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

June 16, 1999

Office of the Secretary
ATTN: Rulemakings and Adjudications Staff
Mail Stop O-16 G15
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

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

Dear Staff:

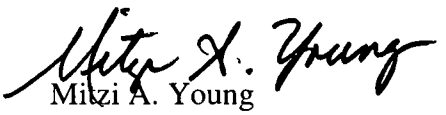
It has come to my attention that the "NRC Staff Opposition To State Of Utah Appeal Of LBP-99-5," dated June 14, 1999, inadvertently contains typographical errors that may make portions of the document confusing. To remedy these errors, the following changes have been made to the affected pages as noted below:

page i, line 4:	changed "No Commit Reversible" to "Not Commit Reversible Error"
page i, line 8:	changed "of the" to "Of The"
page i, line 9:	changed "Decision" to "The Decision"
page i, line 8:	changed "of the" to "Of The"
pages ii-iii:	listed cases in alphabetical (and reverse chronological) order
page 5, note 7:	changed "material that" to "material" on top line
page 7, line 4:	changed "content A" to "content. A"
page 7, note 10:	changed "The Staff noted that" to "The Staff noted" on line 1
page 7, note 10:	deleted "AEA." from beginning of line 3
page 8, note 11:	changed "bolsters the" to "bolsters" on sixth line from the bottom
page 10, line 1:	changed "To do so" to "Such a requirement"
page 10, line 2:	changed "criterion one" to "Criterion 1"
page 10, line 6:	changed "of NRC being able to only indirectly regulate tailings at active mills" to "of NRC being able to regulate tailings at active mills only indirectly"
page 10, line 8:	changed "tailing" to "tailings"
page 10, line 16:	changed "including where" to "including, where"
page 10, line 18:	changed "*environmental*" to "*environmentally*"
page 11, note 15:	changed "powers which" to "powers as" on line 5
page 12, note 15:	changed "important" to "important role" on line eighth line from the bottom

page 18, line 4: changed "hazardous waste" to "to hazardous wastes"
page 19, line 11: changed "To the extent," to "To the extent"
page 19, line 15: changed "for he" to "for the"

Enclosed for your convenience are replacement pages i-iii, 5, 7-8, 10-12, and 18-19 for insertion in the above-mentioned filing. The Staff regrets any inconvenience caused by this errata.

Sincerely,



Mitzi A. Young
Counsel for NRC Staff

Enclosures: As stated

cc w/encl: Anthony J. Thompson, Esq.
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Office of Commission Appellate Adjudication
Adjudicatory File
ASLB Panel

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The Staff argued that, because the State failed to show that the application is deficient or that the Amendment is inconsistent with Staff guidance, the Amendment should not be revoked. *See* NRC Staff Response To Written Presentations By State Of Utah And International Uranium (USA) Corporation, dated January 29, 1999 (Staff Brief), at 1-2. The Staff explained that a showing of whether material is being primarily processed for its source material content can be based on "other grounds" besides financial considerations or the high uranium content of the feed material. *See* Staff Brief at 10-13.

In LBP-99-5, the Presiding Officer found that the Amendment was properly granted and that the State had misconstrued Section 11e.(2) of the Atomic Energy Act (AEA), 42 U.S.C. § 2014e(2), which defines byproduct material as "the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content." *Id.* at 3, 8. Declining to apply a "test of motive or purpose" to Criterion 3 of the guidance, the Presiding Officer concluded that the phrase "processed primarily for its source material content" is met when the extraction of uranium is the principal reason to process the ore, thereby making the material subject to NRC's jurisdiction over the uranium fuel cycle. *Id.* at 2-3. If, however, material is processed primarily to remove other substances (vanadium, titanium, coal, etc.), it would not be byproduct material within the

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[7](...continued)
that economics or uranium content are not determinative in a finding of whether material is being processed primarily for its source material content, (2) that IUSA adequately documented its showing under Criterion 3, and (3) 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 due to the State's dissatisfaction with the regulatory regime in 10 C.F.R. Part 40. *See e.g.,* IUSA Brief at 2-20, 40-63, 78-82.

requests to process alternate feed material can be approved if the Staff concludes, *inter alia*, that the application shows (1) that the material proposed for processing is "ore," (2) that it does not contain a listed hazardous waste, and (3) that it is being processed primarily for its source material content. A showing of whether feed is being processed primarily for its source material content requires, for example, licensee certification and justification, *i.e.*, a sworn statement (with supporting documentation) that alternated feed material is to be processed primarily for recovery of uranium and for no other primary purpose and may be justified "based on financial considerations, the high uranium content of the feed materials, or *other grounds.*" 60 Fed. Reg. 49,296-97 (emphasis added).[10]

A showing regarding Criterion 3 may be based upon satisfying either (a) a co-disposal test (*i.e.*, the material is physically and chemically similar to 11e.(2) byproduct material, is not

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[9](...continued)
11e.(2) Byproduct Material in Tailings Impoundments," 60 Fed. Reg. 49,296 (Disposal Guidance), provides criteria for approving disposal of wastes that have "characteristics comparable to those of Atomic Energy Act (AEA) of 1954, Section 11e.(2) byproduct material," but were not generated from ore processed primarily for the extractions of its source material content. 60 Fed. Reg. 49,296. In promulgating the guidance, the Staff indicated that wastes resulting from the processing of ore for thorium that is disposed of at FUSRAP sites (that did not also process rare earths or other metals) would qualify as 11e.(2) byproduct material. *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, 20,527 (May 13, 1992) (Draft Guidance).

[10] The Staff noted the need for a broad definition of the term "ore" in order to be consistent with the use of the term in the defining AEA Section 11.e(2) byproduct material. *See* Draft Disposal and Alternate Feed Guidance, 57 Fed. Reg. 20,525, 20,531-32. The term "ore" as used in the guidance permits 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 Department of Energy. *Id.* at 20,531-33.

subject to RCRA or other EPA regulations, and can be placed in a tailings impoundment) or (b) a licensee certification or justification test (*i.e.*, certification under oath or affirmation justified by reasonable documentation) that the feed material is to be processed primarily for the recovery of uranium.[11] 60 Fed. Red. 49,297. As the guidance states:

> 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 may 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-by-case basis.

60 Fed. Reg. 49,297 (emphasis added)." *Id.* As shown below, this case-specific determination does not require a particular uranium content or more detailed documentation.

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[11] The State's failure to comprehend the relationship between UMTRCA and the guidance results in a misreading of Criterion 3 and an erroneous attribution of error to the Presiding Officer. *See* Appeal at 11-12. While the State correctly asserts that this criterion addresses concerns about sham disposal (raised in part by Utah officials), *see* Appeal at 9-10, the State ignores that the Staff's primary concern was that material not be "processed primarily to convert what would have been [low-level waste] or mixed waste into 11e.(2) byproduct material." *See* Draft Disposal and Alternate Feed Guidance, 57 Fed. Reg. 20,525, 20,533. The guidance clearly indicated that FUSRAP sites containing wastes resulting from the processing of material primarily for thorium source material used in the Manhattan Engineering District and early Atomic Energy programs "would qualify as 11e.(2) material." 57 Fed. Reg. 20,527. Further, the statement in the co-disposal test that "[i]f the material would be approved for disposal, it can be concluded that, if the mill operator proposes to process it, the processing is primarily for the source-material content," 60 Fed. Reg. 49,297, *see also* Draft Guidance, 57 Fed. Reg. 20,533, bolsters (a) the Presiding Officer's rationale that processing primarily to extract uranium (and not other substances) is determinative and (b) the Staff's conclusion that DOE's classification of the feed as 11e.(2) material (permissible under 42 U.S.C. §§ 7911(1), (6), (7)), meant the feed could be directly disposed of in the White Mesa tailings impoundment and, thus, the processing would be primarily for its source material content. *Compare* 60 Fed. Reg. 49,297 *with* LBP-99-5, at 2-3, *and* Staff Brief at 12-14.

profitability is required. Such a requirement would contradict the expanded definition of "ore" in Criterion 1.

Congress enacted the Uranium Mill Tailings Radiation Control Act of 1978, 42 U.S.C. § 7901 *et seq.* (UMTRCA), on November 9, 1978, to address growing concerns about the potential hazards of uranium mill tailings by closing a regulatory gap that existed as a result of the NRC being able to regulate tailings at active mills only indirectly 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 tailings 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 environmentally sound manner and to minimize or eliminate radiation health hazards to the public,* and
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> (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 AEA was the 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).[14]

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 [authorizing license and exemptions], Section 82 [governing imports], and Section 84 [covering milling and mill tailings]. Therefore, NRC licensing requirements apply to 11.e(2) byproduct material in the possession of an NRC licensee.[15]

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[14] 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 11e.(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. *See* 57 Fed. Reg. 20,525, 20,526. Although not subject to EPA (or State) regulation under RCRA, 11.e(2) byproduct material must meet EPA Clean Air Act permit regulations, whether or not they are commingled with non-11.e(2) byproduct material waste. *Id.*

[15]The 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). .Administrative agencies only have such powers as are conferred by Congress either expressly or by necessary implication. *See* 3 Sutherland, Statutory Construction, § 65.02, at 311-312 (5th Ed. 1992).

(continued...)

In the promulgation of both the draft and final Alternate Feed Guidance, it was stated that waste or tailings that resulted from the extraction or concentration of ore primarily for its source material content would be considered 11e.(2) material. *See* 57 Fed. Reg. 20,525; 60 Fed. Reg. 49,297. The definition of AEA Section 11.e(2) byproduct material applies to the nuclear fuel cycle and excludes 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) (*Subcommittee Hearings*) (IUSA Brief at Licensee Exhibit 3); Draft Disposal Guidance, 57 Fed. Reg. 20525-20,527. It also encompasses all nuclear fuel cycle waste, irrespective of the concentration of

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[15](...continued)

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" were "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). The limits of the NRC's jurisdiction is not a bar to issuance of an amendment authorizing receipt of the Ashland 2 material since DOE can classify the material. The material's status is no different than uranium ore, which is not subject to NRC regulation until it is 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).

The Department of Energy (DOE) has an important role in determining the ultimate fate of mill tailings and wastes given that UMTRCA 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).

impoundment, and thereby undermine State regulation. *Id.*[23] However, the State fails to provide a cogent explanation as to why precluding feed with less than 0.05 % uranium content is necessary to address State concerns about low-level waste, particularly since the guidance already contains a provision (criterion 2) to ensure that listed hazardous wastes are not accepted at a mill.[24]

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[22](...continued)
(1989), *aff'd*, CLI-90-5, 31 NRC 337 (1980), and because IUSA has the burden of proof in this proceeding, the Presiding Officer correctly concluded that the adequacy of the Staff's safety review was not determinative of whether an action should be upheld. *See* LBP-99-5 at 8 n.9, *citing 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. 41 NRC at 121 n.67. For example, there is no requirement that the Staff prepare a safety evaluation for a materials amendment since safety findings may be implied. *University of Missouri*, 41 NRC at 122-23 & n.68.

[23]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.

[24] As noted 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, is subject only to EPA air quality standards and is not required to obtain a SWDA discharge permit. *See* note 14, *supra*. The guidance states:

> 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.

(continued...)

The Amendment below was granted on the condition that the material be tested prior to shipment from the site and upon arrival at the site to confirm that no listed hazardous wastes are present in the material.[25] *See* TER at 4-5; Letter from M. Rehmann, IUSA, to J. Holonich, NRC, dated June 3, 1998 (Hearing File 5); Letter from M. Rehmann, IUSA, to J. Holonich, NRC, dated June 11, 1998 (Hearing File 6); Holonich Affidavit 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; *see* Appeal at 3 n.2. In addition, DOE designation of the Ashland 2 site as containing 11.e(2) byproduct material further ensures that it will retain long term custody of the material and protect the States resources as mandated by Congress. *See* Section 84 of the AEA, 42 U.S.C. § 2113(a)(2), (b)(2). To the extent the State claims that NRC requirements for disposal of mill tailings are inadequate as compared to requirements for low-level waste,[26] that concern was not litigable in this proceeding, in part because the State withdrew its concern that the feed contained listed hazardous wastes, *see* Appeal at 3 n.2, and because this general challenge to the adequacy of the regulatory scheme for the overall operation of White Mesa constitutes an

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[24](...continued)
60 Fed. Reg. 49296, 49297.

[25] The Amendment, as is customary in Staff materials licensing, modified the IUSA license to include a license condition authorizing IUSA to receive and process source material from the Ashland 2 site in accordance with the amendment request, as supplemented through June 11, 1998, the letter that stated that onsite testing for listed hazardous wastes would be done. *See* Amendment, License Condition 10.10 (Hearing File 12).

[26] *See* Appeal at 13-14. NRC regulations conform to the standards 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).