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uranium is extracted, then sham disposal cannot occur. LBP 99-5 at 3, 6 and 8.

As discussed below, LBP-99-5 raises important legal and policy questions in the application of the Commission's Guidance on Alternate Feed Material. Under LBP-99-5 processing any waste material that may contain a hint of uranium through a uranium mill would be allowed regardless of the type of cleanup site that contains the waste or the amount of money the mill operator is paid for receipt of the waste. LBP-99-5 completely undermines the Commission's carefully crafted Guidance on Alternate Feed Material and offers no safeguards against sham disposal.

## II. FACTUAL BACKGROUND

The White Mesa mill at Blanding, Utah, is owned and operated by IUC and is a NRC licensed uranium mill under 10 C.F.R. Part 40. The amendment at issue in this appeal allows IUC to receive and process 45,000 cubic yards<sup>2</sup> of waste material from a portion of the Formerly Utilized Sites Remedial Action Program ("FUSRAP") known as "Ashland 2," located near Tonowanda, New York.

In the 1940's the Manhattan Engineering District ("MED") used property now known as the Ashland 1 portion of the FUSRAP site to dispose of 8,000 tons of waste filter cake (tailings), containing an average uranium oxide residue of approximately 0.54%. The MED waste was spread over two-thirds of the 10.8 acre Ashland 1 site to a depth of

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<sup>2</sup> The original license request was for 25,000 cubic yards of material but IUC later estimated the total amount of Ashland 2 material to be 45,000 cubic yards. Herbert Testimony at 6.

one to five feet. Between 1974 and 1982 the Ashland Oil Company excavated an unknown quantity of soils mixed with radioactive residues at the Ashland 1 site and disposed of the soils at the 115 acre Ashland 2 site. From 1957 to 1982 a portion of the Ashland 2 site was used as an industrial landfill for the disposal of general refuse, and industrial and chemical by-products. See Herbert Testimony at 5-6; Staff's Technical Evaluation Report ("TER") at 1-2 (Hearing File at 12).

Activities over the past 50 years have spread, diluted, and disturbed the original 8,000 tons of tailings disposed of on Ashland 1 by the MED such that it is unknown how much of the tailings material ended up at the Ashland 2 site. Furthermore, IUC has been granted a license amendment by NRC to receive, process and dispose of 220,000 tons of waste material from the Ashland 1 site.<sup>3</sup> Taken together, under the Ashland 1 and Ashland 2 license amendments, IUC would need to process 265,000 tons of waste in order to extract uranium from the 8,000 tons of uranium tailings initially disposed of by the MED project in the 1940's. Moreover, the uranium content of the Ashland 2 material ranges from nondetectable to approximately one percent, with the average uranium content ranging from 0.008% to .058%. TER at 4; Herbert Testimony at 5, 7.

### III. ARGUMENT

The Commission should take review of LBP-99-5 because (1) the Presiding Officer

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<sup>3</sup> The State was granted a hearing in the Ashland 1 case; however, at the request of the parties the Presiding Officer has placed that proceeding in abeyance pending the State's appeal of the Ashland 2 case.

did not apply the Commission's Alternate Feed Material Guidance; and (2) the decision presents important issues of law, policy and discretion.

**A. The Presiding Officer Erred By Not Applying the Alternate Feed Material Guidance.**

The NRC Staff found the Ashland 2 license amendment request complied with the Commission's Alternate Feed Material Guidance because the material (1) meets the definition of "ore"; (2) does not contain listed hazardous waste; and (3) based on the licensee certification test, is being processed primarily for its source material content. TER at 3-6.<sup>4</sup>

The Presiding Officer's decision bypasses the Commission's Guidance on Alternate Feed Material in many important respects. First, the Presiding Officer pronounced that when a uranium mill processes "ore" for the extraction of uranium -- rather than the extraction of vanadium or some other material -- it meets the test under the guidance of "processed primarily for its source material content." LBP-99-5 at 3. This standard, however, ignores the Commission's guidance that when feed material other than natural ore is at issue, the analysis must include the co-disposal test or the licensee certification test to determine "whether the proposed processing is primarily for the

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<sup>4</sup> In the NRC Staff Response to Written Presentations by State of Utah and International Uranium (USA) Corporation ("NRC Staff Response"), the Staff withdrew its determination in the TER that the Ashland 2 material meets the co-disposal test. TER at 6; NRC Staff Response at 11 and n. 11.

source-material content or for the disposal of waste...." <sup>5</sup> Commission's Alternate Feed Material Guidance, 60 Fed Reg at 49,397.

Second, LBP-99-5 does not guard against turning uranium mills into waste disposal facilities. In fact, the Presiding Officer even points to IUC's low cost disposal estimate for the Ashland 2 material against bids from regulated waste disposal facilities in support of granting the license amendment. LBP-99-5 at 5. The Proposed Guidance (*see infra*) recognized the enticement of using uranium mills as a cheap way around the high cost of waste disposal. For example, the Staff proposed that applying either the co-disposal test or licensee certification test would eliminate such practices as paying the mill operator substantially less to process waste for its uranium content and dispose of the resultant 11e.(2) byproduct material than disposing of the material at a waste disposal facility. Uranium Mill Facilities, Request for Public Comments on . . . Guidance on the Use of Uranium Mill Feed Materials Other Than Natural Ores ("Proposed Guidance"), 57 Fed. Reg. 20525, 20,533 (1992). Given the expansive definition of ore<sup>6</sup> under the guidance, the Staff must determine on a case-specific basis whether the processing was primarily for the

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<sup>5</sup> In fact, IUC petitioned the Commission on May 13, 1998, to reconsider the final Guidance on Alternate Feed Material that would do just what the Presiding Officer holds: eliminate the co-disposal and licensee certification tests and create a presumption that any time a NRC licensed uranium mill is milling ore (including alternate feed) containing source material, the mill is processing such ore primarily for its source material content. The IUC petition provides ample proof that LBP-99-5 is contrary to the traditional application of the Commission's Alternate Feed Guidance.

<sup>6</sup> "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." Guidance, 60 Fed Reg. at 49,296.

source-material content or for the disposal of waste. See Proposed Guidance at 20,533. The Presiding Officer misses this point when he says that the State quotes the proposed guidance out of context. LBP-99-5 at 7.

Third, LBP-99-5 ties the Ashland 2 material to the uranium fuel cycle and quotes the legislative history of the Uranium Mill Tailings Radiation Control Act ("UMTRCA"), the cost efficiency of the FUSRAP program, and the savings to the U.S. government in allowing IUC to process and dispose of the Ashland 2 material. LBP-99-5 at 3-5. The State contends when the issue is whether sham disposal is occurring from the processing of alternate feed material, it is inappropriate to paint the uranium fuel cycle with the broad strokes as announced in LBP-99-5.

Congressional intent and case law do not sustain the Presiding Officer's reliance on alternate feed material being just another part of the uranium fuel cycle. When Congress addressed the regulation of the end products of uranium processing under UMTRCA, it had before it the traditional practices of extracting uranium from natural ores. Because Congress never contemplated that alternate feed material would enter the uranium fuel cycle, congressional intent under UMTRCA must be limited to the traditional extraction of uranium from natural ores. Thus, to say that milling alternate feed material furthers the policy under UMTRCA is a non sequitur. As to case law, Kerr-McGee v. NRC, 903 F.2d 1, 7 (D.C. Cir. 1990), should not be read to support the Staff's position that 11.e(2) byproduct material includes "all wastes" from the milling process.

See Staff Response at 7. The court in Kerr-McGee was addressing NRC's refusal to take regulatory control over orphan wastes from the milling and processing of source material ore. By contrast, the original MED materials are not orphaned wastes but are being cleaned up under FUSRAP. Moreover, by tracing the journey of the MED waste to the Ashland 2 site, it can be seen that the original tailings have been disbursed, excavated, diluted and mixed with waste from 50 years of industrial activity (primarily from petroleum processing). Thus, it is a long stretch to say that the Ashland 2 wastes are a continuing part of the uranium fuel cycle or that IUC's Ashland 2 amendment request requires NRC to fill a regulatory void.

Fourth, LBP-99-5 does not effectuate the health based standards of the Atomic Energy Act or the UMTRCA. The White Mesa mill was licensed and environmental standards were set based on the mill processing traditional ores. The regulatory scheme for White Mesa is based on 10 C.F.R. Part 40; it is not based on the land disposal of radioactive waste under 10 C.F.R. Part 61. By ignoring the licensee certification or co-disposal tests, LBP-99-5 affords insufficient protection against processing alternate feed material primarily for waste disposal.

Under the Commission's Alternate Feed Material Guidance there is a very broad and expansive definition of "ore." Thus, material containing contaminants not usually found in traditional ores (such as in the Ashland 2 material) may be disposed of in the mill's tailings impoundment. The State is not arguing for a purely economic analysis.

The State's challenge based on the economics of the transaction between IUC and the cleanup contractor for the Ashland 2 site, however, is a good indicator of whether the processing of the Ashland 2 material is for waste disposal or for the extraction of uranium. Consequently, coupling the broad definition of ore with LBP-99-5's presumption that merely processing alternate feed material and extracting uranium in the mill negates any sham disposal, opens the floodgates to any waste being processed at the White Mesa mill.

Fifth, LBP-99-5 upheld the license amendment without any documentation in the record to justify the Staff's grounds for finding that the Ashland 2 material would be processed primarily for its source material content. To meet the licensee certification test to show that alternate feed material is being processed primarily for its source material content,

The licensee must 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...

Guidance, 60 Fed. Reg. at 49,297 (*emphasis added*).<sup>7</sup> In the NRC Staff Response, the Staff contends that it relied on "other grounds" to uphold the licensee certification test. NRC Response at 13-14. However, the record relied on by the Staff merely contains unsubstantiated statements from IUC's amendment request as "justification" for the

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<sup>7</sup> The "reasonable documentation" requirement was not in the Staff's proposed guidance but was added by the Commission in the final guidance document. Cf Proposed Guidance at 57 Fed. Reg. 20,531 and 10,533 with Final Guidance at 60 Fed. Reg. at 49,297.

request.<sup>8</sup> IUC's position is that the guidance does not prescribe any specific showing that must be made or standards that must be applied, thus giving the Staff wide discretion as to what constitutes reasonable documentation to justify certification. IUC's Reply to the State of Utah's Brief in Opposition to IUSA's Source Material License Amendment 6, at 51. While the Staff may exercise discretion, such discretion is not unbridled, and to comply with the Guidance, the Presiding Officer erred in not finding that the record must contain reasonable documentation. The same lack of documentation is also relevant to the Staff's analysis of whether the Ashland 2 material contained listed hazardous waste.

**B. This Case Presents Important Issues of Law, Policy and Discretion.**

The LBP-99-5 decision is the first written opinion addressing the application of the Commission's September 1995 Alternate Feed Material Guidance.<sup>9</sup> While a number of license amendment requests to receive, process and dispose of alternate feed material in uranium mills have been granted since 1995,<sup>10</sup> the Commission's final Guidance has not

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<sup>8</sup> For example, the Staff cites the "financial costs of stockpiling ore on the mill site will be reduced since ores will be processed through the mill at a higher rate" as one benefit IUC will derive from processing the Ashland 2 material. TER at 5; IUC's License Amendment Request at 6 (Hearing File at 1). The record is devoid of any documentation to substantiate this or any other "benefit."

<sup>9</sup> In the Matter of Umetco Minerals Corporation (Source Materials License No. SUA-1358), LBP-93-7, 37 NRC 267 (1993) – a case also involving processing of alternate feed material at the White Mesa mill – was decided at the time the Staff developed the Proposed Guidance but before the date of the Commission's final Guidance.

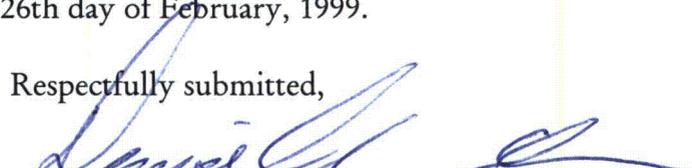
<sup>10</sup> *E.g.*, the State of Utah has not objected to several IUC alternate feed license amendment requests where the waste material contained a sufficient amount of uranium and, thus, reprocessing was a legitimate undertaking. Genuine reprocessing, however, is questionable where the uranium content ranges from nondetectable to one percent, such as in the Ashland 2 material.

been tested in a hearing before the Atomic Safety and Licensing Board.

The case is ripe for review because it juxtaposes the cleanup contractor's payment of over four million dollars to the mill operator for receipt of the waste at the mill site, against the pittance of uranium that could be extracted from the waste material. Under such circumstances, LBP-99-5 offers no protections against sham disposal. Furthermore, the case presents competing policy questions involving the prerogative of states to decide and control siting and regulation of the land disposal of radioactive, hazardous and mixed waste against the legitimate extraction of uranium from alternate feed material. In addition, LBP-99-5 affords the Staff almost unbridled discretion in approving alternate feed license amendment requests. Thus, the Commission has before it a vehicle to either give direction on how to analyze whether sham disposal is occurring or place its stamp of approval on the practices described in the Ashland 2 case. Accordingly, the State urges the Commission to take appeal of LBP-99-5.

DATED this 26th day of February, 1999.

Respectfully submitted,



Fred G Nelson, Assistant Attorney General  
Denise Chancellor, Assistant Attorney General  
Attorney for State of Utah  
Utah Attorney General's Office  
160 East 300 South, 5th Floor, P.O. Box 140873  
Salt Lake City, UT 84114-0873  
Telephone: (801) 366-0290, Fax: (801) 366-0292

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CERTIFICATE OF SERVICE

I hereby certify that copies of STATE OF UTAH'S PETITION FOR REVIEW OF LBP-99-5, dated February 26, 1999, were served on the persons listed below by U. S. Mail, first-class, postage prepaid, and by e-mail (unless otherwise noted) this 26<sup>th</sup> day of February 1999.

OFFICE OF SECRETARY  
RULEMAKING AND  
ADJUDICATIONS STAFF

Shirley A. Jackson, Chairman  
U.S. Nuclear Regulatory Commission  
Mail Stop O-16 G15  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738  
e-mail: [chairman@nrc.gov](mailto:chairman@nrc.gov)

Nils J. Diaz, Commissioner  
U.S. Nuclear Regulatory Commission  
Mail Stop O-16 G15  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738  
e-mail: [cmrdiaz@nrc.gov](mailto:cmrdiaz@nrc.gov)

Greta J. Dicus, Commissioner  
U.S. Nuclear Regulatory Commission  
Mail Stop O-16 G15  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738  
e-mail: [cmrdicus@nrc.gov](mailto:cmrdicus@nrc.gov)

Jeffrey S. Merrifield, Commissioner  
U. S. Nuclear Regulatory Commission  
Mail Stop O16 C1  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738  
e-mail: [tgf@nrc.gov](mailto:tgf@nrc.gov)

Edward McGaffigan, Jr.  
Commissioner  
U.S. Nuclear Regulatory Commission  
Mail Stop O-16 G15  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738  
e-mail: [csg@nrc.gov](mailto:csg@nrc.gov)

Office of Commission Appellate  
Adjudication  
U.S. Nuclear Regulatory Commission  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738  
e-mail: [hrb@nrc.gov](mailto:hrb@nrc.gov)

Adjudicatory File  
Atomic Safety & Licensing Board  
Panel  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Administrative Judge  
Peter B. Bloch  
Atomic Safety & Licensing Board  
Mail Stop T-3 F23  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555  
e-mail: pbb@nrc.gov

Administrative Judge  
Richard F. Cole  
Atomic Safety & Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Attn: Rulemakings & Adjudication Staff  
Office of the Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001  
e-mail: hearingdocket@nrc.gov  
*(Original and two copies)*

Mitzi A. Young, Esq.  
Office of the General Counsel  
Mail Stop -- 0-15 B18  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001  
E-Mail: may@nrc.gov

Anthony J. Thompson, Esq.  
David Lashway, Esq.  
U.S. Nuclear Regulatory Commission  
Shaw, Pittman, Potts & Trowbridge  
Mail Stop: O15 B18  
2300 N Street NW  
Washington, DC 20555-0001  
e-mail: anthony\_thompson@shawpittman.com  
e-mail: Diane\_Eckert@shawpittman.com



Denise Chancellor