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

July 7, 2000

Ms. Michelle Rehmann, Environmental Manager
International Uranium (IUSA) Corporation
Independence Plaza, Suite 950
1050 Seventeenth Street
Denver, Colorado 80265

SUBJECT: AMENDMENT 14 TO MATERIALS LICENSE SUA-1358 -- APPROVAL TO RECEIVE AND PROCESS ALTERNATE FEED MATERIAL FROM THE LINDE FUSRAP SITE AT THE WHITE MESA URANIUM MILL

Dear Ms. Rehmann:

In your letter dated March 2, 1999, you asked that we amend your license for the White Mesa uranium mill to permit the receipt and processing of material from the Linde site, located in Tonawanda, New York. The U.S. Army Corps of Engineers (USACE) is remediating areas on this site that have been contaminated with radioactive materials from the Manhattan Project. This site is being managed by the USACE under the Formerly Utilized Sites Remedial Action Program (FUSRAP), in consultation with the U.S. Environmental Protection Agency (EPA). You propose to receive this material at your White Mesa uranium mill in Blanding, Utah, use this material as alternate feed for the primary purpose of removing the uranium so that it can be reused, and dispose of the process tailings in the mill's tailings pile. You estimate that the USACE and its contractors will remove up to 100,000 cubic yards (CY) of Material from the Linde Site, and that some or all of this material could be sent to your mill for processing.

We have determined that your request to receive and process this material as alternate feed is acceptable, and have amended your license accordingly. We have enclosed the amended license and our Technical Evaluation Report that provides our bases for granting the amendment. Our principal criteria for evaluating this request are contained in our guidance entitled, "Final Position and Guidance on the Use of Uranium Mill Feed Material Other Than Natural Ores" (60 FR 49296; September 22, 1995) and the Commission Memorandum and Order, International Uranium (USA) Corp., CLI-00-01, 52 NRC 9 (Feb. 10, 2000). We also ensured that this request complies with our requirements for uranium mills in 10 CFR Part 40, Appendix A.

Space availability for the tailings became an issue during the review of this request. We are currently reviewing your May 15, 2000, and June 16, 2000, proposal for cell expansion. This review will be handled under a separate license amendment and Technical Evaluation. As indicated in the license condition below, this material can not be received by the mill until adequate cell space is available. In approving the Linde request, we have added the following license condition to your license:

10.14 The licensee is authorized to receive and process source material from the Linde Formerly Utilized Sites Remedial Action Program (FUSRAP) site, in accordance with statements, representations, and commitments contained in the amendment request dated March 16, 2000, and as amended and supplemented by submittals dated March

dated March 16, 2000, and as amended and supplemented by submittals dated April 26, 2000, May 15, 2000, June 16, 2000, June 19, 2000, and June 23, 2000.

Prior to the licensee receiving materials from the Linde FUSRAP site, the licensee must make a determination that adequate tailings space is available for the tailings produced from the processing of this material. This determination shall be made based on a SERP approved internal procedure. Design changes to the cells or the reclamation plan require the licensee to submit an amendment request for NRC review and approval.

Prior to the licensee receiving materials from the Linde FUSRAP site, the licensee must require that the generator of the material certify that the material does not contain listed hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) per a Radioactive Material Profile Record.

In your request, you indicated that Cell 3 does not currently have the capacity for both the St. Louis alternate feed material and the Linde material. In phone conversations with the staff, you requested that we modify License Condition 10.13 so that adequate cell space would be available for the Linde material and several other future alternate feed materials. To accomplish this, we have placed a restriction in the License Condition such that a determination of cell space must first be made prior to receiving St. Louis materials. Therefore, we have amended license condition 10.13 as indicated below:

10.13 The licensee is authorized to receive and process source material from the St. Louis Formerly Utilized Sites Remedial Action Program (FUSRAP) site, in accordance with statements, representations, and commitments contained in the amendment request dated March 2, 1999, and as amended and supplemented by submittals dated June 21, 1999; June 29, 1999 (2); and July 8, 1999. Prior to the licensee receiving materials from the St. Louis FUSRAP site, the licensee must make a determination that adequate tailings space is available for the tailings produced from the processing of this material. This determination shall be made based on a SERP approved internal procedure.

If you have any questions regarding this letter or the enclosures, please contact William von Till, the NRC Project Manager for the White Mesa mill, at (301) 415-6251and he can be reached by e-mail to RWV@nrc.gov.

Sincerely,

/S/

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

Docket No. 40-8681
SUA-1358, Amendment No. 14
Enclosures: Technical Evaluation Report and Source Material License SUA-1358
cc: W. Sinclair, UT
C.Crist, Ute Mountain Ute Tribe EPA
Terry Brown, US EPA Region VIII

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ADAMS ACCESSION NUMBER: ML003727426 *See previous concurrence

OFC	FCLB		OGC		FCLB		FCLB		FCLB
NAME	WvonTill*		MSchwartz*		*JHester		RWeller		PTing
DATE	6 /20 /00		6/28/00		6 /29/00		7 /05/00		7 /6 /00

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ACNW: YES _X_ NO ___ Delete file after distribution: Yes __ No _X_

dated March 16, 2000, and as amended and supplemented by submittals dated April 26, 2000, May 15, 2000, June 16, 2000, June 19, 2000, and June 23, 2000.

Prior to the licensee receiving materials from the Linde FUSRAP site, the licensee must make a determination that adequate tailings space is available for the tailings produced from the processing of this material. This determination shall be made based on a SERP approved internal procedure. Design changes to the cells or the reclamation plan require the licensee to submit an amendment request for NRC review and approval.

Prior to the licensee receiving materials from the Linde FUSRAP site, the licensee must require that the generator of the material certify that the material does not contain listed hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) per a Radioactive Material Profile Record.

In your request, you indicated that Cell 3 does not currently have the capacity for both the St. Louis alternate feed material and the Linde material. In phone conversations with the staff you requested that we condition License Condition 10.13 such that a determination of cell space must first be made prior to receiving St. Louis materials in order to free up space for Linde and W.R. Grace materials. Therefore, we have amended license condition 10.13 as indicated below:

10.13 The licensee is authorized to receive and process source material from the St. Louis Formerly Utilized Sites Remedial Action Program (FUSRAP) site, in accordance with statements, representations, and commitments contained in the amendment request dated March 2, 1999, and as amended and supplemented by submittals dated June 21, 1999; June 29, 1999 (2); and July 8, 1999. Prior to the licensee receiving materials from the St. Louis FUSRAP site, the licensee must make a determination that adequate tailings space is available for the tailings produced from the processing of this material. This determination shall be made based on a SERP approved internal procedure.

If you have any questions regarding this letter or the enclosures, please contact William von Till, the NRC Project Manager for the White Mesa mill, at (301) 415-6251and he can be reached by e-mail to RWV@nrc.gov.

Sincerely,

Philip Ting, Chief
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OFC	FCLB	OGC	FCLB	FCLB	FCLB
NAME	WvonTill 6/27/-	MSchwartz Via E-mail	JHester	RWeller	PTing
DATE	6/29/00	6/28/00	6/29/00	/ /	/ /

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ACNW. YES X NO ___ Delete file after distribution: Yes ___ No X

From: Maria Schwartz
To: Randolph VonTill
Date: Wed, Jun 28, 2000 3:06 PM
Subject: Amendment for White Mesa

Bill,

With the incorporation of OGC's comments that you provided, OGC has no legal objection to amendment 14 and the revision of amendment 13 to license SUA-1359.

Maria

TECHNICAL EVALUATION REPORT
REQUEST TO RECEIVE AND PROCESS
Linde FUSRAP SITE MATERIAL

DOCKET NO.: 040-8681

LICENSE NO.: SUA-1358

LICENSEE: International Uranium (IUSA) Corporation

FACILITY: White Mesa Uranium Mill

DATE: June 27, 2000

PROJECT MANAGER: William von Till

TECHNICAL REVIEWERS: William von Till - RCRA and Groundwater
John Lusher - Health Physicist
Dan Rom - Geotechnical Engineer

SUMMARY AND CONCLUSIONS:

We have reviewed International Uranium Corporation's (IUSA's) license amendment application dated March 16, 2000, to receive and process uranium-bearing materials from the Linde, New York (NY), Formerly Utilized Sites Remedial Action Program (FUSRAP) site located in Tonawanda, NY. These materials would be used as an "alternate feed material". We have reviewed IUSA's request using our formal guidance, "Final Position and Guidance on the Use of Uranium Mill Feed Material Other Than Natural Ores" (60 FR 49296; September 22, 1995) and the Commission Memorandum and Order, International Uranium (USA) Corp ,CLI-00-01, 52 NRC 9 (Feb. 10, 2000). We find the amendment request to be acceptable and have amended the license so that IUSA may process this material. During the review process, we determined that IUSA does not have adequate cell space in their tailings cells for both this material and the St. Louis FUSRAP material. The licensee submitted a proposal to remedy this by letters dated May 15, 2000, and June 16, 2000. This will be reviewed under a separate Technical Evaluation Report. We have conditioned the license to reflect the fact that neither the Linde material or the St. Louis material can be received by the mill until IUSA has determined that adequate space is available in the tailings cells based on a Safety and Environmental Review Panel (SERP) approved internal procedure.

1. DESCRIPTION OF LICENSEE'S AMENDMENT REQUEST

By its submittal dated March 16, 2000, IUSA requested that NRC amend Materials License SUA-1358 to allow the receipt and processing of material other than natural uranium ore (i.e., alternate feed material) at its White Mesa uranium mill located near Blanding, Utah. The proposed alternate feed material would come from the Linde site in Tonawanda, New York. This site currently is being remediated by the U.S. Army Corps of Engineers (USACE) under FUSRAP in consultation with the Environmental Protection Agency (EPA). (See the USACE web site at http://www.lrb.usace.army.mil/fusrap/linde/index.htm for locations, documents, and photographs of the sites being remediated).

IUSA proposes to receive contaminated materials from the Linde site for processing at its uranium mill as alternate feed. The material consists primarily of moist materials containing byproducts from uranium processing operations, mixed with site soils. Uranium, thorium, and radium are its primary radiological constituents. Based on USACE documents, IUSA estimates the amount of material that it would receive under this amendment request to be 70,000 to

100,000 yds^3 . Actual amounts will be determined at the time of excavation, based on sampling. The total amount could also be less than this range because the USACE has selected other contractors to dispose of this material.

In addition to its March 16, 2000, letter requesting that the license be amended, IUSA provided additional information in the following letters to NRC:

- April 26, 2000, letter that provides additional information on comments we had which were provided to the licensee in several phone conversations. The submittal also contains more legible copies of the New York State Department of Environmental Conservation's (NYSDEC) Technical Administrative Guidance Memorandum (TAGM) and flow chart for IUSA's listed hazardous waste protocol.

- May 15, 2000, letter that provides a proposal for cell expansion as a result of cell space issues that we raised with the licensee.

- June 16, 2000, letter that provides supplemental information regarding the cell expansion proposal, specifically a liner for the expanded portion.

- June 19, 2000, letter that contains the Radioactive Material Profile Record for hazardous waste identification.

- June 23, 2000, letter addressing comments regarding debris.

a. Site and Material Information

The Linde property is one of four properties that comprise the Tonawanda site. NRC has already granted license amendments to IUSA to process material from two of the other properties within the Tonawanda site, Ashland 1 and Ashland 2 which contained uranium byproduct material originally generated at the Linde property. Union Carbide was placed under contract with the Manhattan Engineering District (MED) from 1942 to 1946 to extract uranium from seven different ore sources: four African pitchblende ores and three domestic ores. Linde conducted full scale processing of 28,300 tons of ore. There were three phases to the processing conducted at the Linde site - phase 1: uranium separation from the ore; Phase 2: conversion of U_3O_8 to uranium dioxide; and Phase 3: conversion of uranium dioxide to tetrafluride. According to the Remedial Investigation (RI) (Bechtel National Incorporated, 1993), the material that would be transported to White Mesa is associated with waste streams and residues of the Phase 1 operation. Any residues from the Phase 2 and 3 operations have been reprocessed. Triuranium octoxide (U_3O_8) was separated from the feedstock by acid digestion, precipitation, and filtration. The primary radioactive contaminants in the soils that would be shipped to the mill are Uranium-238 (U-238), Radium-226 (Ra-226), Thorium-230 (Th-230), and their respective decay products (DOE 1993a). IUSA, based on a review of this material, states that the weighted average grade of uranium for the Linde site is estimated to be 0.07 percent, with hot spots up to 0.3 percent. The volume of material was estimated by the USACE's contractor IT Corp. to be 50,000 to 70,000 $yrds^3$. With expansion, IUSA estimated the volume to be 70,000 to 100,000 yds^3.

After the transfer of residues to the Ashland sites was completed, Linde added manufacturing operations that very likely contributed additional contaminants to the material. Thirteen contaminant compounds have been identified in the Linde material to result from potentially listed waste sources under the Resource Conservation and Recovery Act (RCRA). These consist of toluene and twelve halogenated volatile organic compounds (VOCs) which are present at very low concentrations. Other contaminants, semi-volatile organic compounds (SVOCs) (specifically poly nuclear aromatics hydrocarbons (PAHs) and phtalates), and metals,

have been determined not to result from RCRA listed wastes. Further discussion of potential hazardous waste issues are discussed in section 2.0 of this report.

a. Transportation Considerations

IUSA does not have a contract in place at this time, so it has not been determined if the shipments will be by rail or truck in intermodal containers. If intermodal containers are used, the material would be loaded onto railcars and transported cross-country to the final rail destination, where the containers will be transferred to truck for the final leg of the trip to the mill (expected to be either near Grand Junction, Colorado; Cisco, Utah; Green River, Utah; or East Carbon, Utah). It is expected that an average of 120 truckloads per week will be used to transport the material to the site from the final rail stop. If the USACE ships 100,000 yrds^3 of material to the mill, IUSA expects that an average of 120 truckloads per week will be used for a period of up to ten to fourteen months. Each shipment will be "exclusive use", meaning that the only material in the container will be the material.

c. Handling and Processing at the Mill Site

The material will be added to the mill circuit in a manner similar to conventional natural ores that are processed. IUSA expects to process solutions after leaching without any significant modifications to either the circuit or the recovery process. Tailings produced by the processing of this material will be disposed of on-site in an existing lined tailings impoundment (Cell 3). Depending upon the amount of material processed and the length of time that material is shipped to the site, IUSA may have to build additional tailings impoundments or utilize cell 4a, which is presently not being used. If this is the case, a license amendment will be necessary to revise the reclamation plan and surety amount. As we note later in this report, IUSA must comply with its existing license requirements that limit the amount of tailings in Cell 3, and obtain whatever approvals are necessary for additional impoundments, if they are needed.

IUSA will ensure safety of workers and the environment using already established procedures and equipment in the radiation safety program for processing natural ores. The potential for employee exposures from the handling and processing of this material is not expected to be any more significant than that normally encountered with the milling of conventional uranium ores. Mill employees involved in handling the material will be provided with personal protective equipment (e.g., coveralls, rubber gloves), including respiratory protection, if necessary. Airborne particulate and breathing zone sampling will be conducted in accordance with the environmental monitoring program established by the licensee.

In the licensee's June 23, 2000, submittal, they address staff's inquiry into the amount of debris in the Linde material and handling of the debris. IUSA states that the amount of debris is estimated to be up to 23.5 percent of the total material. This debris is defined as concrete or asphalt greater than 5.6 cubic feet in size. IUSA states that their mill is built to handle this debris with a grizzly to remove larger debris, and a semi-autogenous (SAG) mill, which grinds the ore and any smaller debris. IUSA also installed a trommel screen to wash/leach the debris and remove it from the soils for FUSRAP material.

For debris which can not be handled by the trommel, IUSA will employ a processing step to recover uranium from the material. Prior to processing, large pieces of debris will be removed from the material and placed on a concrete pad. A concrete curb will surround the pad to collect all solutions. The debris will be washed with either water or recycled process solution to leach the uranium from the debris. The solutions from the leaching will be pumped into a tank where they will be mixed with the solutions from the leaching of the soils. Solutions will be pumped to either solvent extraction or ion-exchange uranium extraction circuits to remove uranium from the solutions. Once leached for its uranium content, debris will be hauled to tailings Cell 2 for disposal.

2. STAFF TECHNICAL EVALUATION

We have reviewed IUSA's request in accordance with NRC staff guidance "Final Position and Guidance on the Use of Uranium Mill Feed Material Other Than Natural Ores" (60 FR 49296; September 22, 1995), the Commission Memorandum and Order, International Uranium (USA) Corp, CLI-00-01, 52 NRC 9 (Feb. 10, 2000) and 10 CFR Part 40, Appendix A requirements. The staff guidance (referred to hereinafter as the "Alternate Feed Guidance") requires that we make the following determinations in our reviews of licensee requests to process material other than natural uranium ores:

(a) Whether the feed material qualifies as "ore" as defined in the NRC guidance;

(b) Whether the feed material contains listed hazardous waste; and

(c) Whether the feed material is being processed primarily for its source-material content.

In this evaluation, we discuss how IUSA has addressed each of these criteria in its application to amend the license. We also discuss the other considerations that affect the granting of this amendment.

In the Commission Memorandum and Order of February 10, 2000, several decisions were made which changed some aspects of the NRC staff Alternate Feed Guidance (NRC, 1995). The following summarizes these changes:

1) The staff does not need to consider the quantity of uranium in its review, only whether the feed material (ore) is being processed primarily for its source content and that radiation safety is considered.

2) The staff does not need to consider financial motives involved in the receipt or processing of alternate feed material. The "Certification and Justification" test is not necessary.

3) The presence of listed hazardous waste under RCRA is necessary due to:

- Possible health and safety issues.
- The potential for undesirable, complex NRC-EPA "dual regulation" of the same tailings impoundment.
- The potential for jeopardizing the ultimate transfer of the tailings pile to the U.S. government, for perpetual care and maintenance.

a. Determination of whether the feed material is "ore"

For the tailings and wastes from the proposed processing to qualify as 11e.(2) byproduct material, the feed material must qualify as "ore." In the Alternate Feed Guidance, we define "ore" in part as:

> "...any other matter from which source material is extracted in a licensed uranium or thorium mill."

IUSA has proposed to use alternate feed material from the Linde site that contains varying concentrations of uranium, a "source material" as defined by the Atomic Energy Act of 1954 (AEA). Uranium concentrations range up to 0.30 percent by weight in small hot spots, with an estimated average content of uranium of approximately 0.07 percent by weight in all of the various properties from which material may be shipped. Because IUSA is proposing in this amendment request to extract the uranium from this material at their White Mesa uranium mill, we find that the proposed feed material qualifies as "ore" as defined in our guidance.

b. Determination of whether the feed material contains hazardous waste

Under the Alternate Feed Guidance, we would not approve proposed feed material for processing at a licensed mill that contains a listed hazardous waste.

The IUSA amendment request addresses several measures that will provide assurance that listed hazardous wastes will not be processed at the White Mesa mill. First, IUSA conducted its own review of information on potential listed hazardous wastes in existing DOE and USACE documents remediating the Linde site properties. Second, IUSA also hired an independent consultant to review available information and perform a separate review for classifying various Linde properties and determining which may contain listed hazardous waste. The consultant's analysis was included in the license amendment request.

IUSA developed a listed hazardous waste protocol that has been accepted by the Utah Department of Environmental Quality (UDEQ) (letter dated December 7, 1999). This protocol was used in IUSA's amendment request for the St. Louis alternate feed and found acceptable by the NRC.

Thirteen contaminant compounds have been identified in the Linde material from potentially listed waste sources under the RCRA. These consist of toluene and twelve halogenated volatile organic compounds (VOCs) which are present at very low concentrations. Other contaminants, semi-volatile organic compounds (SVOCs) (specifically PAHs and phtalates), and metals, have been determined not to result from RCRA listed wastes.

Although some of the material at the Linde FUSRAP site may contain listed hazardous wastes, we find that the material proposed in IUSA's March 16, 2000, April 26, 2000, May 15, 2000, and June 19, 2000, submittals for processing at the White Mesa mill will not contain a listed hazardous waste based on the use of a hazardous waste protocol used by IUSA, the in-depth hazardous waste identification process which will be employed by the USACE under the regulatory authority (RCRA) of the EPA and NYSDEC, and the language in the license condition requiring certification by the generator. Because this material is from the processing of uranium ores and contaminated soils, we also find that it meets the Alternate Feed Guidance provision that it not be a residue from water treatment.

IUSA will require that the generator certify that the incoming material is not a listed hazardous waste as defined in EPA's regulation in 40 CFR 261 and/or that the material is exempt from RCRA regulation under 40 CFR 261.4(a)(4).

b.1. Contained-In/Contained-Out Considerations

The NYSDEC has published a TAGM addressing contaminants in environmental media (NYSDEC, 1992) which is included in the amendment request. This TAGM defines NYSDEC's policy regarding contaminants associated with RCRA listed hazardous wastes detected in environmental media (soil, sediment, and water). The TAGM provides specific action levels for each contaminant. If all contaminants in a given media are present at levels lower than the specified action levels, then the media does not "contain" RCRA listed hazardous waste.

NYSDEC will make determinations on a batch by batch basis using the TAGM criteria for the Linde material in determinations of RCRA listed waste identification.

Within the condition allowing the licensee to receive and process Linde material, we have placed the following text:

> Prior to the shipment of Linde material to the mill, the licensee must require that the generator of the material certify that the material does not contain listed hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) per a Radioactive Material Profile Record.

c. Determination of whether the feed material is being processed primarily for its source-material content

Using our Alternate Feed Guidance, a licensee must show that potential alternate feed material is being processed primarily for its source-material content. In the Commission Memorandum and Order of February 10, 2000, the Commission stated: the staff does not need to consider the quantity of uranium in its review, only whether the feed material (ore) is being processed primarily for its source content and that radiation safety is considered. IUSA has provided a signed certification that the uranium-bearing material is being processed primarily for the recovery of uranium and for no other primary purpose.

d. Conclusions concerning compliance with alternate feed material criteria

Based on the information provided by IUSA, the NRC staff finds that the Linde Site material meets the criteria in the Alternate Feed Guidance, because (1) it qualifies as an "ore" as defined by NRC guidance, (2) the material to be processed will not be or contain listed hazardous wastes, and (3) it is being processed primarily for its source-material content.

e. Other Considerations

We have also considered other factors related to the granting of this amendment request. We have concluded that the processing of this material will not result in (1) a significant change or increase in the types or amounts of effluents that may be released offsite; (2) a significant increase in individual or cumulative occupational radiation exposure; (3) a significant construction impact; or (4) a significant increase in the potential for or consequences from radiological accidents. We base this conclusion on the following:

1) Yellowcake produced from the processing of this material will not cause the currently-approved yellowcake production limit of 4380 tons per year to be exceeded. Yellowcake is the useful product of the mill and contains elevated concentrations of uranium that are further refined in other plants and processes to produce fuel for nuclear reactors, for example. In addition, and as a result, radiological doses to members of the public in the vicinity of the mill will not be elevated above levels previously assessed and approved.

2) The licensee will dispose of the tailings produced by the processing of this material on-site in an existing lined tailings impoundment (Cell 3), and if processing of large amounts continues for an extended period of time, in additional NRC approved tailings impoundments. The volume of tailings that would be generated by processing the alternate feed material is comparable to the volume that would be generated from processing an equivalent amount of ore authorized under the license. The design of the existing impoundment, which includes a leak detection system, has been previously approved by NRC,

and IUSA is required by its NRC license to conduct regular monitoring of the impoundment liners and of the groundwater around the impoundments to detect leakage if it should occur. By license condition under this amendment, IUSA must first determine if cell space exists prior to receiving both Linde and St. Louis material. If any additional tailings cells are needed, they will be first approved by NRC under a license amendment and will have similar monitoring. The licensee originally proposed to build a six cell impoundment system which was addressed in the Final Environmental Statement for the license application (NRC, 1979).

3) In general, the Linde site material will be similar in composition to the mill tailings currently disposed of in the Cell 3 impoundment, because it will contain metals and other chemicals which are present already in the tailings. Furthermore, IUSA is required to conduct regular monitoring of the impoundments to detect leakage if it should occur. Therefore, any environmental impacts that could be associated with the disposal of the additional quantity of Linde Site material from processing in the mill will not be larger than impacts previously evaluated and determined to be acceptable for this mill.

3.0 RECOMMENDED LICENSE CHANGE:

Pursuant to Title 10 of the Code of Federal Regulations, Part 40, Materials License SUA-1358 will be amended by the modification of License Condition No. 10.13 and the addition of License Condition 10.14 as follows:

10.13 The licensee is authorized to receive and process source material from the St. Louis Formerly Utilized Sites Remedial Action Program (FUSRAP) site, in accordance with statements, representations, and commitments contained in the amendment request dated March 2, 1999, and as amended and supplemented by submittals dated June 21, 1999; June 29, 1999 (2); and July 8, 1999. Prior to the licensee receiving materials from the St. Louis FUSRAP site, the licensee must make a determination that adequate tailings space is available for the tailings produced from the processing of this material. This determination shall be made based on a SERP approved internal procedure.

[Applicable Amendments: 13, 14]

10.14 The licensee is authorized to receive and process source material from the Linde Formerly Utilized Sites Remedial Action Program (FUSRAP) site, in accordance with statements, representations, and commitments contained in the amendment request dated March 16, 2000, and as amended and supplemented by submittals dated April 26, 2000, May 15, 2000, June 16, 2000, June 19, 2000, and June 23, 2000.

Prior to the licensee receiving materials from the Linde FUSRAP site, the licensee must make a determination that adequate tailings space is available for the tailings produced from the processing of this material. This determination shall be made based on a SERP approved internal procedure. Design changes to the cells or the reclamation plan require the licensee to submit an amendment request for NRC review and approval.

Prior to the licensee receiving materials from the Linde FUSRAP site, the licensee must require that the generator of the material certify that the material does not contain listed hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) per a Radioactive Material Profile Record.

[Applicable Amendment: 14]

4) ENVIRONMENTAL IMPACT EVALUATION

An environmental report covering the information identified in 10 CFR 51.45 was not required from the licensee. The environmental impacts associated with the excavation of this material and associated site cleanup activities and for transportation were addressed previously by the USACE. Because IUSA's receipt and processing of the material will not result in (1) a significant change or increase in the types or amounts of effluents that may be released offsite; (2) a significant increase in individual or cumulative occupational radiation exposure; (3) a significant construction impact; or (4) a significant increase in the potential for or consequences from radiological accidents, an environmental review was not performed since actions meeting these criteria are categorically excluded under 10 CFR 51.22(c)(11).

With respect to transportation impacts, as we noted in Section 2.c, NRC does not regulate the transportation of this material to the White Mesa Mill. In addition, transportation impacts for various remediation alternatives have already been examined by the EPA and USACE under the Comprehensive Environmental Response, Compensation, and Recovery Act (CERCLA) process used at the Linde Site. With FUSRAP, actions proposed for a site are evaluated in light of NEPA guidelines to determine potential environmental effects and the level of NEPA documentation required. It is the position of the USACE that the CERCLA process is functionally equivalent to the requirements of the National Environmental Policy Act.

The issue of cell expansion or the use of additional tailings cells will be evaluated under a separate Technical Evaluation. Environmental impacts associated with that action will be evaluated at that time. However, the licensee originally proposed to build a six cell impoundment system which was addressed in the Final Environmental Statement for the license application (NRC, 1979). The mill has only utilized four cells, one of which (Cell 4a), is not currently in use. IUSA's current proposal includes expansion into an existing cell footprint.

5.0 STATE CONSULTATION AND ENVIROCARE OF UTAH COMMENTS

The UDEQ was consulted on several occasions. Verbal comments from the UDEQ consisted of cell space, potential RCRA listed hazardous waste, and debris within the material. Staff addressed the cell space issue by placing text in the license that requires IUSA to determine that adequate cell space exists prior to this material being received at the mill. Secondly, staff is working with IUSA to resolve the cell space issue. IUSA has submitted supplemental packages on their proposal to expand their cell space capacity by submittals dated May 15, 2000, and June 16, 2000. This is currently under review and will be addressed by a separate Technical Evaluation. The UDEQ Division of Hazardous Waste agreed with IUSA's Protocol for Determining Whether Alternate Feed Materials are Listed Hazardous Wastes in a letter dated December 7, 1999. IUSA followed this protocol for the Linde material. To address any RCRA concerns, we conditioned the license to require that the material be certified as non-listed hazardous waste prior to being shipped to the mill. To address the debris concern, staff discussed the issue in a phone conversation with IUSA and; consequently, IUSA submitted a letter dated June 23, 2000, to address the staff's comments. Handling of the debris is covered in section 1.c of this report.

The NYSDEC was consulted on April 10, 2000. Issues discussed dealt with listed hazardous waste identification and the NYSDEC's TAGM addressing contaminants in environmental media (NYSDEC, 1992). This TAGM defines NYSDEC's policy regarding contaminants associated with RCRA listed hazardous wastes detected in environmental media (soil, sediment, and water). The TAGM provides specific action levels for each contaminant. If all contaminants in a given media are present at levels lower than the specified action levels, then the media does not "contain" RCRA listed hazardous waste. NYSDEC will make determinations on a batch by

batch basis using the TAGM criteria for the Linde material in determination of RCRA listed waste identification. The staff has placed a condition in the license that requires the licensee to have the material certified by the generator that no listed hazardous waste as defined under RCRA are present prior to Linde material being shipped to the mill.

Envirocare of Utah submitted comments to the NRC by letter dated June 2, 2000. The comments focused on the cell space issue. The staff addressed this issue as discussed above.

REFERENCES:

Bechtel National Incorporated/U.S. Department of Energy (DOE) 1993. Remedial Investigation for the Tonawanda Site, DOE/OR/21949-300.

U.S. Department of Energy (DOE) 1993b. Feasibility Study for the Tonawanda Site.

New York Department of Environmental Conservation (NYSDEC). Technical Administrative Guidance Memorandum (TAGM) regarding "Contained-In" Criteria for Environmental Media. November 30, 1992

U.S. Nuclear Regulatory Commission (NRC). Commission Memorandum and Order, International Uranium (USA) Corp., CLI-00-01, 52 NRC 9 (Feb. 10, 2000).

NRC "Final Position and Guidance on the Use of Uranium Mill Feed Material Other Than Natural Ores" *Federal Register*, Volume 60, No. 184, Pages 49296-49297. September 22, 1995.

NRC "Final Environmental Statement" for the White Mesa Uranium Project, Energy Fuels Nuclear, Inc. May, 1979.

NRC FORM 374
(7-94)

U.S. NUCLEAR REGULATORY COMMISSION

MATERIALS LICENSE

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

Licensee	
1. International Uranium (USA) Corporation [Applicable Amendments: 2]	3. License Number SUA-1358, Amendment No. 14
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 and Low-Level Waste 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 Amendment: 2]

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

(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 is consistent with the conclusions of actions analyzed and selected in the EA dated February 1997.

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's SERP shall function in accordance with the standard operating procedures submitted by letter dated June 10, 1997.

[Applicable Amendments: 3]

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, a Performance Bond 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 $9,682,467 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, 3, 5, 13]

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.

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."

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.

9.11 The final reclamation shall be in accordance with the May, 1999, Reclamation Plan Revision 2.0 and Attachment A submitted on June 22, 1999.

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 Metropolis, 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]

10.9 The licensee is authorized to receive and process source material from Cabot Performance Materials' facility near Boyertown, Pennsylvania, in accordance with the amendment request dated April 3, 1997, as amended by submittals dated May 19, and August 6, 1997.

[Applicable Amendments: 4]

10.10 The licensee is authorized to receive and process source material from the Ashland 2 Formerly Utilized Sites Remedial Action Program (FUSRAP) site, located near Tonawanda, New York, in accordance with the amendment request dated May 8, 1998, as amended by the submittals dated May 27, June 3, and June 11, 1998.

[Applicable Amendment: 6]

10.11 The licensee is authorized to receive and process source material from Cameco Corporation's Blind River and Port Hope facilities, located in Ontario, Canada, in accordance with the amendment request dated June 4, 1998, and by the submittals dated Sepember 14, September 16, September 25, October 7, amd October 8, 1998.

However, the licensee is not authorized to receive or process from these facilities, the crushed carbon anodes identified in these submittals, either as a separate material or mixed in with material already approved for receipt or processing.

10.12 The licensee is authorized to receive and process source material from the Ashland 1 and Seaway Area D Formerly Utilized Sites Remedial Action Program (FUSRAP) site, located near Tonowanda, New York, in accordance with statements, representations, and commitments contained in the amendment request dated October 15, 1998, as amended by letters dated November 23, 1998, November 24, 1998, December 23, 1998, January 11, 1999, January 27, 1999, and February 1, 1999.

[Applicable Amendment: 10]

10.13 The licensee is authorized to receive and process source material from the St. Louis Formerly Utilized Sites Remedial Action Program (FUSRAP) site, in accordance with statements, representations, and commitments contained in the amendment request dated March 2, 1999, and as amended and supplemented by submittals dated June 21, 1999; June 29, 1999 (2); and July 8, 1999. Prior to the licensee receiving materials from the St. Louis FUSRAP site, the licensee must make a determination that adequate tailings space is available for the tailings produced from the processing of this material. This determination shall be made based on a SERP approved internal procedure.

[Applicable Amendments: 13, 14]

10.14 The licensee is authorized to receive and process source material from the Linde Formerly Utilized Sites Remedial Action Program (FUSRAP) site, in accordance with statements, representations, and commitments contained in the amendment request dated March 16, 2000, and as amended and supplemented by submittals dated April 26, 2000, May 15, 2000, June 16, 2000, June 19, 2000, June 23, 2000.

Prior to the licensee receiving materials from the Linde FUSRAP site, the licensee must make a determination that adequate tailings space is available for the tailings produced from the processing of this material. This determination shall be made based on a SERP approved internal procedure. Design changes to the cells or the reclamation plan require the licensee to submit an amendment request for NRC review and approval.

Prior to the licensee receiving materials from the Linde FUSRAP site, the licensee must require that the generator of the material certify that the material does not contain listed hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) per a Radioactive Material Profile Record.

[Applicable Amendment: 14]

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 amended by the submittal dated June 8, 1995, and 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 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.

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.

[Applicable Amendment: 5]

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, and the following:

A. 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.

In addition, the licensee shall implement a monitoring program of the leak detection systems for the disposal cells as follows:

B. The licensee shall measure and record the "depth to fluid" in each of the tailings disposal cell standpipes on a weekly basis. If sufficient fluid is present in the leak detection system (LDS) of any cell, the licensee shall pump fluid from the LDS, to the extent reasonably possible, and record the volume of fluid recovered. Any fluid pumped from an LDS shall be returned to a disposal cell.

If fluid is pumped from an LDS, the licensee shall calculate the flow rate by dividing the recorded volume of fluid recovered by the elapsed time since fluid was last pumped or increases in the LDS fluid levels were recorded, whichever is the more recent. The licensee shall document the results of this calculation.

C. Upon the initial pumping of fluid from an LDS, the licensee shall collect a fluid sample and analyze the fluid for pH and the parameters listed in paragraph A of this license condition. The licensee shall determine whether the LDS fluid originated from the disposal cell by ascertaining if the collected fluid contains elevated levels of the constituents listed in paragraph A of this license condition or has a pH level less than 5.0. If either elevated constituent levels or a pH less than 5.0 is observed, the licensee shall assume that the disposal cell is the origin of the fluid.

If the LDS fluid is determined not to have originated from the disposal cell, the licensee shall continue with weekly measurements of "depth to fluid" in the LDS standpipes. The licensee shall confirm, on an annual basis, that fluid from the disposal cell has not entered the LDS by collecting (to the extent possible) and analyzing an LDS fluid sample for the above stated parameters.

D. Upon indication that the LDS fluids originated from the disposal cell, the licensee shall determine the flow rate through the liner by the calculation method in paragraph B of this license condition. If the flow rate is equal to or greater than one gallon per minute, the licensee shall:

1. Evaluate the cause of the liner distress and take appropriate and timely actions to mitigate the leak and any consequent potential impacts;

2. Continue to measure and record LDS "depth to fluid" measurements weekly; and

3. Notify NRC by telephone within 48 hours, in accordance with License Condition 9.2, and submit a written report within 30 days of notifying NRC by telephone, in accordance with License Condition 9.2. The written report shall include a description of the mitigative action(s) taken and a discussion of the mitigative action results.

If the calculated flow rate is less than one gallon per minute, the licensee shall continue with weekly measurements of "depth to fluid" in the LDS standpipes.

E. All sampling, analysis, and evaluation of LDS fluids shall be documented and retained onsite until license termination for NRC inspection.

[Applicable Amendment: 8]

11.4 Annually, the licensee shall collect, during mill operations, a set of air samples covering eight hours of sampling, at a high collection flow rate (i.e., greater than or equal to 40 liters per minute), in routinely or frequently occupied areas of the mill. These samples shall be analyzed for gross alpha. In addition, with each change in mill feed material or at least annually, the licensee shall analyze the mill feed or production product for U-nat, Th-230, Ra-226, and Pb-210 and use the analysis results to assess the fundamental constituent composition of air sample particulates.

[Applicable Amendment: 7]

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 DELETED by Amendment 13.

[Applicable Amendment: 13]

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 that includes a deailed Quality Assurance Plan. The plan will be in accordance with Regulatory Guide 4.15, "Quality Assurance for Radiological Monitoring Programs," and NUREG-1575, "Multi-Agency

Radiation Survey and Site Investigation Manual (MARSSIM), or equivalent most current guidance.

[Applicable Amendment: 13]

FOR THE NUCLEAR REGULATORY COMMISSION

Date 7/7/00

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