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OFFICE OF PUBLIC AFFAIRS
DOCKETING SECTION

Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Docketing & Service Branch

Re: Draft Radiological Criteria For
Decommissioning

Dear Sir:

Sequoyah Fuels Corporation (SFC), holder of NRC License No. SUB-1010, has reviewed the Draft Radiological Criteria for Decommissioning (Jan. 26, 1994) that have been circulated by the NRC staff for comments.

As a member of the Fuel Cycle Facilities Forum, SFC endorses the comments that have been submitted on behalf of this organization. SFC is submitting these additional comments in order to emphasize the importance of accommodating in the criteria circumstances where the use of an onsite disposal cell is the optimal decommissioning alternative.

The draft criteria properly acknowledge that release for unrestricted use may not be feasible at every site and that the present regulations should be modified to permit termination of a license under appropriate restrictions on future use.

This concept was recognized in the paper on "Issues for Discussion at Workshops" that was prepared by the NRC for purposes of the early stages of this enhanced participatory rulemaking, which stated (at p. 20):

There may be some sites where the cost of meeting the selected criteria would be exorbitant. Consideration should be given to the disposition of such sites. Such sites could be handled in a manner similar to, or reflect elements of, the way the Commission deals with uranium mill tailings sites under the provisions of the Uranium Mill Tailings Radiation Control Act of 1978, As Amended (UMTRCA). Under the provisions of UMTRCA, mill tailings sites are partially decontaminated, stabilized, and subject to requirements for restricted use and long-term

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care and are not released for unrestricted use.

Establishment in the proposed regulations of a mechanism for achieving license termination for a site subject to restrictions is important for a number of reasons:

- (1) Licensees who cannot achieve conditions necessary for release for unrestricted use should nonetheless be encouraged to adopt and implement the optimal decommissioning alternative for the site, rather than simply maintaining the site in its present condition while awaiting future developments;
- (2) Licensees should be informed of the alternatives that are acceptable to the NRC so that they can appropriately develop and implement suitable decommissioning plans; and
- (3) Licensees must be given assurance that, if they proceed in accordance with appropriate mechanisms, they will not later be subject to reopening of decommissioning issues at their sites.

Proposed sections 20.1402 and 20.1405 reflect a desirable first step toward achieving these objectives. However, a number of clarifications and improvements are needed.

For the reasons discussed by the Fuel Cycle Facilities Forum, the proposed 15 mrem/y TEDE for a site being released either for unrestricted use or under restricted conditions is unwarranted and much too low. The level of 100 mrem/y is much more consistent with recommendations of the ICRP, NCRP, current NRC requirements in 10 CFR Part 20 and practices of other agencies. This subject was also discussed in detail in the earlier comments submitted by the Fuel Cycle Facilities Forum on June 28, 1993.

For sites to be released under restricted conditions, the NRC proposes the additional requirement that the site satisfy a 100 mrem/y TEDE if institutional controls are no longer in effect. We are not aware of any precedent for the imposition of a numerical dose requirement on the assumption that institutional controls are no longer in effect. No such requirement exists in 10 CFR Part 40, Appendix A, which governs the regulation of disposal of uranium mill tailings under UMTRCA. No such requirement exists in 10 CFR Part 61, which governs the regulation of low level waste disposal site. In fact, a similar

requirement was considered and rejected when Part 61 was adopted.^{2/} No such requirement exists with respect to the regulation of disposal of hazardous materials by the EPA under 40 CFR Part 264.

Although there is no valid reason to impose a TEDE limit on the assumption that institutional controls are not effective, if any such limit were established it should be significantly higher than the 100 mrem/y limit in newly-adopted 10 CFR Part 20 in view of the remote circumstance under which the hypothetical events might take place and the limited individuals who might be affected. In addition, the limit should be approved on a site-specific basis, rather than established in the regulations, so that the relevant circumstances at each site can be appropriately considered.

Moreover, the criteria should provide that, in determining whether the proposed decommissioning alternative would satisfy an approved TEDE limit if institutional controls are not effective, radioactive materials that are confined in an approved engineered disposal cell will not be considered. For example, if a licensee were to propose to remove large quantities of low-level contaminated soil from substantial areas of its site and place them in a carefully engineered and constructed disposal cell satisfying the technical criteria of 10 CFR Part 40, Appendix A, it would make absolutely no sense to then include such materials in any consideration of the hypothetical TEDE if institutional controls were not effective. Such determination and assumptions are not required for a uranium mill tailings disposal cell under 10 CFR Part 40 and UMTRCA, and, for similar reasons, they should not be required for other circumstances where such engineered cells are properly utilized.

If the criteria required consideration of such confined materials in determining the hypothetical TEDE, they would in effect preclude licensees from proposing and implementing the optimal solution for a particular site. Obviously if a licensee removes contaminated materials which are dispersed over substantial site areas and places the collected materials in a disposal cell, it will be placing large quantities of contaminated material in close proximity. But it will do so in a

^{2/} In its proposed Part 61 regulations, the NRC had included, as a performance objective, a 500 mrem dose limit for an inadvertent intruder. See 46 Fed. Reg. 38,089, 38,095 (1981). The EPA recommended deletion of this limit, and the NRC did not include it in the final rule. See 47 Fed. Reg. 57,446, 57,449 (1982).

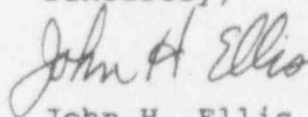
Secretary
March 11, 1994
Page 4

facility incorporating carefully designed and constructed features, including engineered barriers (such as lined cells, earthen caps, and intrusion barriers) approved by the NRC to minimize actual and theoretical environmental impacts. If the licensee is then required to assume that such carefully designed and constructed features are meaningless, it will not be able to satisfy regulatory requirements and it will in fact be penalized for cleaning up the majority of its site. The benefits of this optimal solution will be lost and a less desirable solution -- perhaps leaving the materials in situ with control of access to the site -- will necessarily be employed. It cannot be to the benefit of either the public or the NRC to adopt criteria which would preclude use of the best alternative at a site.

The revisions of the draft criteria necessary to resolve our concerns are contained in the attachments to the comments of the Fuel Cycle Facilities Forum.

We would be pleased to discuss our comments with the NRC staff as it proceeds with the preparation of the proposed rule.

Sincerely,



John H. Ellis
President
Sequoyah Fuels Corporation

cc: Dr. Donald A. Cool (NRC)
Francis X. Cameron (NRC)