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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

'94 JUL 19 P5:05

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

In the Matter of	)	
	)	Docket No. 40-8681-MLA-3
UMETCO MINERALS CORPORATION	)	
	)	
(Source Materials License	)	ASLBP No. 94-693-02-MLA-3
No. SUA-1358 )	)	

MOTION FOR SUBSTITUTION OF PARTIES

Energy Fuels Nuclear, Inc. (EFN) by its undersigned attorneys, moves for an order from the Commission or the Presiding Officer, as appropriate, directing that EFN be substituted for Umetco Minerals Corporation as the applicant in this proceeding, and be so designated in the caption of this proceeding.

As grounds for its motion, EFN states as follows:

1. As previously indicated in counsel's entry of appearance filed with the Presiding Officer on June 13, 1994, the transfer of Source Materials License SUA-1358 from Umetco Minerals Corporation to EFN has been approved by the Commission, and consequently EFN is now the licensee and the real party in interest in this proceeding. Attached as Appendix A to this motion is the letter from the Commission's Uranium Recovery Field Office approving such transfer. Attached as Appendix B is a copy of the reissued license bearing the effective date of May 25, 1994.

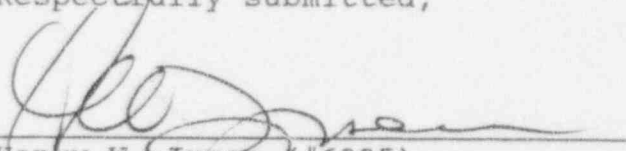
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2. As the successor to Umetco Minerals Corporation's interest in the subject license, EFN has elected to proceed with Umetco's amendment request. Accordingly, EFN should be substituted for Umetco in this proceeding consistent with the provisions of Fed. R. Civ. P. 25(c).

WHEREFORE, EFN requests: (a) that EFN be substituted for Umetco Minerals Corporation as the applicant in this proceeding; (b) that the caption of the subject proceeding be amended to designate EFN as the applicant in this proceeding; (c) that Umetco Mineral Corporation's status as a party to this proceeding be terminated; and (d) that Umetco Minerals Corporation and its counsel be deleted from the certificate of service.

Respectfully submitted,

  
Henry W. Ipsen (#6225)  
Holme Roberts & Owen LLC  
1700 Lincoln, Suite 4100  
Denver, CO 80203  
(303) 861-7000

Counsel for Energy Fuels Nuclear,  
Inc.

Dated at Denver, Colorado  
this 18<sup>th</sup> day of July, 1994

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USNRC

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CERTIFICATE OF SERVICE

I hereby certify that on this 18<sup>th</sup> day of July, 1994, the original and two correct copies of the foregoing **MOTION FOR SUBSTITUTION OF PARTIES** were mailed via UPS Mail, postage prepaid, addressed to the following:

Docketing and Service Branch  
Office of the Secretary  
Nuclear Regulatory Commission  
One White Flint North  
1155 Rockville Pike  
Rockville, MD 20852

Kyra Engelhardt Ransom

I also hereby certify that on this 18<sup>th</sup> day of July, 1994, a true and correct copy of the foregoing **MOTION FOR SUBSTITUTION OF PARTIES** was deposited in the United States mail, postage prepaid, addressed to the following:

Secretary  
U.S. Nuclear Regulatory Commission  
Attn: Docketing & Service Branch  
Washington, DC 20555

Administrative Judge  
James P. Gleason  
Presiding Officer  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Administrative Judge  
Thomas D. Murphy  
Special Assistant  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Office of Commission Appellate Adjudication  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

UMETCO Minerals Corporation  
P.O. Box 1029  
Grand Junction, CO 81502

Sherwin E. Turk, Esq.  
Staff Counsel  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Norman Begay  
P.O. Box 1138  
Blanding, UT 84511

Steve Erickson  
for Downwinders, Inc.  
c/o 961 E. 600 South  
Salt Lake City, UT 84102

Kym Engelhardt Ranson



UNITED STATES  
 NUCLEAR REGULATORY COMMISSION

REGION IV  
 URANIUM RECOVERY FIELD OFFICE  
 BOX 25325  
 DENVER, COLORADO 80225

MAY 25 1994

Docket No. 40-8681  
 SUA-1358, Amendment No. 35

Umetco Minerals Corporation  
 ATTN: Richard A. Van Horn  
 Director of Operations  
 P.O. Box 1029  
 Grand Junction, Colorado 81502

Dear Mr. Van Horn:

We have completed our review of your amendment request dated March 29, 1994, for the transfer of license and change of ownership from Umetco Minerals Corporation to Energy Fuels Nuclear, Inc. for the White Mesa Uranium Mill located near Blanding, Utah. From the review of your amendment request, along with the additional information you supplied by letters dated April 11 and May 17, 1994, we have determined that Umetco Minerals Corporation has fulfilled all the requirements for transfer of Source Material License SUA-1358 to Energy Fuels Nuclear, Inc. We also have determined that Energy Fuels Nuclear, Inc. is qualified by reason of training and experience, and that the equipment, facilities, and procedures are adequate to protect the health and safety of the public.

We have determined under exclusions contained in 10 CFR 51.22(c)(11) that further environmental documentation is not required for this amendment request. The proposed amendment is administrative only, transferring the license to new ownership. Therefore, an environmental assessment by this office for the proposed action is not required since this action is categorically excluded under 10 CFR 51.22(c)(11), and is not required by 10 CFR 51.60(b)(2).

Therefore, pursuant to Title 10 of the Code of Federal Regulations, Section 40.46, the NRC finds that the subject license transfer is in accordance with the provisions of the Atomic Energy Act of 1954, as amended, and hereby gives its consent to the transfer. Source Material License SUA-1358 has accordingly been amended to change the designation of the license and modify the surety instrument. All other conditions of this license shall remain the same. The license is being reissued to incorporate this amendment.

APPENDIX A

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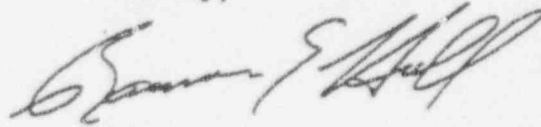
Umetco Minerals Corporation

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The issuance of this amendment was discussed and agreed to in a conversation by telephone between Dana Ward of my staff and you on May 25, 1994.

Sincerely,



Ramon E. Hall  
Director

Enclosures:

- 1. Technical Evaluation Report
- 2. Source Material License SUA-1358

cc:

- H. Roberts, EFNI
- W. W. Brice, Umetco
- W. Sinclair, RCPD, UT

### 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, 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

COPY

1. Energy Fuels Nuclear, Inc.

2. 6425 S. Highway 191  
P.O. Box 789  
Blanding, Utah 84511  
[Applicable Amendments: 10A, 35]

3. License number

SUA-1358, Amendment No. 35

4. Expiration date

September 23, 1991

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

9. Authorized place of use: The licensee's uranium milling facilities located in San Juan County, 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 3.6.6, 5.1, 5.3, 5.4, 6.2, and 6.3, and Appendix E, Section 5, of the license renewal application dated January 1985, as revised May 1985, September 2, 1992, for the standby organizational structure, and May 10, 1994, for the Standby Trust Agreement. The licensee shall conduct operations, and statements referenced above, except where superseded by license conditions below.

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

[Applicable Amendments: 28, 31, 35]

12. The mill production per calendar year shall not exceed 4,380 tons of U<sub>3</sub>O<sub>8</sub>.

13. Any changes in the mill circuit as illustrated and described in Plate 3.1-3 of the renewal application shall require approval by the U.S. Nuclear Regulatory Commission in the form of a license amendment.



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14. Release of equipment or packages from the restricted area shall be in accordance with the attachment to SUA-1358 entitled, "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct or Source Materials," dated September, 1984.
15. The licensee shall avoid by project design, where feasible, the archeological sites designated "contributing" in the attachment to SUA-1358 entitled, "Archeological Sites Related to the White Mesa Project," submitted by letter dated July 28, 1988. When it is not feasible to avoid a site designated "contributing" in the attachment, 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 J. Smith, Utah State Historic Preservation Officer, dated April 13, 1981.

The licensee shall recover through archeological excavation all "contributing" sites listed in the attachment 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. Site 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 attachment 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. [Applicable Amendments: 15]

16. Archeological contractors shall be approved in writing by the Commission. The Commission will consult with the SHPO regarding the qualifications of all archeological contractors and the quality of the laboratory facilities they will use. 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.
17. The licensee shall conduct an annual survey of land use (private residences, grazing areas, private and public potable water and agricultural wells, and non-residential structures and uses) in the area within five miles (8 km) of any portion of the restricted area boundary and submit a report of this survey to the NRC, Uranium Recovery Field Office. This report shall indicate any differences in land use from that described in the last report.
18. The results of all effluent and environmental monitoring required by this license shall be reported in accordance with 10 CFR 40, Section 40.65 with copies of the report sent to the NRC, Uranium Recovery Field Office. Monitoring data shall be reported in the format shown in the attachment to SUA-1358, entitled "Sample Format for Reporting Monitoring Data Regulatory Guide 4.14."



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19. 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 previously assessed or that is greater than that previously assessed, the licensee shall provide a written evaluation of such activities and obtain prior approval of the NRC in the form of a license amendment.

20. 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 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 attachment to this license 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.

Umetco's currently approved surety instrument, Irrevocable Letter of Credit No. S00017012, issued by The Bank of New York in favor of the NRC, as amended May 10, 1994, to include a Standby Trust Agreement, shall be continuously maintained in an amount no less than \$5,635,180 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: 12, 21, 26, 29, 32, 35]

21. 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

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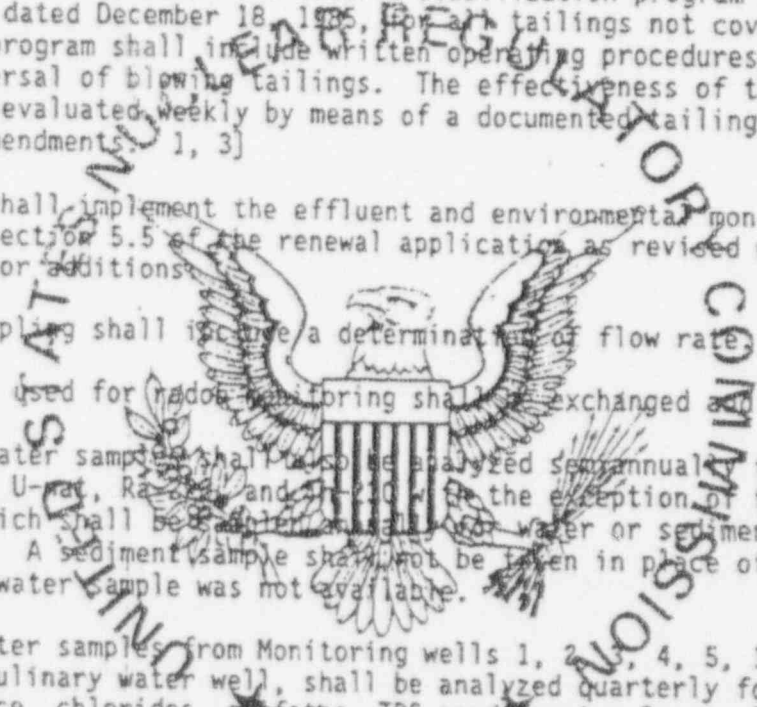
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land owned by the United States or the State of Utah), which is used for the disposal of such byproduct material or is essential to ensure the long term stability of such disposal site to the United States or the State of Utah, at the State's option.

22. The licensee shall not make any changes to the present tailings retention system without specific prior approval of the NRC, Uranium Recovery Field Office, in the form of a license amendment.
23. The licensee shall implement the interim stabilization program submitted to the NRC by letter dated December 18, 1985, for all tailings not covered by standing water. This program shall include written operating procedures and shall minimize dispersal of blowing tailings. The effectiveness of the control method used shall be evaluated weekly by means of a documented tailings area inspection. [Applicable Amendments 1, 3]
24. 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:
- Stack sampling shall include a determination of flow rate.
  - TLD chips used for radon monitoring shall be exchanged and read quarterly.
  - 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 analyzed for water or 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.
  - Ground-water samples from Monitoring wells 1, 2, 4, 5, 11, 12, 14, 15, and the culinary water well, shall be analyzed quarterly for pH, specific conductance, chlorides, sulfates, TDS, and U-nat. Quarterly water level measurements shall also be made. Ground-water samples shall be analyzed semiannually for arsenic, selenium, sodium, Ra-226, Th-230, and Pb-210.
  - Data for the quarterly ground-water parameters shall be maintained in graphical form and copies of the graphs included with the environmental monitoring reports submitted in accordance with 10 CFR 40.65.
  - The licensee shall utilize lower limits of detection in accordance with Section 5 of Regulatory Guide 4.14, Revision 1, dated April 1980, for analysis of effluent and environmental samples.
  - The inspections performed semiannually of the critical orifice assembly committed to in the submittal dated March 15, 1986, shall be documented.



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The critical orifice assembly shall be calibrated at least every 2 years against a positive displacement Roots meter to obtain the required calibration curve.

[Applicable Amendments: 2, 15, 28, 31]

25. The licensee shall submit to the NRC, Uranium Recovery Field Office, by March 15, 1986 for review and approval in the form of a license amendment 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 QA), the estimated volumes of cover materials and their availability and location.
- D. Detailed plans for placement of topsoil and vegetative cover on the final reclaimed tailings pile and mill site area.
- E. A proposed implementation schedule 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.

26. The licensee shall conduct a tailings retention system and liner inspection program in accordance with Section 5.5.7 and Appendix D, Section 3.0, of the renewal application. Notwithstanding any statements to the contrary, changes in inspection frequency shall require the approval of the NRC in the form of a license amendment. Further, copies of the report documenting the annual technical evaluation shall be submitted to the Uranium Recovery Field Office, NRC, within 1 month of the completion of the report.

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During standby operations, when no effluent is being produced, appropriately trained shift foremen are authorized to conduct the daily tailings retention system and liner inspections. Training shall be properly documented. However, the Environmental Coordinator shall continue to conduct weekly, monthly and quarterly routine inspections during standby periods.

[Applicable Amendments: 28]

27. The licensee is hereby exempted from the requirements of Section 20.203(e)(2) of 10 CFR 20 for areas within the mill, provided that all entrances to the mill are conspicuously posted in accordance with Section 20.203(e)(2) and with the words, "Any area within this mill may contain radioactive material."
28. 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.
29. Standard operating procedures (SOPs) shall be established for all operational process activities involving radioactive materials that are handled, processed, or stored. Standard operating procedures for operational activities shall enumerate pertinent radiation safety practices to be followed. Additionally, written procedures shall be established for nonoperational activities to include in-plant and environmental monitoring, bypass 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 nonoperational activities shall be reviewed and approved in writing by the RPO before implementation and whenever a change in procedure is proposed to ensure that proper radiation protection principles are being applied. In addition, the RPO shall perform a documented review of all existing operating procedures at least annually.

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 MPC. Further, 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 maximum permissible concentration (MPC). If these levels exceed 10 percent of the MPC, the sampling frequency should follow Regulatory Guide 8.30 recommendations.

[Applicable Amendments: 28]

30. The Radiation Protection Officer (RPO) shall have the following education, training and experience:



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- A. Education: A bachelor's degree in the physical sciences, industrial hygiene, or engineering from an accredited college or university or an equivalent combination of training and relevant experience in uranium mill radiation protection. Two (2) years of relevant experience are generally considered equivalent to one (1) year of academic study.
- B. Health physics experience: At least 1 year of work experience relevant to uranium mill operation in applied health physics, radiation protection, industrial hygiene, or similar work. This experience should involve actually working with radiation detection and measurement equipment, not strictly administrative or "desk" work.
- C. Specialized training: At least 4 weeks of specialized classroom training in health physics specifically applicable to uranium milling. In addition, the RSO should attend refresher training on uranium mill health physics every two (2) years.
- D. Specialized knowledge: A thorough knowledge of the proper application and use of all health physics equipment used in the mill, the chemical and analytical procedures used for radiological sampling and monitoring, methodologies used to calculate personnel exposure to uranium and its daughters, and a thorough understanding of the uranium milling process and equipment used in the mill and how the hazards are generated and controlled during the milling process.
31. The license shall be required to use a Radiation Work Permit (RWP) for all work or nonroutine maintenance that may be necessary for significant exposure to radioactive material exists and for which no standard written operating procedure already exists. The RWP shall be issued by the RPO or his designate, qualified by way of specialized radiation protection training, and shall at least describe the following:
- The scope of the work to be performed.
  - Any precautions necessary to reduce exposure to uranium and its daughters.
  - The supplemental radiological monitoring and sampling necessary prior to, during, and following completion of the work.
- In addition, the RPO's review of all non-routine activities, committed to in Section 5.3.1 of the renewal application, shall be documented.
32. The RPO and mill foreman, or qualified designees, shall perform weekly inspections of all mill areas to observe general radiation control practices. However, the RPO shall conduct a minimum of one weekly inspection per month during mill standby and two weekly inspections per month during production. A member of the radiation protection staff shall perform a daily walkthrough inspection during weekdays, with qualified supervisory personnel performing the

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inspection on weekends. In addition, the RPO shall prepare a monthly report which includes a review of daily and weekly inspections, and a summary of all monitoring and exposure data for the month. A copy of the monthly report shall be submitted to the Operations Manager. [Applicable Amendments: 28]

33. A copy of the annual ALARA report described in Section 5.3.2.2, of the renewal application as modified by letter dated January 20, 1987, shall be submitted to the NRC, Uranium Recovery Field Office, by April 1, 1987, and every year thereafter. [Applicable Amendments: 5]
34. The licensee shall maintain effluent control systems as specified in Table 4.1-1 of the licensee's renewal application with the following additions:
- Operations shall be immediately suspended in the affected area of the mill if any of the emission control equipment for the yellowcake drying or packaging areas is not operating within specifications for design performance.
  - The licensee shall, during all period of yellowcake drying operations, assure that the scrubber is operating within the manufacturer's recommended ranges for water flow and air pressure differential necessary to achieve design performance. This shall be accomplished by either (1) performing and documenting checks of water flow and air pressure differential approximately every four hours during operations, or (2) installing instrumentation which will signal an audible alarm if either water flow or air pressure differential fall below the manufacturer's recommended levels. If any audible alarm is used, its operation shall be checked and documented daily.
  - Air pressure differential gauges for other emission control equipment shall be read and the readings documented once per shift during operations.
35. Sample volume and analysis for all in-plant air monitoring shall be adequate to achieve an LLD of 10% of the ~~MS~~ listed in Table 1, Appendix B of 10 CFR 20.
36. The licensee shall utilize the results of lapel sampling in calculating employee exposures when the lapel samplers are used.
37. Occupational exposure calculations shall be performed and documented within one 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 airborne ore dust and yellowcake samples shall be analyzed in a timely manner to allow exposure calculations to be performed in accordance with this condition. Non-routine ore dust and yellowcake samples shall be analyzed and the results reviewed by the RSO within two working days after sample collection.
38. The licensee shall conduct a bioassay program in accordance with Section 5.4.2.4 of the renewal application with the following addition:



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- A. A urinalysis program shall be conducted for mill personnel as specified in Section 1.4.1 of the "Radiation Protection Procedures Manual" as revised June, 1985.
- B. Laboratory surfaces used for bioassay analyses shall be decontaminated to less than 25 dpm alpha-(removable)/100 cm<sup>2</sup> prior to analysis of samples.
- C. Anytime an action level of 15 ug/l uranium for urinalysis or 9 nCi of natural uranium for in vivo measurement 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, Uranium Recovery Field Office, as part of the semiannual report required by 10 CFR 40.65.
- D. Anytime an action level of 35 ug/l for two consecutive specimens or 130 ug/l uranium for one specimen for urinalysis or 16 nCi uranium for an in vivo measurement 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, Uranium Recovery Field Office, within thirty (30) days of exceeding the action level.
- E. The licensee is released from the commitment in their license application dated January 29, 1985, for performing routine in vivo measurements of mill personnel. These measurements shall be performed in accordance with the recommendations contained in Revision 1 of Regulatory Guide 8.22.

[Applicable Amendments: 9, 10A]

39. Surveys for fixed and removable alpha contamination shall be conducted in accordance with Section 2.3.2.2 of the "Radiation Protection Procedures Manual" as revised June, 1985. Action levels shall be as specified in Section 2.3.4 of the procedures manual.
40. Calibration of in-plant air and radiation monitoring equipment shall be as specified in Section 3.0 of the "Radiation Protection Procedures Manual" as revised June, 1985, with the exception that in-plant air sampling equipment shall be calibrated at least quarterly and the Kurz meter will be calibrated at least annually. Air sampling equipment shall be checked prior to each use, and the checks documented. [Applicable Amendments: 28]
41. The licensee shall submit a detailed decommissioning plan to the NRC at least twelve (12) months prior to planned final shutdown of mill operations.
42. The licensee shall follow the proposal for the disposal of contaminated material and equipment generated at the mill site as described in their letter dated December 18, 1985, with the provision that any other mill equipment, not

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specifically addressed in the letter, which the licensee proposes to dispose of into the tailings impoundment shall require written approval by the NRC.  
[Applicable Amendments: 1, 3, 10A]

43. Mill tailings other than samples for research 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.
44. 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.
45. A decontamination and survey program for barrels containing yellowcake shall be conducted in accordance with Section 1.8 of Regulatory Guide 8.30, "Health Physics Programs in Uranium Mills," prior to shipment.
46. The licensee shall implement the program to minimize dispersal of dust from the ore stockpile areas) as described in their letter dated December 18, 1985. This program shall include written operating procedures. The effectiveness of the control method used shall be evaluated weekly by means of a documented inspection. [Applicable Amendments: 1, 3, 10A]
47. The licensee shall implement, by September 30, 1990, the program proposed in their letter dated October 31, 1986, for the prevention of the release of material due to an S-X line rupture. Forty days into the final placement of the interim soil cover on Cell 1, the licensee shall propose a rupture detection program specific for Cell 1. [Applicable Amendments: 1, 3]
48. The licensee shall implement a ground-water detection monitoring program to ensure compliance to 10 CFR Part 40, Appendix A. The detection monitoring program shall be in accordance with the licensee's August 1, 1989 submittal and include the following:
- 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 will be statistically analyzed to determine if significant linear trends exist and the results will be submitted to the NRC, Uranium Recovery Field Office for review.
  - If a significant trend is indicated, the licensee will submit a proposed corrective action for review and approval to the NRC, Uranium Recovery Field Office. The corrective action shall include a discussion on delineation of the areal extent and concentration of hazardous constituents.
  - To determine whether increases in the Pond 2 leak detection system are from tailings seepage or from sedimentation pond seepage, the licensee shall by April 1, 1991 implement the changes proposed in their submittal of April 3,

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1990. In addition, the licensee shall collect a minimum of six samples characterizing the sedimentation pond material prior to construction and analyze for U-nat and Ra-226. A copy of the analysis shall be submitted to URFO by February 15, 1991.

D. The licensee shall sample monitoring wells 5, 11, 12, 14, and 15 for potential hazardous constituents and submit this data to the NRC, Uranium Recovery Field Office, so that background can be established and ground-water protection standards set.

[Applicable Amendments: 6, 8, 10, 16]

49. The licensee is authorized to receive, process, and dispose of byproduct material from Mobil's Crownpoint in-situ uranium recovery facility in accordance with letters from Landmark Reclamation dated June 9, 1987, April 25 and April 28, 1988. [Applicable Amendments: 7, 13]

50. A. The operation of the ion-exchange column at the Velvet Mine shall be in accordance with statements, representations and conditions contained in the licensee's submittal dated November 28, 1988.

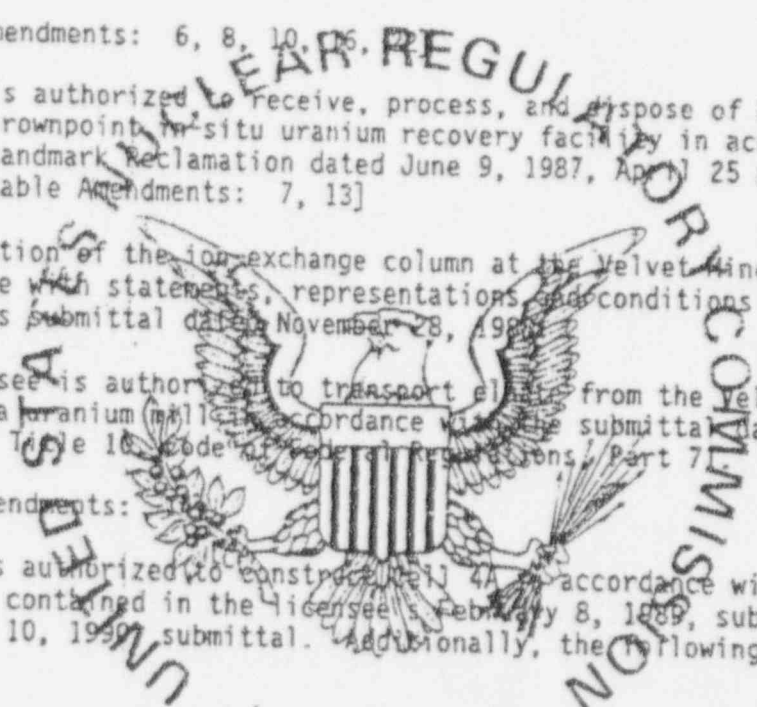
B. The licensee is authorized to transport eluate from the Velvet Mine to the White Mesa Uranium mill in accordance with the submittal dated November 28, 1988, and Title 10, Code of Federal Regulations, Part 7.

[Applicable Amendments: 7, 13]

51. The licensee is authorized to construct Cell 4A in accordance with the plans and specifications contained in the licensee's February 8, 1989, submittal as revised by the January 10, 1990, submittal. Additionally, the following conditions will also apply.

A. Effective with issuance of Amendment No. 20 and until April 30, 1990, the maximum operating elevation in Cell No. 1-I shall not exceed 5616.1 feet. Beginning on May 1, 1990, the maximum operating elevation in Cell No. 1-I shall not exceed 5615.4 feet, which will provide 2.8 feet of freeboard.

B. Effective with issuance of Amendment No. 20 and until April 30, 1990, the maximum operating elevation in Cell No. 3 shall not exceed 5605.4 feet. Beginning on May 1, 1990, the maximum operating elevation in Cell No. 3 shall not exceed 5603.0 feet which will provide 5.0 feet of freeboard. When the volume of tailings approaches 600,000 tons, considering all tailings placed since October 23, 1989, the licensee shall revise the maximum operating elevation for Cell No. 3 in accordance with the procedures specified in their January 10, 1990, submittal. The revised elevation shall be submitted for NRC review and approval in the form of a license amendment request. The amendment request shall be submitted to NRC by the time the total tonnage of dry tailings reaches the 600,000 ton limit.



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- C. The maximum operating elevation for Cell 4A shall not exceed 5596.4 feet, which will provide 1.6 feet of freeboard.
- D. DELETED by Amendment No. 24.
- E. DELETED by Amendment No. 24.
- F. DELETED by Amendment No. 25.

[Applicable Amendments: 17, 18, 19, 20, 24, 25]

52. The licensee is authorized to construct a spillway between Cell 2 and Cell 3 in accordance with the plans contained in the licensee's October 9, 1990, submittal. Once the spillway has been constructed, storage of liquids and tailings will be permitted in Cell No. 2. [Applicable Amendments: 25]
53. The licensee is authorized to place interim cover over exposed tailings in the disposal cells. If the placement of material will impact flood routing for the disposal area, a request to modify the freeboard requirements must be submitted in the form of a license amendment. [Applicable Amendments: 27]
54. The licensee is authorized to conduct plant testing of source materials from the Teledyne Wah Chang Albany facility in accordance with the amendment request dated January 18, 1989.
55. In accordance with the licensee's submittal dated May 20, 1993, the licensee is hereby authorized to dispose of high-level waste generated at licensed in situ leach facilities, subject to the following conditions:
- Disposal of waste in excess of 10,000 cubic yards per year from single sources shall require specific approval from the NRC. Information submitted in support of such a request shall address potential impacts to the composition of the tailings and shall include an environmental report or supplement to previously submitted environmental reports if impacts from the disposal exceed those previously evaluated.
  - 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.
  - All waste shall be buried in Cell No. 3 unless prior written approval is obtained from the NRC for alternate burial locations.
  - All disposal activities shall be documented. The documentation shall include descriptions of the waste and the disposal locations, as well as all



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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.

[Applicable Amendments: 33]

- 56. 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. [Applicable Amendments: 34]

FOR THE NUCLEAR REGULATORY COMMISSION

Date MAY 25 1994

*Ramon E. Hall*

Ramon E. Hall, Director  
Uranium Recovery Field Office  
Region IV

