

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

In 1970, Sequoyah Fuels Corporation (SFC), a subsidiary of Kerr-McGee, began operation of a facility near Gore, in southeast Oklahoma, to convert uranium oxide to uranium hexafluoride, to prepare the material for enrichment. In early 1987 a second process was initiated to convert depleted uranium hexafluoride from the U.S. Department of Energy (DOE) enrichment facilities to depleted uranium tetrafluoride. In late 1987, ownership of the SFC facility was transferred to a subsidiary of General Atomics (GA). After an uncontrolled release of nitrous oxide in November, 1992, SFC announced cessation of operations. After a December 1993, Commission meeting with GA and SFC, the U.S. Nuclear Regulatory Commission (NRC) issued a Demand for Information requiring information on how the facility would be decommissioned and how those activities would be funded. SFC responded with its "Preliminary Plan for Completion of Decommissioning," dated February 16, 1993. In Section 2.4 of this plan, SFC stated that certain activities at the site included the concentration of uranium from yellowcake, thereby resulting in wastes that meet the definition of 11 e.(2) byproduct material, (i.e., "... any ore processed primarily for its source material content."). Therefore, SFC argued, the facility would be more appropriately decommissioned using the criteria in 10 CFR Part 40, Appendix A, which addresses the regulation and decommissioning of uranium milling facilities. A July 6, 1993, Memorandum from James Taylor, Executive Director for Operations, NRC, to the Commission (Attachment 2) addressed SFC's argument stating that "... hexafluoride conversion plants had never been considered as uranium mills, and were not contemplated as such in the Uranium Mill Tailings Radiation Control Act of 1978."

In March 1999, SFC submitted a decommissioning plan to remediate the site and terminate the license in accordance with the 1997 License Termination Rule (LTR) in 10 CFR 20.1403 for restricted conditions. The plan proposes that all waste would be placed in an on-site disposal cell, the design of which is based on mill tailings disposal cell criteria in Part 40, Appendix A, followed by institutional controls to be provided by a party "such as DOE." To date, however, the State of Oklahoma, the U.S. Army Corps of Engineers, and the Cherokee Nation have declined the opportunity to assume responsibility for institutional controls. DOE could accept ownership of the site under Section 151(b) of the Nuclear Waste Policy Act of 1982, but is exploring the transfer of its land management responsibilities to another federal agency and is not interested at this time in proceeding with section 151(b) transfers. No other party has been identified to assume this responsibility.

Because of perceived uncertainties associated with acquiring and implementing institutional controls, in June 2000, representatives of SFC made a presentation to the staff (Attachment 3) again asserting that, because of the similarity of the processing at SFC to that at uranium mills, much of the waste at SFC (75-80 percent) should be considered byproduct material as defined in Section 11e.(2) of the Atomic Energy Act. In January 2001, SFC submitted a formal request to NRC to evaluate this concept (Attachment 4).