

OCT 6 1989

DOCKET NO: 40-8027

LICENSEE: Sequoyah Fuels Corporation (SFC)
Gore, Oklahoma

SUBJECT: SAFETY EVALUATION REPORT, AMENDMENT APPLICATION DATED AUGUST 29, 1989, AND SUPPLEMENT DATED SEPTEMBER 11, 1989, RE CHANGES TO THE ORGANIZATIONAL AND ADMINISTRATIVE PROGRAM AND THE ENVIRONMENTAL PROGRAM; AND LETTER DATED JUNE 19, 1989, RE AUTOCLAVE PROBABILISTIC RISK ASSESSMENT

Background

By amendment application dated June 30, 1989, Sequoyah Fuels Corporation (SFC) submitted administrative and environmental revisions in Chapters 2.0 and 5.0, respectively, of the license. By letter dated August 29, 1989, in response to License Condition 23 (Training Program), SFC submitted a revised application which included additional administrative revisions to Chapters 2.0. At the request of NRC staff, SFC resubmitted Chapter 5.0 revisions by supplement dated September 11, 1989.

By letter dated June 19, 1989, SFC responded to our letter dated March 3, 1989, requesting that SFC readdress their probabilistic risk assessment (PRA) concerning UF_6 heating in autoclaves vs. modified steam chests.

Discussion

In the subject application, SFC proposes revisions to the chapters in the license on General Organization and Administration and Environmental Protection. The administrative changes encompass General Atomics Corporate oversight, Waste Treatment and Disposal Operations, and Training. The environmental changes involve modification of both the detection limits and action levels for environmental sample analyses.

The current license designates GA's Corporate Manager of Licensing, Safety and Nuclear Compliance (LS&NC) as being responsible for oversight and coordination of SFC licensing activities. SFC proposes to delete the requirement for GA's licensing oversight. However, the GA Corporate Manager of LS&NC will continue to ensure that quarterly audits are conducted at SFC to evaluate and verify compliance. In regards to Waste Treatment and Operations, SFC proposes to institute more than one supervisor within this department and add this department to the organization chart. In addition, SFC proposes to change the title of Manager, Administration and Services, to Manager, Human Resources and Administration, and transfer the nuclear material accountability responsibilities to the Controller. Also, SFC suggests that the title of Chapter 10.0 be changed and that a title for Section 10.1 be added.

In response to Condition No. 23, SFC submitted a description of the Plant Operations Review Committee (PORC) and Training Program. PORC determines the level of training required. The cognizant department within the organization develops and approves the training to be conducted. Chemical operator certification is reviewed and approved by PORC.

Since commercial laboratories cannot achieve the detection limits specified in Table 5-1 of the license, SFC proposes to change the detection limits and action levels in water for fluoride, nitrate, radium-226, and thorium-230. As recommended in Regulatory Guide 4-16 for analyses of radium-226 and thorium-230, the limits of detection are 1.5 pCi/l and 100 pCi/l, respectively, and the action levels are 3 pCi/l and 200 pCi/l, respectively. In accordance with the permit issued by the Oklahoma Water Resources Board (OWRB), the action levels are 1.6 mg/l and 20 mg/l for fluoride and nitrate, respectively. The detection limits are 0.4 mg/l for fluoride and 2 mg/l for nitrate. Per phone conversation between OWRB and the NRC reviewer on September 12, 1989, OWRB has no objection to these proposed limits and levels.

In response to Condition No. 11, SFC submitted the report, "Analysis and Improvements in Handling Procedures for Product Cylinders Containing Liquid UF₆, Volumes I and II," dated April 20, 1986. By letter dated October 30, 1986, SFC submitted a report, "Probabilistic Risk Assessment Concerning UF₆ Heating in Autoclaves versus Modified Steam Chests," (Autoclave Report) dated August 1986, as an addendum to the aforementioned report. By letter dated March 3, 1989, NRC requested SFC to readdress their probabilistic risk assessment (PRA) established in the Autoclave Report. SFC submitted a response to NRC by letter dated June 19, 1989. In their response, SFC claims that a PRA of heating cylinders is superfluous. The installation of an in-line sampling system enables SFC to heat only those cylinders which have failed to meet product specifications. In addition, process improvements, such as UF₆ filtering, have reduced the number of out-of-specification product cylinders. As a result, the incidence of heating product cylinders in the modified steam chest has decreased significantly (See Attachment). NRC staff has determined that an SFC reevaluation of the Autoclave Report may be unwarranted; not only due to the aforementioned discussion, but also due to the improved cylinder weighing procedures established since the 1986 restart.

Conclusion/Recommendation

The staff has reviewed the revisions to Chapters 2.0 and 5.0 of the license, as well as the revisions to Chapters 10.0 and 11.0 of the safety demonstration section, and has determined that the changes will have no adverse effect on the public health and safety or the environment. Therefore, staff recommends approval of the application.

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The staff has reviewed the UF₆ cylinder handling reports submitted in response to Condition No. 11, as well as the description of the Training Program submitted in response to Condition No. 23, and believes the general requirements of the conditions have been satisfied. Thus, staff recommends deletion of Condition Nos. 11 and 23.

Region IV staff has no objection to amending the license.

Original Signed By:

Charles H. Robinson
Uranium Fuel Section
Fuel Cycle Safety Branch
Division of Industrial and
Medical Nuclear Safety, NMSS

Original Signed By:

Approved by: George H. Bidinger, Section Leader

Attachment: As stated

OFC:IMUF: <u>CR</u>	IMUF: <u>[Signature]</u>	IMUF: <u>[Signature]</u>	IMUF: <u>SHB</u>
NAME: CRobinson:mh:	MHorn:	VLTharpe:	GHBidinger:
DATE: <u>10/2/89</u>	<u>10/4/89</u>	<u>10/3/89</u>	<u>10/4/89</u>

OFFICIAL RECORD COPY

STEAM CHEST USAGE

January 1985 - June 1989

Number of Product Cylinders Heated

