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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF SECRETARY
RULEMAKING AND
ADJUDICATION STAFF

BEFORE THE PRESIDING OFFICER

In the Matter of)	
)	
INTERNATIONAL URANIUM (USA))	Docket No. 40-8681-MLA-4
CORPORATION)	
)	
(Receipt of Material from)	
Tonawanda, New York))	

NRC STAFF RESPONSE TO WRITTEN PRESENTATIONS BY
STATE OF UTAH AND INTERNATIONAL URANIUM (USA) CORPORATION

Pursuant to 10 C.F.R. § 2.1233, the State of Utah (State) filed its written presentation opposing Amendment 6 to License No. SUA-1538 (Amendment), which was issued June 23, 1998. State of Utah's Brief in Opposition to International Uranium (USA) Corporations' Source Material License Amendment, dated December 7, 1998 (State Brief). International Uranium (USA) Corporation (IUSA or Licensee) filed its reply on January 19, 1999. International Uranium (USA) Corporation's ("IUSA's) Reply to State of Utah's Brief in Opposition to IUSA's Source Material License Amendment 6, dated January 19, 1999 (IUSA Brief).

The Staff files this response to the State and IUSA filings in accordance with the Presiding Officer's "Memorandum and Order (Stipulated Schedule)," dated October 27, 1998. As set forth below, the State of Utah (State) has failed to show that the application is deficient, that the application is inconsistent with Staff guidance and that the amendment authorizing IUSA to process at its White Mesa mill, uranium-bearing material received from the Ashland 2

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Formerly Utilized Sites Remedial Action Program (FUSRAP) site, near Tonawanda, New York, should be revoked. *See* State Brief at 22.¹

BACKGROUND

IUSA, the owner and operator of the White Mesa mill in Blanding, Utah, is authorized pursuant to a source material license issued under 10 C.F.R. Part 40 to process natural uranium ore and certain other materials for their uranium content and to possess the waste generated from such millings operations. *International Uranium (USA) Corporation* (Receipt of Material from Tonawanda, New York), LBP-98-21, 48 NRC 137, 143 (1998).² By application, dated May 8, 1998, as amended May 27, June 3, and June 11, 1998,³ IUSA requested that its license be amended to allow it to receive and process approximately 25,000 dry tons of uranium-bearing material (*i.e.*, alternate feed material -- material other than natural uranium ore) from Ashland 2 FUSRAP site, which is currently being managed by the U.S.

¹Written presentations by intervenors must describe in detail any deficiency or omission in the license application, why any particular portion is deficient or why the omission is material, and what relief is sought. Statement of Consideration, "Informal Hearing Procedures for Materials Licensing Adjudications," 54 Fed. Reg. 8269 (Feb. 28, 1989); *see also, id.*, Proposed Rule, 52 Fed. Reg. 20089, 20090 (May 29, 1987).

²The NRC originally issued the license for the White Mesa mill in 1979, and renewed this license in 1985 and again in 1997. *IUSA*, 48 NRC at 143.

³*See* Letter from M. Rehmann, IUSA, to J. Holonich, NRC, dated May 8, 1998, forwarding amendment application (Hearing File Document 1); Facsimile from M. Rehmann, IUSA, to J. Park, NRC, dated May 27, 1998 (Hearing File Document 2); Letter from M. Rehmann, IUSA, to J. Holonich, NRC, dated May 29, 1998 (transmitting Record of Decision, dated April 1998) (Hearing File Document 3); Letter from M. Rehmann, IUSA, to J. Holonich, NRC, dated June 3, 1998, forwarding response to Request for Additional Information (RAI Response) (Hearing Document 5); Letter from M. Rehmann, IUSA, to J. Holonich, NRC, dated June 11, 1998 (Hearing Document 6). Collectively, these submittals constitute the "Application."

Army Corps of Engineers (ACE).⁴ The material consists of uranium ore processing residues and contaminated soils associated with activities conducted by the Manhattan Engineering District (MED) during the mid-1940s that were originally disposed at the site now called Ashland 1, but later moved to the Ashland 2 site by the Ashland Oil Company, which acquired the property in 1960. TER at 1.

Based on a determination that the Application could be approved under NRC guidance entitled "Final Position and Guidance on the Use of Uranium Feed Material Other Than Natural Ores, 60 Fed. Reg. 49,296, 49,297 (September 22, 1995) (Alternate Feed Guidance) (Hearing File Document 10), the Staff prepared a TER and issued the license amendment authorizing IUSA to receive and process the Ashland 2 material at its White Mesa mill. *See IUSA*, 48 NRC at 144-45. The State of Utah's petition for leave to intervene was granted based on its claim that the Ashland 2 material could contain listed hazardous wastes and that the excavation, storage, processing, and disposal of the same material could violate applicable law and NRC guidance, and harm the State's natural resources. *See IUSA*, 48 NRC at 145-47.

⁴See Technical Evaluation Report: Request to Receive and Process Ashland 2 FUSRAP Material (TER), at 1, attached to Letter from J. Holonich, NRC to M. Rehmann, IUSA, forwarding Amendment 6 to Source Material License SUA-1358, dated June 23, 1998 (Hearing File Document 12 and IUSA Exhibit 1). A similar request to allow IUSA to receive, process and dispose of uranium-bearing material from the nearby Ashland 1 and Seaway Area D FUSRAP sites is pending before the NRC Staff and is the subject of requests for hearing. *See Notice of Opportunity for Hearing*, 63 Fed. Reg. 59,340 (November 3, 1998); *Designation of Presiding Officer*, 63 Fed. Reg. 69,684 (December 17, 1998).

Thereafter, the Staff made a hearing file for the proceeding available in accordance with 10 C.F.R. § 2.1231(a).⁵

In its written presentation the State asserts: (1) that the Application did not satisfy criterion three of the NRC Alternate Feed Guidance -- that the material is to be processed primarily for its source material content -- since the application "omitted several material facts" and the material is being processed primarily to obtain a disposal fee and not for the extraction of its source material content; (2) that the Amendment was based on an inadequate administrative record because documents addressing whether the material contained listed hazardous wastes were not provided until requested by the State and the NRC did not conduct an adequate review; and (3) that the Application did not address the impacts of receipt, processing and disposal of the Ashland 2 material on the environment, particularly the impact on State water resources. *See* State Brief at 2-3, 12, 14-18. The thrust of these arguments is the Amendment authorizes a "sham disposal" of unprofitable uranium-bearing material that could be low-level waste that should be placed in a Utah regulated disposal facility. *See id.* at 3, 12, 16-18.⁶

⁵Letter from M. Young, NRC, to Administrative Judges, dated September 30, 1998.

⁶IUSA asserts that the Amendment should be affirmed given that the Ashland 2 material is 1 le.(2) byproduct material that is being processed primarily for its source material content. *See e.g.*, IUSA Brief at 49-63. It reasons that Utah, an Agreement State for the disposal of low level radioactive waste (but not the milling of uranium and the disposal of resulting tailings and wastes), challenges the amendment in an inappropriate attempt to assert its jurisdiction due to the State's dissatisfaction with the regulatory regime in 10 C.F.R. Part 40. *See id.* at 3, 78-82.

As demonstrated below, the Amendment was approved consistent with the Alternate Feed Guidance and concerns that applicable laws and regulations were violated lack merit.

DISCUSSION

I. The Adequacy of the Staff Review is Not Determinative

Before addressing the State's arguments, the Presiding Officer should be mindful that, while the State may rely on Staff guidance to allege that the Application is deficient, such guidance cannot prescribe requirements. *See Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), LBP-95-41, 34 NRC 332, 338-39, 347, 354 (1991); *Curators of University of Missouri*, CLI-95-1, 41 NRC 71, 98, 100 (1995) (*University of Missouri*). In addition, because licensing boards and presiding officers have no authority to direct the Staff in the performance of its safety reviews, *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant, Units 1, 2, 3, and 4), CLI-80-12, 11 NRC 514, 516 (1980); *Recoil International Corp.* (Rocketdyne Division), ALAB-925, 30 NRC 709, 721-11 (1989), *aff'd*, CLI-90-5, 31 NRC 337 (1980), and because the applicant or licensee has the burden of proof in this proceeding, the adequacy of the Staff's safety review is not determinative of whether an action should be upheld. *University of Missouri*, CLI-95-1, 41 NRC at 121. As the Commission has noted, with the exception of National Environmental Policy Act, 42 U.S.C. 4321 *et seq.*, issues, the sole focus of a hearing is whether the application satisfies NRC regulatory requirements. *Id.* at n. 67. Therefore, the Presiding Officer need not consider arguments that the inadequacy of the Staff's review warrants revocation of the Amendment.⁷

⁷Notably, the Commission has found that there is no requirement that the Staff even
(continued...)

II. NRC Regulation of Byproduct Material

On November 9, 1978, Congress enacted the Uranium Mill Tailings Radiation Control Act of 1978, 42 U.S. § 7901 *et seq.* (UMTRCA). The legislation was intended to address growing concerns about the potential hazards of uranium mill tailings by closing a regulatory gap that existed as a result of NRC being able to only indirectly regulate tailings at active mills through the licensing of source material milling and NEPA. *See* H. R. Rep. No 95-1480, Part 2, 95th Cong., 2d Sess. 28 (1978). Congress expressed its concern that "uranium mill tailing located at active and inactive mill operations may pose a potential and significant public health hazard to the public" and that efforts were needed "to prevent or minimize radon diffusion into the environment and to prevent or minimize other environmental hazards from tailings." UMTRCA Section 2.(a), 42 U.S.C. § 7901(a). Thus, as stated in Section 2.(b), 42 U.S.C. § 7901(b), the purpose of the UMTRCA was to provide:

(1) in cooperation with the interested States, Indian tribes, and the persons who own or control inactive mill tailings sites, a program of assessment and remedial action at such sites, including where appropriate, *the reprocessing of tailings to extract residual uranium and other mineral values where practicable, in order to stabilize and control such tailings in a safe and environmental sound manner and to minimize or eliminate radiation health hazards to the public, and*

⁷(...continued)

prepare a safety evaluation for a materials license amendment since such finding may be implied and it would be difficult for the Staff to handle the approximately 5,000 materials license actions annually if there were a requirement to prepare a written evaluation for each action. *University of Missouri*, 41 NRC at 122-23 and n.68. The Staff, however, maintains that its review was sufficient to determine whether the IUSA Amendment could be granted under 10 C.F.R. Part 40, addressed the relevant aspects of Staff guidance, and reached the necessary environmental findings. *See* Affidavit of Joseph J. Holonich, dated January 29, 1998 (Holonich Affidavit) (attached) at 3-12.

(2) a program to regulate mill tailings during uranium or thorium ore processing at active mill operations and after termination of such operations in order to stabilize and control such tailings in a safe and environmentally sound manner and to minimize or eliminate radiation health hazards to the public.

Pivotal to UMTRCA was the amendment of the Atomic Energy Act, 42 U.S.C. § 2011 *et seq.* (AEA), to add an additional definition of byproduct material (designated as Section 11.e(2)) to include "tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content." 42 U.S.C. § 2014.e(2). As a result, the AEA definition of 11.e(2) byproduct material includes all wastes from the milling process, not just the radioactive components. Draft Guidance, 60 Fed. Reg. 20525, 20526; *Kerr-McGee v. NRC*, 903 F.2d 1, 7 (D.C. Cir. 1990).⁸

Similarly, pursuant to Section 81 of the AEA, 42 U.S.C. § 2111, "[n]o person may transfer or receive interstate commerce, manufacture, produce, transfer, acquire, own, possess, import, or export any byproduct material, except to the extent authorized by this section

⁸ Due to the potential for dual regulation, UMTRCA specifically directed the NRC to ensure that regulation of 11.e(2) material "(1) conforms with the applicable general standards promulgated by the [Environmental Protection Agency (EPA)] under section 275" of the Act and "(2) conforms to the general requirements established by the Commission, with the concurrence of [EPA], which are to the maximum extent practicable, at least comparable to requirements applicable to the possession, transfer, and disposal of similar hazardous material regulated by the Solid Waste Disposal Act." 42 U.S.C. § 2114(a). The AEA was also amended to explicitly exclude the requirement for the EPA (or an Agreement State) to permit 11.e(2) byproduct material under the Resource Conservation and Recovery Act of 1976 (RCRA), 42 U.S.C. 6901 *et seq.* See AEA § 275, 42 U.S.C. § 2022.

As noted in the Draft Guidance, the NRC amended 10 C.F.R. Part 40 to provide for regulation of uranium and thorium tailings and wastes and disposal of these materials under this subpart. 57 Fed. Reg. 20,525, 20,526. Although not subject to EPA (or State) regulation under RCRA, the 11.e(2) byproduct material must meet EPA Clean Air Act permit regulations, whether or not they are co-mingled with non-11.e(2) byproduct material waste. *Id.*

[authorizing license and exemptions], Section 82 [governing imports], and Section 84 [covering milling and mill tailings]. Therefore, NRC licensing requirements would apply to 11.e(2) byproduct material in the possession of an NRC licensee.⁹

Although expansive, the 11.e(2) phrase "produced by extraction or concentration of uranium or thorium from any ore processed primarily for its source material content" applied to the nuclear fuel cycle and excluded tailings containing uranium produced as a side stream of an operation primarily intended to extract a mineral other than uranium or thorium. See *Uranium Mill Tailings Radiation Control Act of 1978 Hearing on H.R. 11698, H.R. 11229, H.R. 12938, H.R. 12535, H.R. 13049 and 13650, Subcommittee on Energy and Power, House Comm. On Interstate and Foreign Commerce, 95th Cong. 2d Sess. 343-344 (1978) (Licensee Exhibit 3) (Subcommittee Hearings); Draft Disposal Guidance, 57 Fed. Reg. 20525-20527.* Nevertheless, the NRC suggested that the term be revised to apply to all nuclear fuel cycle

⁹The new authority afforded NRC could not be applied retroactively unless the statute clearly, by express language or necessary implication, indicated the legislature intended such retroactive application. See 2 Sutherland, *Statutory Construction* § 41.04, at 349-351 (5th Ed 1993); *Bowen v. Georgetown University Hospital*, 488 U.S. 204 (1988). Similarly, administrative agencies only have such powers which are conferred by Congress either expressly or by necessary implication. See 3 Sutherland, *Statutory Construction*, § 65.02, at 311-312 (5th Ed. 1992).

The effective date of the statute renders the Ashland 2 material (which technically meets the definition of 11.e(2) byproduct material since DOE and the Army Corps of Engineers have records which show the "waste or tailings" was "produced by the extraction or concentration of uranium or thorium for its source material content") not subject to NRC jurisdiction until it comes into the possession of an NRC licensee. See Letter from Richard Bangart to Paul Merges, dated September 15, 1998 (Licensee Exhibit 8). While the limits of the NRC's jurisdiction is not a bar with respect to the issuance of the Amendment authorizing receipt of the Ashland 2 material since DOE has the authority to classify the material, its status is no different than uranium ore, which is not subject to NRC regulation until it arrives at an NRC-licensed uranium mill. See Final Generic Environmental Impact Statement on Uranium Milling, NUREG-0706, dated September 1980, vol. II at A-89 (Attachment A).

waste irrespective of the concentration of uranium contained in the ore to capture wastes from mills that used feedstock with less than 0.05% uranium since "[a]s high-grade ores become scarcer, there may be greater incentives in the future to turn to such low grade ores." *See id.* at 343 (Chairman Hendrie).

The role of the Department of Energy (DOE) is also important in determining the ultimate fate of mill tailings and wastes. UMTRCA further revised the AEA to require that either the United States (currently DOE) or the State in which the byproduct material has been disposed of (at the State's option), maintain long-term custody of, and surveillance over, the byproduct material and land used for its disposal. *See* AEA § 83, 42 U.S.C. § 2113. DOE is also responsible for determinations regarding residual radioactive material (e.g., radioactive wastes) at inactive processing sites and property in the vicinity of the site that has been contaminated with residual materials. 42 U.S.C. §§ 7911(1), (6), (7). Thus, the Federal Government has a prominent role with regard to the hazards of uranium mill tailings -- both radiological and non-radiological.

III. Issuance of the Amendment Was Consistent With the Alternate Feed Guidance

The Alternate Feed Guidance was published in the *Federal Register* on September 22, 1995. 60 Fed. Reg. 49,296. The guidance was to present an expanded interpretation of the term "ore" as used in Section 11.e(2) of the AEA, thus permitting feed material other than natural ore to be used by licensed mills to extract source material, avoiding possible dual regulation by the Environmental Protection Agency (EPA) and enabling transfer of other material to the Depart of Energy. *See* Uranium Mill Facilities, Request for Public Comments on Revised Guidance on Disposal of Non-Atomic Energy Act of 1954, Section 11.e(2)

Byproduct Material in Tailings Impoundments and Position and Guidance on the Use of Uranium Mill Feed Materials Other Than Natural Ores," 57 Fed. Reg. 20,525, 20,530-31 (May 13, 1992) (Draft Disposal and Alternate Feed Guidance).¹⁰ In the promulgation of both the draft and final guidance, the NRC emphasized that waste or tailings that resulted from the extraction or concentration of ore primarily for its source material content would be considered 11.e(2) material. *See* 57 Fed. Reg. 20,525; 60 Fed. Reg. 49,297.

The Alternate Feed guidance provides that requests to process alternate feed material can be approved if the Staff concludes, *inter alia*, that the application shows that the material proposed for processing is "ore," that it does not contain a listed hazardous waste, and that it is being processed primarily for its source material content. 60 Fed. Reg. 49,296-49,297; Holonich Affidavit at 4-7. The Staff concluded that the criteria in the guidance were met in the (1) the feed material qualified as "ore," (2) DOE remedial investigations did not identify any hazardous waste on the Ashland 2 property and confirmatory measures would be taken to guard against the presence of listed hazardous waste prior to shipment to, and upon receipt at, the White Mesa mill, and (3) the Licensee had provided an adequate certification that the uranium-bearing material is being processed primarily for recovery of uranium. TER at 4-6.¹¹

¹⁰The Draft Guidance notes that both the Congressional intent in passing UMTRCA, as well as the views of a Federal court, warranted a broad interpretation of the term "ore" in the definition of 11.e(2) byproduct material so a wide range of feed materials could be processed in a mill with the resulting wastes being deemed 11.e(2) byproduct material. *See* 57 Fed. Reg. 20,525, 20,532, *citing*, *Kerr-McGee Corp. v. NRC*, 903 F.2d 1 (D.C. Cir. 1990).

¹¹In addition, the Staff noted that, because DOE had determined that the Ashland 2 material was 11.e(2) byproduct material under the AEA, the material could be disposed of directly in the White Mesa tailings impoundments. TER at 6; Holonich Affidavit at 6-8.

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The State claims that IUSA failed to satisfy either the license certification and justification test -- a sworn statement (with supporting documentation) that the alternate feed material is to be processed primarily for recovery of uranium and for no other primary purpose which may be justified "based on financial considerations, the high uranium content of the feed material, or *other grounds*." See State Brief at 2. The State claims that the processing cannot be justified on financial grounds because the value of the disposal fee far surpasses the value of the uranium that can be extracted and, thus, IUSA is engaging in a "sham disposal." See State Brief at 3-12; Affidavit of Robert F. Herbert, dated December 7, 1998 (Herbert Affidavit).¹²

As noted in the previous section, the definition of 11.e(2) byproduct material was (1) intended to permit NRC regulation of only tailings or wastes associated with the nuclear fuel cycle, capturing low grade feed stock with less than .05% uranium or thorium content necessary to be subject to NRC regulation, and (2) in recognition that some mills were using

¹¹(...continued)

Unfortunately, the Staff confused the issue somewhat in reaching this by referring to the "co-disposal test" since there would be no co-mingling of 11.e(2) and non-11.e(2) byproduct materials since the Staff had accepted DOE's characterization that the alternate feed was 11.e(2). Consequently, the co-disposal test for non-11.e(2) material -- was inapplicable to IUSA's request. *Id.* Thus, it is of no import that various elements of the guidance for co-disposal test for non-11.e(2) material (*e.g.*, the Regional Low-Level Waste Compact approval) in the Disposal Guidance were not satisfied. See State Brief at 13-14. The Staff's finding was consistent with the expectation that the 11.e(2) byproduct material would be transferred to DOE as required by Section 84 of the AEA, 42 U.S.C. § 2113(a)(2), (b)(2).

¹²Mr. Herbert estimates that based on a yellowcake price of \$8.75 per pound, the value of uranium in the material may gross \$68,000 to \$617,000 (depending on whether the uranium concentration of the material is 0.008% or 0.058%), while the handling and disposal fee could be \$4,050,000. See Herbert Affidavit at 5-9.

feedstock with less than that amount and that high grade ores might become scarcer. *See Subcommittee Hearings* (IUSA Exhibit 4) at 343-44; *Kerr-McGee v. NRC*, 903 F.2d at 6-7.

Although the receipt of a fee led the Staff to question whether the material would be processed primarily for its uranium content,¹³ the Staff did not rely on financial considerations as the sole basis for the finding that IUSA's certification and justification were adequate.¹⁴ *See Holonich Affidavit* at 6-8. Rather, the Staff noted that IUSA would process the Ashland 2 material either alone or commingled with conventionally-mined uranium ores and (1) reduce the costs of stockpiling ore, (2) enable IUSA to respond quickly to market price fluctuations by reducing the time from the mining, producing and selling the product, (3) run the mill for longer periods of time, (4) retain trained mill workers, and (5) reduce the overall costs of running the mill. *See TER* at 5-6. The Staff concluded that the certification was justified on *other grounds* in that 11e.(2) byproduct material (with no listed hazardous waste) would be run through the mill even though the material, with the appropriate NRC approval, could be placed directly into White Mesa's mill tailings impoundment. Thus, the Staff found that the material was being processed primarily for its source material content. *See Holonich Affidavit* at 6-8.¹⁵

¹³*See UMETCO Minerals Corp.*, LBP-93-7, 37 NRC 267, 281-82 (1993) (the licensee's justification satisfied the Draft Guidance, but the presiding officer opined that payment of a fee for processing a feed material raised a question as to whether as to the validity of the certification).

¹⁴As the presiding officer in *UMETCO* noted, a detailed financial review of an alternate feed processing request is not mandated by the health and safety mission of the AEA or required by the Commission's regulations. LBP-93-7, 37 NRC at 282.

¹⁵The rationale for this decision was not inconsistent with the rationale underlying the Alternate Feed Guidance that radioactive or mixed waste not be processed at a uranium mill
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This case-specific determination was permissible under the Alternate Feed Guidance. Moreover, since no specific uranium concentration (and thus no specific economic value) is specified in the definition of 11.e(2) byproduct material as approved by Congress, the Staff's promulgation of guidance that would allow processing of alternate feed materials with varying uranium content is consistent with UMTRCA's expanded definition of "ore."¹⁶

In claiming that acceptance of a recycling or disposal fee wholly contradicts IUSA's certification and justification, made under oath and affirmation, *see* State Brief at 3-14, the State ignores that *other grounds* is an alternative and broad category which could include the justifications that foster one purpose of UMTRCA -- to reduce health hazards associated with the wastes and tailings of the nuclear fuel cycle -- as being acceptable.¹⁷ The term "other grounds" in effect give an applicant considerable latitude in demonstrating that the feed material or "ore" *is being processed primarily for its source material content*.

¹⁵(...continued)

primarily to convert it to 11.e(2) byproduct material. *See* 60 Fed. Reg. 49,296, 49,297. The concentration of uranium was not important in reaching this finding, and the expected percentage was similar to that in ores processed at other facilities. *See* Holonich Affidavit at 4-7.

¹⁶In rejecting the NRC's assertion that a determination of whether material was 11.e(2) byproduct material hinged upon whether extraction of uranium was the chief or principal reason for processing the ore, the Court noted that the word "primarily" could also mean substantially and opined that Staff's definition would frustrate the purposes of UMTRCA, which was intended to protect public health by sealing the regulatory gap. 903 F.2d at 7-8.

¹⁷The State conveniently ignores the fact that "other grounds" besides financial considerations or the high uranium content of the feed material may show that the material is being processed primarily for its source material content. *See* Alternate Feed Guidance, 60 Fed. Reg. 49,297. Thus, licensee would have the flexibility to provide reasons that are not tied to fluctuations in the uranium or thorium markets.

The State's argument that IUSA did not meet the co-disposal test, *see* State Brief at 13-14, is correct. The point is moot, however, because this "alternate" test was inapplicable to the Amendment since the Ashland 2 material is classified as 11.e(2) byproduct material in that it is the tailings or waste from the extraction or concentration of any ore for its source material content. *See* note 11, *supra*.

IV The Amendment Was Based On An Adequate Record and Did Not Violate Applicable Laws

The State asserts that the Ashland 2 material may be low-level waste subject to State regulation and that its disposal at White Mesa was approved without the requisite environmental review, proper notice of the Application, and an adequate administrative record. *See* State Brief at 18-22; Herbert Affidavit at 9-10; Affidavit of William Sinclair, dated December 7, 1998, at 3-7.

As stated earlier, in an effort to reduce the potential for dual regulation, 11.e(2) byproduct material, which is specifically excluded from the definition of low-level

waste,¹⁸ is subject only to EPA air quality standards and is not required to obtain a SWDA discharge permit. *See* note 9, *supra*. The Alternate Feed Guidance further states that

Feed material exhibiting only a characteristic of hazardous waste (ignitable, corrosive, reactive, toxic) would not be regulated as hazardous waste and could therefore be approved for recycling and extraction of source material. However, this does not apply to residues from water treatment, so acceptance of such residues as feed material will depend on their not containing any hazardous or characteristic hazardous waste.

60 Fed. Reg. 49296, 49297. While the State expresses concerns about the design of the impoundments, the impact on groundwater, it provides no credible evidence to support its claims of harm as there is no evidence that the impoundments have leaked in over 18 years of operation. *See* IUSA Brief at 16-18, 21-22. Further, since White Mesa is not subject to State regulation, and the State has not provided a basis for exercising its jurisdiction, the Presiding Officer need not make any findings on the design and regulatory issues raised by the State. Moreover, the NRC's compliance with applicable EPA regulations for uranium milling has been upheld. *See* note 19, *infra*.

¹⁸ 10 C.F.R. § 62.2 defines low-level waste as radioactive material that "(1)[i]s not high-level radioactive waste, spent nuclear fuel, or byproduct material (as defined in section 11e.(2) of the AEA, 42 U.S.C. § 2014(e)(2)); and (2) the NRC, consistent with existing law . . . classifies as low level waste. Based on the 11.e(2) classification of DOE (the successor agency to the generator of the material with information about the processing history of the material) and agency determinations that the material contains no listed hazardous wastes or water treatment residues, *see* TER at 4-5, the Ashland 2 material is not subject to regulation by the State. The Staff further determined that the sampling program being conducted both prior to and after transport of the material to White Mesa provided further assurance that the material would contain no listed hazardous wastes. *See* Holonich at 9-11. The validity of the Staff's conclusion (which relied on the determinations of two Federal agencies) was not disturbed by the detailed testing information requested by the State. *See id.* at 11; State Brief at 19-21.

The State also asserts that there has been no analysis of the effect of the Amendment on the uppermost aquifer. *See* State Brief at 21-22. The State, however, provides no information that raises a serious doubt that the Staff correctly concluded that the amendment satisfied the standards for a categorical exclusion pursuant to 10 C.F.R § 51.22(c)(11). The Staff specifically concluded that processing of the material will not result in (1) a significant change or increase the types or amounts of effluents that may be released offsite, (2) a significant increase in individual or cumulative occupational exposures, (3) a significant construction impact, or (4) a significant increase in the potential for or consequences from radiological accidents. TER at 6. The bases for these conclusions include that (a) the annual yellowcake production limit would not be exceeded, (b) tailings from the processed material would be disposed onsite in an existing impoundment (Cell 3), (c) disposal of the tailings would increase the total amount of tailings in the cell by only one percent, and (d) the Ashland 2 material is similar in composition to mill tailing currently in the Cell 3 impoundment. TER at 6-7. As a result, the Staff found that the Amendment satisfied the criteria for a categorical exclusion pursuant to 10 C.F.R. § 51.22(c)(11) as an amendment of a fuel cycle facility that did not require the preparation of an environmental assessment.¹⁹ The

¹⁹The State contends that the Staff failed to address the environmental impacts of the Amendment and claims that the NRC failed to determine whether NRC regulations provide sufficient protection to State resources. *See* State Brief at 3, at 21-22. As previously stated, the NRC regulations conform to the standard promulgated by the EPA as required by Section 84 of the AEA, 42 U.S.C. § 2114, and the regulations have been upheld in Federal court on two occasions. *See American Mining Congress v. NRC*, 772 F.2d 640 (10th Cir. 1985); *American Mining Congress v. NRC*, 902 F.2d 781 (10th Cir. 1990). Moreover, the Staff's analysis properly found that the action met the standards for a categorical exclusion and thus no environmental assessment was necessary. *See* TER at 6-8.

State's arguments and complaints about regulation of mill tailings do not refute these findings.

Similarly, the State has not provided an analysis that disputes environmental findings made with respect to continued operation of White Mesa, which is not a matter litigable in this proceeding. Seepage from White Mesa would have to travel through approximately 1200 feet of low permeability rock before reaching the Navajo Aquifer and likely would not impact the water quality of that aquifer. *See IUSA Brief* at 65-71. In addition, the State has not demonstrated that any necessary information was missing from the administrative record proceeding the issuance of the Amendment.

The State's arguments have more to do with challenging the adequacy of the regulatory scheme for the overall operation of White Mesa than contesting the adequacy of the Amendment authorizing the processing of alternate feed material. Such arguments border on an impermissible attack on the adequacy of the Commission's regulations for uranium milling and should be rejected. *See Philadelphia Electric Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20-21 (1974).

The State also asserts that the amendment is defective because no prior notice of the amendment was provided. *See State Brief* at 19. The Commission has determined that the AEA does not require that any notice be given of materials licensing actions and that notices for all licenses would not be a judicious use of limited agency resources. *See Informal Hearing Procedures for Materials Licensing Adjudications*, 54 Fed. Reg. 8269, 8271 (February 28, 1989). The Staff's practice has been to provide prior notice, as a matter of discretion, of only significant materials licensing actions. *See id.*; Holonich Affidavit at 10-11. Given that no

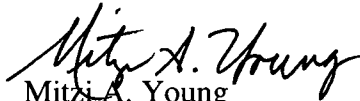
prior notice was required, the States "due process" grounds for challenging the Amendment should be rejected.

In short, the Presiding Officer should find that the State's concerns are without merit, deny the relief requested and uphold issuance of the Amendment.

CONCLUSION

For the reasons set forth above, the State has not shown that the amendment should be conditioned, modified or revoked. Therefore, the relief requested should be denied and issuance of the Amendment upheld.

Respectfully submitted,


Mitzi A. Young
Counsel for NRC Staff

Dated at Rockville, Maryland
this 29th day of January 1999

NUREG-0706
Vol. II

Final Generic Environmental Impact Statement

on uranium milling
Project M-25

Appendices A-F

September 1980

Office of Nuclear Material
Safety and Safeguards
U.S. Nuclear Regulatory Commission

Response: NRC will conform its regulations to those of EPA, as required by the Mill Tailings Act. If EPA establishes the distinction suggested, the NRC would follow suit. It should be pointed out, however, that nothing in the Mill Tailings Act specifically calls for exemption of certain levels of radionuclide content. To the contrary, the Act mandates that radioactive and nonradioactive hazards be regulated.

Comment: In addition to the relevant pre-existing authorities contained in the cited Federal statutes (i.e., the Atomic Energy Act, the Resource Conservation and Recovery Act, the Clean Air Act, and the Federal Water Quality Act), mention also should be made of the applicability of authority contained in the Safe Drinking Water Act and the Toxic Substances Control Act." (41)

Response: Section 13.5.2 of the GEIS has been changed to incorporate this suggestion.

Comment: The proposed regulations should not address ore pads because no uranium milling or ore processing to create source material takes place until ore enters the mill and is processed in the first step of ore grinding. Further, uranium ore on the pad could in no way be considered byproduct material, since it has not been processed. (55)

Response: Section 205.(a) of the UMTRCA amends the Atomic Energy Act of 1954 by adding a new Section 84 which states in part that "the Commission shall insure that the management of any byproduct material, as defined in section 11e.(2), is carried out in such manner as... the Commission deems appropriate to protect the public health and safety and the environment from radiological and nonradiological hazards associated with the processing and with the possession and transfer of such material..." [emphasis added]. The storage of ore on an ore pad prior to milling clearly constitutes an activity associated with processing. Under the language of new Section 84, therefore, it is within NRC's authority to regulate ore pad activities.

Comment: What is the basis for the determination, appearing in the definition of Section 11e.(2) byproduct material, that underground ore bodies depleted by solution extraction techniques do not constitute the tailings or wastes described in Section 11e.(2)? (92, 99)

Response: Although the Mill Tailings Act was primarily directed at the hazards associated with mill tailings from conventional uranium extraction processes, the congressional floor debate on the legislation indicated that there was some concern that in situ operations, though covered by the new Act, should not fall within its requirement that mill tailings and their disposal site be ultimately owned by the Federal or State governments. On the bases of this legislative history and language in the Mill Tailings Act suggesting that the terms "tailings or wastes" are terms of art in the industry referring to discrete materials capable of controlled disposal, the Commission concluded that the Act does not require regulation of the underground ore bodies depleted by solution extraction processes. It has been NRC practice in licensing in situ facilities to require that such sites be returned to baseline conditions; therefore, potential long-term hazards at these sites are eliminated. Surface wastes from in situ operations, however, are sufficiently like those tailings and wastes from conventional milling operations to merit regulation under the Mill Tailings Act. The underlying analysis for this conclusion appears in a memorandum to the U.S. Nuclear Regulatory Commission from Howard K. Shapar, Executive Legal Director, entitled Staff Response to the Commission Request for Further Information Regarding SECY-79-88 "Timing of Certain Requirements of the Uranium Mill Tailings Radiation Control Act of 1978" (May 7, 1979). This document is available in the NRC's Public Document Room.

Comment: NRC should have licensing authority over all DOE owned mill tailings, and NRC should not at any time release its jurisdiction over disposal sites for radioactive wastes. (69, 79)

Response: Under the UMTRCA, the NRC will retain regulatory authority over inactive mill tailings and their disposal sites. Section 83b.(1) of the Atomic Energy Act of 1954, as amended by the UMTRCA, provides that even if the Commission determines that government ownership of a tailings disposal site is not required, "such property and materials shall be maintained pursuant to a license issued by the Commission..." Similarly, Section 84b.(5) provides that the Commission may, pursuant to a license, rule, or order, require the Federal or State agency with custody of tailings and their disposal site to undertake monitoring, maintenance, and emergency measures as may be necessary. Section 84 provides similar authority to the Commission. Thus, it is clear that the UMTRCA requires that the NRC assume and retain regulatory authority over mill tailings that have been disposed of. Criterion 11 of Appendix A to 10 CFR 40 does, in fact, require this.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DOCKETED
USNRC

'99 FEB -1 A10:54

BEFORE THE PRESIDING OFFICER

OFFICE OF SECRETARY
RULEMAKING AND
ADJUDICATIONS STAFF

In the Matter of)

INTERNATIONAL URANIUM)
(USA) CORPORATION)

(Receipt of Material from)
Tonawanda, New York))

Docket No. 40-8681 MLA-4

AFFIDAVIT OF JOSEPH J. HOLONICH

I, Joseph J. Holonich, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission (NRC), Office of Nuclear Material Safety and Safeguards as the Deputy Director in the Division of Waste Management. Previously, I was the Branch Chief of the Uranium Recovery Branch, and served in that capacity from October 1993 through November 1998. As Branch Chief, I was the manager responsible for overseeing the preparation of the "Uranium Mill Facilities, Notice of Two Guidance Documents; Final Revised Guidance on Disposal of Non-Atomic Energy Act of 1954, Section 11e.(2) Byproduct Material in Tailings Impoundments; Final Position and Guidance on the Use of Uranium Mill Feed Materials Other Than Natural Ores," 60 Fed. Reg. 49296 (September 22, 1995) (Disposal and Alternate Feed Guidance) (Hearing File Document 10). Specifically, I reviewed the Staff's Technical Evaluation Report (TER) (Enclosure to Hearing File Document 12: Letter from J. Holonich, NRC, to M. Rehmann, IUSA, forwarding Amendment 6 to Source Material License SUA-1358, dated July 23, 1998) to determine if there was an acceptable basis for taking the final agency action and signed the

amended license authorizing the processing of the alternate feed material by IUSA. A statement of my professional qualifications is attached hereto as Attachment 1.

2. In preparation of this affidavit, I read the following documents:

A. State of Utah's Brief in Opposition to International Uranium (USA) Corporation's Source Materials License Amendment, dated December 7, 1999 (State Brief).

B. Staff's TER (Enclosure to Hearing File Document 12), issued with the Amendment 6 to Source Material License SUA-1358 (License Amendment), which authorized the processing of the Ashland 2 material.

3. I am also familiar with the following documents in connection with this licensing action:

A. The Commission's regulations in 10 C.F.R. Part 40, Domestic Licensing of Source Material, and 10 C.F.R. Part 40, Appendix A, "Criteria Relation to the Operation of Uranium Mills and the Disposition of Tailings or Wastes Produced by the Extraction or Concentration of Source Material from Ores Processed Primarily for Their Source Material Content." These regulations, in part, establish procedures and criteria for the issuance of licenses to possess, etc., source and byproduct material and address disposal of byproduct material, including reclamation of uranium mill tailings and protection of ground water.

B. 10 C.F.R. Part 51 containing the provisions applicable to any environmental analyses that must be done in conjunction with NRC materials licensing actions.

C. The Disposal and Alternate Feed Guidance documents (Hearing File Document 10) concerning the processing of alternate feed material and the disposal of material other than 11e.(2) byproduct material in tailings impoundments.

4. I managed and actively participated in the issuance of the contested license amendment authorizing the processing of the Ashland 2 material. This effort included deciding how the Staff would implement the final guidance for this amendment, and determining whether IUSA provided sufficient information to enable the Staff to conclude that the proposed amendment was acceptable.

THE DISPOSAL AND ALTERNATE FEED GUIDANCE

5. The Disposal Guidance identifies ten criteria that staff will use to determine if material other than 11 e.(2) material can be disposed of in tailings impoundments. These ten criteria identify prohibited material, necessary approvals, and other conditions that should be met. The Disposal Guidance can be used by itself to assess if an application for disposal of material other than 11 e.(2) byproduct material in mill tailings impoundment is acceptable, or as discussed below, it can be used in conjunction with the Alternate Feed Guidance as a means to justifying processing of alternate feed material.

6. The Alternate Feed Guidance has three criteria, and is used to determine if a proposal to process alternate feed material is acceptable. In the first criterion, the guidance relies upon an expanded interpretation of the term "ore" as used in the Section 11 e.(2) of the Atomic Energy Act of 1954, as amended (AEA), to permit feed material other than natural ore to be used by licensed mills to extract source material. Second, the guidance avoids possible dual regulation of the site by the U.S. Environmental Protection Agency (EPA) or EPA primacy state, such as the State of Utah, by prohibiting the processing of any material containing hazardous waste. Finally, the guidance ensures that transfer of the site to the U.S. Department of Energy (DOE) by ensuring the residuals from the processing of alternate feed will meet the definition of 11 e.(2) byproduct materials. This is done by having the licensee demonstrate that the material is being processed primarily for its source material content. The determination of primarily is a statutory requirement under the AEA. See "Uranium Mill Facilities, Request for Public Comments on Revised Guidance on Disposal of Non-Atomic Energy Act of 1954, Section 11 e.(2) Byproduct Material in Tailings Impoundments and Position and Guidance on the Use of Uranium Mill Feed

Materials Other Than Natural Ores,” 57 Fed. Reg. 20525, 20530-31 (May 13, 1992) (Draft Guidance).

FINDINGS IN RESPECT TO THE GUIDANCE

7. In its written presentation, the State asserts that the Staff erred in approving the amendment because (1) it “violated the Commissions Alternate Feed Guidance and the processing of the Ashland 2 material is a “sham disposal”, (2) the amendment was issued based on an inadequate administrative record and an inadequate Staff review, and (3) the application failed to address the impact that receipt, processing, and disposal of the Ashland 2 materials would have on the local environment. *See* State Brief at 2-3, 3-14, 19-22. These assertions are incorrect as outlined in the following paragraphs.

8. In evaluating the acceptability of the IUSA application, the Staff used the Alternate Feed Guidance and determined in the TER that the three criteria were met. *See* TER at 3-6. With respect to the first criterion-- the Staff determined that the Ashland 2 feed material met the definition of ore set forth in the guidance. The guidance states that “[o]re is a natural or native matter that may be mined and treated for the extraction of any of its constituents or any other matter from which source material is extracted in a licensed uranium or thorium mill.” 60 Fed. Reg. 49296. The application showed that the Ashland 2 material on average contained 0.05% uranium and was a “matter from which source material is extracted in a licensed uranium mill.” *See* TER at 4. The conclusion was reasonable since White Mesa is a licensed mill and the amount of uranium was consistent with the definition of source material set forth in 10 C.F.R. § 40.4 (“(1) Uranium or thorium, or any combination thereof , in any physical or chemical form or (2) ores which contain by weight one-twentieth of one percent (0.05%) or more of: (i)

Uranium, (ii) thorium or (iii) any combination thereof") and similar to the average uranium content expected to be milled at other mill sites. For example, the Final Environmental Statement (FES) for the Sweetwater Uranium Project, dated December 1978 [Docket Number 40-8584], stated that the expected average grade for milling at Sweetwater was 0.048% uranium. See Sweetwater FES at 1-1 (Attachment 2). The FES for the Split Rock Uranium Mill, dated February 1980 [Docket Number 40-1162], stated that the ore grade from past operations ranged from 0.15% to 0.30% uranium and was *expected* (emphasis added) to range from 0.05% to 0.15% for future operations. See Split Rock FES at 3-1(Attachment 3).

9. With respect to the second criterion -- whether the material contained hazardous waste listed under subpart D §§ 261.30-33 of 40 C.F.R., the Staff relied on the analysis of the material conducted by DOE, the successor agency to the Manhattan Engineering District, and the U.S. Army Corps of Engineers (USACE). Because those analyses showed no listed hazardous waste in the Ashland 2 material the staff concluded that the second criterion of the guidance was fulfilled. See TER at 4-5; Letter from M. Conrad, USACE, to NRC, dated June 16, 1998, at 2 (Hearing File Document 9); Facsimile from L. Edward, Shaw, Pittman, to J. Park, NRC, dated June 12, 1998, at A-3 (Hearing File Document 8); Facsimile from F. Nelson, Shaw, Pittman, to P. Bloch, Presiding Officer, dated October 26, 1998, at 1 (Attachment 4). In addition, information from USACE confirmed that USACE would have its contractor also test the material for listed hazardous waste prior to leaving the site. See Hearing File Document 9 at 2; TER at 4. Finally, the licensee committed to have the material tested when it arrived on the site to confirm no hazardous material was present in the alternate feed. See TER at 4, Letter from M. Rehmann, IUSA, to J. Holonich, NRC providing supplemental information, dated June 11, 1998, at 1

(Hearing File Document 6). The Staff found the work done by two other federal agencies, the DOE and USACE, as well as the continued testing prior to shipment and upon receipt of the material on site, as a sufficient basis to ensure that the Ashland 2 material was not a hazardous waste of contained a listed hazardous waste. TER at 4; Letter from M. Rehmann, IUSA, dated June 3, 1998, forwarding Response to Request for Additional Information, date June 1, 1998, at 5-6 (Hearing File Document 5). The DOE analyses are documented in the Remedial Investigations (summary found in the USACE's Field Sampling Plan, which is part of the USACE's Sampling and Analysis Plan). See Letter from M. Rehmann, IUSA, dated June 3, 1998, Response to Request for Additional Information, dated June 1, 1998, [June 3, 1998 RAI Response] (Hearing File Document 5) at fourth Enclosure: Sample and Analysis Plan (SAP), dated May 29, 1998, Part 1, at 2-5.

10. With respect to criterion 3 -- whether the feed material is being processed primarily for its source material content, the Alternate Feed Guidance states that this criterion can be fulfilled by either of the following tests: (a) a showing that the alternate feed material that is not 11 e.(2) byproduct material can be placed directly in the tailings impoundment, (a co-disposal test) or (b) a licensee certification under oath that the feed material is to be processed primarily for the recovery of uranium and for no other primary purpose. For (b), the licensee can justify, that the certification is based on financial considerations, the high uranium content of the feed material or "other grounds" See Draft Alternate Feed Guidance, 57 Fed. Reg. 20525, 20533; Alternate Feed Guidance 60 Fed. Reg. 49296, 49297. These tests were established to ensure that licensees did not process low-level waste to simply change its legal definition to 11e.(2) byproduct material, thus avoiding low-level waste disposal regulations. Such processing has

been characterized as “sham disposal” by the State. IUSA completed the second test and as discussed below, the Staff felt that IUSA’s justifications were acceptable. *See* TER at 5-6.

11. The State is incorrect that the record and the Staff’s review were not sufficient to support the amendment. *See* State Brief at 2. In particular, the State asserts that the Staff failed to follow the final guidance because the financial considerations of processing the Ashland 2 material is not present, and the application fails the co-disposal test in the final guidance. *See* State’s Brief at 5-14. During its review, the Staff was aware that IUSA would be receiving a payment for the material. This payment caused the Staff to continue to question whether the material was primarily being processed for its uranium content. However, rather than relying on the financial considerations to justify the certifications, the staff relied on a June 16, 1998, USACE letter which confirmed the DOE classification of the material as 11e.(2) byproduct material. *See* Hearing File Document 9 at 2. With this classification, the Staff was able to conclude that the material could be placed directly in the mill tailings impoundments (*i.e.*, direct disposal). Hence, the concerns about “sham disposal” were not an issue in the Staff’s review, since it did not appear that the material was being processed to change its legal definition, and as such was truly being processed for its uranium content.

12. Similarly, the application of the co-disposal test is not appropriate to the Ashland 2 material for the same reasons. Criterion 3(a) of the Alternate Feed Guidance identified that a licensee can demonstrate alternate feed material that is not 11e.(2) byproduct material is being processed primarily for its uranium content if the material meets the ten criteria in the Disposal Guidance. The term co-disposal applies to low-level waste or other AEA-regulated material that does not meet the definition of 11e.(2) byproduct material being co-disposed of with 11e.(2)

byproduct material in a mill tailings impoundment. Thus, the Disposal Guidance is applicable to material other than 11e.(2) byproduct material. This is clearly demonstrated by several criteria in the Disposal Guidance which address 11e.(1) byproduct material, special nuclear material, or hazardous waste material. In addition, disposal of low-level waste in a 11e.(2) impoundment requires agreement from the originating and receiving low-level waste compact. It also requires, an exemption to low-level waste requirements in 10 C.F.R. Part 61 or in an Agreement State regulations before the Staff could find disposal of low-level waste acceptable. The use of the co-disposal test in the Staff's TER was a misnomer. In reality, because of its classification, the Ashland 2 material could be placed directly in the White Mesa tailings impoundment. Thus a better characterization in the TER would have been direct disposal. This direct disposal test clearly satisfies the "other grounds" test given in criterion 3(b) of the alternate feed guidance. In addition, the direct disposal test used by the staff is consistent with the rationale underlying the co-disposal test in the Alternate Feed Guidance that, if material could be placed in the tailings impoundment for disposal without processing, the licensee is processing the material primarily to extract the source material, and not to change the legal definition of the material. *See* Draft Guidance 57 Fed. Reg 20533; Alternate Feed Guidance, 60 Fed. Reg. 49296, 49297

FINDINGS IN RESPECT TO ENVIRONMENTAL REGULATION

13. Finally, in response to the State's accusation of an inadequate review due to the omission of environmental impacts relating to the processing and storing of the material, the Staff did not perform a written assessment of environmental impacts because it did not have to do so. State Brief at 3. Under the provisions of 10 C.F.R. § 51.22(c)(11), this action is categorically excluded from the need for an environmental assessment since it met the criteria established for such exclusions.

On page 6 of the TER, the Staff laid out why it believed the four criteria in 10 CFR 51.22(c)(11) were met.

FINDINGS IN RESPECT TO LOW-LEVEL WASTE AND HAZARDOUS WASTE

14. The State asserts that the material may be low-level waste and subject to State of Utah regulation. *See* State Brief at 14-16. However, the material has been classified by two federal agencies, the DOE and USACE, as 11e.(2) byproduct material. Because of this, the material is not low-level waste, and is unregulated by the State of Utah. Low-level waste means radioactive material that (1) is not high-level radioactive waste, spent nuclear fuel, or byproduct material (as defined in section 11e.(2) of the Atomic Energy Act of 1954, 42 U.S.C. § 2014 (e) (2)); and (2) the NRC classifies as low-level radioactive waste. 10 C.F.R. § 62.2. Thus, the Ashland 2 material is not low-level waste based on the classification of the generator. In fact, if the material were shipped to the Envirocare site for disposal, based on the classification, it would be placed in the NRC-licensed disposal cell, and not be subject to regulation by the State of Utah. *See* Letter from L.Callan, NRC, to Congressman Cook, dated 9/8/98, at 2 (Attachment 5).

15. The State also argues that the amendment undermines the final guidance, and harms the State of Utah since the hazardous waste industry regulations implemented by the State of Utah are more stringent. *See* State Brief at 16-19. I disagree with the State's argument, particularly the claim that hazardous waste regulations are more stringent. The disposal requirements for uranium mill tailings found in 10 C.F.R. Part 40, Appendix A, offer the same level of protection as that found under the Solid Waste Disposal Act (SWDA), 42 U.S.C. 6901. In Section 275 of the Atomic Energy Act, 42 U.S.C. § 2022, Congress directed the U.S. Environmental Protection Agency (EPA) to establish standards for the regulation of non-radiological components of 11e.(2) byproduct material

to provide the same level of protection as the standards applicable to hazardous waste sites regulated under the SWDA. Congress further directed that the EPA Administrator would not issue any permit under the SWDA in order to ensure there was a single regulator at the mill sites. Consistent with the Congressional direction in Section 275, EPA established standards for uranium mill tailings covering surface reclamation and ground-water protection. In addition, NRC fulfilled its Congressional mandate by conforming its regulations to the standards established by EPA under Section 275. Therefore, the requirements found in 10 C.F.R. Part 40, Appendix A, conform to the EPA standards that provide the same level of protection as the standards applicable to hazardous waste sites. The State of Utah may have more stringent standards than those established by EPA for mill tailings sites; however, from a federal prospective, the NRC requirements are consistent with EPA requires under the SWDA. The NRC informed EPA by letter dated April 1, 1997, that NRC was documenting the agreement NRC and EPA had reached that "no additional work on the comparability of NRC mill tailing regulations to the SWDA will be pursued." *See* Letter from C. Paperiello, NRC to E. Cotsworth, EPA, dated April, 1997, at 1 (Attachment 6).

FINDINGS IN RESPECT TO MATERIAL DEFICIENCY AND OMISSIONS

16. The State of Utah incorrectly claims that there are material deficiencies and omissions in the application in that (1) the application should have been notice, (2) the Staff relied on summary documents and its review was "too brief," and (3) the Staff did not determine if its regulations "adequately protect State of Utah ground water sources." *See* State's Brief at 19-22. First, the Staff is not required to notice any amendment application for a uranium mill. However, in February 1994, the Staff committed to the State of Utah that NRC would notice significant license amendment applications. *See* Letter to W. Sinclair, State of Utah, from R. Bernero, NRC, dated February 25,

1994, at 1 (Attachment 7). Because the alternate feed material covered by this amendment was categorically excluded from an environmental assessment, and the alternate feed material was the same as the mill tailings currently found onsite, the Staff concluded that this application did not meet the definition of significant actions in the February 1994 letter. However, given the amount of controversy over the Ashland 2 alternate feed application, the Staff has chosen to notice the Ashland 1 alternate feed application.

17. Secondly, the Staff relied on all the information it believed was necessary to support its acceptability determination for this application. Given that two sister federal agencies had found there was no hazardous material in the Ashland 2 alternate feed material, and the additional testing committed to prior to shipment and upon receipt, the Staff concluded that there was sufficient information to support issuing the amendment. *See* TER at 4. The strength of the Staff's conclusion was ultimately demonstrated when additional testing by IUSA and approved by the State of Utah showed no hazardous material in the alternate feed. *See* Attachment 4 at 1.


18. In addition, in the interest of efficient use of agency resources and prompt, but well-reasoned, agency decision making, the Staff endeavors to complete material license amendment application reviews in a few months and examines licensee submittals in evaluating applications for licenses and license amendments. Thus, the review period for the Ashland 2 amendment was not unusual and depended upon the adequacy of the information submitted by IUSA.

19. Finally, as previously stated in paragraph 15, above, the Commission's regulations are sufficient to protect State of Utah ground water. These regulations are in conformance with EPA standards for the disposal of hazardous waste and the NRC has previously informed the State of Utah

that NRC regulations provide adequate ground water protection. *See* Letter from S. Jackson, NRC, to D. Nielson, State of Utah, dated December 13, 1996 at 1-2 (Attachment 8).

20. In summary, the State of Utah assertions that the Staff failed to follow its own guidance as part of conducting the evaluation of the Ashland 2 alternate feed amendment is incorrect. On the contrary, the Staff did use the guidance, and ensured that all three criteria specified had been met. In addition, the Staff's amendment complied with the applicable Commission regulations for conducting any needed environmental reviews. Finally, the Commission's regulations covering uranium mill tailings, including those covering ground water, clearly provide the same level of protection as SWDA regulations given the conformance of Part 40 to the EPA standards that were based on ensuring an equivalent level of protection as that provided under the SWDA.

21. The foregoing and attached qualification sheet are true and correct to the best of my knowledge and belief.


Joseph J. Holonich

Sworn and subscribed to before me
this 29th day of January 1999


Notary Public

My Commission Expires: _____

CARRIE BROWN
NOTARY PUBLIC STATE OF MARYLAND
My Commission Expires March 15, 1999

JOSEPH J. HOLONICH

DIVISION OF WASTE MANAGEMENT

U.S. NUCLEAR REGULATORY COMMISSION

EDUCATIONAL AND PROFESSIONAL QUALIFICATIONS

I am employed as the Deputy Director of the Division of Waste Management. My duties involve assisting the Director with the day-to-day operation of the U.S. Nuclear Regulatory Commission (NRC) regulation of radioactive waste disposal. This includes the disposal of high- and low-level waste, decommissioning of fuel cycle and reactor facilities, and licensing, operational oversight, and reclamation of uranium recovery facilities. From October 1993 through November 1993, I served as the Branch Chief of the Uranium Recovery Branch where I managed the NRC's uranium recovery program. In that job, I was responsible for managing: 1) the development of the regulatory framework; 2) completion of all staff licensing actions; 3) at a policy level, the inspection program; and 4) enforcement action delegated to me by the Director of the Office of Enforcement. Prior to that, I worked in the NRC's high-level waste program first as a Project Manager, then as a Section Chief and Project Director.

My work assignments in the Office of Nuclear Reactor Regulation included the review responsibility of reactor core thermal-hydraulic designs submitted in support of reactor construction permits and operating licenses. I also served as a Project Manager for nuclear power plants under construction and operating, and I licensed the Calloway, Unit 1 Plant in Fulton, Missouri. My other reactor experience included working in the Office of Analysis and Evaluation of Operational Data for a short time as an inspector.

For approximately a year from February 1995 through March 1996, I was employed as a consultant. In that capacity, I prepared testimony for public utility commission prudency hearings, supported international activities such as other regulatory agencies, and provided technical support to nuclear utilities.

In May 1980, I graduated from the Pennsylvania State University with a Bachelor of Science degree in Nuclear Engineering. I have a Masters of Mechanical Engineering degree from the Catholic University of America. With the exception of March 1985 through February 1986, I have been continuously employed by the NRC.

FINAL ENVIRONMENTAL STATEMENT

related to the

Minerals Exploration Company

SWEETWATER URANIUM PROJECT

(SWEETWATER COUNTY, WYOMING)

prepared by the

U. S. Nuclear Regulatory Commission

Washington, D. C. 20555

December 1978

1. INTRODUCTION

1.1 THE APPLICANT'S PROPOSAL

Pursuant to Title 10, Code of Federal Regulations (CFR) Part 40 and Part 51, an application was filed with NRC by Minerals Exploration Company (hereinafter referred to as the applicant, or MEC) on November 18, 1976, to conduct certain milling operations involving processing uranium ore deposits mined in Sweetwater County, Wyoming; these proposed operations are collectively referred to as the Sweetwater Uranium Project. The project consists of mining uranium from ore bodies [located from a few feet to more than 400 feet (120 m) underground] in an area about 20,000 feet (6100 m) long and 3000 feet (900 m) wide over a period of 15 years (estimated) and construction and operation of a mill with a nominal capacity of 3000 tons (2.7×10^6 kg) per day. It is estimated by the applicant that the deposits consist of about 16 million tons ($14,500 \times 10^6$ kg) of uranium ore containing approximately 15.3 million pounds (7×10^6 kg) of uranium oxide. The ore has an average grade of 0.048% uranium oxide.

As part of this project, the applicant proposes also to construct a heap leaching and resin ion-exchange facility to extract uranium from ores of a quality too low for economic recovery in the mill.

Production in the mill is expected to be about 900,000 pounds (400,000 kg) of uranium oxide per year. Secondary operations of heap leaching and recovering uranium from the mine discharge water is expected to increase annual production to about one million pounds (450,000 kg) of uranium oxide.

Waste material (tailings) from the mill will be produced at a rate of about 3000 tons (2.7×10^6 kg) per day and will be stored onsite in specially excavated pits.

1.2 BACKGROUND INFORMATION

The proposed Sweetwater Uranium Project lies within the Red Desert portion of Wyoming's Great Divide Basin and is located in Township 24 North, Range 93 West in northeastern Sweetwater County about 40 air miles (65 km) northwest of Rawlins, Wyoming, and about 30 air miles (45 km) south of Jeffrey City, Wyoming, at latitude $42^{\circ}03'22''$ N and longitude $107^{\circ}53'45''$ W (Fig. 1.1).

MEC has obtained the mining rights on approximately 61,200 acres (24,800 hectares), consisting of 2900 unpatented lode mining claims on public domain land and leases on five sections from the State of Wyoming. The U. S. Bureau of Land Management owns the surface rights to approximately 58,000 acres (23,500 hectares) of this land, and the State of Wyoming owns the surface rights to the remaining 3200 acres (1300 hectares). Only a portion of the mining rights will be utilized for the Sweetwater Project.

1.3 FEDERAL AND STATE AUTHORITIES AND RESPONSIBILITIES

Under 10 CFR Part 40, an NRC license is required in order to "receive title to, receive, possess, use, transfer, deliver ... import ... or export ... source material...." (i.e., uranium, and/or thorium in any form, or ores containing 0.05% or more of uranium, thorium, or combination thereof). 10 CFR Part 51 provides for the preparation of a detailed environmental statement pursuant to the National Environmental Policy Act of 1969 (NEPA) prior to the issuance of an NRC license to authorize uranium milling.

*Minerals Exploration Company, "Sweetwater Uranium Project Environmental Report" (prepared by Woodward-Clyde Consultants) with supplements, Docket No. 40-8584, November 1976. [Hereinafter this will be cited as the ER, with specific section number, page number, etc.]

FINAL ENVIRONMENTAL STATEMENT

related to the

Western Nuclear, Inc.

SPLIT ROCK URANIUM MILL

(FREMONT COUNTY, WYOMING)

prepared by the

U.S. Nuclear Regulatory Commission

Washington, D. C. 20555

February 1980

3. OPERATIONS

3.1 MINING OPERATIONS

The uranium ore presently being processed at the Split Rock mill is mined by both open-pit and deep-mining methods from surface and underground mines about 16 to 22 km (10-15 miles) southwest of the mill. The host rocks for the uranium-ore deposits are reddish-brown altered arkosic sandstones within the Battle Springs Formation (Eocene age). Although poorly defined, the ore bodies are of the tabular, stratiform, and roll-type deposits. The ore grade has ranged from 0.15 to 0.30% U_3O_8 .¹ The ore bodies being mined are located at or below the local water table, thereby requiring dewatering. Dewatered mine drainage from the Golden Goose I, Reserve, Congo, Incline, and Seismic mines is diverted to the Green Mountain ion-exchange plant for processing,² as described in Section 3.2.2.

This Environmental Statement does not address the impacts of mining, but does address uranium recovery operations that have been conducted at the Western Nuclear mine sites (see Sec. 3.2.3). These operations are the removal of uranium from mine drainage waters by ion-exchange, and the open-air leaching of huge piles of low-grade ore at the mine sites.

3.2 MILLING, ION EXCHANGE, AND HEAP LEACH OPERATIONS

3.2.1 The Mill

The Split Rock mill processes about 1540 MT (1700 tons) of ore per day. The U_3O_8 content of the ore has ranged from 0.15% to 0.30% during past operations, and is expected to range from 0.05% to 0.15% for future operations.¹

The milling process consists of a number of unit processes involving physical and chemical transformations (detailed in Sec. 3.2.1.2) that take place in the following general sequence. The ore is ground and the resulting particles are leached with sulfuric acid to extract the uranium. The leach liquor (pulp) passes through ion-exchange resins, which extract the uranium. The uranium is eluted from the resins and sent to a concentrating stage where the uranium is extracted into an organic solvent and re-extracted into water. The purified and concentrated product is then precipitated with ammonia, dewatered, calcined, and packaged for shipping.

3.2.1.1 External Appearance of the Mill

An aerial photograph and diagrammatic layout of the Split Rock mill are shown in Figures 3.1 and 3.2. The principal features are the mill building, tailings pond, storage yards, sulfuric acid plant, ore storage pad, and various process-related facilities. The locations of these structures in relation to the location of the tailings pond are shown in Figure 3.3.

3.2.1.2 The Mill Circuit

A schematic diagram of the Split Rock mill circuit is shown in Figure 3.4. The ore is transported from WNI mines in 59-MT (65-ton) trucks, weighed, and dumped on the ore pad in approximately 900-MT (1000-ton) lots. A maximum of six lots is to be on the pad at any one time. The ore is wet on receipt, minimizing dusting problems. From these stockpiles, the ore is transferred by a front-end loader to a coarse-ore hopper that controls the feed rate to the mill.

Chunks of wet ore up to 24-inches in size are first wet-ground to -28 mesh in an 18-foot-diameter semiautogenous grinding mill, to expose the metal. Water is added, and the material is stored in air-agitated tanks. This diluted ground material is fed to a series of 11 wooden leach tanks. Sulfuric acid (H_2SO_4) is added in the first tank to adjust the acidity of the slurry to pH 1; sodium chlorate ($NaClO_3$) is added in the third tank for oxidation of the dissolved uranium. Passage of the pulp through the series of tanks, by gravity, takes about 16 hours, and about 95% of the uranium is extracted. The uranium-bearing liquid and slimes are then separated from the waste ore solids (barren sands) in a series of four classifiers and 18 hydrocyclones which separate out and wash the sands. The barren sands are then discharged as a slurry to the tailings ponds.³

SHAW PITTMAN
POTTS & TROWBRIDGE
A FIRM EMPLOYING PROFESSIONAL CLERICAL PERSONNEL

T-504 P.02/03 F-999
Attachment 4

2300 N Street, N.W.
Washington, D.C. 20037-1128
202.663.8000
Facsimile 202.663.8007

FREDERICK S PHILLIPS
202.663.8677
frederick_phillips@shawpitman.com

New York
Virginia

October 26, 1998

VIA FACSIMILE

Peter B. Bloch, Esq.
Presiding Officer
Atomic Safety and Licensing Board
Mail Stop 1-3 F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555

**Re: In re International Uranium (USA) Corporation, Amendment to NRC
Source Material License SUA-1358**

Dear Judge Bloch:

International Uranium (USA) Corporation ("IUSA") and the State of Utah (the "State") (jointly, the "Parties") wish to inform you that the Parties have resolved the State's concern regarding the possibility that the Ashland 2 materials may contain listed hazardous waste. Based on the analyses and data reviewed to date, the State is satisfied that the Ashland 2 material does not contain listed hazardous waste. Thus, the State of Utah withdraws its objection to IUSA's license amendment on that issue and that concern no longer is an issue for resolution by the Presiding Officer. IUSA agrees to provide the State with analytical results generated to confirm the absence of listed hazardous wastes derived from all future sampling of the Ashland 2 materials.

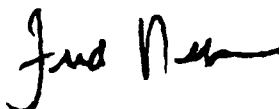
SHAW PITTMAN
POTTS & TROWBRIDGE

A PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

Peter B. Bloch, Esq.
October 26, 1998
Page 2

The Parties have agreed that the primary issue remaining to be heard by the Presiding Officer is whether IUSA is processing the Ashland 2 materials primarily for their source material content. The Parties and NRC Staff are in agreement that the pre-hearing conference, currently scheduled for October 27, 1998, is unnecessary and may be cancelled.

Sincerely,



Fred Nelson
Denise Chancellor
OFFICE OF THE ATTORNEY GENERAL
State of Utah
(801)366-0285



Frederick S. Phillips
Anthony J. Thompson
SHAW, PITTMAN, POTTS &
TROWBRIDGE
Counsel to IUSA
(202) 663-8000

cc:

Mr. William Sinclair
Mitzi Young, Esq.
Mr. Earl Hoellen
David Freydenlund, Esq.
Ms. Michelle Kehmann



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

WASHINGTON, D.C. 20555-0001

September 8, 1998

The Honorable Merrill Cook
United States House of
Representatives
Washington, DC 20575-4401

Dear Congressman Cook:

I am responding to your letter of July 23, 1998, to Mr. Joseph Holonich of my staff, concerning a recent amendment issued by the U.S. Nuclear Regulatory Commission (NRC) to International Uranium Corporation's (IUC's) NRC license for the White Mesa uranium mill. That amendment authorized IUC to accept and process uranium-bearing material from a site near Tonawanda, New York. Your letter raises the concern that NRC's approval of IUC's request would enable the White Mesa mill site to become an unlicensed radioactive waste disposal site without having IUC first meet the applicable State of Utah requirements for low-level waste facilities, and without full review and participation from the State and members of the public.

To address your concerns, I would begin by stating that operation of the White Mesa uranium mill is authorized by an NRC source material license issued under 10 CFR Part 40. This license allows IUC to process natural uranium ore and certain materials other than that for their uranium content, and to possess the waste generated from such milling operations. NRC originally issued IUC's license in 1979, and renewed this license in 1985 and again in 1997. The staff completed environmental reviews and radiological safety evaluations for each of these licensing actions. These reviews were done under the same regulatory requirements and process as the evaluation conducted by NRC in its licensing of the Envirocare facility.

For this particular case, IUC requested an amendment to its NRC license to receive and process the material from the Tonawanda site for its uranium content. The staff reviewed IUC's request as it would any request from a uranium mill licensee to receive and process material other than natural ore -- against its guidance entitled "Final Position and Guidance on the Use of Uranium Mill Feed Material Other Than Natural Ores," which was published in the *Federal Register* in September 1995 (60 FR 49296), and the requirements in 10 CFR Parts 40 and 51. A copy of the staff's guidance is enclosed for your convenience.

Based on its review, the staff determined that the safety aspects and environmental impacts associated with the receipt and processing of the Tonawanda material at the White Mesa mill were acceptable, and on June 23, 1998, the NRC staff amended the White Mesa license. In late July, the mill began receipt of the material, and processing is expected to start in mid September. The State of Utah and Envirocare have requested a hearing on the staff's

amendment. That matter is currently before an Administrative Law Judge (ALJ), who will decide if a hearing is justified. Although the State of Utah requested a stay to stop shipment of the material, the filing was untimely and denied by the ALJ on August 13, 1998

As stated in the staff's guidance, besides reviewing an application to determine compliance with the requirements in Part 40, the staff must also conclude that the material proposed for processing is ore, that it does not contain mixed or hazardous waste, and that it is being processed primarily for its source material content. These three criteria were established to help NRC ensure that uranium mills did not become de facto disposal sites as a result of simply processing material. To satisfy the first and second criteria in this guidance, the staff reviewed the information generated by the U.S. Department of Energy's (DOE's) remedial investigation of the Tonawanda site, which included a characterization and classification of the material. In addition, DOE's investigations did not find listed hazardous wastes in the material. The U.S. Army Corps of Engineers (USACE), which currently is remediating the site, concurred in DOE's classification of the Tonawanda material.

Based on DOE's classification, USACE could have opted to remediate the site by disposing of the material in question directly into a mill tailings impoundment authorized to take material other than that generated as part of milling operations, or at the Envirocare cell licensed by NRC. However, USACE opted to send the material to the White Mesa mill where it could be processed for its uranium content before disposal in the White Mesa mill tailings impoundment. With respect to the third criterion of the guidance, IUC provided a signed affirmation that it would be processing the Tonawanda material primarily for its uranium content and for no other primary purpose. This affirmation was supported by data from IUC that showed that the uranium content of the material was high enough to warrant processing, and by discussion of the financial benefits IUC will gain from the processing of the material.

It is important to point out that responsibility for the disposition of IUC's amendment request rests solely with NRC. Although the State of Utah is an Agreement State under section 274 of the Atomic Energy Act of 1954, the State relinquished its authority over the material being processed at the White Mesa mill site. Accordingly, it was appropriate for IUC to file its amendment request with NRC and, in response to your concern, this was not an effort to avoid State of Utah requirements. As I mentioned earlier, if the USACE had decided to send the material to the Envirocare site, based on the classification made by DOE, the material would have been placed in the Envirocare cell licensed by NRC. Therefore, even if the material were disposed of at Envirocare, the State of Utah would not be the licensing authority. To guard against any hazardous or mixed waste being sent inadvertently with the material, the USACE contractor charged with excavating and preparing the material for shipment will conduct confirmatory tests of the excavated materials to ensure that hazardous wastes will not be included in shipments to White Mesa.

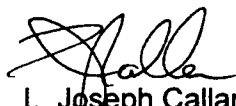
In closing, I want to assure you that, in reviewing a licensee's request to process uranium-bearing materials, NRC is committed to ensuring that the licensee is processing the material for its uranium content, and not to avoid situations in which licensees are processing materials to sidestep State regulations. A year ago, NRC staff took the initiative to hold a public meeting at the White Mesa Mill site to discuss issues relevant to facility operations, including the

processing of alternate feedstock. Unfortunately, only three people attended that meeting. However, because of public concerns recently raised, we plan to hold an additional meeting in Blanding, Utah. At this public meeting, the NRC staff does not plan to discuss the completed licensing action. Rather, the main purpose of the meeting will be to answer any questions the public may have regarding NRC's regulatory oversight of the White Mesa Mill. Our focus will be primarily on the approach that will be used to evaluate future applications to process alternate feedstock. This meeting will be noticed in the *Federal Register* and in appropriate newspapers.

In addition, for any uranium mill licensing action, NRC welcomes public review through an informal hearing process. It is through this process that interested members of the public or individual States may raise a concern with the staff's review or request a stay of any staff licensing actions. In fact, the State of Utah and Envirocare have availed themselves of this process.

I trust this letter responds to your concerns.

Sincerely,



L. Joseph Callan
Executive Director
for Operations

Enclosure: As stated

Uranium Mill Facilities, Notice of Two Guidance Documents: Final Revised Guidance on Disposal of Non-Atomic Energy Act of 1954, Section 11e.(2) Byproduct Material in Tailings Impoundments; Final Position and Guidance on the Use of Uranium Mill Feed Materials Other Than Natural Ores

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice of final guidance.

SUMMARY: The U.S. Nuclear Regulatory Commission has finalized two uranium mill licensing guidance documents after consideration of comments received in response to a request for public comment in a *Federal Register* notice published May 13, 1992 (57 FR 20525). Only minor changes were made to the proposed guidance documents titled, "Revised Guidance on Disposal of Non-Atomic Energy Act of 1954, Section 11e.(2) Byproduct Material in Tailings Impoundments" and "Position and Guidance on the Use of Uranium Mill Feed Materials Other Than Natural Ores."

ADDRESSES: Copies of the comments and the NRC staff responses, as well as SECY-91-243, can be examined at the Commission's Public Document Room at 2120 L Street NW. (lower level), Washington DC.

FOR FURTHER INFORMATION CONTACT: Myron Fliegel, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555; telephone (301) 415-6629.

SUPPLEMENTARY INFORMATION:

Final Revised Guidance on Disposal of Non-Atomic Energy Act of 1954, Section 11e.(2) Byproduct Material in Tailings Impoundments

1. In reviewing licensee requests for the disposal of wastes that have radiological characteristics comparable to those of Atomic Energy Act (AEA) of 1954, Section 11e.(2) byproduct material (hereafter designated as "11e.(2) byproduct material") in tailings impoundments, staff will follow the guidance set forth below. Since mill tailings impoundments are already regulated under 10 CFR part 40, licensing of the receipt and disposal of such material [hereafter designated as "non-11e.(2) byproduct material"] should also be done under 10 CFR part 40.

¹ "non-11e.(2) byproduct material" as used here is simply an encompassing term for source, special nuclear, and 11e.(1) byproduct materials.

2. Radioactive material not regulated under the AEA shall not be authorized for disposal in an 11e.(2) byproduct material impoundment.

3. Special nuclear material and Section 11e.(1) byproduct material waste should not be considered as candidates for disposal in a tailings impoundment, without compelling reasons to the contrary. If staff believes that such material should be disposed of in a tailings impoundment in a specific instance, a request for approval by the Commission should be prepared.

4. The 11e.(2) licensee must demonstrate that the material is not subject to applicable Resource Conservation and Recovery Act (RCRA) regulations or other U.S. Environmental Protection Agency (EPA) standards for hazardous or toxic wastes prior to disposal. To further ensure that RCRA hazardous waste is not inadvertently disposed of in mill tailings impoundments, the 11e.(2) licensee also must demonstrate, for waste containing source material as defined under the AEA, that the waste does not also contain material classified as hazardous waste according to 40 CFR part 261. In addition, the licensee must demonstrate that the non-11e.(2) material does not contain material regulated under other Federal statutes, such as the Toxic Substances Control Act. Thus, source material physically mixed with other material, would require evaluation in accordance with 40 CFR part 261, or 40 CFR part 761. (These provisions would cover material such as: Characteristically hazardous waste; listed hazardous waste; and polychlorinated biphenyls.) The demonstration and testing should follow accepted EPA regulations and protocols.

5. The 11e.(2) licensee must demonstrate that there are no Comprehensive Environmental Response, Compensation and Liability Act issues related to the disposal of the non-11e.(2) byproduct material.

6. The 11e.(2) licensee must demonstrate that there will be no significant environmental impact from disposing of this material.

7. The 11e.(2) licensee must demonstrate that the proposed disposal will not compromise the reclamation of the tailings impoundment by demonstrating compliance with the reclamation and closure criteria of appendix A of 10 CFR part 40.

8. The 11e.(2) licensee must provide documentation showing approval by the Regional Low-Level Waste Compact in whose jurisdiction the waste originates as well as approval by the Compact in whose jurisdiction the disposal site is located.

9. The Department of Energy (DOE) and the State in which the tailings impoundment is located, should be informed of the Nuclear Regulatory Commission findings and proposed action, with a request to concur within 120 days. A concurrence and commitment from either DOE or the State to take title to the tailings impoundment after closure must be received before granting the license amendment to the 11e.(2) licensee.

10. The mechanism to authorize the disposal of non-11e.(2) byproduct material in a tailings impoundment is an amendment to the mill license under 10 CFR part 40, authorizing the receipt of the material and its disposal. Additionally, an exemption to the requirements of 10 CFR part 61, under the authority of § 61.6, must be granted (If the tailings impoundment is located in an Agreement State with low-level waste licensing authority, the State must take appropriate action to exempt the non-11e.(2) byproduct material from regulation as low-level waste.) The license amendment and the § 61.6 exemption should be supported with a staff analysis addressing the issues discussed in this guidance.

Final Position and Guidance on the Use of Uranium Mill Feed Material Other Than Natural Ores

Staff reviewing licensee requests to process alternate feed material (material other than natural ore) in uranium mills should follow the guidance presented below. Besides reviewing to determine compliance with appropriate aspects of appendix A of 10 CFR part 40, the staff should also address the following issues:

1. 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 determining whether the feed material is ore, the following definition of ore must be used:

Ore is a natural or native matter that may be mined and treated for the extraction of any of its constituents or any other matter from which source material is extracted in a licensed uranium or thorium mill.

2. Determination of Whether the Feed Material Contains Hazardous Waste

If the proposed feed material contains hazardous waste, listed under subpart D §§ 261.30-33 of 40 CFR (or comparable RCRA authorized State regulations), it would be subject to EPA (or State) regulation under RCRA. To avoid the

complexities of NRC/EPA dual regulation, such feed material will not be approved for processing at a licensee mill. If the licensee can show that the proposed feed material does not contain a listed hazardous waste, this issue is resolved.

Feed material exhibiting only a characteristic of hazardous waste (ignitable, corrosive, reactive, toxic) would not be regulated as hazardous waste and could therefore be approved for recycling and extraction of source material. However, this does not apply to residues from water treatment, so acceptance of such residues as feed material will depend on their not containing any hazardous or characteristic hazardous waste. Staff may consult with EPA (or the State) before making a determination of whether the feed material contains hazardous waste.

3. Determination of Whether the Ore is Being Processed Primarily for its Source-Material Content

For the tailings and waste from the proposed processing to qualify as 11e.(2) byproduct material, the ore must be processed primarily for its source-material content. There is concern that wastes that would have to be disposed of as radioactive or mixed waste would be proposed for processing at a uranium mill primarily to be able to dispose of it in the tailings pile as 11e.(2) byproduct material. In determining whether the proposed processing is primarily for the source-material content or for the disposal of waste, either of the following tests can be used:

a. Co-disposal test: Determine if the feed material would be approved for disposal in the tailings impoundment under the "Final Revised Guidance on Disposal of Non-Atomic Energy Act of 1954, Section 11e.(2) Byproduct Material in Tailings Impoundments," or revisions or replacements to that guidance. If the material would be approved for disposal, it can be concluded that if a mill operator proposes to process it, the processing is primarily for the source-material content. The material would have to be physically and chemically similar to 11e.(2) byproduct material and not be subject to RCRA or other EPA hazardous-waste regulations, as discussed in the guidance.

b. Licensee certification and justification test: The licensee must certify under oath or affirmation that the feed material is to be processed primarily for the recovery of uranium and for no other primary purpose. The licensee must also justify, with reasonable documentation, the

certification. The justification can be based on financial considerations, the high uranium content of the feed material, or other grounds. The determination that the proposed processing is primarily for the source material content must be made on a case-specific basis.

If it can be determined, using the aforementioned guidance, that the proposed feed material meets the definition of ore, that it will not introduce a hazardous waste not otherwise exempted, and that the primary purpose of its processing is for its source-material content, the request can be approved.

Dated at Rockville, Maryland, this 13th day of September 1995.

For the Nuclear Regulatory Commission.

Joseph J. Helenich,
Chief, High-Level Waste and Uranium
Recovery Projects Branch, Division of Waste
Management, Office of Nuclear Material
Safety and Safeguards.

[FR Doc. 95-23531 Filed 9-21-95; 8:45 am]

BILLING CODE 7560-01-P

SECURITIES AND EXCHANGE COMMISSION

(Rel. No. IC-21382; No. 812-0602)

Golden American Life Insurance Company, et al.

September 15, 1995.

AGENCY: Securities and Exchange Commission ("SEC" or "Commission").

ACTION: Notice of Application for an Order under the Investment Company Act of 1940 ("1940 Act").

APPLICANTS: Golden American Life Insurance Company ("Golden American") Separate Account B ("Account B") and Separate Account D ("Account D")—together with Account B, "Separate Accounts", and Directed Services, Inc. ("DSI").

RELEVANT 1940 ACT SECTION: Order requested under Section 6(c) of the 1940 Act granting exemptions from Sections 12(b), 26(a)(2) and 27(c)(2) thereof and Rule 12b-1 thereunder.

SUMMARY OF APPLICATION: Applicants seek an order permitting the deduction of mortality and expense risk charges, including an asset-based enhanced death benefit charge, from the assets of the Separate Accounts in connection with the offering of certain variable annuity contracts ("Contracts") and certain other variable annuity contracts ("Future Contracts") issued in the future by Golden American that are materially similar to the Contracts. Applicants also request that the order permit the

deduction of a mortality and expense risk charge from the assets of any other separate accounts ("Future Accounts") established in the future by Golden American in connection with the offering of the Future Contracts.

FILING DATE: The application was filed on May 11, 1995, and amended on August 29, 1995.

HEARING OR NOTIFICATION OF HEARING: An order granting the application will be issued unless the Commission orders a hearing. Interested persons may request a hearing by writing to the Secretary of the Commission and serving Applicants with a copy of the request, personally or by mail. Hearing requests should be received by the Commission by 5:30 p.m. on October 10, 1995, and should be accompanied by proof of service on Applicants in the form of an affidavit or, for lawyers, a certificate of service. Hearing requests should state the nature of the requestor's interest, the reason for the request, and the issues contested. Persons may request notification of a hearing by writing to the Secretary of the Commission.

ADDRESSES: Secretary, Securities and Exchange Commission, 450 5th Street, NW., Washington, DC 20549.

Applicants, c/o Mitchell M. Cox, Esq., Vice President, Assistant Secretary and Associate General Counsel, Golden American Life Insurance Company, 1001 Jefferson Avenue, 4th Floor, Wilmington, Delaware 19801.

FOR FURTHER INFORMATION CONTACT: Yvonne M. Hunold, Assistant Special Counsel, or Patrice M. Pitts, Special Counsel, Office of Insurance Products (Division of Investment Management), at (202) 942-0670.

SUPPLEMENTARY INFORMATION: The following is a summary of the application; the complete application is available for a fee from the Public Reference Branch of the Commission.

Applicants' Representation

1. Golden American is a stock life insurance company authorized to do business in all jurisdictions, except New York. Golden American is a wholly-owned subsidiary of BT Variable, Inc. and a wholly-owned indirect subsidiary of Bankers Trust Company.

2. The Separate Accounts were established by Golden American as segregated asset accounts to fund variable annuity contracts. Account B is registered under the 1940 Act as a unit investment trust. Account D is registered under the 1940 Act as a non-diversified open-end management company. Registration statements on Form N-4 and Form N-3, registering the Contracts as securities under the



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

April 1, 1997

Ms. Elizabeth Cotsworth, Acting Director
Office of Solid Waste
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460

SUBJECT: COMPARABILITY OF REGULATIONS FOR URANIUM MILL TAILINGS

Dear Ms. Cotsworth:

Section 84a(3) of the Atomic Energy Act (AEA) of 1954, as amended, requires that the U.S. Nuclear Regulatory Commission's regulations for uranium mill tailings be comparable to the U.S. Environmental Protection Agency's (EPA's) requirements that are applicable to possession, transfer, and disposal of similar wastes under the Solid Waste Disposal Act (SWDA). Section 84a(3) also requires that EPA concur in NRC's determination of comparability. In 1989, NRC completed its evaluation of the comparability of the relevant EPA and NRC regulatory programs and concluded that, with a few exceptions, overall there was comparability. NRC transmitted its report to EPA on August 8, 1989, and October 11, 1989. Since that time, we have not heard from EPA as to whether it agrees that NRC has made its regulations comparable with EPA's requirements.

Over the past seven years we have discussed this issue with EPA management and staff from the Office of Radiation Programs. On December 20, 1996, we met with representatives from the Office of Radiation and Indoor Air (ORIA) and the Office of Solid Waste in Crystal City to discuss the comparability issue. At the meeting, both agencies concluded that the effort required to address the comparability issue would not be justified by the benefits to be derived and it would not be a productive use of resources to pursue action on comparability at this time.

We see no need to revise NRC regulations at this time for purposes of comparability in accordance with Section 84a(3). Since NRC's 1989 evaluation, the regulation of uranium mill tailings has continued with no significant health, safety, or environmental problems identified as attributable to the NRC regulatory framework. NRC's regulation of mill tailings reclamation has been closely coordinated with representatives of ORIA. In addition, a limited review of the existing regulations has not identified any gaps in what is needed to protect public health and safety. Therefore, the purpose of this letter is to document the agreement reached by NRC and EPA that no additional work on the comparability of NRC mill tailings regulations to the SWDA will be pursued.

E. Cotsworth

2

April 1, 1997

If you have any questions please call me at (301) 415-7800 or Joseph J. Holonich, Chief, Uranium Recovery Branch, at (301) 415-7238.

Sincerely,

(Original signed by)

Carl J. Paperiello, Director
Office of Nuclear Material Safety
and Safeguards

cc: R. Travoto, EPA
G. Bonnano, EPA
L. Weinstock, EPA
V. Housman, EPA
J. Rosenberg, EPA

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CP/PROOFED/MARCH 31, 1997

OFC	URB*		URB*		DWM*		NMSS		
NAME	MFliegel		JHolonich		JGreeves		CPaperiello		
DATE	03/26/97		03/26/97		03/28/97		6/1/97		

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E. Cotsworth

2

If you have any questions please call me at (301) 415-7800 or Joseph J. Holonich, Chief, Uranium Recovery Branch, at (301) 415-7238.

Sincerely,

Carl J. Paperiello, Director
Office of Nuclear Material Safety
and Safeguards

cc: R. Travoto, EPA
G. Bonnano, EPA
L. Weinstock, EPA
V. Housman, EPA
J. Rosenberg, EPA

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20585-0001

FEB 25 1994

Mr. William J. Sinclair, Director
Division of Radiation Control
Department of Environmental Quality
State of Utah
168 North 1950 West
P.O. Box 144850
Salt Lake City, Utah 84114-4850

Dear Mr. Sinclair:

I am responding to your letter of January 27, 1994, concerning the U.S. Nuclear Regulatory Commission's public participation process in radioactive materials licensing. In that letter, you indicated that the State of Utah did not believe that the NRC process for public participation was sufficient. You also included several recommendations that the State of Utah believed would improve the NRC public participation process.

As noted in the attachment to your letter, NRC approved three license amendments for the UMETCO White Mesa Uranium Mill in Blanding, Utah that allows the licensee to receive uranium or thorium mill waste for disposal or reprocessing through the mill. Consistent with federal requirements, these amendments did not need to be noticed for public comment. In reviewing your comments on the experiences in Utah, I can understand your view that more public involvement would be appropriate.

In reviewing federal requirements regarding public notification of licensing actions, we find that our past actions are consistent with our regulations and requirements under the National Environmental Policy Act. However, in order to foster better communication with the State, we will notify you directly and NRC will issue Federal Register Notices (FRNs) for mills in Utah upon both the receipt and the final resolution of a license amendment for a significant action, such as disposal of in situ waste material or significant changes to an approved reclamation plan. The FRN issued upon receipt of a significant license amendment will serve notice, under 10 CFR 2.1205(c)(1), that interested parties have 30 days to file a petition for hearing. The FRN issued at the final resolution of the license amendment will be for information purposes. In addition, where the license amendment raises significant or controversial issues, NRC would be willing to attend public meetings, as appropriate. The recent meeting you attended in Moab, Utah is an example of such activities.

William J. Sinclair

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I believe that these steps coupled with the frequent interactions the staff has been undertaking with the State of Utah in the NRC's review of uranium recovery activities in Utah, will ensure a sound and effective working relationship. I trust that this reply clarifies NRC's position in this matter and responds to your concern.

Sincerely,

Original signed by
Robert M. Bernero
Robert M. Bernero, Director
Office of Nuclear Material Safety
and Safeguards



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

December 13, 1996

Dr. Dianne R. Nielson, Executive Director
Department of Environmental Quality
State of Utah
168 North 1950 West
Post Office Box 144810
Salt Lake City, Utah 84114-4810

Dear Dr. Nielson:

I am responding to your September 16, 1996 letter describing recent discussions with the Nuclear Regulatory Commission staff regarding the elimination of dual regulation at uranium mill sites in Utah. The Commission appreciates your interest in simplifying the regulatory oversight of uranium mill and tailings facilities in Utah and in reconciling regulatory differences between the NRC and applicable Utah ground and surface water quality regulations. In retrospect, there seems to have been considerable misunderstanding on the part of both the NRC staff and the State of Utah. I have enclosed specific responses to the six areas of concern that you identified in your letter (Enclosure 1). Nevertheless, I believe it is important to clarify why NRC was not able to undertake all the actions the State of Utah believed were necessary for eliminating dual regulation and to suggest alternative approaches in addressing the concerns you have raised.

As you are aware, the standards contained in NRC regulations conform to standards promulgated by the Environmental Protection Agency (EPA). Judicial reviews by a Federal Court found that the EPA standards met the Federal legislative mandate for protection of groundwater [American Mining Congress v. Thomas, 772 F.2nd 640 (10th Cir. 1985); American Mining Congress v. NRC, 902 F.2nd 781 (10th Cir. 1990)]. Because NRC's requirements conform to the EPA standards, the NRC requirements also meet the Federal legislative mandate and, therefore, provide adequate protection of public health and safety within the meaning of the Atomic Energy Act.

During the past year of interactions, it became apparent that the State of Utah wanted the NRC to impose State of Utah requirements on NRC licensees. As the NRC staff noted in the meetings between the State of Utah and the NRC, there are many aspects of the State of Utah requirements, such as surface water standards, where the NRC does not have statutory responsibility. In addition, there are many other areas of groundwater protection where the NRC may not need to implement requirements as restrictive as those imposed by the State of Utah to provide adequate protection of public health and safety. Although the NRC was willing to consider implementing some of the State of

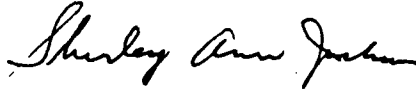
Utah requests, it could do so only if it believed that taking the action was necessary to protect the public health and safety, and it could provide a sound technical and regulatory basis for such action.

One example of the difficulties encountered in trying to resolve the problems is the different approach that NRC and the State of Utah take to contaminated groundwater. In implementing its regulatory program, NRC takes into account the ultimate use of contaminated groundwater. In some cases, groundwater may not be drinking-water quality, and as such, NRC may exercise regulatory discretion regarding what cleanup actions licensees need to take to meet the regulations. The State of Utah, on the other hand, views all groundwater as potential drinking-water, and occasionally may require regulatory actions that go beyond NRC regulations. This different view of the ultimate use of groundwater is one of the major differences between NRC and State of Utah programs. The agreement being advocated by the State of Utah would have NRC implement all the State of Utah requirements. This approach would require NRC to revise its groundwater program, including changes to the NRC regulations. Because the present NRC program provides adequate protection of public health and safety, the staff informed the State of Utah that NRC did not plan to undertake any regulatory actions beyond those currently in the Federal program. NRC encouraged the State of Utah to review the requirements being implemented as part of the Federal program to see if the State could accept this program.

Nevertheless, there are alternative ways that we can work together to eliminate dual regulation. For example, the State of Utah could consider becoming an Agreement State for uranium recovery facilities. This would allow the State of Utah to implement the NRC program as well as any additional State authorized requirements it believed were necessary to regulate groundwater quality. We also have signed Memoranda of Understanding (MOUs) with several States to facilitate interactions. Enclosure 2, for your consideration, is an MOU between NRC and the Utah Department of Environmental Quality (DEQ) that we have drafted that would eliminate dual regulation in Utah. If you would like to pursue this approach, the NRC would be pleased to work with you to implement such an MOU. Another approach to help reduce dual regulation would have Utah licensees voluntarily commit to report on actions or standards satisfying Utah. The NRC could include those voluntary commitments to report in the license. The response to item 6 of your letter (see enclosure 1) discusses some of the considerations NRC uses to determine the appropriateness of including a commitment in the license. In order to include voluntary commitments, the license condition would have to be worded carefully to ensure that NRC would not enforce commitments that go beyond NRC regulatory authority. There also may be an additional issue relating to State reimbursement for NRC implementation of Utah requirements depending on the extent of our involvement relating to the reporting requirements and need for any direct NRC licensing review assistance. Under current Commission policy relating to fees and technical assistance to Agreement States, direct licensing review assistance would be subject to State reimbursement. The NRC staff could work with your staff if you want to pursue this approach.

In closing, I want to assure you that the NRC is committed to working with the State of Utah to resolve these issues. I hope I have clarified NRC's position on these matters and that you will consider one or more of the alternatives that I have proposed. If you have further questions, please contact me.

Sincerely,



Shirley Ann Jackson

Enclosures:

1. Response to State of Utah, dated 9/16/96
2. Memorandum of Understanding

cc: Don Ostler, UDWQ
Larry Mize, UDWQ
Bill Sinclair, UDRC
Peter Heaney, Grand County Council

U.S. NUCLEAR REGULATORY COMMISSION RESPONSE TO
STATE OF UTAH CONCERNS IN SEPTEMBER 16, 1996,
LETTER TO CHAIRMAN SHIRLEY JACKSON

Item 1: Narrow Definition of "Hazardous Constituent": Contaminant Detectability

There are actually two issues identified under this item.

1.a) NRC Criterion 5B(2) unduly restricts the definition of a "hazardous constituent."

Response:

The definition comes directly from U.S. Environmental Protection Agency (EPA) standards in 40 CFR Part 192.

1.b) The determination of whether a constituent meets the definition of "hazardous constituent" is made only once, early in a facility's life. Consequently, slow moving constituents, that may contaminate groundwater after the initial determination of "hazardous constituents," are not monitored and could, therefore, be unregulated.

Response:

All uranium mills with contaminated groundwater are currently under a corrective action program (CAP). These CAPs require that licensees monitor the groundwater for constituents that were identified as "hazardous constituents" when the programs were developed in the late 1980s and early 1990s. Requiring routine monitoring of constituents that were not identified as "hazardous constituents" when the CAPs were accepted is not necessary because the CAPs that are currently in place work to reduce groundwater contamination for all constituents that are present, not just those being monitored. Moreover, before terminating the license for a uranium mill site, the NRC staff will require licensees to demonstrate that all constituents found in the tailings are within standards in the groundwater.

Item 2: Missing Non-radiologic Contaminants in Criterion 13

NRC Criterion 13 does not include several non-radiological contaminants, including ammonia, copper, fluoride, manganese, nitrate, pH, total dissolved solids (TDS), vanadium, and zinc, which are regulated by the Utah Ground Water Quality Protection Regulations.

Response:

The NRC has the ability to regulate other constituents beyond those listed in Criterion 13. At the time NRC reviewed the groundwater CAPs, the staff concluded that there was no need to go beyond the list of constituents found in Criterion 13 and in the tailings liquid for most sites. To date, NRC does not have any reason to revisit those earlier decisions. However, as changes

are made to CAPs, or final monitoring is done at the time of license termination, the staff will consider, based on a sound technical and regulatory basis, what, if any, additional constituents should be included.

It should be noted that the State of Utah equates the elimination of dual regulation with its proposal to have NRC assume all responsibility for groundwater protection at uranium mills. During the June 1996 meeting, the staff tried to explain that concurrent jurisdiction is an area where both NRC and the State of Utah share regulation of the same nonradiological constituents. For those constituents regulated solely by the State of Utah, and not in NRC regulations or license conditions, there are no concurrent jurisdictional issues. The State of Utah is the sole regulatory authority. This is the case for constituents that are in the State of Utah standards, but are not in NRC regulations. The State of Utah proposal would do more than eliminate dual regulation. It also would shift the regulation of State of Utah groundwater standards to NRC, and remove the State of Utah from any review or enforcement of its own standards.

Item 3: Inclusion of Mill Site Facilities in Groundwater Monitoring, Characterization, and Corrective Action

The NRC does not have any standards for cleanup of groundwater contamination from sources other than the tailings.

Response:

The Commission has established standards for the cleanup of groundwater contamination from byproduct material in the tailings impoundment. However, these standards are not applicable to the cleanup of groundwater contamination solely from other activities within the mill site, such as ore storage or yellowcake storage. Groundwater contamination resulting from sources other than the tailings impoundment can be addressed through 10 CFR Part 40, Appendix A, Criterion 5F. Under Criterion 5F, uranium mill licensees would be required to address seepage of contaminants into the groundwater from sources other than byproduct material. Further, Criterion 5F specifies that the cleanup standards for this contamination would be determined on a site-specific basis. The staff informed the State of Utah that it would use the standards in Criterion 5B to help ensure that all groundwater would be cleaned up to comparable standards. The staff has not identified any mill site where there is groundwater contamination that cannot be attributed to the tailings impoundment. Therefore, the staff currently is applying the standards in Criterion 5B to all groundwater cleanup.

Item 4: NRC Lack of Surface Water Quality Standards for Mill Tailings

The NRC does not have standards for the regulation of surface water.

Response:

Although the NRC does not have standards for the regulation of surface water potentially contaminated by leakage from the facility, NRC groundwater standards provide protection of surface water. Each constituent must meet one of three standards at the point of compliance in the groundwater: 1) background concentration; 2) the maximum concentration level established by EPA and identified in Criterion 5C; or 3) an alternate concentration limit

(ACL) established by NRC. If either one of the first two standards is met in the groundwater for a constituent, surface water will be protected. To establish an ACL for a constituent, NRC must consider nine factors relating to potential adverse effects on groundwater quality and nine factors relating to potential adverse effects on hydraulically connected surface water quality. Therefore, although it is technically correct to state that NRC does not have surface water standards, the regulatory framework in Criterion 5 is protective of surface water. Nevertheless, it should be noted that because NRC does not have standards for surface water, there is no concurrent jurisdiction in this area, and thus no dual regulation. The State of Utah is the sole regulator.

Planned discharges to surface waters are regulated under 10 CFR Part 20 for radiological hazards, but the NRC does not have the authority to regulate the chemical hazards of planned discharges to surface water. The State of Utah, through its National Pollutant Discharge Elimination System permit authority, would regulate planned surface water discharges with respect to chemical hazards.

Item 5: NRC Inability to Regulate and Cleanup Groundwater Pollution Pre-dating 1978.

If licensees can show that off-site groundwater contamination occurred prior to 1978, then the NRC does not have any regulatory authority over it.

Response:

The NRC did not have authority over byproduct material until the passage of the Uranium Mill Tailings Radiation Control Act of 1978. As such, licensees do not have to clean up off-site contamination if they can show that all the contamination occurred before 1978. However, if this demonstration cannot be made, and this is usually very difficult to show, NRC will continue to regulate the cleanup of contaminated groundwater beyond the mill site boundary. This is an important distinction that was made to the State of Utah during the June 19, 1996 meeting between NRC and Utah.

Item 6: NRC Refusal to Enforce Voluntary Commitments by a Licensee

The NRC staff refused to enforce voluntary commitments made by licensees.

Response:

Although licensees may propose many commitments in their groundwater CAPs, NRC may not want to include all these commitments in a license condition. Many considerations help determine what commitments should be placed in a license condition. Some of these considerations include: 1) a sound technical basis to include the commitments; 2) consistent and appropriate application of the regulatory program; 3) the ability to conduct effective inspections of the licensee commitment; and 4) the obligation to enforce license conditions, regardless of the basis for the condition.

NRC has further considered this item and concludes that it could include voluntary reporting commitments in a license. License conditions would have to be written carefully, taking into account the above considerations. Enforcement of commitments that have no basis in NRC regulations could present

problems; therefore, commitments that are needed for compliance with State of Utah standards would be the responsibility of the State to enforce. However, the staff is prepared to work with Utah in this area within the regulatory framework discussed above.

DRAFT

MEMORANDUM OF UNDERSTANDING
BETWEEN THE UNITED STATES NUCLEAR REGULATORY COMMISSION
AND THE STATE OF UTAH
DEPARTMENT OF ENVIRONMENTAL QUALITY

1. Purpose. This Memorandum of Understanding ("MOU") is intended to provide a framework for voluntary cooperation between the United States Nuclear Regulatory Commission ("NRC") and the State of Utah, Department of Environmental Quality (UDEQ) to minimize or eliminate the dual regulation of groundwater at uranium mills in the State of Utah.
2. Regulatory Authority. The NRC regulates radiological and non-radiological hazards of byproduct material as confined in Section 11e.(2) of the Atomic Energy Act of 1954, as amended, 42 U.S.C. § 2011 et seq. The UDEQ administers and enforces Utah's environmental statutes over the radiological hazards of 11e.(2) byproduct material.
3. Designation of Site Coordinators. Within ninety (90) days after execution of this MOU, each agency will designate a site coordinator for each uranium recovery mill or 11e.(2) byproduct disposal site identified in Appendix A. Each agency shall notify the other, in writing, of the name, address, telephone and facsimile numbers of each site coordinator. Any changes in the designation of a coordinator will be communicated in writing to the other agency.
4. Meetings and Conference Calls between the Agencies. At the request of either agency, with reasonable notice, a meeting or conference call will be scheduled between the site coordinators and other agency representatives to discuss coordination of actions related to groundwater restoration work or 11e.(2) byproduct disposal at uranium mills covered by this agreement.
5. Technical and Regulatory Consultation. At the request of either agency, with reasonable notice, representatives of each will be made available to discuss technical or regulatory matters pertaining to groundwater restoration work at the sites covered under this agreement.
6. Meetings with the Public. Except in response to site emergencies, each agency will notify the other, at least two weeks in advance, of any public meeting related to groundwater restoration activities at sites covered by this agreement.
7. Meetings with Other Regulatory Entities. At its discretion, either agency may invite representatives of the other agency to attend meetings with other regulatory entities who share some responsibility for the groundwater restoration at sites covered under this MOU. At a minimum, both parties to this MOU will keep the other informed of such meetings and the results of those meetings. [It should be noted that the NRC has an Open Meeting policy which would require these meetings to be open to the public because they almost always would involve discussions concerning a specific licensee (Open Meeting Statement of NRC Staff Policy, 59 Federal Register 48340, 9/20/94)].

8. Notice of Site Inspections. Each agency will make a good faith effort to coordinate routine site inspections of groundwater restoration activities at sites covered under this agreement by providing two weeks advance notice (when possible) to the other agency.

9. Dissemination of Information to Other Agencies. As necessary to implement oversight of operations, remediation, and decommissioning of sites covered under this agreement effectively, the agencies will coordinate pertinent and appropriate dissemination of information to other Federal, State and local government agencies.

10. Exchange of Information Between Agencies.

A. The agencies will exchange information concerning groundwater restoration of uranium recovery mills and 11e.(2) byproduct disposal sites as follows:

i. Upon request, NRC will make available to UDEQ for review and copying any documents disclosable to the public under the Freedom of Information Act, 5 U.S.C. § 552, NRC regulations in 10 CFR Part 9, Public Records, and in 10 CFR Part 2.790, public inspections, exemptions, requests for withholding, and any other applicable Federal statute, regulation, or policy.

ii. Upon request, UDEQ will make available to the NRC for review and copying any documents disclosable to the public under the [insert appropriate state policy] UDEQ's public information policy, and any other applicable Utah statute, regulation, or policy.

B. All documents exchanged by the agencies will be addressed to the designated coordinator for the each site.

C. Nothing in this MOU shall be construed as compelling either agency to produce information or documents which the agency deems confidential or privileged.

11. Disclosure of Information to the Public. The right of access by the public to information under Federal and State law, regulation, or policy is not affected by this MOU.

12. Designation of Single Regulator for Groundwater Restoration.

A. It is agreed that the lead agency for developing a regulatory program for groundwater restoration at uranium mills shall be the NRC. The regulations and standards that NRC will use in its regulatory program will be those contained in 10 CFR Part 40, Appendix A.

B. The NRC will be the lead agency for setting standards other than those contained in 10 CFR Part 40, Appendix A. This could include standards for constituents not covered currently in 10 CFR Part 40, Appendix A, as well as background limits or alternate concentration limits for any constituent regulated by NRC under this agreement. It is agreed that the final determination of any limits for groundwater clean up rests with NRC. If the State of Utah does not agree with the NRC's final determination, it can choose to implement its own regulatory program. However, if the State of Utah does not notify NRC in writing within 60 days of the final NRC position, then the

State of Utah agrees that it will not require any additional clean up by the United States Department of Energy (DOE), if DOE is the long-term care custodian for the site.

C. The evaluation of any groundwater clean up program, or any modification to an already accepted program, will be the responsibility of the NRC. The NRC will be the lead agency for determining the acceptability of any program, or modification. If the State of Utah does not agree with the NRC's final determination, it can choose to implement its own regulatory program, and require additional groundwater corrective actions. However, if the State of Utah does not notify NRC in writing within 60 days of the final NRC position, that Utah plans to undertake its own regulatory program, then the NRC position will be accepted as final by both agencies.

D. On occasion, and when the NRC determines there is a sound technical and regulatory basis to do so, NRC will implement the flexibility provided in 10 CFR Part 40, Appendix A, and will expand the list of constituents contained in 10 CFR Part 40, Appendix A, Criterion 13.

E. The State of Utah agrees that it will not petition to intervene or participate in any hearing on licensing matters before the NRC that are covered by paragraphs 12.B. and C. unless notice was given within 60 days of the NRC final position.

13. Modifications. Any modifications or changes to this MOU shall be effective only if agreed to by the parties and set forth in writing as an amendment of this MOU.

14. Reservation of Rights. Nothing in this MOU shall affect the rights, duties and authority of either agency under the law. The agencies reserve their respective authority and rights to take any enforcement action which they deem necessary to fulfill their duties and responsibilities under the law.

15. Non-binding Memorandum. This memorandum is not intended to and does not create any contractual rights or obligations with respect to the NRC, UDEQ, or any other parties.

Carl J. Paperiello, Director
Office of Nuclear Material Safety
and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C.

Date

Diane R. Nielson, Executive Director
Department of Environmental Quality
State of Utah
Salt Lake City, Utah

Date

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DOCKETED
USNRC

BEFORE THE PRESIDING OFFICER

'99 FEB -1 A10:54

In the Matter of)

INTERNATIONAL URANIUM (USA))
CORPORATION)

(Receipt of Material from)
Tonawanda, New York))

Docket No. 40-8681-MLA-4

OFFICE OF SECRETARY
RULEMAKING AND
ADJUDICATIONS STAFF

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF RESPONSE TO WRITTEN PRESENTATIONS BY STATE OF UTAH AND INTERNATIONAL URANIUM (USA) CORPORATION" and "AFFIDAVIT OF JOSEPH J. HOLONICH" in the above-captioned proceeding have been served on the following by first class United States Mail; and through deposit in the Nuclear Regulatory Commission's internal mail system as indicated by an asterisk, this 29th day of January 1998:

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Presiding Officer
Atomic Safety and Licensing Board
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U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

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Salt Lake City, Utah 84114-0873

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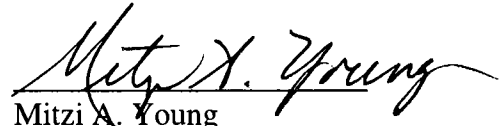
Administrative Judge
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Mitzi A. Young
Counsel for NRC Staff