

July 25, 2002

COMMISSION VOTING RECORD

DECISION ITEM:       SECY-02-0095

TITLE:                APPLICABILITY OF SECTION 11e.(2) OF THE ATOMIC  
ENERGY ACT TO MATERIAL AT THE SEQUOYAH FUELS  
CORPORATION URANIUM CONVERSION FACILITY

The Commission (with Chairman Meserve and Commissioners Diaz and McGaffigan agreeing and Commissioner Dicus disagreeing) approved the staff's recommendation (Option 2) of the subject paper as recorded in the Staff Requirements Memorandum (SRM) of July 25, 2002.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

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Annette L. Vietti-Cook  
Secretary of the Commission

Attachments:

1. Voting Summary
2. Commissioner Vote Sheets

cc:     Chairman Meserve  
       Commissioner Dicus  
       Commissioner Diaz  
       Commissioner McGaffigan  
       OGC  
       EDO  
       PDR

## VOTING SUMMARY - SECY-02-0095

### RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. MESERVE	X					7/18/02
COMR. DICUS		X				6/25/02
COMR. DIAZ	X					6/26/02
COMR. McGAFFIGAN	X					7/22/02

### COMMENT RESOLUTION

In their vote sheets, Chairman Meserve and Commissioners Diaz and McGaffigan approved the staff's recommendation, Option 2 -- Sequoyah Fuels Corporation (SFC) front-end waste can be classified as Section 11e.(2) byproduct material. The Commissioners provided some additional comments. Commissioner Dicus would have preferred Option 1 -- continue decommissioning the SFC site under the License Termination Rule. Commissioner Dicus felt that it would be an unfair decision to reclassify the proposed SFC front-end waste stream from low level waste to 11e.(2) material, thereby, forcing the Department of Energy to take over the SFC site and material, under Section 202 of the Uranium Mill Tailings Radiation Control Act (UMTRCA), which she does not believe comports with the intent of the UMTRCA legislation. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on July 25, 2002.

## Commissioner Comments on SECY-02-0095

### Chairman Meserve

SECY-02-0095 requests Commission approval that certain waste at the Sequoyah Fuels Corporation (SFC) facility in Gore, Oklahoma, be classified as section 11e.(2) byproduct material.<sup>1</sup> I conclude that the staff's recommendation is defensible and hence I approve the staff's action.

Section 11e.(2) byproduct material is defined as "the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content." 42 U.S.C. § 2014(e)(2). There is a strong basis for concluding that the wastes at issue arise from the extraction or concentration of uranium primarily for its source material content. SFC's front-end processing is intended and does serve to concentrate uranium. In fact, the processes are largely identical to similar stages at a uranium mill. And there is no suggestion in the definition of 11e.(2) byproduct material that all stages involved in the extraction or concentration of uranium or thorium must take place in a mill in order for the wastes to be encompassed by the definition.

Somewhat more difficult is the question of whether the extraction or concentration should be deemed to be from an "ore." This matter has been addressed by the United States Court of Appeals for the District of Columbia Circuit in a decision in which the Court held that the NRC's efforts to confine the definition of 11e.(2) byproduct material could not be sustained, despite the normal deference that a reviewing court gives to an agency's construction of its organic statute. Kerr-McGee Chemical Corp. v. NRC, 903 F.2d 1 (D.C. Cir. 1990).<sup>2</sup> The Court held that Congress intended in the Uranium Mill Tailings Radiation Control Act that the NRC exercise comprehensive regulatory authority over wastes derived from uranium and thorium extraction activities. Thus, the Court determined that the fact that certain material had previously been processed through a mill did not preclude that material from being considered "ore" if it were processed again for source material. Id. at 7-8 (interpreting "ore" to encompass wastes from rare earths processing); see also International Uranium (USA) Corp., CLI-00-1, 51 NRC 9, 23 (2000) (holding that the tailings from processing FUSRAP material are 11e.(2) byproduct material). The holding applies directly here: the fact that the SFC feedstock had previously been processed at a uranium mill does not preclude the wastes from the subsequent processing at SFC from being 11e.(2) byproduct material.<sup>3</sup>

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<sup>1</sup> Several years ago I represented the SFC before the Commission on a variety of matters unrelated to the issue presented here. At the time, SFC had different ownership.

<sup>2</sup> I represented the petitioner in this litigation.

<sup>3</sup> As noted in the Differing Professional View (SECY-02-0095, Att. 9 at 4), the wastes arising from the processing at SFC have different radiological concentrations than the wastes typically produced at uranium mills. This, of course, is expected because the feed material is of different character. But the definition of 11e.(2) byproduct material focuses on the nature and purpose of the processing, not the characteristics of the wastes. Thus, the difference in concentration does not bear on the classification issue with which we are presented. It does indicate, however, that staff will have to consider the special character of the wastes in assuring

I conclude that a categorization of the wastes at issue as 11e.(2) byproduct material is consistent with the statutory definition. The appropriateness of this action is reinforced by considering the consequences that flow from such a conclusion. This option enables resolution of the long-term control of the waste if the wastes are left on site; DOE has indicated that it is prepared to take title to the land and the 11e.(2) byproduct material. A determination that the materials are not 11e.(2) material, by contrast, not only is not required by the statutory language, but also would unnecessarily impose the difficult challenge of finding an independent custodian for long-term institutional controls if on-site disposal is pursued.

Although I ultimately disagree with some of the conclusions asserted by Messrs. Fliegel and Lusher in their Differing Professional View, I compliment them on their thoughtful submission. Their presentation does serve to crystallize the issues in a useful fashion.

#### Commissioner Dicus

After careful consideration of the technical, legislative, and interpretational issues associated with the Sequoyah Fuels Corporation (SFC) proposal to classify its UF<sub>6</sub> conversion front-end operations as a continuation of the milling process, thereby, reclassifying the resultant waste stream from low-level waste (LLW) to 11e.(2) byproduct material, I do not support such reclassification. Therefore, I disapprove Option 2 and approve Option 1, to continue SFC site decommissioning under the 10 CFR Part 20, Subpart E, license termination rule.

I do not believe that the front-end of the SFC UF<sub>6</sub> conversion process is a continuation of the milling process or that the U<sub>3</sub>O<sub>8</sub> milling process product, which is the feedstock to the SFC UF<sub>6</sub> conversion process, is **ore**. The very nature of SFC's UF<sub>6</sub> front-end operations (i.e., nitric acid dissolution, solvent extraction, and evaporation/concentration) were designed and sequenced to accommodate the complete UF<sub>6</sub> process. In my view, a fair comparison of this example is the UF<sub>6</sub> conversion process currently in operation at the Honeywell facility. With the Honeywell operation being a "dry process" versus the SFC "wet process," Honeywell's UF<sub>6</sub> product refinement is on the back-end, with an additional UF<sub>6</sub> process stage. Whereby, SFC's wet process would require the UF<sub>6</sub> product refinement stage on the front-end, which eliminates the additional back-end stage as in the case of Honeywell's "dry process." It is my view that SFC's front-end steps are process design requirement steps for the complete UF<sub>6</sub> conversion process, and should not be considered a continuation of the milling process. These are the design process steps needed to produce UF<sub>6</sub> spec product, which was once used as feedstock for enrichment operations at gaseous diffusion plants, as well for the SFC UF<sub>6</sub> to DUF<sub>4</sub> reduction process.

I believe that it would be an unfair decision to reclassify the proposed SFC front-end waste stream from LLW to 11e.(2) material, thereby, forcing the Department of Energy (DOE) to take over the SFC site and material, under Section 202 of the Uranium Mill Tailings Radiation Control Act (UMTRCA), which I do not believe comports with the intent of the UMTRCA legislation. Section 151(b) of the Nuclear Waste Policy Act (NWPA) currently provides DOE with the authority to assume title and custody of LLW and land on which such waste is disposed of, upon request by the owner, following termination of the license issued by the NRC. I recognize that the resolution of this matter has not been resolved with DOE and that DOE is pursuing title and custody takeover of such sites with the Department of Interior. However, and regardless of legislative

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protection of public health and safety.

mechanisms to allow and/or force Federal take-over of title and custody of LLW or 11e.(2) decommissioning sites, the Commission still has a responsibility to develop and implement fair and consistent policy positions, so that our regulatory requirements and practices can also be implemented with consistency and predictability.

While it may be permissible interpretation of the language in the statute to continue to consider yellow cake processed away from a uranium mill as still being ore being processed for its source material content, I cannot conclude that such is the preferred or best interpretation from a policy standpoint. It has always been clear that one of the overriding concerns of Congress in passing UMTRCA legislation was to close a regulatory gap so that materials not at the time subject to any regulation, would be covered. At that time, mill tailings from heap leach or in-situ leach facilities and similar wastes, were not being regulated. That is not the case with the materials at Sequoyah Fuels, which has always been regulated as source material. Similarly, I am not convinced that we should create a new and rather stretched definition of ore, in order to force the material at SFC into the Atomic Energy Act's 11e.(2) definition. However attractive it may be to solve the disposal concerns of this licensee by attempting to have DOE take title and custody under UMTRCA, I do not believe that expediency makes good policy in this instance.

It is my view that the SFC restricted release situation is quite similar to AAR's, as well as to many other decommissioning licensees, both existing and former. The Staff Requirements Memorandum for SECY 01-0194 addressed restricted release issues and concerns, and directed staff, in part, to conduct a comprehensive analysis of the restricted release provisions of 10 CFR 20.140 and the alternate criteria of 10 CFR 20.1404 of the LTR, as well as to resolve how to make those provisions more available for licensee use.

With respect to the SFC decommissioning situation, they still have options to consider if the front-end waste is not reclassified as 11e.(2) material, such as:

1. Disposal of waste at an existing LLW disposal facility; or
2. Consistent with the SRM for SECY 99-012, the **disposal** of "other than 11e.(2) byproduct material," or **its use as alternate feed material**, under certain conditions, at uranium mill tailings impoundments.

However, it is becoming more obvious that the Commission will need to revisit the restricted release provisions of the LTR since licensees are truly having problems in finding a third party willing to take over title and custody, and I believe that the direction provided to staff in SRM 01-0194 will facilitate a path to resolution. I also believe that there is no incentive for any State authority to take over title and custody to any site, when DOE can be viewed as the default custodian and will always be viewed as such (Under 151(b) of the NWPA which is voluntary ownership and under Section 202 of UMTRCA which is mandatory ownership). I don't believe that the NRC's washing of its hands with respect to reclassifying the SFC LLW to 11e.(2) byproduct material, fixes anything. In fact, even if the 11e.(2) classification is determined, SFC would still need DOE's approval under Section 151(b) of the NWPA for the remaining non-11e.(2) material (**approximately 1,981,386 ft<sup>3</sup>**). As identified in DOE's May 13, 2001, response to this very issue, DOE expressed no formal opinion, but simply repeated existing legislative language regarding Section 202 of UMTRCA and 151(b) of NWPA.

Commissioner Diaz

Approved Option 2.

Commissioner McGaffigan

I agree with Chairman Meserve's vote and approve the staff's recommendation in SECY-02-0095 that the waste from the front end of Sequoyah Fuels's operation be classified as 11e.(2) byproduct material.

As explained in the Chairman's vote, the determination that this material be classified as 11e.(2) material is allowed under the Atomic Energy Act and NRC is in its authority to make this determination. In addition, as the staff stated in the paper, the designation of this waste as 11e.(2) does not change the health and safety impacts at the site. Under either designation the site will have to be remediated to NRC's decommissioning standards which are protective of the public health and safety.

Therefore, since the determination that the material is 11e.(2) is allowed by law, and there would be no impact to public health and safety, then I also agree with the Chairman that classifying the material as 11e(2) is appropriate. Otherwise, a determination that it was non-11e(2) would only serve to slow the decommissioning activities at the Sequoyah Fuels' facility.