



40-8027

November 18, 2002

RE: 0241-DE

Lee Liberman Otis
General Counsel
U.S. Department of Energy
Room 6A-245
1000 Independence Avenue, S.W.
Washington, D.C. 20585

Re: Request for DOE Concurrence With Disposal of Certain Non-11e.(2)
Material at the Sequoyah Fuels Corporation, Gore, Oklahoma Facility

Dear Ms. Otis:

Sequoyah Fuels Corporation (SFC) requests that the Department of Energy (DOE) indicate in writing that it concurs with SFC's proposal to dispose of certain material, as described below, in a disposal cell at the SFC site that will be transferred to DOE in accordance with Section 202 of the Uranium Mill Tailings Radiation Control Act of 1978, as amended, after completion of decommissioning. On September 11 and 12, 2002, Sequoyah Fuels Corporation (SFC) met with members of the Department of Energy (DOE) staff and with Deputy Assistant Secretary James Owendoff to discuss the transfer of SFC's uranium processing site near Gore, Oklahoma to the DOE upon completion of decommissioning and termination of its Nuclear Regulatory Commission (NRC) license. As we indicated in those meetings, the NRC Commissioners voted to concur with SFC's assertion that the front end of its uranium processing and conversion facility was a uranium milling operation under Title II of the Uranium Mill Tailings Radiation Control Act. Attachment 1 is a copy of the Staff Requirements Memo for SECY-02-0095, date July 25, 2002, documenting the Commissioners' decision. The result of this decision is that now approximately 80% of the waste material that will result from reclamation of the site is considered by the NRC to be Atomic Energy Act, Section 11e.(2) byproduct material. The balance of the waste, while chemically, radiologically and physically similar to the 11e.(2) wastes, originated from the back end or conversion part of the process and is therefore considered to be non-11e.(2) material.

Prior to making this decision, the NRC staff, in a letter dated February 20, 2001, requested the DOE's opinion on SFC's assertion. Attachment 2 is a copy of

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DOE's response in which it states in part that DOE "--- is prepared to take title to the land and 11e.(2) byproduct material at NRC-licensed disposal cells, at the time the 11.e.2 license is terminated ---". The DOE letter also went on to discuss requirements for the placement of non - 11e.(2) material in an 11e.(2) disposal cell.

On September 30, 2002, SFC submitted a request to the NRC to amend its license, SUB-1010, to authorize possession of 11e.(2) byproduct material. Attachment 3 is a copy of this amendment request. Notice of Receipt of the application was published in the Federal Register on November 14, 2002 (67 Fed. Reg. 69048). The NRC staff has indicated to us that they will promptly review this request and that they expect to approve it, as it is considered to be only an administrative change to SFC's license.

SFC plans to submit a Reclamation Plan (as defined in appendix A of 10 CFR 40 and NUREG - 1620) to address how SFC will comply with the requirements for uranium mill tailings in the decommissioning of its facility. In this Reclamation Plan, SFC will propose to place the non - 11e.(2) waste materials from decommissioning into its planned 11e.(2) disposal cell. At the same time, SFC will request a license amendment to authorize implementation of the Reclamation Plan, including the disposal of non - 11e.(2) byproduct material decommissioning wastes in its 11e.(2) disposal cell. Pursuant to NRC policy on disposal of non-11e.(2) byproduct material in tailings impoundments, SFC hereby seeks Department of Energy (DOE) concurrence with the proposed disposal and commitment to take title pursuant to the Uranium Mill Tailings Radiation Control Act to the disposal cell—which will contain both 11e.(2) and non-11e.(2) material—after closure and termination of SFC's NRC license.

As you know, NRC Regulatory Issue Summary 2000-23, "Recent Changes to Uranium Recovery Policy" (RIS 2000-23) provides guidance on the disposal of non-Atomic Energy Act, Section 11e.(2) byproduct material in tailings impoundments licensed by the NRC. This policy requires that before materials that are not regulated as 11e.(2) byproduct materials can be disposed of at an NRC licensed 11e.(2) disposal facility, the agency which is the long term property custodian for the licensed disposal cell should be consulted and requested to provide its concurrence with the planned disposal. Because the DOE would be the long term property custodian for 11e.(2) disposal cell at SFC's Gore, Oklahoma facility, SFC seeks DOE concurrence.

The facility at issue is a rural site in eastern Oklahoma, located approximately 70 miles southeast of Tulsa. The nearest town, Gore, Oklahoma, is located about 3 miles away and has a population of approximately 900. SFC operated a uranium purification, concentration and conversion facility at the Gore site from 1970 until 1992 under an NRC license, producing uranium hexafluoride for the commercial nuclear power industry. Since 1992, SFC has been preparing for decommissioning of the facility.

As previously indicated, about 20% of the materials which SFC plans to include in the on-site disposal cell can not be classified as 11e.(2) byproduct material.¹ These materials are comprised of uranium-contaminated soil, demolition debris, and calcium fluoride sludge. The first two types of material are typical of a uranium mill operation and are very similar to the 11e.(2) material that SFC plans to place in the disposal cell, with the principal difference being that these materials became contaminated with radioactive material as a result of parts of the uranium conversion processing at the SFC facility that did not involve concentration or purification of uranium. The calcium fluoride sludge, which comprises about 7% of the total volume of materials planned to be placed in the disposal cell, was generated during neutralization with lime (CaO) of acidic wastewater from the conversion process fluorine scrubber systems. It is primarily composed of calcium fluoride, lime and calcium sulfate. Excess lime was used during the neutralization step and the pH was then adjusted to near neutral using sulfuric acid. The sludge contains about 45% water and an average of about 700 ppm natural uranium.

Attachment 4 to this letter provides the results of a detailed chemical analysis of the calcium fluoride sludge that was performed as part of an EPA RCRA Facility Investigation completed in 1996. It shows that the sludge that was tested does not contain constituents at levels that would cause the sludge to be classified as a RCRA hazardous waste. (There is some buried calcium fluoride sludge at the site that has not been tested. SFC plans to excavate this sludge during reclamation, test it for chemical constituents and dispose of it accordingly.)

Attachment 5 to this letter provides the results of chemical analyses for RCRA metals on the calcium fluoride sludge. It shows the results of TCLP leachability analysis on the calcium fluoride sludge, demonstrating that this material is not a RCRA Hazardous Waste due to Toxic Characteristics. The calcium fluoride sludge is not expected to react in any adverse chemical way with other materials in the cell. Testing has shown that the uranium in the calcium fluoride sludge is less leachable than most of the 11e.(2) materials that will be placed in the cell. Reduction of the water content, which is planned prior to placement in the cell, will result in a structurally acceptable material that will not contribute to cell subsidence. In summary, the non-11e.(2) byproduct materials are not expected to have a significant affect on the ability of the disposal cell to assure that the contaminants in the disposal cell remain isolated from the environment.

SFC does not plan to place materials regulated under the Resource Conservation and Recovery Act (RCRA) in the disposal cell. The site is subject to an Administrative Order issued by the U.S. Environmental Protection Agency (EPA) under RCRA, with the principal contaminant of concern being arsenic in groundwater. However, the EPA's concerns are not with any of the non-11e.(2)

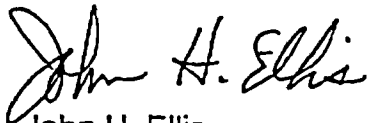
¹ Out of the estimated 8.7 million cubic feet of waste to be placed in the disposal cell, a total of 1.7 million cubic feet, or about 20% of the volume, is considered to be non-11e.2 material.

wastes that SFC wants to place in the disposal cell. None of the wastes to be placed in the disposal cell, whether 11e.(2) or non-11e.(2), contain RCRA-listed hazardous wastes, and none of the wastes are characteristically hazardous under RCRA.

Also, like typical older uranium mill tailings sites, some of the SFC buildings and equipment destined for disposal in the 11e.(2) cell contain asbestos bearing materials. About half of the asbestos is 11e.(2) material; the other half is not. Asbestos is not a hazardous waste under RCRA. Asbestos is regulated under the Clean Air Act, and therefore is incorporated by reference as a hazardous substance in the Comprehensive Environmental Resource and Liability Act. However, since asbestos will not migrate in the subsurface, it would not present any environmental risk when buried in the cell. Of course, the non-11e.(2) asbestos will not pose a different risk than the 11e.(2) asbestos.

SFC requests your written concurrence that including the non-11e.(2) materials described above in the 11e.(2) disposal cell at SFC's Gore, Oklahoma facility will not change DOE's agreement to accept ownership and custody of the wastes and disposal cell after decommissioning and NRC termination of SFC's license. The NRC Staff has indicated that receipt of DOE's written concurrence is required before NRC will approve the reclamation plan for the SFC facility because the reclamation plan will rely on the 11e.(2) disposal cell for the disposal of the non-11e.(2) material. Consequently, SFC requests your concurrence before the end of February 2003 to avoid significant regulatory delays in decommissioning. If there are any questions regarding this issue, please contact Craig Harlin, Director of Regulatory affairs at SFC at 918-489-5511, ext. 14 or me at 918-489-5511, ext. 13. Thank you in advance for assisting us with this matter.

Sincerely,



John H. Ellis
President, SFC

Enclosures: (5)

1. Attachment 1 – Staff Requirements Memo for SECY-02-0095
2. Attachment 2 – DOE's letter to NRC with Comments on the SFC Proposal to Designate Certain Material as 11e.(2) byproduct material.
3. Attachment 3 – SFC's license amendment request to possess 11e.(2) byproduct material.
4. Attachment 4 – Table 15, Study Area 1 Source Sampling Results
5. Attachment 5 – Table 4-2. Chemical Analysis Results

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