



INTERNATIONAL  
URANIUM USA  
CORPORATION

Independence Plaza, Suite 950 • 1050 Seventeenth Street • Denver, CO 80265 • 303 625 7798 main • 303 389 4125 fax

August 27, 1999

**VIA FACSIMILE: (301) 415-3504**  
**Original Via U.S. Mail**

Greta Joy Dicus, Chairman  
Nuclear Regulatory Commission  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738

**Re: Regulation of "Pre-1978" 11e.(2) Byproduct Material**

Dear Chairman Dicus:

I am writing with considerable urgency concerning a matter that reaches to the very core of NRC's regulatory program for uranium. Recently, a great deal of confusion has arisen regarding the regulatory status of a class of material that has been referred to as "pre-1978 byproduct material." Materials in this class satisfy the definition of byproduct material contained in Section 11e.(2) of the Atomic Energy Act (AEA), but they originate from facilities that were not licensed by the Commission either on, or after, the effective date of the Uranium Mill Tailings Radiation Control Act (UMTRCA). Because of the confusion that exists regarding the regulatory status of pre-1978 byproduct material, there is a real and imminent danger that wastes consisting of 11e.(2) byproduct material will be disposed of in facilities that are not designed to accommodate such materials and in a manner that would circumvent the long term protections contemplated for such wastes by UMTRCA. Hence the urgency of this letter.

The current confusion over the status of pre-1978 byproduct material has resulted largely from recent statements issued by NRC that directly conflict with positions previously advanced by the Commission concerning this class of material. Many of these statements have been made with respect to materials found at sites administered under the Department of Energy's (DOE's) Formerly Utilized Sites Remedial Action Program (FUSRAP), since these FUSRAP materials often consist of pre-1978 byproduct material.

In 1992, NRC publicly took the position that pre-1978 byproduct material constitutes 11e.(2) byproduct material for purposes of the AEA. In a Federal Register notice published that year, the Commission indicated that FUSRAP materials satisfying the definition of 11e.(2) byproduct material would be regulated by NRC as 11e.(2) byproduct material. See 57 Fed. Reg. at 20,527 (May 13, 1992). A similar approach was adopted by the Commission Staff in litigation involving FUSRAP material that was intended for use as an alternate feed by International Uranium (USA) Corporation (IUSA). See Affidavit of Joseph J. Holonich,

Greta Joy Dicus, Chairman  
August 27, 1999  
Page 2

Deputy Director, Division of Waste Management, Nuclear Materials Safety and Safeguards, *In the Matter of International Uranium (USA) Corp.*, Docket No. 40-8681 MLA-4 at 7-9 (Jan. 29, 1999) (where Mr. Holonich indicates that FUSRAP materials designated as 11e.(2) byproduct material by DOE can be disposed of directly in a licensed 11e.(2) disposal facility without having to satisfy the criteria set out in the Commission's non-11e.(2) disposal policy and that such materials, because they qualify as 11e.(2) byproduct material, cannot be disposed of as low level radioactive waste).

Inconsistent statements on this issue first emanated from NRC about a year and a half ago, when Robert L. Fonner, then Special Counsel for Fuel Cycle and Safeguards Regulations at NRC, wrote a letter in which he articulated an approach to pre-1978 byproduct material that was directly opposite of NRC's previously announced position.<sup>1</sup> In that letter (the "Fonner Letter"), Mr. Fonner asserted that NRC cannot exercise jurisdiction over pre-1978 byproduct material because, according to Mr. Fonner, AEA Section 83a only allows the Commission to regulate as 11e.(2) byproduct material the tailings or wastes generated at a facility that was licensed by the Commission as of, or after, the effective date of UMTRCA. The Fonner Letter went on to conclude that since pre-1978 byproduct material cannot be regulated by NRC as 11e.(2) byproduct material, NRC regulations would not preclude the disposal of such material in a facility that is not licensed under the AEA (for example, a Resource Conservation and Recovery Act (RCRA) hazardous waste disposal facility).

Most recently, in April of this year, in correspondence responding to an inquiry from Envirocare of Utah, Inc. (Envirocare), former Chairman Shirley Ann Jackson reiterated the position articulated in the Fonner Letter.<sup>2</sup> In her letter, Chairman Jackson repeated the assertion in the Fonner Letter that, based on AEA Section 83a, NRC can exercise jurisdiction over material satisfying the definition of 11e.(2) byproduct material only if the material was generated at a site that was licensed by NRC on or after November 8, 1978 (the effective date of AEA Section 83a). Jackson Letter at 2. We have recently learned that the Jackson Letter was cited in support of a request that Envirocare has made to the State of Utah to allow 11e.(2) byproduct material from a FUSRAP site to be disposed of in Envirocare's low level radioactive waste (LLRW) disposal facility.<sup>3</sup> Envirocare's request to the State was followed by an inquiry from Utah to the Director of NRC's Office of State Programs, seeking clarification of NRC's position regarding the acceptability of disposing of pre-1978

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<sup>1</sup> Letter from Robert L. Fonner, Special Counsel for Fuel Cycle and Safeguards Regulations (NRC) to Ann Wright, Counsel, HTRW Center of Expertise, USACE (March 2, 1998).

<sup>2</sup> Letter from Shirley Ann Jackson, Chairman, Nuclear Regulatory Commission, to Charles A. Judd, President, Envirocare (April 26, 1999) (the "Jackson Letter").

<sup>3</sup> Letter from Mark Ledoux, Corporate Radiation Safety Officer, Envirocare to William J. Sinclair, Director, Utah Division of Radiation Control (August 5, 1999) (included here as Attachment 1).

Greta Joy Dicus, Chairman  
August 27, 1999  
Page 3

byproduct material in a licensed 11e.(2) disposal facility as compared to a licensed LLRW disposal facility.<sup>4</sup>

In an attempt to dispel some of the confusion surrounding this issue, the National Mining Association (NMA) recently presented the Commission with an Addendum to NMA's 1997 "White Paper" on the regulation of the uranium recovery industry. In that Addendum, NMA argues forcefully that the rationale articulated in the Fonner Letter (and repeated in the Jackson Letter) is incorrect, and that pre-1978 byproduct material *is* subject to regulation by NRC. Two points from the NMA Addendum warrant discussion here.

First, notwithstanding the Fonner Letter's assertion to the contrary, AEA Section 83a in no way limits NRC's authority to license pre-1978 byproduct material. Section 83a simply provides that a license for 11e.(2) byproduct material that is in effect on or after the effective date of Section 83 must contain certain provisions pertaining to the transfer of ownership and custody over byproduct material produced pursuant to such license and over the land used for disposal of such byproduct material. In other words, Section 83 requires that certain terms and conditions regarding transfer of title and custody must be included in or added to new licenses or licenses existing as of the effective date of that section. Section 83 does *not* provide that the Commission can only license materials that have been produced pursuant to an already-existing license. Indeed, the statute requires quite the opposite. Under Section 81 of the AEA, *any* person who wishes to possess, transfer or receive 11e.(2) byproduct material *must* obtain a license or other authorization from NRC, regardless of when the byproduct material was first generated and regardless of whether it was generated pursuant to an NRC license. Section 81 provides, simply, that:

No person may transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, own, possess, import, or export any [11e.(2)] byproduct material, except to the extent authorized by [a license or other authorization issued by the Commission].

42 U.S.C. 2111. Moreover byproduct material is defined in AEA Section 11e.(2) broadly, to encompass *all* tailings or wastes produced from the extraction of uranium that is processed primarily for its source material content. There is no limitation in the definition of 11e.(2)

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<sup>4</sup> Letter from William J. Sinclair, Executive Secretary, Utah Department of Environmental Quality, Division of Radiation Control to Paul Lohaus, Director [sic], Nuclear Regulatory Commission (August 9, 1999) (the "Utah Letter") (included here as Attachment 2). In its letter to NRC, Utah also expressed concern regarding the current uncertainty over the regulatory status of pre-1978 byproduct material: "[t]he pre-1978 determination has produced confusion regarding radioactive waste management that attack [sic] the very core of proper protection of the environment and human health." *Id.*

byproduct material that requires the definition to be applied only to material that was produced pursuant to a license. Thus, Section 81 provides that any person seeking to possess, transfer or receive 11e.(2) byproduct material must first obtain an NRC license, and under Section 11e.(2), whether a material was produced pursuant to an NRC license is *irrelevant* to the material's status as 11e.(2) byproduct material. Therefore, Section 81 requires NRC to issue a license for the possession, transfer or receipt of 11e.(2) byproduct material, regardless of whether the material was produced pursuant to a license; and nothing in Section 83 detracts from NRC's authority to do so.

The second point from the NMA Addendum that warrants discussion is the following: if the Commission departs from its previous position on pre-1978 byproduct material and follows the approach laid out in the Fonner and Jackson letters, a serious threat to the continued protection of public health and the environment will result. There are two aspects to this threat. First, wastes that constitute 11e.(2) byproduct material will be disposed of in a manner that does not provide the protections that Congress intended for such material when it enacted UMTRCA. Specifically, under the approach articulated in the Fonner Letter, pre-1978 byproduct material would not have to be disposed of in licensed 11e.(2) disposal facilities, but instead could be disposed of in solid or hazardous waste landfills. Consequently, even though pre-1978 byproduct material satisfies the definition and is in all respects identical to 11e.(2) byproduct material, unlike other 11e.(2) byproduct material wastes which would have to be disposed of in licensed 11e.(2) facilities, pre-1978 11e.(2) byproduct material could be disposed of in facilities that are not licensed under the AEA and that do *not* satisfy the long term stability and other technical criteria set out in NRC's and EPA's regulations under UMTRCA.<sup>5</sup> Furthermore, unlike wastes disposed of in licensed 11e.(2) facilities, these pre-1978 byproduct material wastes would *not* be subject to long-term government custody and monitoring, or perpetual licensing following closure of the sites used for their disposal.<sup>6</sup>

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<sup>5</sup> This is precisely the concern that was raised by Senators Hatch and Bennett and Representatives Cannon, Cook and Hansen in their recent letter to the U.S. Army, where the Congressmen state that: "If the [Army Corps of Engineers] follows the ill-advised position of NRC's staff and fails to exercise regulatory control, these radioactive [pre-1978 byproduct] materials could be disposed at landfills which are not designed or operated to handle the unique characteristics of radioactive byproduct material." Letter from Senator Orrin Hatch, Senator Robert Bennett, Representative Chris Cannon, Representative Merrill Cook and Representative James Hansen to Mr. Joseph W. Westphal, Assistant Secretary of the Army - Civil Works (June 23, 1999) (included here as Attachment 3).

<sup>6</sup> Moreover, an unlicensed site that disposes of 11e.(2) byproduct material could conceivably be required, after disposing of such material, to comply with the technical criteria and other requirements set out under UMTRCA (to the surprise of the site operator). Even if this were the case, however, DOE presumably would still be reluctant or unwilling to accept title and custody of the site following closure because 11e.(2)

Greta Joy Dicus, Chairman  
August 27, 1999  
Page 5

As the NMA Addendum points out, this danger is not just speculative. Publicly available information indicates that at least one hazardous waste disposal facility that is not licensed to accept 11e.(2) byproduct material – the Buttonwillow facility in California – may have already accepted pre-1978 byproduct material wastes for disposal. In addition, a second hazardous waste facility – the Envirosafe facility in Idaho – has been selected by the U.S. Army Corps of Engineers (USACE) to receive pre-1978 byproduct material from various FUSRAP sites across the country, despite the fact that the facility is not licensed to dispose of 11e.(2) byproduct material. Similarly, Envirocare's request for permission to utilize its LLRW facility to dispose of pre-1978 byproduct material (*see page 2, supra*) reflects another attempt to bypass the protections provided by 11e.(2) disposal facilities, which Congress intended to be applied to the disposal of all 11e.(2) byproduct material.

The other way in which the position outlined in the Fonner and Jackson letters threatens the protection of human health and the environment is by jeopardizing the transfer to DOE of 11e.(2) disposal facilities that, consistent with the position first articulated by the Commission, previously accepted pre-1978 byproduct material for disposal. This is because at these facilities pre-1978 byproduct material that now may not be considered 11e.(2) byproduct material will have been commingled with 11e.(2) byproduct material already present at the facility. Through its policies governing 11e.(2) disposal facilities, the Commission has consistently sought to prevent this sort of commingling, in order to ensure that 11e.(2) disposal facilities would not be subject to dual regulation and that DOE would be free to accept custody and title to such sites following site closure, consistent with AEA Section 83.<sup>7</sup> If NRC were to follow the position articulated in the Fonner and Jackson letters, it effectively would be sanctioning precisely the sort of commingling that the Commission has struggled so hard to avoid over the years.

For all of these reasons, we believe it is imperative that the Commission review its position on the regulatory status of pre-1978 byproduct material in light of the arguments presented in the NMA White Paper Addendum. In particular, we urge the Commission to clarify that pre-1978 byproduct material is 11e.(2) byproduct material and therefore is subject to licensing and regulation by NRC, except to the extent that such material is present at a site administered by DOE, in which case it is 11e.(2) byproduct material that is subject to

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and non-11e.(2) material (some of which may be RCRA hazardous waste) would have been commingled at the site.

<sup>7</sup> See, e.g., *Uranium Mill Facilities, Notice of Two Guidance Documents: Final Revised Guidance on the 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. 49,296 (1995).

Greta Joy Dicus, Chairman  
August 27, 1999  
Page 6

regulation by DOE. In addition, we urge the Commission to act quickly to prevent any further disposal of such 11e.(2) byproduct material in facilities that are not licensed, or designed, to accept such materials, by taking the following steps:

- (i) informing USACE (the agency responsible for implementing the remediation of FUSRAP sites across the country) that FUSRAP materials consisting of pre-1978 byproduct material wastes that are to be disposed of off-site *must* be disposed of in facilities that are licensed to accept 11e.(2) byproduct material for disposal;
- (ii) notifying the State of Idaho that the Envirosafe facility cannot accept or dispose of wastes consisting of pre-1978 byproduct material without first obtaining a license to dispose of 11e.(2) byproduct material;
- (iii) notifying the State of California that the Buttonwillow facility cannot accept or dispose of wastes consisting of pre-1978 byproduct material without first obtaining a license to dispose of 11e.(2) byproduct material; and
- (iv) informing the State of Utah, in response to the State's recent inquiry (*see* footnote 4, page 3, *supra*), that pre-1978 byproduct material (including FUSRAP materials consisting of pre-1978 byproduct material) can only be directly disposed of at a facility that is licensed to dispose of 11e.(2) byproduct material in accordance with the requirements of UMTRCA, and that such material cannot otherwise be disposed of in an LLRW disposal facility.

Moreover, if the Commission concludes that additional time is required to evaluate this issue, we urge the Commission to notify the entities identified above that this issue is being reviewed by the Commission and that, as an interim measure to ensure adequate protection of public health and the environment pending completion of NRC's review, pre-1978 byproduct material should not be allowed to be disposed of at any facility that is not licensed to dispose of 11e.(2) byproduct material.

Thank you for your consideration.

Sincerely,



Earl E. Hoellen  
President and Chief Executive Officer

Greta Joy Dicus, Chairman  
August 27, 1999  
Page 7

cc: Commissioner Nils J. Diaz  
Commissioner Edward McGaffigan, Jr.  
Commissioner Jeffrey S. Merrifield  
William D. Travers, Executive Director for Operations, NRC  
Dianne R. Nielson, Executive Director, UDEQ  
William J. Sinclair, Director, UDEQ Division of Radiation Control  
Edgar D. Bailey, Chief, California DHS, Radiological Health Branch  
David Eisentrager, Idaho Division of Health and Welfare  
Kip Huston, USACE  
Paul Lohaus, Director, NRC Office of State Programs  
John T. Greeves, Director, NRC Division of Waste Management  
John J. Surmeier, Director, NRC Division of Waste Management  
Maria Schwartz, NRC, Office of General Counsel  
Fred G. Nelson, Utah Attorney General's Office  
Senator Orrin G. Hatch  
Senator Robert F. Bennett  
Representative Christopher B. Cannon  
Representative Merrill A. Cook  
Representative James V. Hansen