



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION IV  
URANIUM RECOVERY FIELD OFFICE  
BOX 25325  
DENVER, COLORADO 80225

URFO:DMG  
Docket No. 40-8681

NOV 05 1982

MEMORANDUM FOR: Docket File No. 40-8681

FROM: Daniel M. Gillen  
Uranium Recovery Field Office

SUBJECT: REVIEW OF CONSTRUCTION REPORT AND PROPOSED  
INSPECTION PROGRAM, TAILINGS MANAGEMENT SYSTEM,  
ENERGY FUELS NUCLEAR (EFN), WHITE MESA SITE.

In accordance with License Condition No. 26b, EFN submitted by letter dated March 1, 1982, a construction report on the initial phase of the tailings management system. The construction of the initial phase of the tailings system was authorized by Amendment No. 1 of Source Material License No. SUA-1358.

I have reviewed the construction report and find that construction and testing activities were performed in accordance with the requirements of Conditions No. 25 and No. 26 of Amendment No. 1. EFN has adequately responded to License Condition 26b by including the following in the report:

1. As-built drawings of the initial phase.
2. Subsoil profiles beneath each embankment.
3. Compaction control test results; Most of the tests indicated fill that met the compaction criteria, but whenever fill failed a test it was reworked, recompacted and retested. An adequate number of tests were conducted (more than one test per 1000 cubic yards of fill).
4. Identification and classification of soils used in the embankment.
5. Discussion of construction equipment and procedures.
6. Identification of unexpected conditions and discussion of the resolution; a significant amount of calcareous subsoils were

8211170417 821105  
PDR ADOCK 04008681  
C PDR

OFFICIAL DOCKET COPY

20225

NOV 05 1982

encountered. These areas required over-excavation of the embankment foundations.

In addition, EFN's letter of March 1, 1982, submitted a detailed plan for the operational inspection and surveillance of the White Mesa mill tailings disposal system. This was submitted in response to the NRC mill appraisal report, in which it was identified that EFN's performance and documentation of the tailings retention system inspections were inadequate.

I have reviewed the subject inspection program and find that it is fully consistent with the staff's guidelines in Regulatory Guide 3.11.1, "Operational Inspection and Surveillance of Embankment Retention Systems for Uranium Mill Tailings." In summary, the program will include the following:

1. Compilation of all pertinent design and construction documents for reference at the site.
2. Daily, monthly and quarterly inspections that meet or exceed the program as outlined in Regulatory Guide 3.11.1.
3. Yearly survey of the alignment and elevation of all embankments.
4. Yearly technical evaluation report.
5. Use of detailed inspection checklist forms that include requirements for action to be taken upon various observations of potential concern.

Based on the results of this review, Source Material License No. SUA-1358 should be amended to require the performance of the inspection program as outlined in the report. The present license condition merely generally requires a daily documented inspection with no details of what the inspection program should include.

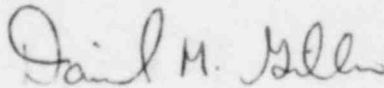
Approval of an amendment with the following revised license condition is recommended:

OFFICIAL DOCKET COPY

NOV 05 1982

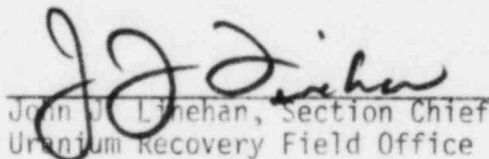
26...

- d. Conduct and document a program of operational inspection and surveillance of the initial and second phases of the tailings disposal system in accordance with the statements and recommendations in "Monitoring Plan, Initial Phase - Tailings Management System, White Mesa Uranium Project, Blanding, Utah" prepared by D'Appolonia Consulting Engineers, Inc. for Energy Fuels Nuclear, Inc., forwarded by letter dated March 1, 1982.



Daniel M. Gillen  
Uranium Recovery Field Office

Approved By:



John J. Linehan, Section Chief  
Uranium Recovery Field Office

OFFICIAL DOCKET COPY