SEQUOYAH FUELS
A GENERAL ATOMICS COMPANY

RE: 0647-N

December 8, 2006

U.S. Nuclear Regulatory Commission
ATTN: Mr. James Park, Project Manager
Environmental Review Section
Environmental and Performance
Assessment Directorate
Division of Waste Management
And Environmental Protection
Two White Flint North
11545 Rockville Pike
Rockville, MD 20852-2738

Subject: Sequoyah Fuels Corporation, Docket – 40-8027
Request for Additional Information for Environmental Review of Proposed Reclamation Plan

Dear Jim,

In a letter dated November 16, 2006, you requested additional information related to the environmental review of SFC's Reclamation Plan (RP). Enclosed with this letter is our response to your request, and a compact disk containing the digital version of all requested information.

If you have any questions, don't hesitate to call Craig Harlin at (918) 489-5511, ext. 14.

Sincerely,

John H. Ellis
President

Enclosures

XC: Alvin Gutterman, MLB
Trevor Hammons, OAG
Jeanine Hale, CN

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Response to Request for Additional Information
Sequoyah Fuels Corporation
Docket No. 40-8027

By letter dated October 28, 2006, SFC submitted an updated environmental report (ER) for the proposed reclamation activities. Based upon NRC review of the ER and previously submitted site specific information, the Staff is requesting additional information to support its evaluation of the potential environmental impacts of SFC's proposed reclamation plan and the alternatives. Enclosed with this letter is a compact disk (CD) containing digital copies of information responsive to the NRC request. All information is provided in portable document format, spreadsheets, or AutoCAD format. The following summarizes the information included on the CD.

1. Provide the following concerning radiation levels, radon flux measurements, and occupational dose exposure measurements obtained from the raffinate sludge dewatering and handling processes.

   a. Direct radiation levels (milliroentgen/hour (mR/hr) or millirem/hour) measured on the outside of a filled super sack and how the radiation level falls off with distance, e.g., measurements recorded at specific distances.

   b. Radiation levels recorded from the super sacks in their current storage configuration. Preferably, these levels would be provided at different distances and locations within the current storage configuration.

   c. Radon flux measurements obtained from a typical super sack and data related to the radon flux from the super sacks in their current storage configuration on the former yellowcake storage pad.

   d. Occupational radiation exposure for individuals involved in loading and stacking the super sacks in their current storage configuration (primarily health physics support staff and logistics staff). Preferably, this information should be provided in mrem, including DAC-Hours, and also should include, if possible, the type of activity the individual performed and the number of super sacks they handled.

   This information will be used to estimate occupational and public health impacts from the proposed handling of the super sacks for placement within the proposed disposal cell or for shipment off site.

   Response:

   Included in the file folder RAI1 is a copy of the report on radon flux measurements submitted as part of the license amendment request for raffinate sludge dewatering. This folder also contains information on exposure rates at raffinate sludge storage cells, direct radiation levels on discrete bags of dewatered raffinate sludge, an exposure summary and working level measurements of the dewatering project, and a summary of environmental radon monitoring.

2. Clarify the anticipated demolition/construction activities described in Attachment F of the SFC Reclamation Plan. Provide the following, as possible, based on recent plans received from potential bidders:

   a. The site activity locations for construction and demolition (staging, traffic pattern,

waste storage).

b. The quantity of construction equipment to be used in the demolition and, decommissioning.

c. A schedule of demolition and construction activities that shows the anticipated sequence of events.

d. The expected contractor work force size.

e. The design for demolition for individual buildings.

This information will be used to determine potential noise, air, and traffic impacts from the proposed reclamation activities.

Response:

SFC has not released the Reclamation Plan for competitive bids, and does not plan to do so until the Reclamation Plan (RP) is approved. SFC has received unsolicited proposals which would be more in line with feasibility studies and not project plans. Since the eventual project team selected will have its own approach, it is difficult to speculate in detail as to how the actual reclamation will proceed. As such, we do not have dependable project plans to produce in response to this request. However, we have discussed a number of possible scenarios with the NRC during previous EIS and SER reviews which SFC has used to conduct internal assessments. Included in the file folder RAI2 is an independent cost assessment of the reclamation activities proposed in the RP which was based upon a successful uranium mill reclamation campaign by another company. This document is in draft form and was never published. The evaluation was used to qualify SFC cost estimates used in the RP. Also included is an internal cost estimate on the cell construction. These two files include our internal assessment of the types of information requested here.

3. Provide the following documents and information:

   a. SFC's 1997 "Final RCRA Facility Investigation of the Sequoyah Fuels Uranium Conversion Industrial Facility".

   b. Data collected in support of any ecological risk assessments conducted for the site and proposed reclamation activities.

   This information is needed to support the summary information provided in the proposed Reclamation Plan and the October 2006 Environmental Report.

   Response:

   SFC has included a copy of the Final RFI Report in folder RAI3 on the CD enclosed. The report is broken into two files, one containing the report itself and the other file contains all the appendices submitted with the report. In addition, the folder contains a draft risk assessment conducted as part of settlement negotiations with the State and Cherokee Nation. The risk assessment evaluates the post-reclamation risk if the proposed cell and cleanup levels were used to decommission the Facility. The report contains some information that could be useful to NRC in its review of the RP.

4. Provide the following electronic files:

a. Electronic data files of the environmental data collected for all media (soil, air, water, vegetation). These data will be used in evaluating dose/risk assessment models, and in the generation of summary data tables.

b. The AUTOCAD drawings from the Reclamation Plan in dwg format All drawings and layers are requested. Drawings in this format will be used as base maps and will allow expeditious production and reproduction of legible figures.

Response:

The folder RAI4 on the CD includes a number of spreadsheets and drawings that are responsive to this request. The following summarizes the material included:

- A table of source, sediment, and soil analyses was constructed from the Reclamation Plan, Appendix D, Vol I., Table 6, and brought forward to include recent sample results.
- Fenceline air sampling results have been compiled from the quarterly composite samples collected under the environmental monitoring program, and presented in tabular form on the CD. This information is routinely inspected by NRC, but not published on the Docket.
- Groundwater data was taken from annual groundwater reports submitted to the NRC and EPA, and presented in table form including background groundwater monitoring results, groundwater monitoring results, and monitoring well information and water level measurements.
- An effluent release summary for Outfalls 001 and 008 was constructed from monthly DMR reports submitted to the State as part of the OPDES permit, and is included on the CD.
- A table of Forage Analyses from the Agland Application Area summarizes annual Completion Reports submitted to the NRC
- A table of Surface Water Analyses was taken from the Environmental Report submitted to the NRC recently.
- Drawings constructed in AutoCAD showing environmental sample locations and sources of gravel and rock for reclamation are included along with a facility base map and a facility topographic map. Also, RP Figures 2-1, 2-3 and 2-5, and the disposal cell drawings in Attachment A of the RP are included on the CD.