

April 29, 1994

RE: 9452-N

Mr. Robert M. Bernero, Director
Office of Nuclear Material Safety
and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C.

RE: Sequoyah Fuels Corporation (SFC)
Preliminary Report
License SUB-1010

Dear Mr. Bernero:

Enclosed is a copy of changes to the facility's report titled Preliminary Report: Description of Current Conditions and Investigations (CCI) which was originally sent to your office on March 1, 1994. The changes are a result of comments received from the U.S. EPA, Region VI in Dallas, which also received a copy of the report as a requirement under the Administrative Order on Consent between SFC and EPA.

Attachment 1 contains the EPA's comments and SFC's response to comments, along with several pages showing some of the incorporated changes. Attachment 2 contains the pages which NRC should use to replace pages in the previously submitted CCI.

Please contact me at (918) 489-3386 or Bill Reid at (918) 489-3203 if you need any additional information or have questions about this submittal.

Sincerely,



Craig Harlin
Director, Regulatory Affairs

Attachments

xc: L. J. Callan, NRC Region IV
James C. Shepherd, NRC NMSS/LLDR
Maurice Axelrad, Newman & Holtzinger

cc (letter only): Mike Hebert, EPA-VI

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April 25, 1994

RE: 9449-E

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

Mr. Michael Hebert (6H-CX)
RCRA Enforcement Branch
U.S. Environmental Protection Agency
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

RE: Sequoyah Fuels Corporation
Preliminary Report Revisions
RCRA U3008(h) Administrative Order on Consent
EPA ID No. OKD051961183
Docket No. VI-0050(h)93-H

Dear Mr. Hebert:

Enclosed are three (3) sets of revised text for insertion into the final Preliminary Report: Description of Current Conditions and Investigations (CCI) for Sequoyah Fuels Corporation's (SFC) facility located near Gore, Oklahoma. SFC is submitting a fourth copy directly to the NRC to fulfill an SFC requirement to that agency. I have also provided a copy of the revised CCI text to Mr. Damon Wingfield of the Oklahoma Department of Environmental Quality.

This revised text incorporates SFC's response to your comments received in a letter of April 7, 1994. Attachment 1 to this letter is a summary of our response to each of your comments and copies of the revised text which are marked to indicate the corrections made. Attachment 2 consists of the revised text which is to be substituted into your copies of the CCI report. Please replace those pages of the current text which correspond to the page numbers of the revised pages. Please be aware that SFC is submitting only those pages of the CCI which contain revised text.

Please contact me at 918/489-3298 if you have any questions about the revisions.

Sincerely,

Tom Blachly
Project Coordinator

TRB:acl
Attachments
cc: Damon Wingfield, ODEQ

ATTACHMENT 1

SFC Response to EPA Comments

Preliminary Report: Current Conditions and Investigations

Table of Contents

- After completing revisions regarding all other comments, SFC should ensure the Table of Contents accurately reflects the organization of the Draft CCI Report.

Response: SFC agrees with this comment and has made the requested changes.

List of Figures

- With the addition of Figure 2-3, SFC should ensure that the List of Figures accurately reflects the figures which are included in the Draft CCI Report.

Response: SFC agrees with this comment and has included a reference to Figure 2-3 in the List of Figures on page iv. SFC has also included a reference to Figure 2-3 in Section 2.1.2.

Section 2.1.2, Page 2-1

- This section discusses characteristics of the facility, including the approximate area encompassed by the facility. Within this section, there are two references to area encompassed by the facility, specifically, 85 acres and 250 acres. These references are not consistent with the new section 1.6 added due to EPA's previous comment regarding facility terminology. SFC shall revise Section 2.1.2 to make it consistent with Section 1.6.

Response: SFC agrees with this comment and has made changes to clarify and provide consistency of terms. In addition to the requested changes, Section 2.1.1 and Figure 1-1 were also revised to be consistent with Section 1.6. Changes to the text are shown on pages 3 through 5 of Attachment 1 which correspond to pages 2-1, 2-2 and 4-19 of the report.

Section 4.3.2, Page 4-19

- It does not appear that the suggested new language proposed by SFC in its February 23, 1994 response has been inserted into the text. SFC should revise the section to include the proposed language.

Attachment 1 Page 2

Response: SFC agrees with this comment and has inserted the proposed language.

Table B-1, Page B-2

- With the addition of Figure 2-3, SFC should update Table B-1, CAP-Task I, A.1.b to reflect the new Figure 2-3.

Response: SFC has updated Table B-1, CAP-Task A.1.b to reflect the new Figure 2-3.

- According to EPA's review, Tables 53, 54 and 55 of the FEI more appropriately contains the information described in CAP-Task I, A.1.i. SFC should ensure that these FEI tables are the correct reference for the above task.

Response: References in Table B-1, A.1.i (FEI-Addendum Tables 1 and 2 and GMIM-Appendix F) provided all information required in CAP-Task A.1.i and therefore complied with the Administrative Order on Consent. Tables 53, 54 and 55 provide one additional piece of information, depth of surface conductor casing, which was not specified in the Order. However, surface conductor casing information is helpful for characterizing groundwater monitoring conditions at SFC. Therefore, the requested changes have been incorporated by removal of references to Tables 1 and 2 and adding references to Tables 53, 54 and 55 under item A.1.i of Table B-1.

2.0 General Information

2.1 Site Background

2.1.1 Site Ownership

Sequoyah Fuels Corporation (SFC) is a wholly-owned subsidiary of Sequoyah Fuels International Corporation, which is a wholly-owned subsidiary of Sequoyah Holding ~~owned~~ Corporation, a subsidiary of General Atomic Technologies Corporation. SFC is incorporated in the state of Delaware (Ref. 7). SFC owns the Gore, Oklahoma facility ~~and~~ site.

2.1.2 Site Location

The SFC Facility is located in Sequoyah County in mideastern Oklahoma at 95 A5) west longitude and 35 A30) north latitude, about 150 miles east of Oklahoma City, Oklahoma, 40 miles west of Fort Smith, Arkansas, 25 miles southeast of Muskogee, Oklahoma, and 2.5 miles southeast of Gore, Oklahoma. The Facility is located in Section 21 of Township 12 North, Range 21 East, and consists of a total of ~~85~~ 688 acres bounded on the north by private property and on the south by the State of Oklahoma Transportation Department Interstate 40 (I-40) and on the west by U.S. Government-owned land managed by the U.S. Army Corps of Engineers along the Illinois and Arkansas River tributaries of the Robert S. Kerr Reservoir. The eastern boundary of the Facility is Oklahoma State Highway 10. Access to the Facility is via State Highway 10,

adjacent to the east site fence. The Facility is on gently rolling terrain at approximate elevation 570 feet M.S.L. The SFC site industrial area is comprised of about 250-200 acres surrounding the facility. The SFC site is bordered on the north, east, and south by land owned by Sequoyah Fuels International Corporation.

The principal office of SFC is located at the Sequoyah Facility, I-40 and Highway 10 (Post Office Box 610), Gore, Oklahoma 74435. Figure 2-1 shows the general location of the SFC Facility with respect to major points of reference. A recent aerial photograph of the SFC Facility may be found in Reference 8. Figure 2-2 depicts the layout of the SFC Facility. Figure 2-3 is a map showing the SFC property boundary and all adjacent property owners.

Prior to ceasing production operations, SFC conducted processing activities in an 85 acre portion of its property. The conversion of uranium ore concentrate into uranium hexafluoride (UF_6) was conducted in the Main Process Building, the Miscellaneous Digestion Building, and the Solvent Extraction Building. The reduction of depleted uranium hexafluoride to depleted uranium tetrafluoride (UF_4) was conducted in the UF_6 Reduction Plant. Feed material for the UF_6 Conversion Plant was stored on the yellowcake storage pad southwest of the Main Process Building. Liquid byproduct processing was conducted primarily in the clarifiers, settling basins, and the raffinate treatment area west of the yellowcake storage pad. Feed material for the UF_6 Reduction

areas of soils at the SFC Facility were impacted and that the impacts were generally in the MPB and SX Building areas. The uranium was investigated with respect to area and depth. Soils impacted with uranium were generally those within a few feet (5 or less) of the surface with little, if any, found to have penetrated to deeper zones. The extent of nitrate and fluorides impacts were- was not as completely defined.

Analyses for soil gases indicated a presence of hydrocarbons in only a few locations, (near the Main Process Building and the SX Building) at low levels, and generally near the surface.

The results of the soil and sediment sampling are more completely described in Section 7.0 of the FEI (Ref. 4) and Section 4.0 of the FEI Addendum (Ref. 5).

4.3.3 Surface Water and Sediment Contamination

With respect to the surface water sampling events described in Section 4.2.3, the concentrations of fluoride measured for all monitoring sites were below the discharge limitations established in permits issued to SFC by the EPA and the OWRB. The data indicate fluoride does not pose an environmental concern for the Sequoyah Facility surface water system.

ATTACHMENT 2

Revised Text

Preliminary Report: Current Conditions and Investigations

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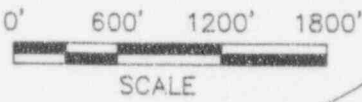
TO GORE
1.3 MILES

ILLINOIS
RIVER

U.S. HWY 64

LEGEND

- SFC FACILITY OR SITE (≤ 688 ACRES)
- - - PROCESSING AREA (≤ 85 ACRES)
- · - · - INDUSTRIAL AREA (≤ 200 ACRES)



KERR RESERVOIR

SFC PROPERTY
BOUNDARY

STATE HWY-10

I-40

SFC SITE TERMS
FIGURE 1-1

2.0 General Information

2.1 Site Background

2.1.1 Site Ownership

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areas of soils at the SFC Facility were impacted and that the impacts were generally in the MPB and SX Building areas. The uranium was investigated with respect to area and depth. Soils impacted with uranium were generally those within a few feet (5 or less) of the surface with little, if any, found to have penetrated to deeper zones. The extent of nitrate and fluorides impacts was not as completely defined.

Analyses for soil gases indicated a presence of hydrocarbons in only a few locations, (near the Main Process Building and the SX Building) at low levels, and generally near the surface.

The results of the soil and sediment sampling are more completely described in Section 7.0 of the FEI (Ref. 4) and Section 4.0 of the FEI Addendum (Ref. 5).

4.3.3 Surface Water and Sediment Contamination

With respect to the surface water sampling events described in Section 4.2.3, the concentrations of fluoride measured for all monitoring sites were below the discharge limitations established in permits issued to SFC by the EPA and the OWRB. The data indicate fluoride does not pose an environmental concern for the Sequoyah Facility surface water system.

Nitrate concentrations did not exceed the permit limit for the surface water outfall (008) in Event No. 1 and only slightly exceeded the permit limit in Event No. 2. All other

Sequoyah Facility exit points (SW4, SW6, and SW8) for surface water were below the SFC environmental action level⁴ (EAL) (20 mg/L) for nitrate in both events. During Event No. 3, the nitrate concentrations showed a decrease from the concentrations measured during Event No. 2 at 14 of the monitoring sites. For each event, nitrate concentrations exceeded the SFC EAL in drainage areas generally around Unit 18, Unit 25, and Unit 8.

Uranium concentrations for all monitoring sites were below the allowable 10 CFR 20 discharge limit for each event. The Event No. 1 and Event No. 3 uranium concentrations for all four Sequoyah Facility exit point monitoring sites were well below the Sequoyah Facility EAL (225 µg/L). The Event No. 2 uranium concentrations for two Sequoyah Facility exit point monitoring sites were below the SFC EAL and slightly above the SFC EAL at the other two exit point monitoring sites. Uranium concentrations exceeded the SFC EAL in the Unit 10 and Unit 11 drainage areas during Event No. 2. Uranium concentrations also exceeded the SFC action limits in other FEI defined drainage areas during Events No. 1, No. 2, and No. 3.

The results of each sampling event are more completely described in Section 3.0 and 8.0 of the FEI (Ref. 4) and Section 3.0 of the FEI Addendum (Ref. 5).

⁴ The EAL is a level established by SFC in order to trigger evaluation or corrective action prior to exceedance of a regulatory limit.

The sediment samples collected from drainage pathways were analyzed for total uranium, radium-226, and thorium-230. The sample results indicated the present drainage pathway to be uncontaminated but historical drainage pathways to be intermittently impacted with low concentrations of uranium and thorium-230.

The results of the sediment sampling are more completely described in Section 7.0 of the FEI (Ref. 4) and Section 4.0 of the FEI Addendum (Ref. 5).

4.3.4 Structures and Equipment Contamination

The interior of structures within the restricted area are contaminated with fixed and removable radioactive material. Depending on the structure, the average levels range from 1 to 4,200 disintegrations per minute per 100 cm² (dpm/100 cm²) removable alpha, 4 to 20,000 dpm/100 cm² removable beta/gamma, 21 to 21,000 dpm/100 cm² fixed alpha, 2,000 to 34,000 dpm/100 cm² fixed beta/gamma, 0.2 to 54 mrem/h contact beta/gamma dose rate, and 0.2 to 7 mrem/h general area dose rate. Detailed surveys of equipment are not available but results similar to the structure interior results would be expected on the exterior of this equipment. The interior of process equipment is expected to have higher levels of contamination. Except for the UF₆ Reduction Facility, a more complete summary of contamination survey results for structures and grounds is contained in Appendix A of SFC's Preliminary Plan for Completion of Decommissioning (Ref. 1). A more complete summary of contamination survey results for the UF₆ Reduction Facility may be found in Table 4-1 and Figures 4-2 and 4-3.

TABLE B-1. Cross-Reference between Resource Conservation and Recovery Act Administrative Order on Consent - Corrective Action Plan (Task I) and information in this draft Current Conditions and Investigations Report (CCI), the Facility Environmental Investigation (FEI), and the draft Groundwater Monitoring Interim Measures Workplan (GMIM).

CAP-TASK I	CCI	FEI	GMIM
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A.1.a	Figure 2-1	Figure 4	
A.1.b	Figure 2-3		
A.1.c		Drawing 3	
A.1.d	Figure 2-2	Figures 2 and 6	Appendix F
A.1.e		Figure 6	
A.1.f		Figure 6	
A.1.g		Drawing 4	
A.1.h	Figure 3-4		
A.1.i		Tables 53, 54 and 55	Appendix F
A.2	Section 2.1		
A.3	Section 4.1.1	Section 2	
A.4	Section 2.1.3		
B			Section 4.0
B.1	Sections 4.1 and 4.2	Section 3	
B.1.a		Figure 6	Appendix F
B.1.b *			
B.1.c			Section 4.0
B.1.d *			
B.2			3.0, Appendices G-L
B.2.a	Section 4.3	Sections 4,5,6 and 7	Appendix L
B.2.b	Sections 3.1 - 3.5	Sections 2,3,4,5,6,7 Drawing 4	Appendix A
B.2.c	Sections 3.6 - 3.10 Appendix A		
C	Section 1.5		Section 4.0

* Information does not exist