Trustee to administer the Moab Mill Reclamation Trust (Trust). PricewaterhouseCoopers LLP (Trustee) has agreed to undertake remediation of the Moab Mill Site, pursuant to 10 C.F.R. Part 40 under License SUA-917 and in accordance with the Trust established for such purposes. The NRC has agreed to accept the Settlement Agreement in satisfaction of Atlas' regulatory responsibilities under 10 C.F.R. Part 40 for remediation of the Moab Mill Site, to transfer License SUA-917 to the Trust, and to limit the Trustee's liability for remediation and maintenance of the site to the amount of funding available to the Trust from Atlas' assets, receivables and future receivables transferred to the Trust under the Settlement Agreement, and any other assets which may become available to the Trust. The NRC is aware that because of the time involved in concluding the bankruptcy proceeding, some dates in the license conditions have already passed while others are imminent and therefore, might be impractical for the Trustee to meet. These dates will be considered in future actions.

Current assets and receivables include the following:

- (1) \$5.25 million in cash from Atlas/ACSTAR (the entity which holds the reclamation bond issued for the benefit of the NRC to be used for reclamation of the Moab Mill Site. This entity has agreed to transfer the sum to the Trust in full and complete satisfaction of its obligations under Bond #5652);
- (2) the assignment of funds from the Department of Energy pursuant to the Energy Policy Act of 1992 (Pub. L. 102-486, Title X, Section 1001, Oct. 24, 1992, 106 Stat. 2946, codified at 42 U.S.C. 2296(a)), [hereinafter "Title X funds"] for past claims. This amount is estimated to be approximately \$1,082,000;
- (3) fifty (50) percent of any net recovery from collection of the disputed Title X claim for dismantling performed by American Reclamation and Dismantling Inc. (ARD claim);
- (4) any and all of Atlas' rights as a licensee to future Title X funds;
- (5) Atlas' water rights located at the Moab Land, listed as 6.3 cubic feet per second (cfs) from the Colorado River, Grand County, Utah, Water Right Number 01-40, Application 30032, Certificate No. 60111;
- (6) Atlas' possible Water Rights in the following:
 - A. Water Right Number 01-1121 for 31 acre-feet, a segregation application from Water Right Number 01-40;
 - B. Water Right Number 09-199 for 3.33 cfs in the San Juan River;
 - C. Water Right Number 05-982 for .015 cfs for a well in the Monticello Mining District;
 - D. Water Right Number 99-32 for .004 cfs from Seep Springs (approximately 4 miles from Fry Canyon);

(7) Atlas' interest in the certain real property owned by Atlas and consisting of approximately 430 acres, located in Grand County, Utah, together with all buildings, structures, improvements, appurtenances, fixtures, and easements; and,

(8) two and a half (2.5) percent of the stock in a reorganized Atlas Corporation which would be issued to the Reclamation Trust.

The land and water rights, herein described, have stand-alone value and may be sold by the Trustee independent of, and prior to or during, any reclamation work being performed at the site by the Trustee. As to items 5, 6, and 7 above, Atlas will transfer all said assets to the Trust by way of quit claim deed or similar document, without representations, warranties, or indemnification rights of any kind.

IV.

Remediation of the Moab Mill Site is to be conducted in accordance with the terms and conditions of License SUA-917. These include the RPAs and RPMs in the U.S. Fish and Wildlife Service's FBO, dated July 29, 1998. The Trustee has agreed to these terms and conditions. The NRC, as the lead Federal Agency regarding the consultation required under Section 7 of the Endangered Species Act of 1973 (16 U.S.C 1531 et seq.), has included these RPAs and RPMs in the NRC's NUREG-1531 published in March 1999.

The Trustee's maintenance of the site and administration of the remediation of the site in accordance with the terms of license SUA-917 and the terms of this Order, will provide adequate protection of the public health and safety and reasonable assurance of compliance with the Commission's regulations.

Pursuant to the terms of the Settlement Agreement described in the preceding sections of this Order, the NRC, with concurrence from the State of Utah, selected PricewaterhouseCoopers LLP as Trustee. PricewaterhouseCoopers LLP is qualified to perform the duties enumerated in this Order.

In view of the foregoing, I have authorized the transfer of License SUA-917 which will be amended to reflect the change in the named licensee. The Trustee accedes to this Order voluntarily, and has agreed to take the necessary steps to undertake remediation of the site to the extent permitted by the funds available to the Trust, according to the requirements in Part V of this Order.

V.

Accordingly, pursuant to Sections 62, 63, 81, 84, 161b, 161i, 161o and 184 of the Atomic Energy Act of 1954, as amended (42 USC 2011 et seq.), and the Commission's regulations in 10 C.F.R. Part 40, IT IS HEREBY ORDERED that, effective December 30, 1999, License SUA-917 is transferred to the Trust and the Trustee is authorized to possess byproduct material in the form of uranium waste tailings and other uranium waste generated by Atlas' milling operations at the Moab Mill Site pursuant to the terms and conditions of License SUA-917. IT IS FURTHER ORDERED that:

A. The Trustee shall:

1. Perform remediation of the site pursuant to the terms and conditions of NRC License SUA-917.
2. Notify and request relief from the Chief, Uranium Recovery and Low-Level Waste Branch, Division of Waste Management, Office of Nuclear Material Safety and

Safeguards, NRC, Washington, DC 20555-0001, if the Trustee believes it should be relieved of any requirements in the license because the Trustee believes that these requirements are impracticable given the parameters of the Trust Agreement or that they have either been satisfactorily completed or are unnecessary. The Trustee will continue to comply with all requirements in this license pending NRC action on the Trustee's request for relief from specified requirements under this subsection.

3. Cooperate with the NRC (or its contractor) in NRC's site inspections.
4. Cooperate with the U.S. Department of Energy (DOE) in matters relating to the transfer of the site to DOE, including preparation by DOE of the site Long-Term Surveillance Plan required by 10 C.F.R. 40.28.
5. Use reasonable efforts to secure all Title X funds from the Department of Energy pursuant to section 1001 of the Energy Policy Act of 1992 (42 U.S.C. 13201 et. seq.) to which it is legally entitled, including requests for additional Title X funds from DOE based on remediation work at the site performed by or on behalf of the Trust.
6. Notify the Director, Office of Nuclear Material Safety and Safeguards, NRC, Washington, DC 20555-0001, and the Regional Administrator, NRC Region IV, NRC Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, TX 76011-8064, by certified registered mail, no later than 180 days prior to the anticipated date, that all contractual and other projected obligations will have reasonably exhausted the Trust Fund.

7. Upon notification required by paragraph 6 of this Part, cease remediation work as set forth in this Order, and commence passive maintenance and monitoring only of the site in order to provide for the protection of the public health and safety using the remaining assets in the Reclamation Trust to fund monitoring and maintenance until further order of the NRC.
- B. Upon completion of the NRC inspection to determine that the site has been remediated in conformance with the requirements in 10 C.F.R. Part 40 and the conditions set forth in the license to the extent practicable given the funding available to the Trustee, title to the real property and the remaining byproduct material at the Moab Mill Site will be transferred in accordance with section 83 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations, and this license shall be modified or terminated accordingly.
- C. Notwithstanding any of the foregoing requirements, the NRC shall not require the Trustee to perform or pay for any reclamation, remediation, monitoring, or surveillance, the cost of which would exceed the amount of money available to the Trustee from the Trust assets and receivables. The Trustee's responsibilities, liabilities and authority under this license shall terminate upon further order of the NRC.
- D. The requirements identified in this Order may only be modified in writing by the Director, Office of Nuclear Material Safety and Safeguards.

VI.

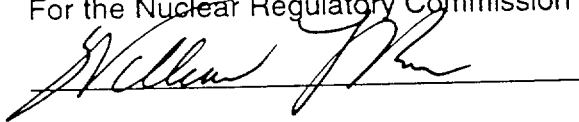
Any person adversely affected by this Order, other than Atlas or the Trustee, may request a hearing within 20 days of its issuance. Any request for a hearing shall be submitted to

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the Regional Administrator, NRC Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, TX 76011-8064 and to the Trustee, PricewaterhouseCoopers LLP, Attention: Mr. Keith E. Eastin, Director, 1201 Louisiana, Suite 2900, Houston, TX 77002-5678. If a hearing is requested, the requester shall set forth with particularity the manner in which his or her interest is adversely affected by this Order and shall address the criteria set forth in 10 C.F.R. 2.1306 and 2.1308.

If a hearing is requested by a person whose interest is adversely affected by this Order, the Commission will consider the hearing request pursuant to 10 C.F.R. Part 2, Subpart M, and will issue an Order designating the time and place of any hearing. If a hearing is held, the procedures of Subpart M will be applied as provided by the Order designating the time and place of the hearing. The issue to be considered at such hearing shall be whether this Order transferring the license should be sustained. Any request for a hearing shall not stay the effectiveness of this Order.

For the Nuclear Regulatory Commission



William F. Kane
Director, Office of Nuclear Material Safety
and Safeguards

Dated at Rockville, Maryland,
this 27th day of Dec. 1999

ENCLOSURE 2

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended (the "Act"), Regulations promulgated under the Act (10 CFR Parts 40, 43, 45, and 46), and the Nuclear Regulatory Commission's (NRC) Order on the Petition for Review of the Atomic Energy Act of 1954, as amended, and the regulations promulgated thereunder, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below, to use such material for the purposes and at the place(s) designated below, to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

1. Licensee Moab Mill Reclamation Trust [Applicable Amendment: 32]	3. License Number SUA-917, Amendment No. 32
2. c/o PricewaterCoopers LLP 1201 Louisiana, Suite 2900 Houston, Texas 77002 [Applicable Amendment: 32]	4. Expiration Date Until terminated
	5. Docket or Reference No. 40-3453

6. Byproduct, Source, and/or Special Nuclear Material	7. Chemical and/or Physical Form	8. Maximum Amount that Licensee May Possess at Any One Time Under This License
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Natural Uranium

Any

Unlimited

9. Authorized place of use: The licensee's uranium milling facility located at Moab, Utah.
10. The licensee is hereby authorized to possess byproduct material in the form of uranium waste tailings and other uranium byproduct waste generated by the licensee's milling operations authorized by this license.
11. For use in accordance with statements, representations, and conditions contained in Sections 4.2.4, 5, and 7 (except 5.5.10 and 5.5.11), Appendices 5.3, 5.5.6, and 6.0 of Atlas Corp's the licensee's renewal application dated May 31, 1984, and submittals dated December 17, 1984, January 18, and June 5, 1985, and September 16, 1992. The mill site organizational structure shall be maintained as presented by submittal dated May 13, 1991, as revised by letter dated March 5, 1993.

Whenever the word "will" is used in the above referenced sections, it shall denote a requirement.

[Applicable Amendments: 12, 15, 18, 20, 32]

12. DELETED by Amendment No. 18.

13. DELETED by Amendment No. 18.

14. The licensee is hereby exempted from the requirements of Section 20.1902(e) of 10 CFR 20 for areas within the mill, provided that all entrances to the mill are conspicuously posted in accordance with Section 20.1902 and with the words, "Any area within this mill may contain

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radioactive material. "

15. The results of sampling, analyses, surveys and monitoring; the results of calibration of equipment; reports on audits and inspections; all meetings and training courses required by this license; and any subsequent reviews, investigations, and corrective actions, shall be documented. Unless otherwise specified in NRC regulations, all such documentation shall be maintained for a period of at least 5 years.

16. DELETED by Amendment No. 18.

17. The licensee shall implement a compliance monitoring program containing the following:

- A. Sample wells AMM-1, AMM-2 and AMM-3 on a quarterly frequency for chloride, nitrate, sodium, sulfate, pH, TDS and water level, and on a semiannual frequency for chromium, gross alpha, lead, molybdenum, nickel, radium-226 and 228, selenium, silver, uranium and vanadium. Additionally, the upper completion of well ATP-2 shall be sampled on a quarterly frequency for chloride, nitrate, sodium, sulfate, pH, TDS and water level.

- B. Comply with the following ground-water protection standards at point of compliance wells AMM-2 and AMM-3, with background being recognized as well AMM-1.

chromium = 0.08 mg/l, gross alpha = 33 pCi/l, molybdenum = 0.05 mg/l, nickel = 0.06 mg/l, radium-226 and 228 = 5 pCi/l, selenium = 0.01 mg/l, vanadium = 0.04 mg/l and uranium = 4.0 pCi/l.

- C. Implement a corrective action program that includes pumping dewatering wells PW1, PW4, PW6, PW7, PW8, PW9, and PW12 during periods of nonfreezing weather. Sufficient data shall be collected, for the constituents listed in Subsection A, to determine the mass of constituents that have been recovered by the corrective action program.

The licensee shall on a semiannual frequency, submit a ground-water monitoring report as well as submit a corrective action program review by December 31, of each year, that describes the progress towards attaining ground-water protection standards.

[Applicable Amendments: 3, 4, 8, 11, 13, 19]

18. Released equipment or packages from the restricted area shall be in accordance with the document entitled, "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of License for Byproduct or Source Materials" dated September, 1984. [Applicable Amendment: 18]

19. DELETED by Amendment No. 18.

20. The licensee shall conduct and document at least five inspections of the tailings embankment per week (one per day, 5 days per week) and shall immediately notify the NRC, by telephone and telegraph, of any failure to the tailings dam which could result in a release of radioactive materials and/or of any unusual conditions which if not corrected could lead to such failure. This

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requirement is in addition to the reporting requirements of 10 CFR 20.

[Applicable Amendment: 18]

21. A. The licensee shall decommission the Moab Mill facilities in accordance with policy and procedures described in Atlas Corp's submittals dated November 27, 1987, and March 29, and May 13, 1988.
- B. The licensee shall submit soil sampling criteria, including radium-226/gamma correlations at least 60 days prior to conducting soil sampling as a part of the mill decommissioning process.
- C. The licensee shall submit decontamination and decommissioning reports within 60 days of completion of the decontamination and decommissioning activities.
- D. The reports required by this condition shall include, as a minimum, the following information:
 - (1) Employee exposure records including internal exposure time weighted calculations.
 - (2) Bioassay results.
 - (3) Inspection log entries and inspections.
 - (4) Training program activities, including safety meetings.
 - (5) Radiological survey and sampling data.
 - (6) Cross section drawings of all disposal areas and the proposed interim cover.

[Applicable Amendments: 3, 15, 32]

22. Occupational exposure calculations shall be performed and documented within 1 week of the end of each regulatory compliance period as specified in 10 CFR 20.103(a)(2) and 10 CFR 20.103(b)(2). Routine samples taken in airborne ore dust and yellowcake areas shall be analyzed in a timely manner to allow exposure calculations to be performed in accordance with this condition.

Non-routine samples taken in ore dust and yellowcake areas shall be analyzed and the results reviewed by the Radiation Control Coordinator (RCC) within 2 working days after sample collection.

23. Standard written procedures shall be established and maintained for all activities involving radioactive materials that are handled, processed or stored. Written procedures shall be established for nonoperational (nonprocessing) activities to include in-plant and environmental monitoring, bioassay analyses, and instrument calibrations. Up-to-date copies of all written procedures shall be kept in the applicable work stations to which they apply.

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All written procedures, shall be reviewed and approved in writing by the RCC before implementation and whenever a change in procedure is proposed to ensure that proper radiation protection principles are being applied. The RCC shall perform a documented review of all existing procedures at least annually.

[Applicable Amendment: 18]

24. The personnel contamination surveys conducted, in accordance with Section 5.5.5.2 of Atlas Corp's application, shall be documented and maintained. In addition, the licensee (RCC or qualified alternate) shall perform spot personnel surveys for alpha contamination at least quarterly on employees leaving the restricted area.

[Applicable Amendment: 32]

25. The licensee shall use a Radiation Work Permit (RWP) for all nonroutine work not covered by an existing procedure where the potential for significant exposure to radioactive materials exists. The RWP shall be approved by the RCC or an alternate, qualified by way of specialized radiation protection training, and shall at least describe the following:
- A. The scope of work to be performed and the potential radiological hazards.
 - B. Any precautions necessary to minimize worker exposure to radioactive materials.
 - C. The radiological monitoring and sampling necessary prior to, during, and following completion of the work in order to assess any potential exposures.
26. Notwithstanding the representations in Appendix 5.3 to Atlas Corp's renewal application, the licensee shall develop and implement procedures to ensure that visitors and contractors receive instruction and training in accordance with Section 19.12 of 10 CFR 19, prior to entering any restricted area.

[Applicable Amendment: 32]

27. The existing on-site catchment basin west of the S-X units shall be maintained in a condition and with enough remaining available capacity to assure the collection of any spillage of chemicals from hazardous chemical storage tanks within the graded area. Any storage tanks containing hazardous chemicals which are not located within the graded area shall be surrounded by individual containment dikes capable of containing all leakage.
28. Notwithstanding the representations in Section 5.5.5 of Atlas Corp's application, the licensee shall conduct weekly alpha contamination surveys of lunch rooms and monthly surveys of change rooms, shower facilities and offices when they are in use.

[Applicable Amendment: 18, 32]

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29. A copy of the report documenting the annual ALARA audit in accordance with Section 5.1.4 of Atlas Corp's renewal application dated May 31, 1984, shall be submitted to the NRC, for review within 30 days of completion of the audit report.
- [Applicable Amendment: 32]
30. In addition to the tailings embankment surveillance and inspection program specified in Section 4.2.4 of Atlas Corp's renewal application dated May 31, 1984, the licensee shall comply with the following:
- A. Notwithstanding any statements to the contrary, the professional responsible for the annual technical evaluation report shall ensure that all field inspectors are trained to recognize and assess signs of possible distress or abnormality.
 - B. All routine inspection reports shall be dated and maintained on file at the mill site for use in developing the annual report.
 - C. The results of ground-water sampling and piezometer and pond level measurements shall be maintained in graphical form and on file at the mill site for use in developing the annual report. The licensee shall adhere to commitments made in Atlas Corp's their July 8, 1991, submittal modifying the number of piezometers monitored.
 - D. The annual technical evaluation report shall include an assessment of the hydraulic and hydrologic capacities, water quality and structural stability of the tailings impoundment.
 - E. A copy of each annual technical evaluation report shall be submitted to the NRC, within one (1) month of its completion.
- [Applicable Amendment: 15, 32]
31. In addition to the requirements in Section 5.2 of Atlas Corp's renewal application, the Radiation Control Coordinator (RCC) shall have the minimum education, training, and experience as detailed in Section 2.4.1 of Regulatory Guide 8.31 dated May 1983. [Applicable Amendment: 18, 32]
32. Radiation survey instruments shall be calibrated at least semiannually or at the manufacturer's suggested interval, and after each repair, whichever is sooner. All radiation survey instruments shall be checked for proper operation using a radiation check source prior to each day's use. Portable air sampling equipment shall be calibrated after repair and at least quarterly or at the manufacturer's suggested interval, whichever is sooner. Flow rates on portable samplers shall be checked and documented prior to each day's use. Fixed continuous air samplers shall be calibrated after repair and at least quarterly or at the manufacturer's suggested interval, whichever is sooner. Flow rates on fixed continuous air samplers shall be checked each time the sampling head is changed.
33. The licensee shall implement an interim tailings stabilization program as specified in Atlas Corp's March 16, 1987 submittal. In addition, this program shall include written procedures which are of sufficient detail to describe inspection methodologies, management notifications and

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implementation of corrective actions to assure compliance to Criterion 8 of 10 CFR 40, Appendix A. As a minimum, the licensee shall perform at least weekly, a documented inspection to assure the effectiveness of the control methods used. Corrective actions taken shall be documented in response to inspection findings. Corrective actions shall be completed within 30 days unless a longer period is approved in writing by the NRC.

[Applicable License: 32]

34. The licensee is authorized to dispose of byproduct material contaminated solid wastes generated at the Moab Mill in the sump collection pond as described in the Atlas Corp's submittal dated February 29, 1984.

[Applicable Amendment: 32]

35. Notwithstanding representations made in Section 4.3 of Atlas Corp's renewal application, the licensee shall not dispose of materials other than uranium mill tailings, spent resins, raffinate, vanadium waste residues, liquids or residues contained in the catchment basin described in Condition No. 27, or liquid sanitary wastes in the tailings pond, without the specific authorization of NRC. If liquid sanitary wastes are discharged to the tailings pond, written authorization shall first be obtained from the Utah Bureau of Water Pollution Control. A copy of the written authorization shall be submitted to NRC prior to the discharge of the liquid sanitary waste.

The licensee shall be permitted to discharge as necessary any liquids or solids to the tailings impoundment from the catchment basin as described in License Condition No. 27 that are generated during the decommissioning phase of the mill.

[Applicable Amendment: 18, 32]

36. DELETED by Amendment No. 18.
37. Reclamation phase modifications to Moab Wash shall be as specified in the "Pilot Channel" option of Atlas Corp's submittal dated October 13, 1983 with the following modifications:
- A. The pilot channel bottom shall be sloped at a 1% grade away from the tailings pile (i.e., to the north).
 - B. Excavation material shall be used to backfill the entire length of the existing Moab Wash channel, with the fill sloped away from the tailings pile. Any remaining excavation material shall be used to construct a berm on the south side of the pilot channel to increase channel capacity.

In addition, operational phase modifications to Moab Wash shall be maintained in accordance with Atlas Corp's submittal dated October 26, 1982.

[Applicable Amendment: 32]

38. Mill tailings other than samples for research shall not be transferred from the site without specific

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prior approval of the NRC. The licensee shall maintain a permanent record of all transfers made under the provisions of this condition.

39. The licensee shall, in accordance with Atlas Corp's submittals dated February 25 and June 29, 1987, develop methods and procedures prior to reclamation, to ensure that:

- A. The entire area of contaminated soil southeast of the tailings impoundment, consisting of approximately 6.6 acres with an estimated volume of 25,000 cubic yards, is placed in the tailings pond and otherwise ensure that the entire area is decontaminated consistent with 10 CFR Part 40, Appendix A, Criterion 6.
- B. The entire area west of State Highway No. 279 identified as exceeding Ra-226 levels provided in 10 CFR Part 40, Appendix A, Criterion 6, shall be removed and placed in the tailings pond prior to final reclamation. By our letter dated February 25, 1987, background for the area west of State Highway No. 279 is 5.5 pCi/gm Ra-226.
- C. Records of all surveys and soil analyses of the section southeast of the tailings impoundment and west of State Highway No. 279 shall be maintained until the NRC authorizes their disposal.

[Applicable Amendment: 32]

40. DELETED by Amendment No. 18.

41. The licensee shall reclaim the tailings disposal area in accordance with Atlas Corp's October 1996 submittal entitled "Final Reclamation Plan, Atlas Corporation Uranium Mill and Tailings Disposal Area" and revisions thereof, with the following modifications:

- A. The licensee shall commence dewatering the tailings in conformance with the U. S Fish and Wildlife Service final biological opinion (FBO) of July 1998, Terms and Conditions 1.a. The licensee shall provide a design for the dewatering by December 31, 1999. The design should be such that dewatering can be completed by July 1, 2002.
- B. The licensee shall provide, by May 1, 2000, a revision to the corrective action program identified in license condition 17.C. that will meet ground-water standards within 7 years from the date of approval by NRC.
- C. Before commencing construction of the final radon barrier, the licensee shall provide analyses, appropriately supported by necessary data, showing that the ammonia standards identified in item 2. of the reasonable and prudent alternative of the FBO will be met over the design life of the reclamation.
- D. Before commencing the reconfiguration of Moab Wash, the licensee shall provide a design that NRC, after consultation with FWS, finds acceptable to compensate for the loss of 0.5 acre of critical habitat, in conformance with item 5. of Terms and Conditions of the FBO.
- E. Comply with item 6. of Terms and Conditions in the FBO by:

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- (1) Monitoring for southwestern willow flycatcher
- (2) Implement construction activities in such a way as to minimize loss of southwestern willow flycatcher habitat and revegetate disturbed area with willow plantings.

F. Before commencing construction activities, the licensee shall obtain NRC approval of a plan to implement the following mitigative measures identified in the FEIS:

- (1) Minimization of emissions of fugitive dust during reclamation (Section 4.1.7).
- (2) Spill prevention and control and erosion control applicable to the Atlas site and borrow areas (Section 4.5.2.6).
- (3) Interception and storage of sediment-and contaminant-laden runoff through use of adequate drainage control, retention, and treatment ponds, silt fences, and other means as necessary (Section 4.5.2.6).
- (4) Avoidance of major earth-moving operations (such as the relocation of Moab Wash) during periods of high thunderstorm potential where and when feasible (Section 4.5.2.6).
- (5) Avoidance of siting potential borrow areas immediately adjacent to streams (Section 4.5.2.6).
- (6) A survey by a qualified botanist to determine if Jones cycladenia is present in the vicinity of the proposed Kane Creek quarry site before any activities are initiated at the site. If the species is present, the licensee would be required to develop appropriate mitigative measures in consultation with the FWS to ensure that populations are protected from disturbance (Section 4.6.4.1).
- (7) Limitations on the use of the Potash quarry site to the December through February period to avoid impacting recreational use of the Potash boat ramp (Section 4.7.3.2).
- (8) Topographic and vegetative restoration of borrow areas as required by the State of Utah Division of Oil, Gas and Coal Mining (Section 4.5.2.6 and 4.7.4.3).

[Applicable Amendment: 18, 30, 32]

42. The licensee shall maintain an NRC-approved financial surety arrangement, consistent with 10 CFR 40, Appendix A, Criteria 9 and 10, adequate to cover the estimated costs, if accomplished by a third party, for decommissioning and decontamination of the mill and mill site, for reclamation of any tailings or waste disposal areas, ground-water restoration as warranted and the long-term surveillance fee. Within 3 months of NRC approval of a revised reclamation/decommissioning plan, the licensee shall submit, for NRC review and approval, a proposed revision to the financial surety arrangement if estimated costs in the newly approved plan exceed the amount covered in the existing financial surety. The revised surety shall then be in effect within 3 months of written

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NRC approval.

Annual updates to the surety amount, required by 10 CFR 40, Appendix A, Criteria 9 and 10, shall be submitted to the NRC at least 3 months prior to the anniversary date which is designated as December 31 of each year. If the NRC has not approved a proposed revision to the surety coverage 30 days prior to the expiration date of the existing surety arrangement, the licensee shall extend the existing surety arrangement for 1 year. Along with each proposed revision or annual update, the licensee shall submit supporting documentation showing a breakdown of the costs and the basis for the cost estimates with adjustments for inflation, maintenance of a minimum 15 percent contingency fee, changes in engineering plans, activities performed, and any other conditions affecting estimated costs for site closure. The basis for the cost estimate is the NRC approved reclamation/decommissioning plan or NRC approved revisions to the plan. The previously provided guidance entitled, "Recommended Outline for Site Specific Reclamation and Stabilization Cost Estimates," outlines the minimum considerations used by the NRC in the review of site closure estimates. Reclamation/decommissioning plans and annual updates should follow this outline.

Atlas' currently approved surety instrument, Performance Bond No. 5652 issued by the Acstar Insurance Company of New Britain, Connecticut in favor of the NRC, shall be continuously maintained in an amount no less than \$6,500,000 for the purpose of complying with 10 CFR 40, Appendix A, Criteria 9 and 10, until a replacement is authorized by the NRC.

The Licensee shall maintain a Standby Trust (Trust) arrangement for the benefit of NRC. The currently established Trust is with Norwest Bank of Colorado N.A.

[Applicable Amendments: 5, 14, 16, 22, 24]

43. Prior to termination of this license, the licensee shall provide for transfer of title to byproduct material and land, including any interests therein (other than land owned by the United States or the State of Utah), which is used for the disposal of such byproduct material or is essential to ensure the long term stability of such disposal site to the United States or the State of Utah, at the State's option.
44. DELETED by Amendment No. 18.
45. Before engaging in any activity not previously assessed by the NRC, the licensee shall prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity may result in a significant adverse environmental impact that was not assessed, or that is greater than that assessed in the Final Environmental Impact Statement (NUREG-1531), the licensee shall provide a written evaluation of such activities and obtain prior approval of the NRC for the activity.

[Applicable Amendment: 32]

46. Prior to disturbing any presently undisturbed soils for mill related activities (including borrow areas for tailings reclamation cover) in the future, the licensee shall have an archeological survey conducted of the site(s) to be disturbed. The Utah State Department of Development Services and

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the U.S. Department of the Interior shall be contacted by the licensee prior to the survey to provide assistance or comment in planning such a survey. The completed survey shall be submitted to the NRC for review and approval to proceed prior to any disturbance of presently undisturbed areas.

47. The licensee shall conduct an annual survey of land use (grazing, residence, wells, etc.) in the area within two miles of the mill and submit a report of this survey annually to the NRC. This report shall indicate any differences in land use from that described in the licensee's previous annual land use report. The report shall be submitted by March 31 of each year.
48. The results of the effluent and environmental monitoring programs required by this license shall be reported in accordance with 10 CFR 40, Section 40.65 with copies of the report sent directly to the NRC. Data from the effluent and environmental monitoring program shall be reported in accordance with the format in the previously provided guidance entitled, "Sample Format For Reporting Monitoring Data."
49. The licensee shall conduct an environmental and effluent monitoring program as specified in Atlas Corp's renewal application in accordance with Table 5.5-8 during normal operations and Table 5.5-9 during periods of extended shutdown with the following modifications:
- A. Air particulate samples shall be analyzed for U-nat, Ra-226 and Th-230, quarterly.
 - B. The analysis of quality control samples shall be in accordance with Section 3 of Regulatory Guide 4.15.
 - C. Lower limits of detection utilized for sample analysis shall be in accordance with Section 5 of Regulatory Guide 4.14.
 - D. Soil and vegetation sampling shall be analyzed annually for Ra-226 and Pb-210.
 - E. Notwithstanding the ground-water monitoring specified in Tables 5.5-8 and 5.5-9, the licensee shall monitor the ground water as described in License Condition No. 17.
 - F. DELETED by Amendment No. 23.

[Applicable Amendments: 1, 3, 4, 11, 23, 32]

50. The licensee shall conduct a bioassay program in accordance with Section 5.5.4 of Atlas Corp's renewal application with the following additions:
- A. Laboratory surfaces used for in-house bioassay analyses shall be decontaminated to less than 25 dpm alpha-(removable)/100 cm² prior to analysis of samples.
 - B. Anytime an action level of 15 µg/l uranium for urinalysis is reached or exceeded, the licensee shall document the corrective actions which have been performed in accordance with Revision 1 of Regulatory Guide 8.22, dated January 1987. This documentation shall be submitted to the NRC as part of the semiannual report required by 10 CFR 40.65 and

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Condition No. 48 to this license.

- C. Anytime an action level of 35 $\mu\text{g/l}$ for two consecutive specimens or 130 $\mu\text{g/l}$ uranium for one specimen for urinalysis is reached or exceeded, the licensee shall document the corrective actions which have been performed in accordance with Revision 1 of Regulatory Guide 8.22. This documentation shall be submitted to the NRC, within thirty (30) days of exceeding the action level.

[Applicable Amendment: 32]

51. DELETED by Amendment No. 6.

52. A. Construction of a roadway toward the center of the tailings impoundment for use by mobile equipment in the application and inspection of binding agents for dust control and to provide access during initial reclamation activities, shall be in accordance with Atlas Corp's submittals dated July 14 and August 19, 1988.
- B. Any proposed changes to the roadway or its uses, as described in Atlas Corp's July 14 and August 19, 1988 submittals, shall require prior approval of the NRC, in the form of a license amendment.

[Applicable Amendments: 2, 32]

53. The licensee shall conduct fence line inspections on a monthly basis in accordance with Atlas Corp's submittal dated March 22, 1989.

[Applicable Amendments: 7, 18, 32]

54. The licensee shall implement the program for radon attenuation specified in the submittal dated July 19, 1989.

[Applicable Amendment: 10]

55. The licensee shall complete site reclamation in accordance with the approved reclamation plan. The ground-water corrective action plan shall be conducted as authorized by License Condition No. 17 in accordance with the following schedules.
- A. To ensure timely compliance with target completion dates established in the Memorandum of Understanding with the Environmental Protection Agency (56 FR 55432, October 25, 1991), the licensee shall complete reclamation to control radon emissions as expeditiously as practicable, considering technological feasibility, in accordance with the following schedule:
- (1) Windblown tailings retrieval and placement on the pile - December 31, 2000.
 - (2) Placement of the interim cover - Complete.

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- (3) Placement of final radon barrier designed and constructed to limit radon emissions to an average flux of no more than 20 pCi/m²/s above background - December 31, 2000.

B. Reclamation, to ensure required longevity of the covered tailings and ground-water protection, shall be completed as expeditiously as is reasonably achievable, in accordance with the following target dates for completion.

- (1) Placement of erosion protection as part of reclamation to comply with Criterion 6 of Appendix A of 10 CFR Part 40 - December 31, 1999.
- (2) Projected completion of ground-water corrective actions to meet performance objectives specified in the ground-water corrective action plan - July 31, 2006.

C. Any license amendment request to revise the completion dates specified in Section A must demonstrate that compliance was not technologically feasible (including inclement weather, litigation which compels delay to reclamation, or other factors beyond the control of the licensee).

D. Any license amendment request to change the target dates in Section B above must address added risk to the public health and safety and the environment, with due consideration to the economic costs involved and other factors justifying the request such as delays caused by inclement weather, regulatory delays, litigation, and other factors beyond the control of the licensee.

[Applicable Amendments: 21, 25, 26, 27, 28, 29, 30]

56. Notification to NRC under 10 CFR 20.2202, 10 CFR 40.60, and specific license conditions should be made as follows:

Required written notice to NRC under this license should be given to: Chief, Uranium Recovery and Low Level Waste Branch, Division of Waste Management, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

Required telephone notification to NRC should be made to the Operations Center at (301) 816-5100.

[Applicable Amendment: 24, 30]

57. The licensee and Mid-Atlantic Pipeline Company are authorized to cleanup a corridor up to 150 feet wide and 1400 feet long prior to laying pipe in the pipeline right-of-way and install the new gas pipeline within the restricted area in conformance with submittals dated April 20, 1999 and May 14, 1999, with the following restrictions and modifications:

- A. The RCC shall oversee and/or direct work in accordance with licensee radiation control procedures to ensure ALARA and radiation safety to all individuals in the restricted area.
- B. All contaminated material will be consolidated in the old ore storage area as a low profile pile,

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From: Myron Fliegel
To: Thomas Essig
Date: Thu, Feb 17, 2000 3:48 PM
Subject: Update from Atlas trustee

I just received an update from Keith Eastin on PWC activities. Eastin is putting together his final contracting plan which will be billed as primarily a groundwater project - i.e., the difficult aspects are groundwater related; the tailings reclamation being standard stuff. There are 3 aspects:

1. Shepard-Miller will be the groundwater cleanup contractor. They will prepare a plan consisting of digging a trench in which they will put limestone in and aerate from underneath to convert the ammonia to nitrogen. S-M will do analysis and prepare the revised gw CAP for NRC review. Eastin did not know if plan will get gw to standards within 7 years but plan submitted to NRC will address that.
2. SRK will dewater the tailings using a technique it is using at Fernwald and has used at a large tailings pile in east Germany. In addition to inserting pipes with wick material it also involves injecting air into the tailings to force water up under pressure. They expect to complete dewatering in 18 months.
3. HLA will handle the rest of the tasks, which are the more standard reclamation tasks of moving dirt. This enables PWC to take advantage of HLA's institutional knowledge of the Atlas site and the data that it has.

PWC and the contractors still need to assess the time needed to prepare analysis called for in the license. Then PWC will write to us asking for amendment to change the dates.

CC: John Greeves, Joseph Holonich, Maria Schwartz

T/15

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From: Joseph Gray
To: SGB1
Date: Thu, Feb 24, 2000 4:50 PM
Subject: Fwd: Atlas dates

More info.

TH

From: Myron Fliegel
To: Marjorie Nordlinger
Date: Wed, Feb 23, 2000 3:04 PM
Subject: Atlas dates

Marjorie:

I spoke to the trustee about dates for some specific actions. The following are not final dates - the trustee wants his contractors to buy into them before formally requesting them via license amendment.

* Dewatering plan - June 15, 2000. The contractor will be installing piezocones into the pile looking for pockets of moisture. The process of piezocone installation will require preparing some areas, where the near surface is not compacted, before installation equipment can be brought out. After the data is collected, the contractor will have to analyze it and then prepare its dewatering plan.

* Revised ground-water corrective action program - March 1, 2001. The primary holdup is the need to acquire data representing seasonal variations. Data collection will begin soon, but still has to wait for seasonal changes. The contractor has to analyze the data and prepare the revised gw CAP.

The trustee will request a license amendment, asking for revisions to these and other dates and other changes in the license by March 31, 2000.

Mike

CC: Joseph Holonich, Thomas Essig

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From: Joseph Gray
To: SGB1
Date: Fri, Mar 31, 2000 1:39 PM
Subject: Fwd: Telcon with FWS on Atlas

T/17

From: Myron Fliegel
To: John Cordes, John Greeves, Joseph Gray, Joseph ...
Date: Fri, Mar 31, 2000 12:58 PM
Subject: Telcon with FWS on Atlas

John Greeves had been trying to contact the FWS Denver regional director, Ralph Morganweck to discuss Atlas. We had heard that FWS was internally discussing a re-initiation of consultation on the Atlas biological opinion. John was told that Morganweck was tied up all day but the program director for Utah and Colorado in the Denver regional office, Bob McCue, spoke to John. McCue confirmed that FWS was discussing reinitiating consultations, although he stated that consultation can be reinitiated without effecting the existing bio opinion. John stressed to McCue that any such action by FWS cannot help but delay the process and that would not be beneficial to the fish. John pointed out that the trustee is getting ready to dewater the tailings which will be of great benefit and that delaying that and subsequent actions will only hurt the fish. John requested that Morganweck call him and that FWS take no action (e.g., sending us a letter) before he and Morganweck can discuss the issues. McCue said he would pass that message to Morganweck.

CC: B. Jennifer Davis, Carl Paperiello, Lisa Clark, ...

26

From: Joseph Gray
To: SGB1
Date: Tue, Apr 4, 2000 5:20 PM
Subject: Fwd: Telcon with Atlas trustee

fyi

T/1/4

From: Myron Fliegel
To: John Greeves, Joseph Holonich, Thomas Essig
Date: Tue, Apr 4, 2000 4:50 PM
Subject: Telcon with Atlas trustee

I just spoke to Keith Eastin, PWC. He, along with Tony Thompson and Don Bauer (Trust's attorneys) will have a conference call tomorrow with Gina Guy (DOI attorney) and Paul Boudreaux (DOJ attorney representing NRC & FWS).

Eastin suggested that appropriate level NRC official(s) contact Don Barry, DOI Asst Secretary for Fish, Wildlife, and Parks. He runs both the Park Service and FWS and used to work for Keith. Keith considers him one of the world's leading experts in endangered species (he helped write the ESA). Keith thinks that if Barry heard our story, he would change the FWS approach.

Also, PWC received a letter from Earthjustice stating that it has not received a response to its offer to settle the District Court case and will withdraw that offer on Wednesday if there is no response.

CC: B. Jennifer Davis, John Cordes, Joseph Gray, Ma...

27

From: Joseph Gray
To: Sgb1
Date: Tue, Apr 4, 2000 5:16 PM
Subject: Fwd: Atlas

T/19

From: John Greeves
To: internet:Ralph_Morgenweck@fws.gov
Date: Tue, Apr 4, 2000 4:40 PM
Subject: Atlas

Ralph

I have placed repeated calls to your office to set up a conference call to discuss Atlas. No one calls back. It is disappointing to see FWS discuss this case in the media without adequate dialogue with key agency representatives. I would appreciate it if you could provide some time on your schedule to discuss the case before any additional media discussion occurs. The article below does not help us coordinate on this sensitive national site.

John G

Fish Poisoned By Uranium Mine Waste
Tuesday, April 4,
2000

BY BRENT ISRAELSEN

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TRIBUNE

A new U.S. Geological Survey report proves that ammonia leaking into the Colorado River from the Atlas tailings, a huge pile of uranium-processing waste near Moab, is lethal to fish.

The report on studies conducted between August 1998 and February 2000 shows ammonia levels as high as 1,500 milligrams per liter -- far above the 12 milligrams per liter at which the fish are known to survive.

When researchers placed caged experimental fish in the river below the tailings pile, the fish died, usually within an hour. In some situations, they died immediately.

"This study confirms what we originally thought: There is a 'take' occurring in the Colorado River," said Reed Harris, who heads the U.S. Fish and Wildlife Service office in Utah.

A "take" is the killing of an endangered species.

In this case, the endangered species are the Colorado pikeAminnow (formerly known as the Colorado squawfish) and the humpback chub, though their mortality rate from the contamination cannot be measured.

The killer is the 10.5 million-ton pile of radioactive tailings left over from decades of uranium processing on the banks of the Colorado about three miles north of Moab.

Last owned by the now-bankrupt Atlas Corp., the uranium mill site has been the center of a heated national debate over what to do with the tailings. The

Nuclear Regulatory Commission (NRC) has proposed leaving the toxic tailings in place, with a cap that would prevent further water penetration into the pile.

Environmentalists and local leaders argued in favor of moving the pile away from the river. Their position has attracted numerous supporters downstream, including politically powerful water officials in Los Angeles.

Rep. Chris Cannon, R-Utah, is expected to introduce a bill soon that would shift Atlas cleanup decisions from the NRC to the U.S. Department of Energy, which has a program for such projects. The bill also would seek several hundred million dollars for moving the Atlas tailings and cleaning up the groundwater.

Though the new findings by the U.S. Geological Survey do not directly address the merits of the capping vs. removal options, they should increase the urgency for a remedy and give impetus to a more immediate need to treat the already-contaminated groundwater inside and beneath the tailings, Harris said.

A team of state, federal and local leaders, along with representatives of the Atlas bankruptcy receiver, is exploring ways to treat the water.

"One of our biggest concerns is we get a groundwater treatment project," Harris said.

Even if the tailings were capped or removed, an estimated 1.9 billion gallons of groundwater contaminated with ammonia, uranium, molybdenum, nitrates and sulfates would drain into the river for the next 270 years.

CC: Joseph Gray, Joseph Holonich

28

From: Myron Fliegel
To: John Greeves, Joseph Gray, Joseph Holonich, Tho...
Date: Tue, Apr 4, 2000 3:41 PM
Subject: Atlas newspaper article

Today's Salt Lake Tribune carried an article, under the headline "Fish Poisoned By Uranium Mine Waste" that begins "A new U.S Geological Survey report proves..." The article quotes Reed Harris of FWS. The article can be found at: http://www.sltrib.com/2000/apr/04042000/nation_w/38526.htm

We have not seen the report nor been asked to comment on what was found. Would it not be appropriate for some communication from a high level NRC official to DOI on this? What about OGC communicating with DOJ?

CC: B. Jennifer Davis, John Cordes, Maria Schwartz, ...

T/20

29

From: Myron Fliegel
To: John Cordes, John Greeves, Joseph Gray, Joseph ...
Date: Wed, Apr 5, 2000 11:27 AM
Subject: Re: Atlas newspaper article - more info

Joe:

I also checked the FWS Final Bio Opinion. A few interesting quotes:

"The ammonia concentrations leaching into the Colorado River from the Atlas tailings pile are well above these chronic and acute effect levels, as far as 1.5 miles downstream. Adverse impacts to Colorado squawfish and razorback sucker from both chronic and acute exposure may be occurring in the form of...as well as **lethality**." (p. 76)

And in the reasonable and prudent alternative, item 2.a.), discussing the river concentration that must be achieved by the reclamation "An acute toxicity standard of 1.93 mg/l total ammonia...shall not be exceeded in the Colorado River...This acute standard shall not allow for any mixing zone because a mixing zone for an acute level of contamination would, by definition, allow lethal levels... causing an undetermined level of **mortality**. (p. 88)"

Again, it is amazing that FWS should be surprised that there are some areas, where contaminated ground water seeps into the river, that are lethal to fish. Are they so used to exaggerating impacts that when one of their claims of harm is actually shown to be correct they are in almost disbelief?

Mike

CC: B. Jennifer Davis, E. Slaggie, Maria Schwartz, ...

T/21

33

From: Joseph Gray
To: SGB1
Date: Wed, Apr 26, 2000 1:27 PM
Subject: Fwd: Re: PLATEAU RESOURCES PROPOSAL RE MOAB TAILINGS

Another country heard from -- (I don't like to end a sentence with a preposition).

T/22

From: Thomas Essig
To: Joseph Gray, Maria Schwartz
Date: Wed, Apr 26, 2000 1:14 PM
Subject: Re: PLATEAU RESOURCES PROPOSAL RE MOAB TAILINGS

Maria,

Since you've been tasked with looking into Plateau Resources Limited's application to us, here's the scoop as we know it:

1. An application dated March 22, 2000 has been submitted by PRL for its Shootaring Canyon mill near Ticaboo, UT (not Riverton, WY --- that is the corporate office location) to dispose of 11e.(2) byproduct material.
2. Neither the amounts nor the sources of the material were specified in the application. There was no specific mention of a source such as Atlas, for example.
3. We currently are considering the matter from a policy perspective. It is my understanding that in previous applications, sources and volumes have usually been specified.

Tom Essig

>>> Joseph Gray 04/26/2000 10:21 >>>

Maria-

Steve Burns pointed out an article in the Utah Desert News that states that a Wyoming firm, Plateau Resources, "has requested from the Nuclear Regulatory Commission an amendment to their Shootaring Canyon license that would allow the company to accept the Atlas waste tailings." The article indicates that the Shootaring Canyon mill in Riverton, Wyoming is prepared to take the Moab tailings if authorized by the appropriate federal authorities. Could you check with the staff and determine whether the NRC has received the application described in the quote (above) and, if such an application has been received, describe the status of the staff's review?

Thanks -- Joe G.

CC: John Cordes, Joseph Holonich, Marjorie Nordlinge...

July 27, 1995

EA 94-117

Atlas Corporation
ATTN: Richard E. Blubaugh, Vice President
Environmental and Governmental Affairs
Republic Plaza
370 Seventeenth Street, Suite 3150
Denver, Colorado 80202

Gentlemen:

This will acknowledge receipt of your letter dated July 13, 1995, and your check for \$5,000 in payment for the civil penalty proposed by NRC in a letter dated June 15, 1995. Your corrective actions will be examined during future inspections.

Sincerely,

151

James Lieberman, Director
Office of Enforcement

Docket No. 040-3453
License No. SUA-917

cc: L. J. Callan, RIV

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