

July 26, 2000

MEMORANDUM TO: William D. Travers
Executive Director for Operations

FROM: Annette L. Vietti-Cook, Secretary **/RA/**

SUBJECT: STAFF REQUIREMENTS - SECY-99-0012 - USE OF URANIUM
MILL TAILINGS IMPOUNDMENTS FOR THE DISPOSAL OF
WASTE OTHER THAN 11e.(2) BYPRODUCT MATERIAL AND
REVIEWS OF APPLICATIONS TO PROCESS MATERIAL
OTHER THAN NATURAL URANIUM ORES

The Commission has disapproved the staff's recommendation to pursue Option 3 - seek legislative changes regarding disposal of materials in mill tailings impoundments. Instead, the Commission has approved Option 2 - allow more flexibility in the disposal capacity for mill tailings impoundments - subject to the additional considerations noted below.

The disposal of material other than 11e.(2) byproduct material – which may include listed hazardous wastes – in mill tailings impoundments should be allowed only if: 1) there is adequate protection of the public health, safety, and the environment; 2) the long-term custodian of the site has indicated its willingness to accept responsibility for maintenance of the site prior to NRC approving the disposal; and 3) necessary approvals of other affected regulators (e.g., States, EPA) have been obtained. Regarding consent of the long-term custodian, consideration should be given to requiring written confirmation from DOE or the State that it would accept responsibility for the maintenance of the site prior to NRC approving the disposal of non-11e.(2) material.

This revised position should be codified in the new rule after interaction with stakeholders and, in particular, the Department of Energy (DOE), the Environmental Protection Agency (EPA), the States and industry. In the interim, the staff should implement the direction in this SRM and allow disposal of materials (other than 11e.(2) byproduct material) that are radiologically, physically and chemically similar to and compatible with materials already being disposed of in mill tailings impoundments. The staff should pursue a generic exemption to the requirements of Part 61 which would eliminate the need for individual exemptions for each proposed disposal. Guidance to this effect should be developed, issued, and implemented as soon as possible.¹

With respect to applications to process material other than natural uranium ores, the

¹The Commission views this guidance as interim. It is to provide a mechanism for providing more detail on how the staff will implement the Commission decision only until Part 41 is promulgated. Resources for developing the guidance should be minimized by using, to the extent practicable, existing guidance and reserving formal notice and comment to the Part 41 rulemaking.

Commission disapproved the staff's proposal. Instead, consistent with the Commission's decision on CLI-00-01 51 NRC 9 (2000) International Uranium Corporation, the staff should proceed to revise the 1995 Alternate Feed Guidance to allow alternate feed material to be processed for uranium without any inquiry into a licensee's economic "motives" in determining whether the processed materials fall in the "11e.(2)" category since no such inquiry is compelled by the Uranium Mill Tailings Radiation Control Act. In addition, because the Commission has approved disposal of certain other than 11e.(2) materials in a tailings impoundment, such material also should be allowed in the proposed feed so long as 1) the alternate feed is primarily processed for the extraction or concentration of uranium or thorium; 2) there is adequate protection of the public health and safety and the environment; 3) the long-term custodian of the site has indicated its willingness to accept responsibility for maintenance of the site; and 4) necessary approvals of other affected regulators have been obtained.

The staff should interact with stakeholders to codify the revised approach to allow disposal of non 11e.(2) byproduct material, including Toxic Substance Control Act material, Resource Conservation and Recovery Act material, Comprehensive Environmental Response, Compensation and Liability Act material, and naturally occurring radioactive material (NORM), accelerator produced radioactive material and technologically enhanced NORM.

The staff should continue to implement the guidance which requires approval from both the appropriate regional LLW compact from which the non-11e.(2) byproduct waste originated and the appropriate regional LLW compact (if different from originating compact) where the disposal impoundment is located before allowing disposal of non-11e.(2) byproduct material in a tailings impoundment.

As part of the development of the new Part 41, the staff should attempt to make the new regulation more performance based (as appropriate). As an illustrative example, the staff could codify requirements for alternative feed in the new Part 41 and in appropriate licensing conditions such that a license amendment would no longer be required for each use of alternative feed material. The licensee would certify that the material met the criteria for alternative feed and would only request permission from the NRC if an exemption to the regulations was necessary. The staff should also require licensees to implement appropriate administrative controls to ensure the performance criteria are met through a process that is inspectable and considers the consequences of a licensee potentially violating the alternate feed guidance.

The staff should revise, issue, and implement final guidance consistent with this SRM for processing of alternate feed as soon as possible. The guidance should be codified in the rulemaking plan for the new Part 41.

The staff may use limited efforts to pursue a legislative initiative to avoid dual regulation. Because any such effort has important implications for DOE, any legislative actions in this area should be coordinated with DOE.

cc: Chairman Meserve
Commissioner Dicus
Commissioner Diaz
Commissioner McGaffigan
Commissioner Merrifield
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