



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

May 9, 1997

40-8631  
40-9024

Earl E. Hoellen, President  
International Uranium (USA) Corporation  
Independence Plaza, Suite 950  
1050 Seventeenth Street  
Denver, Colorado 80265

SUBJECT: TRANSFER OF NRC SOURCE MATERIAL LICENSES SUA-1358 FOR THE  
WHITE MESA URANIUM MILL (AMENDMENT 2) AND NRC SOURCE  
MATERIAL LICENSE SUA-1558 FOR THE RENO CREEK PROJECT  
(AMENDMENT 4)

Dear Mr. Hoellen:

The U.S. Nuclear Regulatory Commission staff hereby acknowledges receipt from International Uranium (USA) Corporation of the following Standby Trust Agreement and Reclamation Performance Bond (collectively, the "Bond Documents") in satisfaction of the financial assurance requirements for the White Mesa Uranium Mill, as set forth in NRC Source Material License SUA-1358:

Standby Trust

Grantor: International Uranium (USA) Corporation  
Trustee: Norwest Bank Colorado, N.A.  
Beneficiary: United States Nuclear Regulatory Commission

Reclamation Performance Bond

Principal: International Uranium (USA) Corporation (IUSA)  
Issuer: National Union Fire Insurance Company of Pittsburgh, PA  
Bond Number: 18-23-17

The NRC staff has reviewed the Bond Documents and finds the proposed financial surety arrangement to be acceptable. This completes the financial surety requirements for the transfer of Source Material License SUA-1358 for the White Mesa Uranium Mill from Energy Fuels Nuclear, Inc. (EFN) to International Uranium (USA) Corporation (IUSA).

Additional details of EFN's December 31, 1996, request to transfer NRC Source Material Licenses SUA-1358 for the White Mesa mill and Source Material License SUA-1558 for the Reno Creek Project are discussed in the NRC staff's Technical Evaluation Report (TER). Additional information was provided by EFN and IUSA by letter dated April 27, 1997, by facsimile, and finally by hand-delivery on May 9, 1997. The TER documents the basis for the NRC staff's evaluation of the amendment request and is provided as Enclosure 1.

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The NRC staff reviewed EFN's request in accordance with 10 CFR Part 40, Appendix A, requirements, NRC Information Notice 89-25 (Revision 1), and NRC staff guidance on financial surety arrangements. Based on its review, the NRC staff finds the proposed license transfers to be acceptable, and this letter is evidence of the consent of the NRC to such transfers.

Therefore, pursuant to Title 10 of the Code of Federal Regulations, Part 40, Source Material License SUA-1358 is hereby amended by revising License Condition Nos. 1, 2, 9.3, and 9.5, and Source Material License SUA-1558 is hereby amended by revising License Condition Nos. 1, 2, 9, and 12. All other conditions of these licenses shall remain the same. The enclosed licenses are being reissued to incorporate the above modifications (Enclosures 2 and 3). An environmental review was not performed since these are administrative actions which are categorically excluded under 10 CFR 51.22(c)(11).

If you have any questions concerning this letter or the enclosures, please contact Mr. James Park of my staff, at (301) 415-6699.

Sincerely,

(Original signed by)

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

Docket Nos. 40-8681, 40-9024  
License Nos. SUA-1358, SUA-1558  
Case Closed: L51489

Enclosures: As stated (3)

cc: H. Roberts, EFN  
W. Sinclair, UT

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DOCUMENT NAME: S:\DWM\URB\JRP\TRANSFER.EFN

OFC	URB	E	LLDP	C	OGC	C	URB	C
NAME	JPark <i>JRP</i>		RTurtill <i>R. Turtill</i>		RFonner by email		JHolonich <i>J. Holonich</i>	
DATE	5/8/97		5/8/97		5/8/97		5/8/97	

OFFICIAL RECORD COPY

Enclosure 1

Technical Evaluation Report  
for Request of License Transfer  
Source Material License Nos. SUA-1358 and SUA-1558

TECHNICAL EVALUATION REPORT  
FOR REQUEST FOR LICENSE TRANSFER

DOCKET NOS. 40-8681, 40-9024

LICENSE NOS. SUA-1358, SUA-1558

LICENSEE Energy Fuels Nuclear, Inc

FACILITIES: White Mesa Uranium Mill  
Reno Creek Project

PROJECT MANAGERS: James Park  
Harold Lefevre

**SUMMARY AND CONCLUSIONS:**

The U.S. Nuclear Regulatory Commission staff has reviewed Energy Fuels Nuclear, Inc.'s (EFN's) request to transfer NRC Source Material Licenses SUA-1358 and SUA-1558 to International Uranium (USA) Corporation (IUSA), as submitted by EFN's letter dated December 31, 1996. Additional financial information was provided to the staff by facsimile, with final original copies hand-delivered on May 9, 1997. Based on its review, the NRC staff considers the request for license transfer to be acceptable.

**DESCRIPTION OF LICENSEE'S AMENDMENT REQUEST.**

By its submittal dated December 31, 1996, EFN requested that NRC Source Material Licenses SUA-1358 and SUA-1558, for the White Mesa Uranium Mill and the Reno Creek Project, respectively, be transferred to IUSA. As part of its submittal, EFN provided the information requested under NRC Information Notice (IN) 89-25, Revision 1 (December 7, 1994) and copies of the signed U.S. Bankruptcy Court Order and the fully executed Asset Purchase Agreement between the appropriate respective parties, for acquisition of substantially all of the Energy Fuels assets.

In addition, by facsimile, representatives for IUSA provided the NRC staff with draft copies of the financial surety arrangement documents, a Surety Trust Agreement and a Reclamation Performance Bond, for the White Mesa mill. Final original copies of these documents were hand-delivered to the NRC staff on May 9, 1997.

**TECHNICAL EVALUATION**

The NRC staff has reviewed EFN's license transfer request in accordance with 10 CFR Part 40, Appendix A, requirements, IN 89-25, and appropriate NRC staff guidance on financial surety arrangements.

With the transfer of the licenses, IUSA has stated that it will maintain the same functional organization structure, responsibilities, and qualifications, as those currently in place for both facilities. In addition, there are no planned changes in organization, facility location, equipment,

current operating and emergency procedures, or personnel, for either facility associated with the license transfer. Records at both sites concerning licensed activities and site decommissioning will be transferred to IUSA. Also, there will be no change in the use or storage of any licensed material on site. Finally, IUSA has committed to abide by all commitments and representations previously made to NRC for SUA-1358 and SUA-1558 and by all constraints, conditions, requirements, representations, and commitments included in the existing Source Material Licenses SUA-1358 and SUA-1558.

With respect to the financial surety arrangement for the White Mesa mill, IUSA is proposing to replace the current surety held by NRC (a Letter of Credit issued by The Bank of New York and provided by Umetco Minerals Corporation), with a performance bond issued by National Union Fire Insurance Company of Pittsburgh, PA (National Union). IUSA and its legal counsel drafted the various documents necessary for a complete financial assurance package using recommended language provided in NRC guidance, and as discussed above, provided these drafts by facsimile to the NRC staff. The NRC staff has reviewed and finds acceptable (1) IUSA's draft Standby Trust (including Schedules A, B, and C), (2) its letter of acknowledgement, (3) the draft Performance Bond issued by National Union, and (4) the "Unanimous Written Consent" by IUSA's board of directors consenting to establishment of the surety. Based on NRC staff comments to IUSA's legal counsel, a trustee that is acceptable to NRC, Norwest Bank Colorado, N.A., was selected by IUSA to administer the Standby Trust. In addition, the NRC staff determined that National Union is listed in the Department of the Treasury's most recent Circular 570, as an acceptable insurance company.

The NRC staff has reviewed the final original copies of the Standby Trust and the Performance Bond, provided on May 9, 1997, and finds these documents to be acceptable.

IUSA did not provide a replacement financial surety arrangement for the Reno Creek Project. EFN's currently approved surety, a reclamation performance bond issued in favor of the State of Wyoming, will remain in effect until the State of Wyoming approves of a replacement provided to the State by IUSA.

Therefore, based on its review, the NRC staff finds acceptable the transfer of NRC Source Material Licenses SUA-1358 and SUA-1558 from EFN to IUSA, as requested.

#### RECOMMENDED LICENSE CHANGE

Pursuant to Title 10 of the Code of Federal Regulations, Part 40, Source Material License SUA-1358 is amended by revising License Condition Nos. 1, 2, 9.3, and 9.5, as follows:

- 1 International Uranium (USA) Corporation
- 2 6425 S. Highway 191  
P.O. Box 809  
Blanding Utah 84511
- 9.3 The licensee shall conduct operations in accordance with statements, representations, and conditions contained in the license renewal application submitted by letter dated

August 23, 1991, as revised by submittals dated January 13, and April 7, 1992, November 22, 1994, July 27, 1995, December 13, and December 31, 1996, and January 30, 1997, which are hereby incorporated by reference, and for the Standby Trust Agreement, dated April 29, 1997, except where superseded by license conditions below.

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

- 9.5 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 for the long-term surveillance fee. Within three 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 June 4 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.

The currently approved surety instrument, Performance Bond 18-23-17, issued by National Union Fire Insurance Company in favor of the NRC, and the associated Standby Trust Agreement, dated April 29, 1997, shall be continuously maintained in an amount not less than \$10,915,467 for the purpose of complying with 10 CFR 40, Appendix A, Criteria 9 and 10, until a replacement is authorized by the NRC.

In addition, pursuant to Title 10 of the Code of Federal Regulations Part 40, Source Material License SUA-1558 is amended by revising License Condition Nos. 1, 2, 9, and 12, as follows:

1. International Uranium (USA) Corporation

2. Independence Plaza, Suite 950  
1050 Seventeenth Street  
Denver, Colorado 80265

9. For use in accordance with statements, representations, and conditions contained in the license application dated July 19, 1993, and by page changes submitted on: 08/06/96 and 12/31/96.

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

12. The licensee shall maintain an NRC-approved surety arrangement, consistent with 10 CFR Part 40, Appendix A, Criterion 9, adequate to cover the estimated costs, if accomplished by a third party, for disposal of the resin. Annual updates to the surety amount, required by 10 CFR Part 40, Appendix A, Criterion 9, shall be provided to the NRC at least three months prior to August 15, 1994, and in each successive year. Financial surety coverage for the full amount of the NRC-approved decommissioning cost estimate shall not lapse for any time period prior to license termination.

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, changes in engineering plans, activities performed, and any other conditions affecting estimated costs for site closure. The licensee shall also provide the NRC with copies of surety-related correspondence submitted to the State, a copy of the State's surety review, and the final approved surety arrangement. The licensee must also ensure that the surety, where authorized to be held by the State, expressly identifies the NRC-related portion of the surety, and covers the cost of resin disposal.

The International Uranium (USA) Corporation currently approved surety, a reclamation performance bond No. 6101906886, issued by the U.S. Fire Insurance Company in favor of the State of Wyoming, shall be continuously maintained in an amount no less than \$142,890.00 for the purpose of complying with 10 CFR Part 40, Appendix A, Criterion 9, until a replacement is authorized by both the State and the NRC.

#### **ENVIRONMENTAL IMPACT EVALUATION:**

An environmental review was not performed since these actions are administrative actions which are categorically excluded under 10 CFR 51.22(c)(11).

Enclosure 2

NRC Source Material License No. SUA 1358, Amendment No. 2



**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 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.

Licensee

1	International Uranium (USA) Corporation [Applicable Amendments: 2]	3 License Number	SUA-1358, Amendment No. 2
2	6425 S. Highway 191 P.O. Box 809 Blanding, Utah 84511 [Applicable Amendments: 2]	4 Expiration Date	March 31, 2007
		5 Docket or Reference No.	40-8681
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	
Natural Uranium	Any	Unlimited	

**SECTION 9: Administrative Conditions**

- 9.1 The authorized place of use shall be the licensee's White Mesa uranium milling facility, located in San Juan County, Utah.
- 9.2 All written notices and reports to the NRC required under this license, with the exception of incident and event notifications under 10 CFR 20.2202 and 10 CFR 40.60 requiring telephone notification, shall be addressed to the Chief, Uranium Recovery Branch, Division of Waste Management, Office of Nuclear Material Safety and Safeguards.

Incident and event notifications that require telephone notification shall be made to the NRC Operations Center at (301) 816-5100.

- 9.3 The licensee shall conduct operations in accordance with statements, representations, and conditions contained in the license renewal application submitted by letter dated August 23, 1991, as revised by submittals dated January 13, and April 7, 1992, November 22, 1994, July 27, 1995, December 13, and December 31, 1996, and January 30, 1997, which are hereby incorporated by reference, and for the Standby Trust Agreement, dated April 29, 1997, except where superseded by license conditions below.

Whenever the word "will" is used in the above referenced documents, it shall denote a requirement. [Applicable Amendments: 2]

- 9.4 A. The licensee may, without prior NRC approval, and subject to the conditions specified in Part B of this condition:

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**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

SUA-1358, Amendment No. 2

Docket or Reference Number

40-8681

- (1) Make changes in the facility or process as presented in the application.
  - (2) Make changes in the procedures presented in the application.
  - (3) Conduct tests or experiments not presented in the application.
- B. The licensee shall file an application for an amendment to the license, unless the following conditions are satisfied.
- (1) The change, test, or experiment does not conflict with any requirement specifically stated in this license, or impair the licensee's ability to meet all applicable NRC regulations.
  - (2) There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.
  - (3) The change, test, or experiment are consistent with the conclusions of actions analyzed and selected in this EA.
- C. The licensee's determinations concerning Part B of this condition, shall be made by a "Safety and Environmental Review Panel (SERP)." The SERP shall consist of a minimum of three individuals. One member of the SERP shall have expertise in management and shall be responsible for managerial and financial approval changes; one member shall have expertise in operations and/or construction and shall have responsibility for implementing any operational changes; and, one member shall be the corporate radiation safety officer (CRSO) or equivalent, with the responsibility of assuring changes conform to radiation safety and environmental requirements. Additional members may be included in the SERP as appropriate, to address technical aspects such as health physics, groundwater hydrology, surface-water hydrology, specific earth sciences, and other technical disciplines. Temporary members or permanent members, other than the three above-specified individuals, may be consultants.
- D. The licensee shall maintain records of any changes made pursuant to this condition until license termination. These records shall include written safety and environmental evaluations, made by the SERP, that provide the basis for determining changes are in compliance with the requirements referred to in Part B of this condition. The licensee shall furnish, in an annual report to NRC, a description of such changes, tests, or experiments, including a summary of the safety and environmental evaluation of each. In addition, the licensee shall annually submit to the NRC changed pages to the Operations Plan and Reclamation Plan of the approved license application to reflect changes made under this condition.

The licensee shall submit to the NRC by April 30, 1997, for review, the standard operating procedures (SOPs) needed to implement this license condition. The licensee shall not implement any provision of this license condition until NRC has found the proposed SOPs acceptable.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

SUA-1358, Amendment No. 2

Docket or Reference Number

40-8681

- 9.7 Before engaging in any activity not previously assessed by the NRC, the licensee shall administer a cultural resource inventory. All disturbances associated with the proposed development will be completed in compliance with the National Historic Preservation Act (as amended) and its implementing regulations (36 CFR 800), and the Archaeological Resources Protection Act (as amended) and its implementing regulations (43 CFR 7).

In order to ensure that no unapproved disturbance of cultural resources occurs, any work resulting in the discovery of previously unknown cultural artifacts shall cease. The artifacts shall be inventoried and evaluated in accordance with 36 CFR Part 800, and no disturbance shall occur until the licensee has received authorization from the NRC to proceed.

The licensee shall avoid by project design, where feasible, the archeological sites designated "contributing" in the report submitted by letter dated July 28, 1988. When it is not feasible to avoid a site designated "contributing" in the report, the licensee shall institute a data recovery program for that site based on the research design submitted by letter from C. E. Baker of Energy Fuels Nuclear to Mr. Melvin T. Smith, Utah State Historic Preservation Officer (SHPO), dated April 13, 1981.

The licensee shall recover through archeological excavation all "contributing" sites listed in the report which are located in or within 100 feet of borrow areas, stockpile areas, construction areas, or the perimeter of the reclaimed tailings impoundment. Data recovery fieldwork at each site meeting these criteria shall be completed prior to the start of any project related disturbance within 100 feet of the site, but analysis and report preparation need not be complete.

Additionally, the licensee shall conduct such testing as is required to enable the Commission to determine if those sites designated as "Undetermined" in the report and located within 100 feet of present or known future construction areas are of such significance to warrant their redesignation as "contributing." In all cases, such testing shall be completed before any aspect of the undertaking affects a site.

Archeological contractors shall be approved in writing by the Commission. The Commission will approve an archeological contractor who meets the minimum standards for a principal investigator set forth in 36 CFR Part 66, Appendix C, and whose qualifications are found acceptable by the SHPO.

- 9.8 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. Mill tailings shall not be transferred from the site without specific prior approval of the NRC in the form of a license amendment. The licensee shall maintain a permanent record of all transfers made under the provisions of this condition.

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

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

SUA-1358, Amendment No. 2

Docket or Reference Number

40-8681

- (1) Make changes in the facility or process as presented in the application.
  - (2) Make changes in the procedures presented in the application.
  - (3) Conduct tests or experiments not presented in the application.
- B. The licensee shall file an application for an amendment to the license, unless the following conditions are satisfied.
- (1) The change, test, or experiment does not conflict with any requirement specifically stated in this license, or impair the licensee's ability to meet all applicable NRC regulations.
  - (2) There is no degradation in the essential safety or environmental commitments in the license application, or provided by the approved reclamation plan.
  - (3) The change, test, or experiment are consistent with the conclusions of actions analyzed and selected in this EA.
- C. The licensee's determinations concerning Part B of this condition, shall be made by a "Safety and Environmental Review Panel (SERP)." The SERP shall consist of a minimum of three individuals. One member of the SERP shall have expertise in management and shall be responsible for managerial and financial approval changes; one member shall have expertise in operations and/or construction and shall have responsibility for implementing any operational changes; and, one member shall be the corporate radiation safety officer (CRSO) or equivalent, with the responsibility of assuring changes conform to radiation safety and environmental requirements. Additional members may be included in the SERP as appropriate, to address technical aspects such as health physics, groundwater hydrology, surface-water hydrology, specific earth sciences, and other technical disciplines. Temporary members or permanent members, other than the three above-specified individuals, may be consultants.
- D. The licensee shall maintain records of any changes made pursuant to this condition until license termination. These records shall include written safety and environmental evaluations, made by the SERP, that provide the basis for determining changes are in compliance with the requirements referred to in Part B of this condition. The licensee shall furnish, in an annual report to NRC, a description of such changes, tests, or experiments, including a summary of the safety and environmental evaluation of each. In addition, the licensee shall annually submit to the NRC changed pages to the Operations Plan and Reclamation Plan of the approved license application to reflect changes made under this condition.

The licensee shall submit to the NRC by April 30, 1997, for review, the standard operating procedures (SOPs) needed to implement this license condition. The licensee shall not implement any provision of this license condition until NRC has found the proposed SOPs acceptable.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

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SUA-1358, Amendment No. 2

Docket or Reference Number

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9.5

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 for the long-term surveillance fee. Within three 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 June 4 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.

The currently approved surety instrument, Performance Bond 18-23-17, issued by National Union Fire Insurance Company in favor of the NRC, and the associated Standby Trust Agreement, dated April 29, 1997, shall be continuously maintained in an amount not less than \$10,915,467 for the purpose of complying with 10 CFR 40, Appendix A, Criteria 9 and 10, until a replacement is authorized by the NRC.

[Applicable Amendments: 2]

9.6

Standard operating procedures shall be established and followed for all operational process activities involving radioactive materials that are handled, processed, or stored. SOPs for operational activities shall enumerate pertinent radiation safety practices to be followed. Additionally, written procedures shall be established for non-operational activities to include in-plant and environmental monitoring, bioassay analyses, and instrument calibrations. An up-to-date copy of each written procedure shall be kept in the mill area to which it applies.

All written procedures for both operational and non-operational activities shall be reviewed and approved in writing by the radiation safety officer (RSO) before implementation and whenever a change in procedure is proposed to ensure that proper radiation protection principles are being applied. In addition, the RSO shall perform a documented review of all existing operating procedures at least annually.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number

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Docket or Reference Number

40-8681

9.7 Before engaging in any activity not previously assessed by the NRC, the licensee shall administer a cultural resource inventory. All disturbances associated with the proposed development will be completed in compliance with the National Historic Preservation Act (as amended) and its implementing regulations (36 CFR 800), and the Archaeological Resources Protection Act (as amended) and its implementing regulations (43 CFR 7).

In order to ensure that no unapproved disturbance of cultural resources occurs, any work resulting in the discovery of previously unknown cultural artifacts shall cease. The artifacts shall be inventoried and evaluated in accordance with 36 CFR Part 800, and no disturbance shall occur until the licensee has received authorization from the NRC to proceed.

The licensee shall avoid by project design, where feasible, the archeological sites designated "contributing" in the report submitted by letter dated July 28, 1988. When it is not feasible to avoid a site designated "contributing" in the report, the licensee shall institute a data recovery program for that site based on the research design submitted by letter from C. E. Baker of Energy Fuels Nuclear to Mr. Melvin T. Smith, Utah State Historic Preservation Officer (SHPO), dated April 13, 1981.

The licensee shall recover through archeological excavation all "contributing" sites listed in the report which are located in or within 100 feet of borrow areas, stockpile areas, construction areas, or the perimeter of the reclaimed tailings impoundment. Data recovery fieldwork at each site meeting these criteria shall be completed prior to the start of any project related disturbance within 100 feet of the site, but analysis and report preparation need not be complete.

Additionally, the licensee shall conduct such testing as is required to enable the Commission to determine if those sites designated as "Undetermined" in the report and located within 100 feet of present or known future construction areas are of such significance to warrant their redesignation as "contributing." In all cases, such testing shall be completed before any aspect of the undertaking affects a site.

Archeological contractors shall be approved in writing by the Commission. The Commission will approve an archeological contractor who meets the minimum standards for a principal investigator set forth in 36 CFR Part 66, Appendix C, and whose qualifications are found acceptable by the SHPO.

9.8 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. Mill tailings shall not be transferred from the site without specific prior approval of the NRC in the form of a license amendment. The licensee shall maintain a permanent record of all transfers made under the provisions of this condition.

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

License Number

SUA-1358, Amendment No. 2

Booklet or Reference Number

40-8681

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

- 9.10 Release of equipment or packages from the restricted area shall be in accordance with "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material," dated May 1987, or suitable alternative procedures approved by the NRC prior to any such release.

**SECTION 10: Operational Controls, Limits, and Restrictions**

- 10.1 The mill production rate shall not exceed 4380 tons of yellowcake per year.
- 10.2 All liquid effluents from mill process buildings, with the exception of sanitary wastes, shall be returned to the mill circuit or discharged to the tailings impoundment.
- 10.3 Freeboard limits for Cells 1-I, 3, and 4A, and tonnage limits for Cell 3, shall be as stated in Section 3.0 to Appendix E of the approved license application.
- 10.4 Disposal of material and equipment generated at the mill site shall be conducted as described in the licensee's submittals dated December 12, 1994 and May 23, 1995, with the following addition:
- A. The maximum lift thickness for materials placed over tailings shall be less than 4-feet thick. Subsequent lifts shall be less than 2-feet thick. Each lift shall be compacted by tracking of heavy equipment, such as a Cat D-6, at least 4 times prior to placement of subsequent lifts.
- 10.5 In accordance with the licensee's submittal dated May 20, 1993, the licensee is hereby authorized to dispose of byproduct material generated at licensed in situ leach facilities, subject to the following conditions:
- A. Disposal of waste is limited to 5000 cubic yards from a single source.
  - B. All contaminated equipment shall be dismantled, crushed, or sectioned to minimize void spaces. Barrels containing waste other than soil or sludges shall be emptied into the disposal area and the barrels crushed. Barrels containing soil or sludges shall be verified to be full prior to disposal. Barrels not completely full shall be filled with tailings or soil.
  - C. All waste shall be buried in Cell No. 3 unless prior written approval is obtained from the NRC for alternate burial locations.
  - D. All disposal activities shall be documented. The documentation shall include descriptions of the waste and the disposal locations, as well as all actions required by this condition. An annual summary of the amounts of waste disposed of from off-site generators shall be sent to the NRC.
- 10.6 The licensee is authorized to receive and process source materials from the Allied Signal Corporation's Metropolis, Illinois, facility in accordance with the amendment request dated June 15, 1993.

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- 10.7 The licensee is authorized to receive and process source material from Allied Signal, Inc. of Metropolitan Illinois, in accordance with the amendment request dated September 20, 1996, and amended by letters dated October 30, and November 11, 1996.
- 10.8 The licensee is authorized to receive and process source material, in accordance with the amendment request dated March 5, 1997.  
[Applicable Amendments: 1]

**SECTION 11: Monitoring, Recording, and Bookkeeping Requirements**

- 11.1 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 the NRC regulations all such documentation shall be maintained for a period of at least five (5) years.
- 11.2 The licensee shall implement the effluent and environmental monitoring program specified in Section 5.5 of the renewal application as revised with the following modifications or additions:
  - A. Stack sampling shall include a determination of flow rate.
  - B. Surface water samples shall also be analyzed semiannually for total and dissolved U-nat, Ra-226, and Th-230, with the exception of the Westwater Creek, which shall be sampled annually for water sediments and analyzed as above. A sediment sample shall not be taken in place of a water sample unless a water sample was not available.
  - C. Groundwater sampling shall be conducted in accordance with the requirements in License Condition 11.3.
  - D. The licensee shall utilize lower limits of detection in accordance with Section 5 of Regulatory Guide 4.14 (Revision 1), for analysis of effluent and environmental samples.
  - E. The inspections performed semiannually of the critical orifice assembly committed to in the submittal dated March 15, 1986, shall be documented. The critical orifice assembly shall be calibrated at least every 2 years against a positive displacement Roots meter to obtain the required calibration curve.
- 11.3 The licensee shall implement a groundwater detection monitoring program to ensure compliance to 10 CFR Part 40, Appendix A. The detection monitoring program shall be in accordance with the report entitled, "Points of Compliance, White Mesa Uranium Mill," submitted by letter dated October 5, 1994, as modified by the following:
  - A. The leak detection system for all ponds will be checked weekly. If liquid is present, it shall be analyzed for chloride, sulfate, selenium, and pH. The samples



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will be statistically analyzed to determine if significant linear trends exist, and the results will be submitted to NRC for review.

- B. if a significant linear trend is indicated, the licensee will submit a proposed corrective action for review and approval to NRC. The corrective action shall include a discussion on delineation of the areal extent and concentration of hazardous constituents.
- C. The licensee shall sample monitoring wells WMMW-5, -11, -12, -14, -15, and -17 on a quarterly basis. Samples shall be analyzed for chloride, potassium, nickel, and uranium, and the results of such sampling shall be included with the environmental monitoring reports submitted in accordance with 10 CFR 40.65.

11.4 During extended periods of mill standby, eight-hour annual sampling for U-nat, Ra-226, Th-230 and Pb-210 may be eliminated if routine airborne sampling show levels below 10 percent of the appropriate 10 CFR Part 20 limits.

During periods of standby, sampling frequencies for area airborne uranium sampling within the mill may be reduced to quarterly, provided measured levels remain below 10 percent of the derived air concentration (DAC). If these levels exceed 10 percent of the DAC, the sampling frequency should follow the recommendations in Regulatory Guide 8.30.

11.5 Calibration of in-plant air and radiation monitoring equipment shall be performed as specified in the license renewal application, under Section 3.0 of the "Radiation Protection Procedures Manual," with the exception that in-plant air sampling equipment shall be calibrated at least quarterly and air sampling equipment checks shall be documented.

11.6 The licensee shall perform an annual ALARA audit of the radiation safety program in accordance with Regulatory Guide 8.31.

**SECTION 12: Reporting Requirements**

12.1 The licensee shall submit to NRC for review, by June 30, 1997, a detailed reclamation plan for the authorized tailings disposal area which includes the following:

- A. A post-operations interim stabilization plan which details methods to prevent wind and water erosion and recharge of the tailings area.
- B. A plan to determine the best methodology to dewater and/or consolidate the tailings cells prior to placement of the final reclamation cover.
- C. Plan and cross-sectional views of a final reclamation cover which details the location and elevation of tailings. The plan shall include details on cover thickness, physical characteristics of cover materials, proposed testing of cover materials (specifications and quality assurance), the estimated volumes of cover materials and their availability and location.

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Plant or Site License Number

40 8681

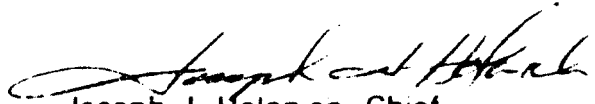
- D. Detailed plans for placement of rock or vegetative cover on the final reclaimed tailings pile and mill site area.
- E. A proposed implementation schedule for items A through D above which defines the sequence of events and expected time ranges.
- F. An analysis to show that the proposed type and thickness of soil cover is adequate to provide attenuation of radon and is adequate to assure long-term stability, as well as an analysis and proposal on methodology and time required to restore ground water in conformance to regulatory requirements.
- G. The licensee shall include a detailed cost analysis of each phase of the reclamation plan to include contractor costs, projected costs of inflation based upon the schedule proposed in item E, a proposed contingency cost, and the costs of long-term maintenance and monitoring.

12.2 The licensee shall submit a detailed decommissioning plan to the NRC at least twelve (12) months prior to planned final shutdown of mill operations.

FOR THE NUCLEAR REGULATORY COMMISSION

Date

May 9, 1997



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

NRC Source Material License No. SUA-1558. Amendment No. 4

9705140177 970509  
PDR ADOCK 04008681  
C PDR

MATERIALS LICENSE

Licensee  
International Uranium (USA) Corporation  
[Applicable Amendment: 4]

License Number

SUA-1558, Amendment No. 4

Independence Plaza, Suite 950  
1050 Seventeenth Street  
Denver, CO 80265  
[Applicable Amendment: 4]

Expiration Date

August 26, 2000

Docket or  
Reference No.

89-9024

6. Byproduct Source and/or  
Special Nuclear Material

7. Chemical and Physical  
Form

8. Maximum Amount that Licensee  
May Possess at Any One Time  
Under This License

Uranium and radium  
contaminated resin

Contaminated resin

3500 ft<sup>3</sup> of  
contaminated resin

9. For use in accordance with statements, representations, and conditions contained in the license application dated July 19, 1993, and by page changes submitted on: 08/06/96 and 12/31/96.

[Applicable Amendments: 1, 4]

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

10. The authorized place of use shall be the licensee's Reno Creek site located in Campell County, Wyoming.

11. The licensee shall conduct and maintain a record of radiation surveys and security inspections on a monthly frequency. The licensee may authorize designated individuals for periodic entry into the restricted area to characterize resin quality in selected containers.

[Applicable Amendment: 1]

12. The licensee shall maintain an NRC-approved surety arrangement, consistent with 10 CFR Part 40, Appendix A, Criterion 9, adequate to cover the estimated costs, if accomplished by a third party, for disposal of the resin. Annual updates to the surety amount, required by 10 CFR Part 40, Appendix A, Criterion 9, shall be provided to the NRC at least three months prior to August 16, 1994, and in each successive year. Financial surety coverage for the full amount of the NRC-approved decommissioning cost estimate shall not lapse for any time period prior to license termination.

License Number

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Docket or Reference Number

40-9024

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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, changes in engineering plans, activities performed, and any other conditions affecting estimated costs for site closure. The licensee shall also provide the NRC with copies of surety-related correspondence submitted to the State, a copy of the State's surety review, and the final approved surety arrangement. The licensee must also ensure that the surety, where authorized to be held by the State, expressly identifies the NRC-related portion of the surety, and covers the cost of resin disposal.

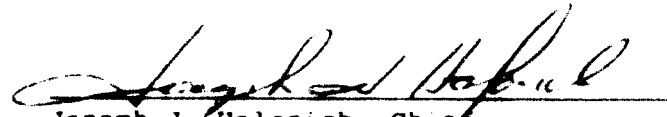
The International Uranium (USA) Corporation currently approved surety, a reclamation performance bond No. 6101906886, issued by the U.S. Fire Insurance Company in favor of the State of Wyoming, shall be continuously maintained in an amount not less than \$142,890.80 for the purpose of complying with 10 CFR Part 40, Appendix A, Criterion 9, until a replacement is authorized by both the State and the NRC.

{Applicable Amendments: 1, 2, 3, 4}

FOR THE NUCLEAR REGULATORY COMMISSION

Date:

May 9, 1991



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