



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555-0001

November 8, 1996

DOCKET NO: 40-8027

LICENSEE: Sequoyah Fuels Corporation

FACILITY: Sequoyah Facility
Gore, Oklahoma

SUBJECT: SAFETY EVALUATION REPORT, LICENSE AMENDMENT APPLICATION DATED
JULY 19, 1994, AS AMENDED, RE: CHANGES RELATED TO NEW 10 CFR
PART 20

1. Background

In a letter dated February 16, 1993, the licensee notified the U.S. Nuclear Regulatory Commission of its intentions to cease operations and decommission the facility. By license amendment application dated July 19, 1994, Sequoyah Fuels Corporation (SFC) requested changes, related to new 10 CFR Part 20, to the license for its Sequoyah facility at Gore, Oklahoma. On February 2, 1996, SFC amended the request in response to comments by NRC staff. On April 2, 1996, SFC submitted editorial corrections to the February 2 submittal. Further editorial changes were submitted on September 27, 1996. The licensee's amendment request reflects implementation of changes to Part 20 and reductions in activities at the Sequoyah facility resulting from licensee's decision to cease all production-related operations in July 1993, and to proceed with decommissioning of the facility and license termination.

2. Discussion

2.1 Licensee Proposal

The licensee proposes to remove definitions of operational items from the license, change some personnel protective clothing and monitoring requirements within the restricted area, remove sampling requirements for areas no longer active, and change the frequency of some environmental monitoring. These are discussed below.

2.2 Changes to Authorized Activities and Definitions

Section 1.7 of the license application is modified to remove the authorizations for refining uranium, laboratory services, and reduction of UF₆ to UF₄. The authorization for treatment and disposal of wastes is modified to limit activities to those consistent with 10 CFR 40.42. Authorization to perform remedial actions specified by the U.S. Environmental Protection Agency (EPA) pursuant to the Administrative Order on Consent of August 1993 is added. Definitions of process functions and materials are removed.

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The staff has reviewed these changes and determined that, based on the licensee's notice to cease operation and seek license termination, and the NRC response to that notice (R. Bernero, Director, Office of Nuclear Material Safety and Safeguards, NRC, letter, to J. Ellis, President, Sequoyah Fuels Corporation, September 1, 1993), these changes are appropriate and reflect the limits of actual activities at the facility.

2.3 Changes to Exemptions and Special Authorizations

The description of decontaminated articles to be released to persons not licensed (free release) is removed and this activity is controlled by §3.3.4.7 of the license. The staff has reviewed this change and finds it is consistent with the limitations on activities described above.

The following changes are made to the Fertilizer Distribution part of Section 1.8. The ammonium nitrate fertilizer control areas identified in §6 and the related sampling requirements of §§7-8 are deleted. A new control area (Ag Land) is identified in accordance with §9. Soil sampling requirements are specified as 15 cm (6-inch) intervals from 0 to 122 cm (0- to 48-inches) before and after the spreading season and at approximately the middle of the season. This complies with the requirements identified in §5 and Appendix I. Ground water monitoring in the Ag Land is being performed in accordance with the SFC response to NRC comments on the Draft Site Characterization Report (J. Ellis, SFC letter to M. Weber, NRC dated October 4, 1996). The staff has reviewed these changes and finds that they meet the requirements for sampling, and are acceptable.

2.4 Changes in Radiation Protection

Some definitions are removed, others are reworded to reflect the actual conditions at the facility, and references to the pertinent definitions in Part 20 are made. The staff has reviewed these changes and find they are appropriate for the actual conditions at the facility.

The boundaries of restricted areas are redefined and more than one access point to Restricted Area (RA) 1 is allowed; appropriate monitoring requirements and equipment exist at each access location. The staff has reviewed the radiation area and radioactive material postings and determined they meet regulatory requirements (IR 40-8027/9601).

The requirements of minimum protective clothing and monitoring for external dose, for personnel entering restricted areas, are reduced to be commensurate with the potential hazard as identified by a contamination survey of the area. The staff has reviewed the licensee's radiation survey program in Procedure HS-301 and the personnel external/internal monitoring program (§3.3.4 of the license and procedure HS-101) and determined that the program meets the requirements of 10 CFR 20 (IR 40-8027/96-01). The staff has also determined that these changes are appropriate for the actual conditions at the facility.

The requirements for ventilation and monitoring potential effluent paths are modified to reflect the deactivation and isolation of some areas of the facility. Specifically, for those buildings that have been sealed, no routine monitoring is required; and for processes no longer functional, such as fluoride production, the monitoring requirements are removed. The staff has reviewed these changes and finds that they are consistent with Procedure G-150, "Respiratory Protection Program", and with the requirements of Chapter 5 of the license application. The staff has also determined that these changes are appropriate for the actual conditions at the facility.

Beta-Gamma contamination limits have been added to the contamination control program. This is a significant improvement in the licensee's monitoring program.

Condition 24 is amended to reflect current version of 10 CFR Part 20.

2.5 Changes to Environmental Protection

Monitoring of airborne and liquid effluent paths has been modified to reflect the closure of some areas of the facility and changes to the combination stream, which no longer discharges at the site boundary, but is piped directly to the headwaters of the Kerr-McGee Reservoir. The staff has reviewed these changes and finds that they comply with the requirements of 10 CFR 20.1302(a), and are appropriate for the actual conditions at the facility.

The sampling frequency of the ground water monitoring wells is changed from quarterly to semi-annually. The proposed plan provides an adequate level of information on ground water contamination during preparation for remediation activities for the following reasons: the primary sources of contamination--the process--have been discontinued and the process materials have been removed from the site; all remaining ponds have been relined to prevent additional leakage; and liquid waste has been consolidated. There are, also, over 20 years of data on migration of radioactive contamination through the ground water, and the relatively slow migration rate of the radioactive contamination. These changes are consistent with the requirements of license condition 24 and 10 CFR 20.1501(a)(2).

Sampling for fluoride will be limited to water sampling because all generation capability has been removed, and only the fluoride ponds remain as potential sources. The staff has reviewed this change and find it is appropriate for the actual conditions at the facility.

3. Conclusions

On February 16, 1993, the licensee filed a notice in accordance with 10 CFR 40.42 that operations would be permanently ended at the Sequoyah facility. The staff responded on September 1, 1993, advising the licensee that authorized activities were limited to those related to decommissioning, and routine environmental and effluent monitoring. The staff has reviewed this

license amendment request in light of these limitations and concludes that the changes are acceptable for the current level of activity.

The staff has evaluated the performance of the licensee and found it satisfactory. As activities at the facility change, the staff will continue to review personnel and environmental monitoring requirements to ensure protection of the environment and to prevent adverse impacts on the health and safety of the public and workers. Monitoring requirements will be reviewed as part of the approval process for the site decommissioning plan.

If activities at the facility change--in particular, when there is increased work within the restricted areas--SFC must ensure that monitoring is sufficient to maintain potential worker and public exposure as low as reasonably achievable and within the dose limits in 10 CFR Part 20.

NRC offered an opportunity for a hearing on this amendment request in a Federal Register notice [59 FR 49720] dated September 21, 1994.

The staff concludes that this license amendment request will not adversely affect the protection of the environment nor have any significant impact on the health and safety of the employees and the general public.

[Original signed by]
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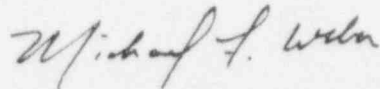
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ENCLOSURE 3