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

MAR 10 1994

Ms. Elaine M. Carlin
Executive Director
Northwest Interstate Compact
P.O. Box 47600
Olympia, WA 98504-7600

Dear Ms. Carlin:

This is in response to your letter of March 2, 1994, requesting comments on a number of questions related to the disposal of high volume, low activity cleanup wastes at the Envirocare facility in Utah. The U.S. Nuclear Regulatory Commission's interest, like yours, is to achieve full implementation of the Low-Level Radioactive Waste Policy Amendments Act of 1985 (Act), in accordance with the applicable health and safety regulations. A first principle in waste management is that timely disposal is the preferred option and your Compact's decisions in the past have been helpful in achieving this goal. At the same time, we recognize that compacts have the authority to exclude out-of-compact wastes and, therefore, decide which wastes can be imported for disposal in regional sites. We support your efforts to better define your policies for importing wastes.

We have specific responses to two of your questions:

- In response to your first question regarding definitions for the terms "bulk" and "slightly contaminated," the existing terms are, as you note, qualitative and cannot be measured. A numerical specification would eliminate any ambiguity in interpretation. We believe it would be useful to consider quantifying these terms by referring to a fraction or multiple of values already in use, such as the concentration limits for isotopes in the existing health and safety regulations in 10 CFR Part 61.

- In response to your second question, we believe it would be helpful if the waste were defined based on measurable properties related to health and safety, rather than its source.

Finally, your questions apply only to the Envirocare facility in Utah. We believe that it would also be useful if the Northwest Compact considered providing additional disposal capacity at other facilities in the region, consistent with your authority for regulating imports. We have enclosed as an example NRC's draft position on disposal of non-11(e).2 byproduct material (primarily source material waste) in uranium mill tailings impoundments for your consideration.

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We appreciate the opportunity to comment.

Sincerely,
ORIGINAL SIGNED BY
John J. Greeves

Malcolm R. Knapp, Director Designee
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosure: As stated

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contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

Since the Commission has made a final determination that the amendment involves no significant hazards consideration, if a hearing is requested, it will not stay the effectiveness of the amendment. Any hearing held would take place while the amendment is in effect.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Services Branch, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555, by the above date. Where petitions are filed during the last ten (10) days of the notice period, it is requested that the petitioner promptly so inform the Commission by a toll-free telephone call to Western Union at 1-(800) 32[illegible]-6000 (in Missouri 1-(800) 3428700). The Western Union operator should be given Datagram Identification Number 3737 and the following message addressed to (Project Director): petitioner's name and telephone number, date petition was mailed, plant name, and publication date and page number of this Federal Register notice. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and to the attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

Duquesne Light Company, et. al., Docket No. 50-412, Beaver Valley Power Station, Unit 2, Shippingport, Pennsylvania

Date of amendment request: January 1[illegible], 1992

Description of amendment request: The amendment revises Table 3.2-1 of Technical Specification 3.2.5, "DNB Parameters." Specifically, it lowers the value for the minimum required reactor coolant system (RCS) total flow rate from 274,300 gpm to 270,850 gpm and lowers the flow measurement uncertainty value, specified in the footnote, from 3.5% to 2.6%.

Date of issuance: April 23, 1992

Effective date: April 23, 1992

Amendment No.: 46

Facility Operating License No. NPF-73. Amendment revised the Technical Specifications. Public comments requested as to proposed no significant hazards consideration: No. The Commission's related evaluation of the amendment, finding of emergency circumstances, and final determination of no significant hazards consideration are contained in a Safety Evaluation dated April 23, 1992.

Local Public Document Room location: B. F. Jones Memorial Library, 663 Franklin Avenue, Aliquippa, Pennsylvania 15001.

Attorney for licensee: Gerald Charnoff, Esquire, Jay E. Silberg, Esquire, Shaw, Pittman, Potts & Trowbridge, 2300 N Street, NW., Washington, DC 20037.

NRC Project Director: John F. Stolz

Dated at Rockville, Maryland, this 5th day of May 1992.

For the Nuclear Regulatory Commission

Steven A. Varga,

Director, Division of Reactor Projects - I/II, Office of Nuclear Reactor Regulation

[Doc. 92-11039 Filed 5-12-92; 8:45 am]

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Uranium Mill Facilities, Request for Public Comments on 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

AGENCY: Nuclear Regulatory Commission.

ACTION: Request for public comment.

SUMMARY: The Nuclear Regulatory Commission (NRC) is soliciting public comment on two guidance documents: "Revised Guidance on Disposal of Non-Atomic Energy Act of 1954, section 11e.(2) Byproduct Material in Tailings Impoundments" and "Position ad Guidance on the Use of Uranium Mill Feed Materials Other Than Natural Ores;" along with the associated staff analyses.

DATES: The comment period expires June 12, 1992.

ADDRESSES: Send written comments to Chief, Rules and Directives Review Branch, U.S. Nuclear Regulatory Commission, Washington, DC 20555, or hand deliver to 7920 Norfolk Avenue, Bethesda, MD, between 7:45 a.m. and 4:15 p.m. on Federal workdays.

FOR FURTHER INFORMATION CONTACT: Myron Fliegel, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 504-2555.

SUPPLEMENTARY INFORMATION:

Discussion

NRC staff has prepared a revision to its licensing guidance, issued July 27, 1988, on the disposal of material other than that defined in section 11e.(2) of the Atomic Energy Act of 1954 (AEA), as amended, in uranium mill tailings impoundments (Part A of the Supplementary Information). The staff has also prepared new licensing guidance on the processing of feed materials other than natural ores in uranium mills (Part B of the Supplementary Information). In developing the guidance, staff analyzed the policy and legal issues involved for each guidance document. In order to solicit input all interested parties on the issues associated with these guidance documents, the NRC is soliciting comments from the public, the Environmental Protection Agency, NRC Agreement States, and regional low-level waste compacts. Comments received will be considered in deciding whether the guidance documents should be revised.

In the guidance documents and associated staff analyses, the term "non-11e.(2) byproduct material" is used to refer to radioactive waste that is similar in physical and radiological characteristics (for example, low specific activity) to byproduct material, as defined in Section 11e.(2) of the AEA but does not meet the definition in that section because it is not derived from ore processed primarily for its source material content.

The staff analyses in Parts A and B contain additional definitions and extensive background information necessary to understand the summary guidance documents. The reader should consult the analyses for the terms and issues presented in context.

Part A—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 source material 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. Licensing of the receipt and disposal of such non-AEA, section 11e.(2) byproduct material (hereafter designated as "non-11e.(2) byproduct material") should be done under 10 CFR Part 40.

2. Naturally occurring and accelerator produced material waste shall not be authorized for disposal in an 11e.(2) byproduct material impoundment.

3. Special nuclear material and Section 11e.(1) product 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 regulations or other U.S. Environmental Protection Agency standards for hazardous or toxic wastes prior to disposal.

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) license 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 should be informed of the Nuclear Regulatory Commission findings and proposed action, with an opportunity to provide comments within 30 days, 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. The license amendment and the § 61.6 exemption should be supported with a staff analysis paper addressing the issues discussed in this guidance.

NRC Staff Analysis of Disposal of Non-Atomic Energy Act of 1954, Section 11e.(2) Byproduct Material in Tailings Impoundments

1. Introduction

Recently, the Nuclear Regulatory Commission (NRC) received several requests to allow activities other than the normal processing of native uranium ore at licensed uranium milling facilities. We have, in the past, received, and, in some cases, approved, similar requests. These requests have fallen into two categories. The first category of requests is to allow the processing of feedstock material that is not usually thought of as ore, for the extraction of uranium, and then dispose of the resulting wastes and tailings in the facility's tailings pile. The second category of requests is to allow the direct disposal of non-Atomic Energy Act (AEA) of 1954, section 11e.(2) byproduct material [1] (hereafter designated as "non-11e.(2) byproduct material"), that was not generated onsite, into tailings piles.

In assessing these requests, the staff has raised two policy concerns related to tailings piles. The first concern is that the requested activity might result in complicated, dual, or even multiple regulation of the tailings pile, and the second concern is that the requested activity might jeopardize the ultimate transfer to the United States Government, for perpetual custody and maintenance, of the reclaimed tailings pile.

This analysis addresses the second category of requests, that is, requests to dispose of non-11e.(2) byproduct material in tailings piles. Issues relating to such proposals requesting regulatory consideration of commingling of tailings with other radioactive wastes are discussed. This analysis is limited to options involving commingling with existing tailings impoundments.

2. Background

The Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978 amended the AEA to specifically include uranium and thorium mill tailings and other wastes from the process as radioactive material to be licensed by NRC. Specifically, the definition of byproduct material was revised in Section 11e.(2) of the AEA, to include ". . . the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content."

The definition of byproduct material [2] in Section 11e.(2) of the AEA includes all the wastes resulting from the milling process, not just the radioactive components. In addition, Title II of UMTRCA amended the AEA to explicitly exclude the requirement for the Environmental Protection Agency (EPA) to permit 11e.(2) byproduct material under the Resource Conservation and Recovery Act (RCRA). The designation of 11e.(2) byproduct material contrasts significantly with the situation for source material [3] and other radioactive materials controlled under the authority of the AEA. This possibility for dual regulation by both NRC and EPA can become an issue when dealing with mixed hazardous wastes. As a result of UMTRCA, NRC amended 10 CFR Part 40 to regulate the uranium and thorium tailings and wastes from the milling process. Thus, under normal operation, all the tailings and wastes in an NRC or Agreement State licensed mill producing uranium or thorium are classified as "11e.(2) byproduct material," and are disposed of in tailings piles regulated under Part 40. They are not subject to EPA regulation, under RCRA. However, the EPA Clean Air Act regulations still result in direct EPA permit authority over the mill tailings, whether or not they are commingled with non-11e.(2) byproduct material waste.

The UMTRCA also required and provided for long-term custody and surveillance of the byproduct material and the land use for its disposal. The Department of Energy (DOE) is the Federal agency currently designated as

[1] For the purposes of this analysis, the term "non-11e.(2) byproduct material" will be used to refer to radioactive waste that is similar to byproduct material, as defined in the AEA in section 11e.(2), but is not legally considered to be 11e.(2) byproduct material.

[2] Henceforth, byproduct material as defined in Section 11e.(2) of the AEA will be referred to as "11e.(2) byproduct material."

[3] Except in the case of source material ore, this material consists only of the radioactive components of the waste, that is, uranium, thorium, or any combination of the two (10 CFR 40.4).

the "custodial agency" by the AEA. However, the UMTRCA specifically referred only to 11e.(2) byproduct material. UMTRCA contains no provision allowing for the transfer of custody or title, and hence for eventual long-term custody and surveillance of other material, even if the material were no more radioactive or toxic than the uranium or thorium tailings themselves.

3. The Category of Requests for Commingled Disposal To Be Addressed

Some licensees have proposed to directly dispose of radioactive wastes in existing uranium mill tailings sites. The materials vary from tailings from extraction processes for metals and rare-earth metals (such as copper, tantalum, columbium, zirconium) to spent resins from water-treatment processes. However, because these materials did not result from the extraction or concentration of uranium or thorium from ore, they are not 11e.(2) byproduct material. Many of these "orphaned" wastes have elevated concentrations of source material, and unless otherwise exempted, require licensed control, if the materials exceed the 0.05-percent licensable (content of source material by weight) criterion in 10 CFR Part 40. Some of the wastes proposed for commingling contain radioactive material, not regulated by NRC, that classify as naturally-occurring and accelerator-produced radioactive material (NARM) and as such cannot be easily disposed of. In most of the proposals the staff has seen, disposal of these materials in tailings impoundments would not significantly increase the effect on the public health, safety, and environment. Because of the relatively large volumes of these wastes, low-level waste disposal options are limited. These wastes are similar to tailings in volume, radioactivity, and toxicity. Therefore, some waste producers see the mill tailings disposal sites as providing an economical option for such disposal.

4. Types of Wastes Being Proposed for Disposal Into Tailings Piles

The NRC and the Agreement States continue to receive requests for the direct disposal of non-11e.(2) byproduct material into uranium mill tailings piles. The following general categories of non-11e.(2) byproduct material illustrate the requests submitted to NRC and the Agreement States for disposal into uranium mill tailings piles licensed under authority established by title II of UMTRCA:

4.1 Mine Wastes

To mine uranium or other source material ore from underground or open-pit mines, operators frequently need to dewater the mine cavities. This results in quantities of mine water with suspended or dissolved constituents, some of which are source material. After processing the mine water to satisfy National Pollution Discharge Elimination System or other release requirements, the resultant clean mine water is then discharged offsite. In some cases, the resulting water-treatment filter-cake or sludge residues exceed the 0.05-percent licensable limit for source material. These residues do not satisfy the definition of 11e.(2) byproduct material, because they do not result from the extraction or concentration of uranium or thorium from ore.

NRC and the Agreement States have been contacted by licensees and waste generators that desire to dispose of such filter-cake or sludge residue directly into the tailings piles at licensed uranium mill tailings sites. NRC has indicated that such material does not constitute 11e.(2) byproduct material.

4.2 Secondary Process Wastes

Frequently, natural ores that are processed for rare-earth or other metals have significant concentrations of radioactive elements. Examples include copper, zirconium, and vanadium ores. Sometimes the uranium is captured in a side-stream recovery operation, in which uranium is precipitated out of the pregnant solution, before or after the rare earth or other metal. Although this side-stream recovery operation is licensed by NRC, the tailings (which consist of the crushed depleted ore and the depleted solution after recovery of metals and rare earths) are not 11e.(2) byproduct material. This is because the ore was not processed primarily for its source material content, but for the rare earth or other metal. If the tails contain greater than 0.05 percent uranium and thorium, they would be source material and would thus be licensable and have to be disposed of in compliance with NRC regulations. NRC has received requests from NRC and Agreement State licensees to dispose of such tailings (resulting from processes to extract other metals) into licensed uranium mill tailings piles.

4.3 Formerly Utilized Sites Remedial Action Program (FUSRAP)

These sites primarily processed material, such as monazite sands, to extract thorium for commercial applications. Government contracts were issued for thorium source material used in the Manhattan Engineering District and early Atomic Energy Commission programs. Wastes resulting from that processing and disposed of at these sites would qualify as 11e.(2) byproduct material. However, it is not clear that all the contaminated material at these sites result from processing of ore for thorium. At some sites there was also processing for rare earths and other metals. The DOE, which accepts responsibility for the FUSRAP materials, is investigating options for disposal and control of these materials. DOE estimates that a total of 1.7 million cubic yards of material is located at sites in 13 States. Recent proposals have considered the transportation of FUSRAP materials from New Jersey to tailing piles at uranium mills in other States, such as Utah, Washington, and Wyoming.

4.4 NARM

These wastes result from a wide range of operations, but are not generally regulated by the AEA. Past requests for disposal in uranium mill tailing ponds have included contaminated resins from ion-exchange well-water purifying operations. NRC has also received inquiries regarding the disposal of construction scrap and radium-contaminated soil from old commercial operations. The individual States usually administer the regulatory responsibility over NARM, but many other Federal agencies have jurisdictional responsibilities related to NARM. These include EPA, the Consumer Product Safety Commission, the Department of Health and Human Services, and the Department of Labor. There is a State-licensed NARM disposal facility in Clive, Utah, licensed to Envirocare of Utah, Inc.

Two common elements run through most of the requests we have received for direct disposal of non-11e.(2) byproduct material in tailings piles: the material is of low specific-activity and the material is physically similar to 11e.(2) byproduct material. Most of the requests are for bulk material like soil, crushed rock, or sludges, contaminated with source material in relatively low concentrations.

5. Previous Staff Guidance

In response to a request from Region IV, the Director of the Office of Nuclear Material Safety and Safeguards (NMSS) provided guidance for addressing requests to allow the disposal of non-11e.(2) byproduct material in licensed mill tailings impoundments. The staff considered that the types of material proposed for such disposal could be

separated into two categories: (1) NARM wastes: and (2) wastes generated by operations regulated under the AEA.

In the guidance, the staff concluded that it would not approve a policy of allowing disposal of NARM wastes in tailings impoundments. A major concern was that NRC did not have authority to regulate NARM. If States or EPA became involved in regulation of NARM, a situation with duplicative jurisdiction with respect to the commingled radioactive materials could be created. Furthermore, the Commission's authority, under section 84c of the AEA, to approve alternatives to requirements, if the NARM wastes were to violate standards, would be impaired.

The staff viewed the other category, wastes generated by operations regulated under the AEA, as potentially acceptable in a mill tailings impoundment. Each such proposal should be considered on a case-specific basis. The guidance identified four findings that would have to be made before NRC would authorize such disposal.

As a result of this guidance, present policy is that NRC will approve of proposed disposals of source material on their individual merits, and only if the licensee can demonstrate the following:

a. The disposal will have no significant additional effects on public safety and health, and the environment.

b. The disposal will not compromise the reclamation of the tailings impoundment. In effect, disposal must comply with the reclamation and closure criteria in part 40, appendix A.

c. The disposal will not result in the tailing becoming subject to RCRA or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

d. DOE or the State agrees, in advance, to take title to the site, upon completion of the reclamation.

The first two conditions are self-evident and will not be discussed further. The other two conditions can be sufficient obstacles to any routine decisions to allow such commingling of byproduct and non-11e.(2) byproduct materials under UMTRCA, and are discussed, along with other issues, below.

6. Major Issues

Although the technical, economic and societal advantages in some proposals have appeared to encourage such disposal of low specific-activity radioactive material into tailing piles, significant statutory and regulatory issues may complicate such disposal:

6.1 RCRA Authority and Mixed Waste

The NRC and Agreement State licensed uranium and thorium milling facilities do not fall under the jurisdiction of RCRA. The AEA explicitly excludes 11e.(2) byproduct material from RCRA permitting. However, radioactive wastes that are not 11e.(2) byproduct material and contain hazardous wastes are mixed wastes and are not exempted from RCRA. Commingling RCRA-regulated wastes with tailings could result in the application of the EPA RCRA regulations and separate EPA-permitting authority. The licensee would have to comply with both EPA- and AEA-related regulations.

NRC has revised the regulations in 10 CFR part 40 (including appendix A) to conform to the appropriate portions of EPA's RCRA regulations. The UMTRCA, as amended, stipulates that regulations for byproduct material be consistent with the Solid Waste Disposal Act (SWDA). On November 13, 1987, NRC conformed the regulations of part 40 to the EPA standards containing the RCRA provisions of the SWDA. However, if a licensee disposes of source material compounds or mixtures other than uranium or thorium ores, in the tailings piles, only the source material component of that compound or mixture would be excluded from the provisions of RCRA, if the compound or mixture qualifies as "hazardous." The bulk of such material would come under the purview of EPA RCRA regulations, resulting in dual regulation of the tailings impoundment. To preclude this dual regulatory authority and the complications resulting from it, including potential conflicts in requirements, the staff will not approve co-disposal of non-11e.(2) byproduct material containing hazardous constituents, regulated under RCRA.

6.2 Custody and Title Transfer

UMTRCA, title II, section 202 (Section 83 of the AEA) stipulates that such title to the 11e.(2) byproduct material and to the land used for the disposal of 11e.(2) byproduct material shall be transferred to either the United States Government or to the State in which the land is located. UMTRCA identifies DOE, or any other agency so designated by the President, to be the custodial agency for the U.S. Government. However, at its option, the State may elect to become the custodial licensee of the site after closure.

The NRC staff has two concerns relating to this transfer:

a. The licensees for any site where the materials would be commingled would need strong assurances or permission from either the State or DOE that the commingling would not compromise the eventual transfer of title and custody.

b. The license cannot be legally terminated, unless the custody and title have been transferred as stipulated in Section 83 b(1)(A) of the AEA. Commingling of wastes could complicate this transfer and, hence, the termination of the license.

Because of these concerns, NRC staff wrote to DOE regarding its position on such transfers. DOE's response of June 10, 1988, indicated its uncertainty regarding authority to accept custodial transfer of tailings sites, where radioactive material not constituting 11e.(2) byproduct material has been commingled. In further correspondence, of October 5, 1988, and March 16, 1990, the NRC staff requested more specificity from DOE.

DOE's initial responses addressed the general issue of DOE acceptance of a Title II site containing non-11e.(2) byproduct material. DOE would have no objection to such a transfer provided it would not incur any additional costs related to the non-11e.(2) byproduct material. To ensure that there would be no additional costs due to the non-11e.(2) byproduct material, DOE suggested that NRC make the following findings before transfer:

—That there is no adverse environmental impact resulting from the disposal of these wastes (e.g., that the reclamation of the impoundment will not be impacted or that there are no groundwater restoration issues).

—There are no outstanding environmental compliance issues under any applicable environmental law (e.g., under RCRA or CERCLA).

These conditions will be met if the first three conditions (a-c) discussed in section 5, above, are demonstrated.

By letter dated January 23, 1991, DOE responded to five specific questions NRC staff had raised. The questions focused on the quantities and concentrations of several categories of non-11e.(2) byproduct material that DOE would find acceptable to dispose of in tailings impoundments without jeopardizing title transfer. DOE's response stated that criteria for determining acceptability should consider three issues:

a. Concentrations of hazardous constituents in the non-11e.(2) byproduct materials.

Tables showing concentrations typically found in tailings were presented and the statement made that acceptable concentrations could be

selected from those tables. DOE also recommended that if concentrations in the non-11e.(2) byproduct material exceed those "* * *" adopted from the tables (or other sources) * * *," a risk assessment be performed.

Thus, DOE described a process, with an ultimate resort to risk assessment, that could be used to determine acceptable concentrations of constituents in non-11e.(2) byproduct materials. The first demonstration, discussed in Section 5, above (that the disposal have no significant additional effects on public safety and health and the environment), encompasses this DOE consideration. Thus, this consideration will be met if the 1988 staff guidance is adhered to.

b. Impact of the additional material quantity (volume) of non-11e.(2) byproduct materials that the Title II site would have to accommodate.

DOE stated that this determination would have to be made on a site-specific basis, considering cost, schedule, design capacity of the impoundment, and the impact of errors and uncertainties in these projections and estimates. This consideration will be satisfied by the first two demonstrations discussed in section 5 above.

c. Possibility that Radon-222 releases from the disposal site would exceed the limits specified in 40 CFR 192.32, as a result of including non-11e.(2) byproduct materials in the title II site.

The Radon-222 release limits in 40 CFR 192.32 are incorporated in Criterion 6 of 10 CFR part 40, appendix A. Thus, this consideration will be satisfied by the second demonstration discussed in section 5 above.

Therefore, demonstration of the first three findings discussed in section 5 above (health and safety, compliance with appendix A, and no RCRA problems), should result in the fourth finding (DOE acceptance of title) being met. However, there is one remaining concern related to DOE's acceptance of title to tailings impoundments containing non-11e.(2) byproduct material. None of DOE's response to NRC on this question contains an unequivocal statement that, if NRC determines that the above discussed concerns and criteria are satisfied, DOE will accept title to such a site. For example, in the letter of November 6, 1990, DOE states "At this time, we would interpose no objection if NRC transferred * * *." At a meeting on December 11, 1990, NRC staff discussed this issue with DOE and a possible DOE concurrence on individual NRC decisions to allow non-11e.(2) byproduct material disposals. DOE responded by letter dated December 24, 1990, that its concurrence would not be appropriate or necessary. However, in order to reduce the potential for future problems with transfer to DOE, NRC staff will notify DOE (with an opportunity to provide comments) of each impending decision to allow non-11e.(2) byproduct material disposal in a tailings impoundment.

6.3 Acceptable Wastes

As discussed in section 4 above, most of the requests for commingling non-11e.(2) byproduct material in tailings impoundments pertain to material similar to uranium mill tailings and wastes. These are usually bulk materials like soil, crushed rock, or sludges contaminated with low concentrations of source material or NARM.

For the reasons discussed in section 5 above, the staff will not approve commingling of NARM in tailings impoundments. However, current staff policy is to consider on a case-specific basis, wastes generated by operations regulated under the AEA. This would allow consideration of byproduct, as defined in section 11e.(1) of the AEA, and special nuclear materials (SNM) wastes, in addition to source material waste, for disposal in tailings impoundments. Recently, there have been inquiries to the staff about disposal of SNM-contaminated soils in tailings impoundments. For the reasons discussed below, NRC staff will not normally approve disposal of 11e.(1) byproduct material (hereafter referred to as "byproduct material") or of SNM in tailings impoundments.

Appendix A of 10 CFR part 40 presents criteria for the disposal of 11e.(2) byproduct material. These criteria, to properly dispose of this material, were developed based on the physical, chemical, and radiological characteristics of the material. The basis for most of the requests to commingle non-11e.(2) byproduct material in tailings impoundments is that the proposed material is similar in characteristics to 11e.(2) byproduct material, but does not meet the definition, which is based on process and history, rather than characteristics. Because of this similarity to 11e.(2) byproduct material, the criteria in appendix A are appropriate to use, to ensure safe disposal of this material.

This premise is only valid for the types of materials discussed in section 4, that is, bulk material whose primary radiological contamination is uranium, thorium, and radium in low concentrations. Wastes contaminated with byproduct material are sufficiently different that this premise may not be valid.

Soils contaminated with SNM may be similar to 11e.(2) byproduct material in physical, chemical, and radiological characteristics. There are, however, issues related to the disposal of byproduct material or SNM-contaminated soils in tailings impoundments that preclude routine approval, using the criteria in appendix A of 10 CFR part 40. Possession of byproduct material or SNM would have to be licensed under 10 CFR part 30 or 70, respectively, and not part 40. For SNM, the issues of criticality, material control and accountability, and site security might also have to be addressed.

For these reasons, the staff will not approve the disposal of byproduct material or SNM through the process discussed in this guidance and analysis. If there is a compelling reason, such as an immediate health and safety concern, to consider a specific proposed disposal of byproduct material or SNM in a tailings impoundment, approval of the Commission will be required.

6.4 Regulatory Issues

There are two regulatory issues that require consideration in developing this guidance:

a. Inasmuch as the kind of material under consideration is within the purview of the States under the Low Level Radioactive Waste Policy Amendments Act of 1985 (LLRWPAA), the explicit approval of both the originating and the receiving Compact should be obtained if the waste is going anywhere but a designated Regional facility. Although this is not specifically a health and safety issue, it is an issue that could cause problems for the licensee and perhaps interfere with ultimate reclamation of the tailings. As a result, the policy should include a requirement that the licensee's submittal provide evidence of the Compacts' approval of the proposed disposal.

b. The material being proposed for disposal in tailings impoundments is material subject to the Commission's authority under the Atomic Energy Act. It is mostly, if not all, soil contaminated with uranium, thorium, and associated radium (which is a decay product of uranium and thorium) with radiological characteristics similar to those of tailings (11e.(2) byproduct material). The disposal of such material is regulated by 10 CFR 20.301 (10 CFR 20.2001 in the new part 20). That section states that no licensee shall dispose of licensed material except by (a) transfer to an authorized recipient as provided in 10 CFR part 30, 40, 60, 61, 70, or 72, or (b) disposal authorized pursuant to § 20.302

(20.2002) or part 61. Part 61 provides regulations for the disposal of radioactive waste received from others, while § 20.302 (20.2002) allow for disposal by a licensee of licensed material in a manner not otherwise authorized in the regulations.

Since the material proposed for disposal in tailings impoundments will be received from licensees other than the impoundment owner, 10 CFR part 61 is the appropriate regulation for such disposal. Disposal under § 20.302 has been used by licensees to dispose of their own wastes onsite. It does not preclude disposal of radioactive waste received from others. Section 20.2002 (in the new part 20), however, specifically limits disposals under that Part to licensed material generated in the licensee's activities, so it could not be used for the disposals discussed in this paper. The new Part 20 became effective on June 20, 1991, with discretion by licensees to defer implementation until January 1, 1993 (however, the Commission has under consideration a proposal to change the discretionary implementation date to January 1, 1994).

Thus, in order to allow disposal of non-11e.(2) byproduct material at a tailings impoundment, either a part 61 review would have to be performed and a license under 10 CFR part 61 would have to be issued to the mill operator, or an exemption to such a review and license would have to be granted. The part 61 license to allow disposal of the non-11e.(2) byproduct material in the tailings impoundment would be in addition to the amendment to the part 40 license authorizing receipt of the material.

The basic objectives of parts 40 and 61 are the same: protection of public health and safety and the environment by disposal that controls and isolates the wastes for long periods of time. Part 61.6 of title 10 allows for exemptions from the requirements of Part 61 if such an exemption will not endanger life or property. In order to avoid separate part 40 and 61 reviews and licenses for the disposal of non-11e.(2) byproduct material in tailings impoundments, an exemption under Part 61.6 will be granted for each such proposed commingling that meets all of the other requirements discussed in this analysis. The basis for such an exemption is that the proposed disposal will not endanger life and property by virtue of its meeting the criteria discussed in this analysis (which includes demonstrating that the reclamation and closure criteria in appendix A to part 40 will be met).

7. Results of Staff Analysis

NRC staff identified the following course of action with respect to requests for direct disposal of non-11e.(2) byproduct material in tailings impoundments:

1. Each proposal will be treated on its individual merits.

2. The guidance discussed in section 5, will be followed. Specifically, for each such co-disposal request, the staff will:

a. Reject the request if the non-11e.(2) byproduct material is NARM waste.

b. Determine whether the request is for bulk material contaminated with low concentrations of source material. If the request is for byproduct material or SNM, determine if there is a compelling reason, such as an immediate health and safety concern, to grant the request. If so, a specific request for approval by the Commission will be prepared.

c. Determine whether the proposed disposal will cause significant additional effects to public safety, health and the environment.

d. Determine whether the proposed disposal will compromise the reclamation of the tailings impoundment by determining whether compliance with the reclamation and closure criteria stated in 10 CFR part 40, appendix A, will be ensured.

e. Not approve the request if the non-11e.(2) byproduct material contains hazardous constituents regulated under RCRA.

f. Notify DOE (with an opportunity to provide comments) if the staff intends to approve the proposed disposal.

g. The licensee must provide documentation showing approval by the Regional LLW Compact in whose jurisdiction the waste originates as well as approved by the Compact in whose jurisdiction the disposal site is located.

3. Approval of the request will be accomplished through an amendment to the part 40 license of the impoundment owner.

Part B—Position and Guidance on the Use of Uranium Mill Feed Materials 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 Is Mixed Waste

Note to Federal Register notice readers: For further explanation of this complex issue, see the discussion section of the Staff Analysis that follows.

If the proposed feed material were hazardous or mixed waste, it would be subject to EPA regulation under RCRA. To avoid the complexities of NRC/EPA dual regulation, such feed material will not be approved for processing at a licensed mill. If the licensee can show that the proposed feed material would not be a hazardous or mixed waste, if not proposed for processing at the mill, 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 being hazardous or mixed waste. Additionally if proposed feed material contained a waste listed under Subpart D (261.30–33) of 40 CFR, it would be a hazardous waste and should not be approved.

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 was 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 guidance contained in the July 27, 1988, memorandum from Hugh L. Thompson to Robert D. Martin, or subsequent revisions (e.g., as described

in Part A of this notice). If it would, 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 Part A.

b. *Licensee certification test.* If the licensee certifies under oath or affirmation that the feed material: (1) is being reclaimed or recycled in accord with RCRA, or does not contain RCRA hazardous waste; and (2) is to be processed primarily for the recovery of uranium and for no other primary purpose, it can be accepted.

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.

NRC Staff Analysis of the Use of Uranium Mill Feed Materials Other Than Natural Ores

1. Introduction

The Nuclear Regulatory Commission (NRC) and Agreement States have received, and in some cases approved, requests to allow a uranium mill to process feed material that was not natural (native, raw) uranium ore and dispose of the resulting waste in the facility's tailings impoundment. In those cases, the feed material was generally either processing wastes from other extraction procedures or the residues from mine-water treatment. These requests were handled on a case-by-case basis, and approvals were based on the interpretation that the proposed feed material was refined or processed ore. This designation of the feed material as ore is critical to the determination of disposal methods. This stems from the definition under section 11e.(2) of the AEA, which limits byproduct material origin to "ore processed primarily for its source material content."

If the alternate feed material does not meet the definition of ore, or is not processed primarily for its source material, there are two concerns. The first is that complicated, dual regulation of the tailings pile by both NRC and the Environmental Protection Agency (EPA) under RCRA could result. The second concern is that the requested activity might jeopardize the ultimate transfer of the reclaimed tailings impoundment to the State or Federal Government for perpetual custody and maintenance.

During the past three years, several additional requests for approval of alternate feed materials have been received. Decisions on those requests are pending until development of a generic agency position. The analysis addresses the need for a definition of the term "ore" as used in the definition of byproduct material in the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA), and for criteria to determine if mill-processing wastes from alternate feed material will meet the requirements for byproduct material under a 10 CFR part 40 license.

2. Background

The UMTRCA amended the AEA to include uranium and thorium mill tailings and other wastes from the milling process as material to be licensed by NRC. Specifically, the definition of byproduct material was revised in section 11e of the AEA by adding:

> And (2) the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content.

Such byproduct material includes all the wastes resulting from the milling process, not just the radioactive components. In addition, title II of UMTRCA amended the AEA to explicitly exclude the requirement for EPA to permit 11e.(2) byproduct material under the RCRA. The definition and RCRA exemption of 11e.(2) byproduct material contrasts significantly with the situation for source material and low-level radioactive waste (LLW), where only the radioactive component is regulated under the authority of the AEA. EPA has to address hazardous constituents in those materials separately.

As a result of UMTRCA, the NRC amended 10 CFR Part 40, to regulate the uranium and thorium tailings and wastes from the milling processes. Thus, under normal operation, all tailings and wastes in an NRC or Agreement State licensed mill producing uranium or thorium are classified as "11e.(2) byproduct material," and are disposed of in tailings piles regulated under part 40. They are not subject to EPA regulation, under RCRA. However, if material that did not qualify as 11e.(2) byproduct material was placed in a mill's tailings impoundment, any hazardous constituents it contained could lead to regulation by EPA.

The UMTRCA also required either the United States, or the State in which the byproduct material has been disposed of, to maintain long-term custody of, and surveillance over, the byproduct material and the land used for its disposal. The AEA currently designates the Department of Energy (DOE) as the Federal "custodial agency." However, the UMTRCA specifically referred only to 11e.(2) byproduct material, and contains no provision allowing for the transfer of custody or title of any other material. While the application of section 151(b) of the Nuclear Waste Policy Act could moot this issue in a specific case, it does not provide a [illegible] basis for avoiding the labeling of a tailings disposal impoundment as either a mixed waste facility or a low-level waste disposal facility with the complex regulatory burdens these labels carry. One of the purposes of the guidance is to avoid these consequences.

The term "alternate feed materials" is used to indicate sources of uranium or thorium (throughout this analysis references to uranium mills or ore should be taken to apply to thorium mills or ore, also), for a mill, that are not natural ore (ore is not defined in the AEA nor in UMTRCA). NRC staff has approved requests, in the form of license amendments, to allow processing of alternate feed materials in uranium mills. The requested license amendments generally were to allow the mill to use feed materials that were either processing wastes such as those derived through the extraction of other elements, or the residues from mine-water treatment.

The following are examples of license amendments approved in the past:

1. Processing Wastes From Other Operations

The Rio Algom (Lisbon uranium mill in Utah has had its source-material license amended several times in the period from 1982 to 1987, so the mill could receive alternate feed materials. The mill was authorized to use processing wastes from: a uranium hexafluoride conversion facility, a niobium-tantalum recovery facility, and from an yttrium-lanthanides recovery facility. The materials were radiologically consistent with the existing tailings, but, in the first example, the fluoride was in higher concentration (greater than one percent) than in the existing tailings. In 1987, NRC also authorized the Quivira Mining Company to process raffinate sludge from a uranium hexafluoride conversion plant. The uranium content of these wastes (the yttrium-lanthanides wastes averaged 1.17 percent and the uranium hexafluoride waste streams 0.6 to 6.7 percent) was higher than the average

natural ore processed in the United States.

2. Wastes From Treatment of Mine Water

Some mines have to be dewatered as the shafts or pits fill with ground-water. This water often contains dissolved constituents as a result of flow through and contact with ore bodies. It must therefore be treated before it can be discharged offsite. Treatment is often via ion-exchange columns which concentrate high levels of uranium on resins or the eluate. Several mills (Western Nuclear Inc., Split Rock, Wyoming, and Atlas Minerals Corp., Moab, Utah) have obtained license amendments and processed these residues/wastes through the mill.

The NRC staff approved the processing of these alternate feed materials, considering them to be refined and processed ore. This designation as ore is essential so that the residue from uranium processing can qualify as 11e.(2) byproduct material for the reasons stated earlier. With this interpretation, the resultant milling wastes were legitimately classified as 11e.(2) byproduct material.

However, because there is not a definition of ore in 10 CFR Part 40 and because of the potential policy issues involved in approving the processing of feed material other than natural ore, the staff has put recent requests on hold, pending establishment of an agency position.

3. Discussion

Uranium mills were designed and operated to process natural uranium-bearing rock (i.e., ore), usually mined nearby, in order to produce uranium (in the form of yellowcake). There usually was no question of other feed material or what constituted ore. However, there have been occasions when other material has been proposed for processing at uranium mills.

Mill tailings that meet the definitions of 11e.(2) byproduct material must be stabilized in accordance with the criteria in appendix A of 10 CFR part 40, but are not subject to separate regulation as LLW or as hazardous waste under RCRA. The wastes and tailings produced in a uranium mill processing uranium-bearing rock from nearby mines would meet the definition of 11e.(2) byproduct material. However, it is not obvious, from the definition alone, whether wastes produced from processing feed material that is something other than rock mine from the earth meets the definition of 11e.(2) byproduct material.

Neither the AEA nor 10 CFR part 40 contains a definition of "ore" as it appears in the definition of 11e.(2) byproduct material. The term "unrefined and unprocessed ore" is, however, defined separately in part 40, in relation to the exemption in 10 CFR 40.13(b) for source material in ore, as:

> Ore in its natural form prior to any processing, such as grinding, roasting or beneficiating, or refining.

The fact that the term "any ore", rather than "unrefined and unprocessed ore," is used in the definition of 11e.(2) byproduct material implies that a broader range of feed materials could be processed in a mill, with the wastes still being considered as 11e.(2) byproduct material.

Legislative history confirms the validity of a broad interpretation of the term "any ore." The definition of 11a.(2) byproduct material as originally presented in UMTRCA was:

> The tailings or wastes produced by the extraction or concentration of uranium or thorium from any source material.

However, there was a concern that tailings resulting from the processing of ore containing less than 0.05 percent uranium (the minimum concentration that would still meet the definition of source material) would fall outside the definition. To preclude that possibility, it was suggested that the words "any ore processed primarily for its source material content" be substituted for "any source material."

In its decision in a case involving whether certain material in and near the West Chicago, Illinois, facility of Kerr-McGee Chemical Corporation (*Kerr-McGee Corporation v. NRC*, 903 F2d 1 (D.C. Cir. 1990)) was 11e.(2) byproduct material or source material, the United States Court of Appeals arrived at a broad interpretation of the definition of byproduct material in which the concept of ore is not restricted to native rock. It also cited Chairman Hendrie's testimony before Congress that led to the wording that now exists, in the AEA, defining 11e.(2) byproduct material as establishing that a broad reading of the definition was in line with Congressional expectations.

The previous discussion leads to the conclusion that the term "ore" in the definition of 11e.(2) byproduct material can be applied to a broad spectrum of feed materials from which uranium or thorium is extracted. In view of the foregoing, NRC staff has recommended a definition of ore as follows:

> Ore is a mineral 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.

Two major considerations that went into this proposed definition of ore were:

1. It is broad enough to include a wide variety of feed materials.

2. The definition continues to be tied into the nuclear fuel cycle. Because the extraction of uranium in a licensed mill remains the primary purpose of processing the feed material, it excludes secondary uranium side-stream recovery operations at mills processing ore for other metals. Thus, tailings from such side-stream operations at facilities that are not licensed as uranium or thorium mills, would not meet the definition of 11e.(2) byproduct material.

Although the intent of Congress in defining 11e.(2) byproduct material appears to have been to encompass the wastes from all feed material processed primarily for its source-material content, two significant issues result from the proposed definition of ore.

Since some of the feed material could contain hazardous components, in addition to source material, the first significant issue is whether material that would otherwise have to be disposed of as hazardous waste can be processed in a uranium mill and disposed of in the tailings impoundment as 11e.(2) byproduct material. If such feed material were not processed at a uranium mill, it would be classified as mixed waste (radioactivity regulated under AEA, plus hazardous waste regulated by EPA) and would thus have to be disposed of in a mixed waste facility.

To determine if the feed material would be regulated as hazardous waste, one must first determine if it meets the definition of solid waste, since hazardous waste is a subset of solid waste, under RCRA. The EPA regulations that implemented RCRA state (40 CFR 261.1–261.4) that solid waste is any discarded material not excluded in the regulations and includes recycled material. A material is recycled if it is reclaimed. Reclaimed is defined as, "* * * processed to recover a usable product * * *" Since alternate feed material would be reclaimed at the mill, it would be considered solid waste. It also would be classified as byproduct, which EPA defines as, "* * * not one of the primary products of a productive process * * *" However, 40 CFR 261.3(c)(2) provides that byproducts that exhibit only a characteristic of hazardous waste (ignitable, corrosive, reactive, toxic) and that are being reclaimed are not regulated as hazardous waste. To support the "reclaimed" provision, it must be demonstrated that there is a known

market for the material and documentation provided, such as contracts showing that a second person uses the material as an ingredient in a production process. An exception to this exemption is sludge from a water treatment plant, so residues from mine-water treatment would not qualify.

Since feed material is being used as an ore from which a useable product (uranium) is to be extracted, it is being reclaimed and thus would meet the EPA exemption to regulation as characteristic hazardous waste, except if it were mine-water treatment residues.

The proposed feed material would still be hazardous waste if it contained a waste listed under subpart D (part 261.30–.33) of the EPA regulations. It is unlikely that feed material for uranium mills would contain such substances. Assurances need to be provided that these proposed feed materials do not contain RCRA or TSCA listed hazardous wastes.

Constituents with hazardous characteristics that were in feed materials processed at a uranium mill would eventually end up in the tailings impoundment as 11e.(2) byproduct material. As such, they would be regulated under appendix A of 10 CFR part 40 which provides for monitoring and control of hazardous constituents. Thus, the ultimate fate of hazardous constituents that might be in uranium mill feed material would not escape regulatory oversight.

The second significant issue that must be addressed is the potential of converting material that would have to be disposed of as LLW or mixed waste into ore, for processing and disposal as 11e.(2) byproduct material. The possibility of converting such wastes to 11e.(2) byproduct material can be very attractive to owners of such material. This is because of the high cost of disposing of LLW and especially of mixed waste. An owner of such material could pay a mill operator substantially less to process it for its uranium content and dispose of the resulting 11e.(2) byproduct material than to dispose of the material as waste at an appropriate facility. Utah officials have already expressed concern over "sham disposal" (i.e., converting a mill into a LLW disposal site).

The proposed definition of ore would include any material from which source material is extracted in a licensed mill and would thus seem to allow such sham disposals. However the definition of 11e.(2) byproduct material requires that the ore be processed "* * * primarily for its source material content" and thus would not permit such sham disposals. Material that was processed primarily to convert what would have been LLW or mixed waste into 11e.(2) byproduct material would not meet the definition of 11e.(2) byproduct material.

Therefore, as part of its review of a licensee proposal to process material other than natural ore, the staff would have to determine whether the processing was primarily for the source-material content or for the disposal of waste. This determination would have to be made on a case-specific basis, but either of the following tests can be used:

1. *Co-disposal test:* If the feed material would be approved for disposal in the tailings impoundment, under the guidance contained in the July 27, 1988 memorandum from Hugh L. Thompson to Robert D. Martin, or subsequent revisions, 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 this notice.

2. *Licensee certificate test:* If the licensee certifies under oath or affirmation that the feed material: (1) is being reclaimed or recycled in accord with RCRA, or does not contain RCRA hazardous waste; and (2) is to be processed primarily for the recovery of uranium and for no other primary purpose, it can be accepted.

4. Results of Staff Analysis

The staff has determined to issue guidance on the definition of ore and on the issues related to feed material that could be considered waste. Although Agency guidance does not carry the weight of a regulation, the staff concludes that the time and resources required for rulemaking on the definition of ore would not be justified in this instance. There are only a few mills that are in active or standby status and that would be able to process alternate feed material, and it is estimated that the Agency would receive only one or two such requests a year. However, the staff will include the definition of ore the next time amendments to 10 CFR Part 40 are proposed.

Issuance of the guidance would also assist Agreement States. As a policy, the Agreement States are not required to adopt this guidance as a matter of compatibility. However, if an Agreement State implements a similar policy, the State will have some assurance that NRC will not question its policy in program reviews and in making the determination as required in 10 CFR 150.15a(a) prior to the State terminating the license.

Dated at Rockville, Maryland, this 7th day of May 1992.

For the Nuclear Regulatory Commission.

John Surmeier,

Chief, Uranium Recovery Branch, Division of Low-Level Waste Management and Decommissioning, Office of Nuclear Material Safety and Safeguards.

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(Docket No. 50-416)

Entergy Operations, Inc.; Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity for Hearing

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. NPF-29, issued to Entergy Operations, Inc. (the licensee), for operation of the Grand Gulf Nuclear Station, Unit 1, located in Clairborne County, Mississippi.

The proposed amendment would increase the trip setpoints of four circuit breakers for the suppression pool makeup (SMPU) valves.

In response to NRC Generic Letter 89-10, the licensee has identified the need to replace four valve actuators for the SPMU valves with larger actuators. During the design change process, it was determined that the required larger valve actuator motors would require circuit breakers with higher trip setpoints. These trip setpoints are specified in the Technical Specifications (TS), and the licensee must request a TS change to permit the use of the higher trip setpoints. Allowing for the standard 30-day Federal Register notice would delay approval of the requested change beyond the scheduled end of the current refueling outage. The staff concludes that the licensee has provided an acceptable basis for its request and that exigent circumstances exist.

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

The Commission has made a proposed determination that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed