

APPENDIX A  
U. S. NUCLEAR REGULATORY COMMISSION  
REGION IV  
URANIUM RECOVERY FIELD OFFICE

NRC Inspection Report: 40-4492/85-001 License: SUA-667

Docket: 40-4492

Licensee: American Nuclear Corporation  
314 West Midwest Avenue  
Casper, WY 82601

Facility: Gas Hills Mill

Inspection At: Fremont County, Wyoming

Inspection Conducted: July 16-17, 1985

Inspectors:

15/  
N. M. Shopenn, Project Manager -  
Team Leader

8/16/85  
Date

15/  
H. J. Pettengill, Project Manager

8/16/85  
Date

Approved:

15/  
H. J. Pettengill, Chief  
Licensing Branch 2  
Uranium Recovery Field Office, Region IV

8/16/85  
Date

Inspection Summary

Inspection Conducted on July 16-17, 1985 (Report 40-4492/85-001)

Areas Inspected: An announced inspection of the uranium mill facilities and associated radiation safety program records was conducted under Source Material License SUA-667. The mill currently remains on indefinite shutdown status. The licensee filed an intent to terminate its license on June 13, 1985. The inspection covered a review of Management Organization and Controls, Radiation Protection, and

Waste Management. The inspection involved a total of 10 inspector hours on site by two NRC inspectors.

Results: Within the three areas inspected, no violations or deviations were identified by the inspectors.

### DETAILS

#### 1. Persons Contacted

##### ANC

- \*Jack Ferguson, President
- \*\*\*Niles Andrus, Vice President Operations
- \*\*Sheryl McArt, Consultant and RSO

##### NRC

- \*\*\*Doug Sly, SMPB/IE

\*Denotes those present at the exit interview at Casper, Wyoming July 16, 1985.

\*\*Denotes those present at the exit interview at the mill site July 16, 1985.

\*\*\*Denotes those present at both exit interviews.

#### 2. Licensee Action on Previous Inspection Findings

(Closed) Violation 40-4492/84-001. Failure of the licensee to monitor the settlement monuments semiannually during 1983 as required by License Condition No. 20. The monuments were monitored in 1984 and the first half of 1985 as documented by records provided by the licensee.

(Closed) Violation 40-4492/84-001. Failure of the licensee to properly analyze airborne concentrations during mill entry on October 13, 1983 in accordance with 10 CFR 20 103(a)3. All entries conducted since the last inspection were properly analyzed and documented by the licensee as indicated in records made available during this inspection.

(Closed) Deviation 40-4492/84-001. Failure of the licensee to utilize a personnel monitor and/or shower prior to leaving the restricted area of the mill as stated in Regulatory Guide 8.30. A

review of the entry and exit records for the restricted area since the last inspection indicated that monitoring had been performed as required by the license and was in accordance to the Regulatory Guide.

(Closed) Deviation 40-4492/84-001. Failure of the licensee to have the restricted area boundary fence next to tailings pond No. 2 replaced after completion of seasonal construction work. The inspectors noted that the fence was replaced and properly placarded.

(Closed) Deviation 40-4492/84-001. Failure of the licensee to evaluate piezometer measurements that showed considerable fluctuations between June 1982 to June 1984. The licensee had previously evaluated the data by submittal dated August 27, 1984 and piezometer readings taken since the last inspection showed no erratic variations.

### 3. Management, Organization and Controls

The licensee described the organizational structure. There are only two remaining full-time ANC personnel responsible for the maintenance of the mill site. In addition, ANC has hired three other personnel under contract on a part-time basis. Two of the contract personnel are Messrs. K. Watts and J. DeJoia who were previously employed by ANC. These employees carry out the routine monitoring requirements of the license. The remaining contract employee, Sheryl McArt is the radiation safety officer (RSO) for the site. The part-time RSO's qualifications had been reviewed and approved by the NRC (URFO). The RSO is on call and is present when all mill entries are made.

No violations or deviations were identified by the NRC inspectors.

### 4. Radiation Protection

The mill has been shutdown status since 1981. All site entries since 1984 have been made under a Radiation Work Permit (RWP) because routine in-plant monitoring is no longer required by the license. The work that has been done within the mill since the last inspection was done under six RWPs. The main effort involved the winterizing of the mill tanks between November 28 and December 12, 1984.

The licensee has maintained limited radiation safety procedures appropriate for the current level of activity. The inspector's

review of the records indicated that all required air samples had been taken since the last inspection and had been analyzed properly. TLD's have not been issued to personnel since 1984 because exposures in excess of 25% of the 10 CFR 20 standard were determined as not likely. Bioassays taken as a result of the RWP work were all reported at less than 10 ugm/l by the vendor.

The licensee's survey instruments were noted to be properly calibrated at the time of the inspection. The surveys performed when the RWPs were issued indicated that there were no "radiation areas" identified within the mill complex.

Personnel exit contamination survey records were examined by the inspectors since the last inspection. The inspectors determined that the instrument used to do this survey was in calibration and that the record of self-monitoring of personnel was properly annotated.

The inspectors noted that records of surveys for the release of a trailer, furniture and other office equipment were not available for examination at the time of the inspection. As established by an ANC submittal dated July 24, 1985, the inspectors were able to establish that ANC was able to account for all released equipment and the trailer. The trailer and its contents had been surveyed and cleared prior to shipment to the Edgemont TVA Mill Facility. The transfer of the trailer was to another licensed facility. Some of the office equipment and furniture was sent to the Riverton, Wyoming office and either returned to the mill or sent to TVA's Carol Shop office when the Riverton office was closed on July 1, 1985. The licensee in the July 24, 1985 submittal either provided adequate survey records or committed to the completion of surveys prior to release. The URFO staff will instruct the licensee to complete and submit surveys for all materials remaining at the Carol Shop within 30 days or return the furniture to the mill site.

The inspectors have identified no violations of NRC requirements.

#### 5. Radioactive Waste Management

Tailings Pond 2 has had interim stabilization work performed as required by the reclamation plan. The inspectors observed minor evidence of erosion on the outslopes of the embankment. It did not appear to adversely affect the interim stabilization but should be evaluated and repaired as needed. It will be an open item for review on later inspections. (ANC 85-001/01)

The restricted area boundary fence was observed by the inspectors to be intact and properly placarded. This was a deviation on the 1984 inspection.

Records of piezometer measurements for tailings pond No. 2 were not available for review at the time of the inspection. These records were later forwarded to the URFO on July 24, 1985 for review after the inspectors returned to Denver. The inspector's review of these records indicate they are complete. Tailings pond inspections records were examined during the inspection and determined to be in order. Also, the ground water pumpback system for tailings pond No. 1 that had not been operational at the time of the last inspection was determined by the inspectors to be partially operating. Since the pumpback system had been only partially operational since the last inspection it will remain an open item. (ANC 85-001/02).

The inspectors reviewed the settlement monument readings recorded since the last inspection and determined the records were in accordance to license requirements. This was a violation during the 1984 inspection of the previously numbered License Condition No. 20, which has been renumbered License Condition No. 16 under the new license.

The NRC inspectors reviewed all the environmental monitoring records since the last inspection and determined that the licensee met the requirements of License Condition No. 18.

No violations of NRC requirements were identified.

#### 6. Exit Interview

An exit interview was held at the conclusion of the inspection at each location. The inspectors noted that survey records for release of equipment and the piezometer readings for pond No. 2 were missing and requested the licensee establish the whereabouts and submit these records for review within one week of this date. The licensee indicated that this occurrence resulted from the movement of its office twice within the last year and the loss of some past employees. The licensee committed to locating and submitting the required survey results. The submittal providing this information was received in URFO on July 30, 1985.