

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Presiding Officer:

G. Paul Bollwerk, III, Administrative Judge

Special Assistant:

Dr. Charles N. Kelber, Administrative Judge

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USNRC

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OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

In the matter of)
) Docket No. 40-3453-MLA
ATLAS CORPORATION)
) ASLBP No. 97-723-02-MLA
(Moab, Utah Facility))

LICENSEE'S RESPONSE

I. Facts

The Nuclear Regulatory Commission (NRC) has issued Materials License SUA-917A to Atlas Corporation (Atlas or the Company) for its uranium milling facility at Moab, Utah. Condition 55(A)(3) of this license required Atlas to complete placement of the final radon barrier by December 31, 1996.

However, events completely beyond the control of Atlas prevent the company from moving forward with installation of its final radon barrier. Essentially, before Atlas can even begin to plan the installation of the radon barrier, NRC must make a decision to approve Atlas'

18254

application for a revised reclamation plan.^{1/} Moreover, NRC's decision on the application for a revised reclamation plan must await completion of a second Environmental Impact Statement (EIS). A Technical Evaluation Report (TER) reassessing a variety of issues associated with on-site stabilization was finalized by NRC on March 7, 1997. NUREG 1532. This report concludes that, subject to license conditions identified in the TER, the proposed reclamation plan satisfies the applicable regulatory requirements.

Atlas has had no control over NRC's completion of this EIS/TER process. Indeed, Atlas thought the EIS/TER process would be on a "fast track" and completed within one year, but the process so far has taken three years. Even though the TER has been completed, NRC staff currently estimates that the EIS will not be completed until October or November, 1997.^{2/} The NRC Staff also agrees with Atlas' estimate that if the company receives NRC approval to begin construction, it will take approximately three years to finish installation of the radon barrier.^{3/}

Because Atlas may not commence construction of the radon barrier until the NRC has finally completed the EIS/TER process and approved on-site stabilization, the Company had no option but to seek an amendment to the license condition extending the deadline for completion

^{1/} This revised reclamation plan updates Atlas' 1988 proposal to stabilize the tailings on-site.

^{2/} Until recently, NRC believed that the TER would be completed by the end of April, 1997, and that the final EIS would be completed in August, 1997. See, Letter from Sherwin E. Turk, Counsel for NRC Staff, to G. Paul Bollwerk, III, Administrative Law Judge (February 21, 1997) (copy attached to this Response as Exhibit A). However, NRC actually completed the TER in March, 1997. See, Letter from Joseph J. Holonich, Chief, Uranium Recovery Branch, NRC to Richard Blubaugh, Vice President of Environmental and Governmental Affairs, Atlas Corporation (March, 7, 1997) (copy attached to this Response as Exhibit B). Furthermore, NRC now believes that the EIS will be completed in October or November, 1997. Telephone call from Joseph J. Holonich, Chief, Uranium Recovery Branch, NRC to Anthony J. Thompson (April 2, 1997).

^{3/} See Exhibit A.

of the radon barrier. This amendment, which NRC approved on March 4, 1997, will allow the NRC sufficient time to complete its EIS/TER review, will allow a licensing decision on Atlas' revised reclamation plan based on that review, and, if the NRC approves the revised reclamation plan, will allow Atlas time to install the radon barrier.

Petitioner, John Francis Darke (Darke or Petitioner) has requested a hearing before the NRC on this license amendment request.

II. Petitioner has not established a right to a hearing

The NRC Rules applicable to this hearing are located at 10 C.F.R. Part 2, Subpart L. These rules apply to this hearing because it is an adjudication initiated by a request for a hearing for a licensee-initiated amendment of a materials license. 10 C.F.R. § 2.1201(a)(1).

When ruling on a request for a hearing, the NRC regulations provide that the Presiding Officer shall determine that the specified areas of concern are germane to the subject matter of the proceeding; that the petition is timely; and that the requester meets the judicial standards for standing. 10 C.F.R. § 2.1205(g). In determining whether the Petitioner has standing, the Presiding Officer shall consider, among other factors: (1) the nature of the requester's right to be made a party to the proceeding; (2) the nature and extent of the requester's property, financial or other interest in the proceeding; and (3) the possible effect of any order that may be entered in the proceeding upon the requester's interest. 10 C.F.R. § 2.1205(g). The Petitioner has the burden of proof in each of these matters. See, Energy Fuels Nuclear, 40 N.R.C. 151 (October 21, 1994) (the Petitioner must show that the areas of concern are germane to the subject matter of the

proceeding); Babcock and Wilcox, 1993 NRC LEXIS 6, *1 (burden is on Petitioner to establish standing).

A. Petitioner has not identified specified areas of concern that are germane to the subject matter of the proceeding

It is important for the Board to remember that Atlas has merely requested an amendment to its license. This amendment would allow Atlas an additional four years to complete installation of the radon barrier at its Moab facility. In Energy Fuels Nuclear, this Board stated that when examining whether an area of concern is germane to a license amendment proceeding, the Board must focus on whether the license amendment, not the already licensed activities, will have an impact on the Petitioner's areas of concern. Energy Fuels Nuclear, 40 N.R.C. 151 (October 21, 1994). In that case, the Board clearly distinguished between concerns arising from the initial licensing of the facility and those arising from the amendment application. Therefore, to show that his areas of concern are germane to the proceeding, Darke must show that granting a four year extension for completion of the radon barrier will have an impact on his interest. This Darke has failed to do.

As an initial matter, the Petitioner has not identified any areas of concern at all. His vague references to adverse health and safety effects and harm, "radiological and otherwise," are not sufficient to demonstrate that his areas of concern are germane to a license amendment proceeding. See, Darke's Request for Hearing (January 30, 1997); see also, Darke's Second Response at 8 (March 3, 1997); Darke's Third Response at 4 (March 24, 1997) (alleging that Petitioner "most probably intercepts numerous overloaded exposure pathways").

Moreover, even if Darke has shown areas of concern, these concerns are not germane to granting this license amendment. There is no reason that allowing Atlas additional time to complete the radon barrier, particularly when Atlas is prohibited from doing so until it has NRC approval, will cause any adverse effects on Darke or his family.

B. Petitioner has not shown standing to challenge
Atlas' application for an amendment

The Presiding Officer's Initial Order and the Memorandum and Order Permitting Additional Filing direct the Petitioner to supplement his Petition to indicate why he has standing to request a hearing. Initial Order at 2; see also, Memorandum and Order Permitting Additional Filing at 2. Furthermore, the Presiding Officer's Initial Order specifically directs Darke to provide an affidavit setting forth factual information in support of his claim, including details about his proximity to the facility. Id. at 3. Petitioner has not shown that he has standing, nor has he provided the affidavit requested in the Order.

The Board has addressed the question of standing in a proceeding where an applicant sought to amend its license for a nuclear fuel fabrication facility. See, e.g., In the Matter of Babcox and Wilcox, 1993 NRC LEXIS 6 (February 5, 1993). In that case, the Board stated that, to be entitled to a hearing, a party must show: (1) that it could suffer an actual "injury in fact" because of the licensing proceeding; and (2) that its interest arguably is within the zone of interests to be protected by the pertinent statute. Id. at *6.

The Board outlined three components of the injury in fact determination. First, there must be an asserted injury that is "distinct and palpable" and "particular and concrete" as opposed

to "conjectural, hypothetical or abstract." Id. at *7 (punctuation omitted). Second, there must be a causal nexus between the asserted injury and the challenged action. Id. at *8. Finally, there must be a sufficient causal connection between the alleged harm and the requested remedy so that the complaining party has something to gain from the outcome. Id.

First, with respect to the question of whether there is a distinct and palpable injury asserted, Petitioner has made no allegation of an injury beyond vague references to his health and safety and the health and safety of his family. Moreover, any such claim is inaccurate. Petitioner has no authorized access to the site itself and the tailings pile has been covered with interim cover to reduce radon emissions and to virtually eliminate particulate emissions (i.e., windblown tailings). As a result, Atlas complies with NRC's requirement that annual total effective dose equivalents (TEDE) fall below 100 millirem per year to the maximally exposed individual. 10 C.F.R. §§ 20.1301-02. See, Letter from Richard Blubaugh, Vice President Environmental and Governmental Affairs, Atlas Corporation to Joseph Holonich, Chief, High Level Waste and Uranium Recovery Projects Branch (February 27, 1997) (copy attached to this Response as Exhibit C). Finally, although the Petitioner has claimed that he resides "in the vicinity" of the facility, the Board should be mindful that where mere proximity might confer standing in a commercial power reactor hearing request, this is not the case with a materials licensing action. Babcock and Wilcox, 1993 NRC LEXIS at *13-*14.

Recognizing that the Petitioner had not yet established standing, this Panel noted that the Petitioner "must make a showing that his proximity to the facility . . . is such that the Moab facility and activities related to that facility that are relevant to the license amendment at issue will

affect his interests" Memorandum and Order Permitting Additional Filing (March 11, 1997) (emphasis added). The Panel recognizes that in addition to showing proximity to the facility, the Petitioner must show "how, at those distances, the facility and any relevant activities at the facility will affect the Petitioner's interests." Id.

Responding to the Memorandum and Order Permitting Additional Filing, Darke alleges that he and his family obtain drinking and cooking water from a source that is "within a short walk" of the facility and bathe in the Colorado River. Petitioner's Third Response at 3. However, Darke has still failed to show why he has standing. Specifically, Petitioner has not stated whether this water source is upstream or downstream of the facility or how the proposed license amendment will have an impact on this water. Furthermore, Darke has not indicated whether the drinking or cooking water he refers to is from surface water or groundwater. Because it is very unlikely that Petitioner drinks the water from the Colorado River, his cooking and drinking water is most likely from a spring, the source of which is at an elevation level above the facility. Therefore, the facility cannot have an impact on Mr. Darke's drinking water.

Darke has also made allegations about a "programmatic regulatory breakdown" at the NRC that has caused "noxious exposure pathways." Petitioner's Third Response at 4. This programmatic regulatory breakdown allegedly causes activities resulting in "overloaded exposure pathways most probably intercepted by the [Petitioner] and family." Id. In addition to being nonsense, Petitioner has not shown how these allegations have any relationship whatsoever to allowing Atlas a four-year extension to complete placement of the final radon barrier.

For the foregoing reasons, Petitioner has failed to satisfy the requirement that he demonstrate some "injury in fact."

III. Darke's Petition

Although Atlas strongly believes that Darke has failed to present areas of concern that are germane to this proceeding, and that he has failed to demonstrate that he has standing, there are three matters raised by his Petition and supplementary filings which Atlas will address. First, Darke claims that the license amendment should be denied because completing the radon barrier is not technologically infeasible. Second, he demands that NRC establish a public document room in Moab, Utah for this proceeding. Third, he claims that he is entitled to a formal hearing.

A. It is technologically infeasible for Atlas to complete the final radon barrier

Atlas' license provides that "[a]ny license amendment request to revise the completion dates specified in Section A must demonstrate that compliance was not technologically feasible." License Condition 55(C). Petitioner Darke contends that Atlas' application fails to show that compliance with the deadline in the license was not technologically feasible. Petitioner's Second Response at 5.

Darke ignores the language in the provision noting that technological infeasibility includes "inclement weather, litigation which compels delay to reclamation, or other factors beyond the control of the licensee." License Condition 55(C) (emphasis added). Indeed, this license condition merely reflects the definition of "factors beyond the control of the Licensee" in

the Introduction to Appendix A, 10 C.F.R. Part 40. Furthermore, the NRC's Federal Register notice proposing the amendment to Appendix A states as follows:

Factors beyond the control of the licensee would be defined as factors proximately causing delay in meeting the schedule in the applicable reclamation plan for the timely emplacement of the final radon barrier notwithstanding the good faith efforts of the licensee to complete the barrier. Consistent with the further description in the preamble to EPA's proposed rule, these factors may include, but are not limited to:

...

Delays beyond the time reasonably required in obtaining necessary government permits, licenses, approvals or consent for activities described in the reclamation plan proposed by the licensee that result from agency failure to take final action after the licensee has made a good faith, timely effort to submit legally sufficient applications, responses to requests (including relevant data requested by the agencies), or other information, including approval of the reclamation plan;

58 Fed. Reg. 58661 (Nov. 1993) (second emphasis added).^{4/}

Therefore, NRC has explicitly recognized that the situation where a licensee cannot perform a task because it has not yet received the required approval from the licensing agency is a "factor beyond the control of the licensee." Moreover, the NRC staff has determined that "Atlas' inability to complete placement of the radon barrier on the pile by December 31, 1996, is due to factors beyond Atlas' control." NRC Technical Evaluation Report for the License Amendment attached to Letter from Joseph J. Holonich, Chief, High Level Waste and Uranium Recovery Projects Branch, NRC, to Richard Blubaugh, Vice President of Environmental and Governmental Affairs, Atlas Corporation (March 4, 1997) (attached to this Response as Exhibit D).

^{4/} Atlas would also like this Panel to note that the EPA-NRC Memorandum of Understanding (MOU) that Darke requests basically has been superseded by NRC's amendments to Appendix A of 10 C.F.R. Part 40. See generally, 58 Fed. Reg. 58657 (Nov. 1993).

Petitioner's claim that Atlas' amendment application is not the result of technological infeasibility has no merit.

B. Darke is not entitled to have a public document room established in Moab

Also in Petitioner's Second Response, he claims that he is entitled to the establishment of a public document room. Essentially, he claims that he is entitled to documents referenced in Atlas' license. However, Darke has made no showing that any of these documents are relevant to this license amendment proceeding. Indeed, given the narrow scope of this license amendment request, it would be difficult to imagine how any documents could be relevant to a time extension other than those which the Board has already ordered NRC staff to provide Darke. Initial Order at 8 (ordering NRC to provide Darke with a copy of Atlas' request for a license amendment and a copy of the license).

In addition, Atlas has provided copies of virtually all documents filed in connection with this facility in the EIS/TER process with the Grand County Council and has made available copies of the major documents involved to the residents of Moab by sending them to the local public library.^{5/} To the extent Petitioner seeks further information on Atlas' site and the lengthy environmental review it has undergone, he will find such documents with the County Council or in the library. Moreover, although not related to this amendment request, but to the underlying request for a revision to the reclamation plan, there have been at least three public meetings held in

^{5/} Darke is aware of the documents in the public library, and has apparently helped the library to organize its files. See, "Unemployed 'Darke Man' is Moab's Tailings Guru," Salt Lake Tribune (March 28, 1997) (noting that Darke's "quest is to establish a 'Local Public Document Room' in Moab") (attached to this Response as Exhibit E).

Moab. The NRC held two meetings and the Licensee held another. Between the documents provided to the local library and the information presented at the public meetings, this has been an open process that has ensured public access to large amounts of information about the Atlas site.

C. Darke is not entitled to a formal hearing

In Petitioner's First Response, Darke claims that he is entitled to a formal hearing. Petitioner's First Response at 2-3. Although not altogether clear from the Petition, the basis for this claim appears to be the Petitioner's belief that Atlas' amendment request is not a "licensee initiated amendment." Id. at 2.

Petitioner misunderstands the nature of this proceeding, which is plainly a licensee initiated amendment. First, Atlas is the licensee. Second, Atlas applied for an amendment to its license. Therefore, this matter is a licensee-initiated amendment.^{6/} If Darke is entitled to a hearing at all, the informal hearing procedures are appropriate, and the Board should deny Darke's request for a formal hearing.

^{6/} The Board should note that, in his Second Response, Darke refers to Atlas' request for an amendment as "the December 20, 1996 Applicant/Licensee license amendment request." Petitioner's Second response at 2. Therefore, Petitioner is aware that the licensee initiated this request for an amendment.

IV. Conclusion

For the foregoing reasons, Petitioner's request for a hearing should be denied.

Respectfully submitted,

Anthony J. Thompson / PG

Anthony J. Thompson
Shaw, Pittman, Potts & Trowbridge
2300 N Street, N.W.
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Telephone: (202) 663-9198
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Counsel for Licensee

Date: April 7, 1997

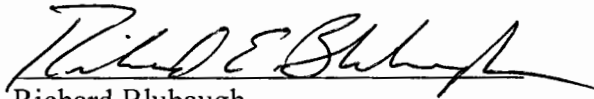
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VERIFICATION

As Vice President of Environmental and Governmental Affairs for Atlas Corporation ("Atlas"), I am familiar with the facts concerning Atlas' uranium mill tailings facility in Moab, Utah. In particular, I am familiar with the licensing proceedings before the Nuclear Regulatory Commission.

I have read the foregoing Response of Atlas Corporation to the Petition of John Francis Darke, and the facts stated therein are true and accurate to the best of my knowledge.

Dated this 4th day of April 1997.

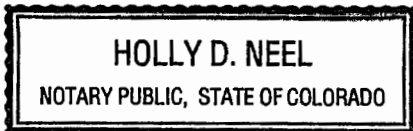


Richard Blubaugh
Vice President, Environmental and Governmental Affairs
Atlas Corporation

STATE OF COLORADO)
 : SS.
COUNTY OF DENVER)

On the fourth day of April, 1997, before me personally appeared Richard Blubaugh, known to me or proved to me to be the Vice President, Environmental and Governmental Affairs of Atlas Corporation, a Delaware corporation, who, being first duly sworn, acknowledged that he executed the foregoing instrument in the name of said entity, that he had the authority to execute the same, and that he executed the same as the act and deed of said entity for the uses and purposed therein stated.

Witness my hand and official seal.


NOTARY PUBLIC

My commission expires:
December 8, 1997

EXHIBIT A



OFFICE OF THE
GENERAL COUNSEL

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

February 21, 1997

G. Paul Bollwerk, Esq.
Administrative Judge
Presiding Officer
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. Charles N. Kelber
Administrative Judge
Special Assistant
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

In the Matter of
Atlas Corporation (Moab, Utah Facility)
(Request for Extension of Site Reclamation Plan Milestone)
Docket No. 40-3453-MLA

Dear Administrative Judges:

In the Presiding Officer's Memorandum and Order (Initial Order) dated February 12, 1997 (at 3), the NRC Staff ("Staff") was requested to inform the Presiding Officer by February 21, 1997, whether it wishes to participate as a party in this adjudication concerning the licensee's request to change the milestone completion date stated in License Condition 55 A.(3). In accordance with the Presiding Officer's Order and 10 C.F.R. § 2.1213, I wish to inform you that the Staff has determined that it does not desire to participate as a party in this MLA proceeding, if an adjudicatory hearing is in fact conducted.

In addition, the Staff has authorized me to inform you that it has reviewed the licensee's December 20, 1996 application, which states that an extension of the milestone date is required in order to allow completion of the Staff's review of the licensee's site reclamation plan and a three-year period for licensee implementation of the plan thereafter. The Staff is in agreement with the licensee's statements concerning these schedular matters. Although the site reclamation plan and the Staff's evaluations thereof are not at issue in this proceeding, the Staff notes that its technical evaluation report (TER) with respect to that plan is expected to be completed in about two months, and its related environmental impact statement (EIS) should be completed in about six months. The licensee's projection of a three-year licensee implementation period is consistent with the Staff's expectations.

Sincerely,

Shorwin E. Turk
Counsel for NRC Staff

cc: Service List

EXHIBIT B



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

March 7, 1997

Mr. Richard Blubaugh
Vice President of Environmental
and Governmental Affairs
Atlas Corporation
370 Seventeenth Street, Suite 3150
Denver, Colorado 80202

SUBJECT: FINAL TECHNICAL EVALUATION REPORT

Dear Mr. Blubaugh:

Enclosed please find the U.S. Nuclear Regulatory Commission Final Technical Evaluation Report (FTER) for the proposed revised reclamation plan for Atlas Corporation's (Atlas) Moab, Utah mill. NRC plans to publish the FTER as a NUREG document in the near future.

The FTER documents the staff's review of your proposed reclamation plan for the uranium mill site and tailings pile near Moab, Utah. The NRC staff concludes that, subject to license conditions identified in the FTER, the proposed reclamation plan meets the requirements identified in NRC regulations, which appear primarily in 10 CFR Part 40. The NRC cannot, however, make a final determination of the acceptability of the proposed reclamation plan until it completes its environmental review, required under the National Environmental Policy Act of 1969 and NRC regulations in 10 CFR Part 51. Staff anticipates completing that review and documenting its findings in a Final Environmental Impact Statement this summer.

Any questions should be addressed to the Project Manager, Myron Fliegel at (301) 415-6629.

Sincerely,

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

Joseph J. Holonich, Chief
Uranium Recovery Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosure: As stated

cc: See attached list

Addressees for Letter to R. Blubaugh dated: March 7, 1997

Mr. John E. Cook, Reg. Dir.
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EXHIBIT C



ATLAS CORPORATION



Republic Plaza, 370 Seventeenth Street, Suite 3050
Denver, CO 80202
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RICHARD E. BLUBAUGH
Vice President Environmental
and Governmental Affairs

February 27, 1997

Mr. Joseph J. Holonich, Chief
High-Level Waste and Uranium Recovery Projects Branch
Division of Waste Management
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Re: License SUA-917, Docket No. 40-3453, 1996 Annual Dose Calculations

Dear Mr. Holonich:

This letter transmits the calculated annual dose for 1996 pursuant to 10 CFR Parts 20.1301 and 20.1302. We used the same method (10CFR20.1302(b)(2)) for determining the total effective dose equivalent (TEDE) to the individual most likely to receive the highest dose from the licensed facility for 1996 as was submitted in the revised 1995 calculation.

As shown in the tables presented in the enclosure, the sum of the internal and external doses (TEDE) to the maximally exposed individual (MEI) for calendar year 1996 is calculated to be 56 mrem (0.56mSv). This is slightly less than the TEDE of 64 mrem calculated for 1995 by Atlas and the 67 mrem reported in the January 1996 DEIS (NUREG-1531). The 1996 TEDE to the MEI is less than the regulatory limit of 100 mrem (1 mSv).

Please contact me or Dale Edwards (801-259-5131) should you have any questions concerning this submittal.

Sincerely,

Richard E. Blubaugh

Enclosure

cc: Distribution List

**Atlas Corporation
Moab, Utah**

**1996 Annual Dose to Nearest Resident
Sum of External and Internal Doses**

INTERNAL	* Loc.	Q1	Q2	Q3	Q4	Avg.	Diff.	Fraction of DAC
U-Nat(E^{238}) μ Ci/ml	#1	.001	.001	.001	.002	.0013	.0001	$.001 E^{-12} \mu$ Ci/ml = .001 $9 E^{-14} \mu$ Ci/ml (DAC)
	#6	.002	.001	.007	.001	.0012		
Ra 226 (E^{226}) μ Ci/ml	#1	.0008 *	0	.0003	.0004	.0004	0	$0 = 0$ $9 E^{-13} \mu$ Ci/ml (DAC)
	#6	.0005	.0005	.0002	.0004	.0004		
Th 230 (E^{230}) μ Ci/ml	#1	.05	.08	.04	.05	.055	.025	$.025 E^{-13} \mu$ Ci/ml = .013 $2 E^{-14} \mu$ Ci/ml (DAC)
	#6	.007	.034	.007	.07	.030		

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg.	Diff.	
Rn 222 (E^{222}) μ Ci/ml	#1	31	31	20	22	11	13	23	51	33	31	43	35	29	17	$17 E^{-10} \mu$ Ci/ml x 0.094 = 1.60 $1 E^{-10} \mu$ Ci/ml (DAC) *
	#6	13	9	12	9	2	7	5	8	15	17	37	7	12		

Sum of Fractions $1.61 \times 50 \text{ mrem/y} = \frac{80.6}{2} \text{ mrem/y}$

INTERNAL DOSE
= 40 mrem

EXTERNAL	Loc.	Q1	Q2	Q3	Q4	mrem Total	mrem Diff.	External Dose
(TLD) mrem.Qtr.	#1	17	13	10	17	57	16	= 16 mrem
	#6	12	11	7	11	41		

Total = 56 mrem

#1 Air Sampler by the Nearest Residence

#6 Air Sampler at the Background Station

* 0.094 = Equilibrium Factor for Nearest Residence -- Assuming Wind Speed of 3.5 m/s (from Table 2-4 EPA 520/1-86-009, August 1986).

+ With Daughters Present at 100% Equilibrium

Distribution List for Letter Dated: February 27, 1997

Mr. John E. Cook, Regional Director
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Vijai Rai, Chief
Energy Facilities Division
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EXHIBIT D



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

WASHINGTON, D.C. 20555-0001

March 4, 1997

Mr. Richard Blubaugh
Vice President of Environmental
and Governmental Affairs
Atlas Corporation
370 17th Street
Suite 3050
Denver, Colorado 80202

**SUBJECT: CHANGE RECLAMATION MILESTONE FOR RADON BARRIER PLACEMENT
LICENSE CONDITION 55A.(3) SOURCE MATERIAL LICENSE NO. SUA-917
AMENDMENT 28**

Dear Mr. Blubaugh:

In response to your amendment request dated December 20, 1996, we are modifying Source Material License No. SUA-917 to incorporate a change in the date for placement of the final radon barrier, in License Condition (LC) 55A.(3). Atlas Corporation (Atlas) stated that placement of the final radon barrier is part of its revised reclamation plan, which has not yet been approved by NRC. If the reclamation plan is approved in mid-1997, Atlas would commence construction activities in 1997 and would be expected to complete this milestone by the end of 2000.

The enclosed Technical Evaluation Report (TER) contains NRC's assessment of the licensing action and the recommended license change. Based on this assessment, the date for placement of the final radon barrier in LC 55A.(3) is being changed from December 31, 1996, to December 31, 2000. The license is being reissued to incorporate this change.

An environmental assessment for this action is not required since it is categorically excluded under 10 CFR 51.22 (c)(11), and an environmental report from the licensee is not required by 10 CFR 51.60 (b)(2).

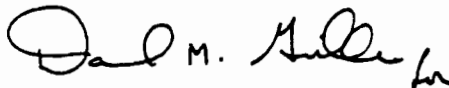
A request for hearing has been filed on Atlas' requested license amendment and as a result, an Atomic Safety and Licensing Board panel has been established to consider the request. In accordance with 10 CFR 2.1205(m), the staff hereby issues the requested amendment, notwithstanding the pendency of the request for hearing, based upon the evaluation contained in the enclosed TER.

R. Blubaugh

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Any questions should be addressed to Myron Fliegel, NRC's project manager, at (301) 415-6629.

Sincerely,

A handwritten signature in dark ink, appearing to read "J. M. Holonich", followed by a small "for" written in cursive.

Joseph J. Holonich, Chief
Uranium Recovery Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 40-3453
Source Material License No. SUA-917
Amendment No. 28

Enclosures: As stated

cc: See attached list

Addressees for Letter Dated: March 4, 1997

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TECHNICAL EVALUATION REPORT

DOCKET NO. 40-3453 LICENSE NO. SUA-917

LICENSEE: Atlas Corporation

FACILITY: Atlas Moab Uranium Mill

PROJECT MANAGER:

Myron Fliegel

TECHNICAL REVIEWER:

Myron Fliegel

SUMMARY AND CONCLUSIONS:

By letter dated December 20, 1996, Atlas Corporation (Atlas) submitted a request to amend License Condition 55 (LC 55) of Source Material License No. SUA-917. LC 55 lists the completion dates for reclamation milestones established as targets in the Memorandum of Understanding (MOU) with the Environmental Protection Agency (EPA) (56 FR 55432, October 25, 1991). Atlas requested that the license date for completion of placement of the final radon barrier on the pile in LC 55A.(3), be changed from December 31, 1996 to December 31, 2000. The staff concludes that Atlas' inability to complete placement of the radon barrier on the pile by December 31, 1996, is due to factors beyond Atlas' control. The staff recommends that the license be amended to require placement of the final radon barrier by December 31, 2000.

DESCRIPTION OF LICENSEE'S AMENDMENT REQUEST:

The licensee requested that the date in LC 55A.(3) for completion of placement of the final radon barrier on the pile, be changed from December 31, 1996 to December 31, 2000. Reclamation milestones in the MOU with EPA are in License Condition 55. The requested date change is attributed to the fact that Atlas has not yet received NRC approval to commence placement of the final radon on the pile. Atlas' proposed date is based on the assumption that NRC will approve its proposed plan for onsite reclamation in mid-1997 and that construction activities will commence in late-1997.

TECHNICAL EVALUATION:

Atlas states that it can not commence construction of the final radon barrier, as it has not yet received NRC approval of its' proposed reclamation plan. NRC can not approve Atlas' reclamation plan until it has completed its evaluation of the plan with respect to technical criteria contained in 10 CFR Part 40, Appendix A and considered the associated environmental impacts. The staff expects to have completed its evaluations and published a final Technical Evaluation Report and Environmental Impact Statement by mid-1997. If the staff approves the proposed plan, Atlas can then begin construction activities. Staff considers three years to be a reasonable time period to complete the radon barrier.

Radon emissions from the pile are currently attenuated by an interim cover such that there should be no public health risk during the period prior to completion of the final radon barrier.

RECOMMENDED LICENSE CHANGE:

The staff recommends that a minor change to Source Material License SUA-917, LC55 A.(3), be made to reflect the revised date for completion of placement of final radon barrier. The revised license condition will read as follows:

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, 1997.
 - (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 - December 31, 1998.
 - 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]

ENVIRONMENTAL IMPACT EVALUATION:

The staff has determined under exclusions contained in 10 CFR 51.22 (c) (11) that further environmental documentation is not required for this amendment. The amendment is administrative, revising a date for completion of an activity. Therefore, an environmental assessment by this office for the proposed action is categorically excluded under 10 CFR 51.22 (c) (11), and is not required by 10 CFR 51.60 (b) (2).

REFERENCES:

Letter from Richard E. Blubaugh to Joseph J. Holonich, December 20, 1996.

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.

Licensee	
1. Atlas Corporation	3. License Number SUA-917, Amendment No. 28
2. 370 17th Street, Suite 3150D Denver, Colorado 80202-5631 [Applicable Amendment: 9]	4. Expiration Date Until terminated 5. Docket or Reference No. 40-3453

6. Byproduct, Source, and/or
Special Nuclear Material7. Chemical and/or Physical
Form8. Maximum Amount that Licensee
May Possess at Any One Time
Under This License

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 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."
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,

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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.

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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.

[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)

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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.

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]

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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.
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

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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.

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 May 29, 1981, submittal entitled "Report, Conceptual Design and Cost Estimate, Tailings Pile Reclamation, Moab, Utah, for Atlas Minerals," until superseded by an approved site reclamation plan which meets the requirements of 10 CFR 40, Appendix A.

[Applicable Amendment: 18]

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 previously provided guidance entitled, "Recommended Outline for Site Specific

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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

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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 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, 2, 4, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100]

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.

**MATERIALS LICENSE
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SUA-917, Amendment No. 28

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40-3453

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 submittals dated July 14 and August 19, 1988.

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, 1997.
- (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

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performance objectives specified in the ground-water corrective action plan - December 31, 1998.

- 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]

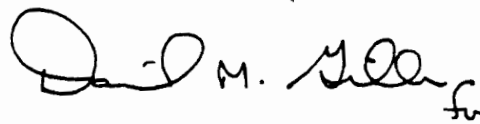
- 56. Notification to NRC under 10 CFR 20.2202, 10 CFR 40.60, and specific license conditions should be made as follows:

Required written notice to NRC under this license should be given to: Chief, Uranium Recovery 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]

FOR THE NUCLEAR REGULATORY COMMISSION



Joseph J. Holonich, Chief
Uranium Recovery Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Dated: 3/4/97

EXHIBIT E

Unemployed 'Darke Man' Is Moab's Tailings Guru

BY BRENT ISRAELSEN

THE SALT LAKE TRIBUNE

MOAB — On occasions that the U.S. Nuclear Regulatory Commission needs to get in touch with John Darke, it writes to:

Mr. John Darke
In Route General Delivery
Moab, UT 84532

The NRC would mail letters directly to Darke's residence, but the U.S. Postal Service does not deliver to campsites along the Colorado River, where Darke, his wife, Sarah, and their teen-age son now live.

The Darkes are homeless and unemployed, though it is unclear whether it is by choice or misfortune. They would rather not talk about themselves. And they prefer not to be photographed.

What is clear is that Darke knows a lot about the legacy created by the old Atomic Energy Commission, the Department of Energy, the NRC and the nuclear power industry.

To Moab residents trying to get Uncle Sam to remove a pile of radioactive tailings from the banks of the Colorado River, Darke has become somewhat of a guru.

"Yeah, you could call him that," says Peter Haney, a former Grand County councilman, who is leading the tailings removal effort.

The tailings pile is owned by Atlas Corp. of Denver, which once operated a uranium mill next to the river, about two miles northwest of town. The pile contains 10.5 million tons of mildly radioactive waste, which is leaching into the waterway, upstream from Canyonlands National Park.

Residents want to see the tailings moved to a remote site in the desert 20 miles north. Atlas claims that proposal would bankrupt the company and instead proposes to cap the tailings in place to minimize the leaching.

The NRC, which is the federal agency that decides what to do with uranium mill tailings, favors Atlas' proposal, saying the tailings can be made safe where they are.

Residents have not backed away from their fight, but they are becoming increasingly frus-

trated by what they say is an overwhelmingly complex NRC bureaucracy.

Enter Darke.

Sometime last fall, Darke and his family came to Moab, an area in which they have resided off and on for the past 20 years. Until they find gainful employment, they stay at campsites along the Colorado River.

Sometime in December, Darke left Haney some notes at work, offering his services. Haney accepted the offer and has since spent dozens of hours with Darke, poring over NRC and Atlas documents.

"John probably knows the NRC regulations as well as anyone in the NRC," says Haney. "He has been a real asset for me in trying to figure out the NRC. He understands the right things to say to get you through the NRC hearing process. He can argue legalese with the best of them."

The Tribune caught up with Darke on a sunny March morning on Kane Creek Boulevard as he talked at a pay phone outside of Slickrock Cinemas 3. His wife was folding clothes at the coin-op laundromat next door.

A tall, slender man in his 50s, Darke was dressed in a royal blue flannel shirt and loose-fitting gray trousers. His long, silver hair was pulled back into a pony tail, exposing a dark-tanned forehead and deeply set eyes. An inch-thick stack of documents rested atop the phone. He occasionally rested his arm on the documents and tapped his fingers impatiently on the side of them.

"Uh-oh," Darke says to his wife, extending a slightly arthritic hand to a Tribune reporter. "We've been busted by the press."

Eloquent but often rambling in conversation, Darke, a native of Washington, D.C., says he first came to southeast Utah in the mid-1970s as a ranch hand in San Juan County. Prior to that, he apparently attended school. "I experienced three universities here in Utah. Let's leave it at that," Darke says when asked about his education.

He and his wife first became sensitized to nuclear issues on Dec. 18, 1979. They were camping north of the Nevada Test Site when an underground nuclear blast, code-named "Fable," went awry, venting a cloud of radioactivity 8,000 feet into the sky.

In the ensuing months, Darke tried to find out exactly what happened and what risk he and his

wife might face. What he discovered instead was a secretive U.S. government that he says either did not want the public to know about atomic testing or did a bad job of releasing information.

Darke decided to become active in making the federal government fully disclose all documents relating to its nuclear history. Citizens, he says, have the right to consent, dissent or remain silent. But the exercise of any of those three options must be informed.

These days, he has renewed his interest of a decade ago in the Atlas problem and the NRC, an agency he says has suffered from a "programmatic breakdown" in making documents public.

Since just before Christmas, Darke has been re-educating himself on Atlas, using the few documents that are available locally at the Grand County Library.

"He comes in here at least once a week, sometimes twice," says assistant librarian Kathy Megee.

"He will be in here for three hours at a time. Sometimes, he checks out Atlas documents to take home with him, or, I mean, to his camp."

Megee says the library is grateful to Darke because the current librarian did not know what to do with the Atlas files. "He kind of put them in order for us. He has told us what we need to keep."

Darke often is joined by his wife, a soft-spoken woman who knows the ins and outs of obtaining documents by phone or via computer. "There are more than 2,000 documents relating to Atlas. Only a few of them are here [in Moab]. The people of Moab have never truly had access to these documents."

Do not ask Darke for his opinion on what should be done to mitigate the Atlas tailings pile. That is not his focus yet.

His quest is to establish a "Local Public Document Room" in

Moab that would fully stock all records relating to uranium mining and processing in southeast Utah.

He credits the NRC for its efforts in "retrofitting" the public record with lost or misplaced documents dating back to 1955. In recent years, the NRC has been cataloging hundreds of such documents.

But those documents should be made better available to the communities most affected by them, Darke says.

So far, the NRC has refused his requests.

Darke has formally petitioned the NRC for a hearing to establish a reading room in Moab. He expects them to respond within a month or two.

"We'll talk more then," he says, lifting his pack to his back, and saying goodbye.

He and his wife head into City Market to buy a few groceries before hitchhiking back to camp.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DOCKETED
USNRC

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

'97 APR 10 P4:26

In the matter of)

ATLAS CORPORATION)

(Moab, Utah Facility))

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH
Docket No. 40-3453-MLA

ASLBP No. 97-723-02-MLA

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Licensee's Response were served upon the persons listed below by deposit in the United States mail, first class, postage prepaid, return receipt requested, this 7th day of April, 1997.

Office of Commission Appellate Adjudication
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

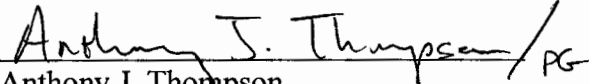
Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001
Attn: Docketing and Service Branch

Administrative Judge
Charles N. Kelber
Special Assistant
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Administrative Judge
G. Paul Bollwerk, III
Presiding Officer
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

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Washington, D.C. 20555-0001


Anthony J. Thompson PG

Dated: April 7, 1997

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