

September 10, 2001

Mr. William C. Salisbury  
American Nuclear Corporation  
P.O. Box 2713  
Casper, Wyoming 82602

SUBJECT: NRC INSPECTION REPORT 40-4492/01-01

Dear Mr. Salisbury:

On July 11, 2001, the U.S. Nuclear Regulatory Commission (NRC) completed a construction inspection at the site of your former Gas Hills uranium milling facility accompanied by Mr. Mark Moxley of Wyoming Department of Environmental Quality, Land Quality Division. The enclosed report presents the results of that inspection.

The inspection was an examination of activities conducted under the license as they relate to site reclamation related activities being conducted under your license.

The inspection disclosed that no reclamation activities have been in progress since the last inspection. During this inspection, no items of non-compliance or significant issues were identified.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

**/RA/**

Melvyn N. Leach, Chief  
Fuel Cycle Licensing Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

Docket No.: 40-4492  
License No.: SUA-667

Enclosure:  
NRC Inspection Report  
040-4492/00-01

cc w/enclosure:  
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Bureau of Land Management  
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Mr. David Finley  
Solid and Hazardous Waste Division  
Wyoming Department of Environmental Quality  
122 West 25th Street  
Cheyenne, Wyoming 82002

Mr. Mark Moxley  
District II Supervisor  
Wyoming Department of Environmental Quality  
Land Quality Division  
250 Lincoln Street  
Lander, Wyoming 82520-2848

Mr. Jerome Gonzalez  
U. S. Department of Energy  
Grand Junction Project Office  
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bcc to DCD (IE07)

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DOCUMENT NAME: Draft: G:\FCLB\UraniumRecoverySection\ANC\1044901.wpd

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JHLusher		GSJanosko		MNLeach	
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**ENCLOSURE**

U. S. NUCLEAR REGULATORY COMMISSION

Docket No.: 40-4492

License No.: SUA-667

Report No.: 40-4492/00-01

Licensee: American Nuclear Corporation

Facility: Former Gas Hills Project

Location: Gas Hills area, Fremont County, Wyoming

Inspection Date: July 11, 2001

Inspectors: John H. Lusher, Health Physicist  
Division of Fuel Cycle Safety  
and Safeguards  
Fuel Cycle Licensing Branch  
Uranium Recovery Section

Accompanied By: Terry Johnson, Surface Hydrologist  
Division of Fuel Cycle Safety  
and Safeguards  
Fuel Cycle Licensing Branch  
Uranium Recovery Section

Dan Rom, Geotechnical Engineer  
Division of Fuel Cycle Safety  
and Safeguards  
Fuel Cycle Licensing Branch  
Uranium Recovery Section

Carl Jacobson, Project Manager  
DOE, Grand Junction Office

Approved By: Melvyn N. Leach, Chief  
Fuel Cycle Licensing Branch  
Division of Fuel Cycle Safety  
and Safeguards

Attachment: Supplemental Inspection Information  
Photographs

## **EXECUTIVE SUMMARY**

### American Nuclear Corporation's Gas Hills Project NRC Inspection Report 40-4492/00-01

This inspection included a review of site status and remediation.

#### Site Status and Decommissioning for Uranium Mill Sites

- Site activities and decommissioning programs were being conducted in accordance with the remediation plan, the license, and applicable regulations for uranium mill sites (Section 1).

#### Radiation Protection

- Site fences were in good condition. Site security and perimeter postings were appropriate (Section 2).

## Report Details

### **1 Site Status and Decommissioning Inspection Procedure for Uranium Mill Sites (87654)**

#### 1.1 Inspection Scope

The site status and decommissioning program were reviewed to determine if licensee activities were being conducted in accordance with the American Nuclear Corporation (ANC) Reclamation Plan, the license, and applicable NRC regulations for uranium mill sites.

#### 1.2 Observations and Findings

##### a. Site Status

Reclamation oversight of the facility had been transferred to the State of Wyoming, Department of Environmental Quality (WDEQ). This transfer occurred because ANC had become insolvent in May 1994 and site reclamation was incomplete. A Confirmatory Order between the NRC and the WDEQ describing the requirements for reclamation activities had been agreed upon by both parties and was issued in October 1996.

The licensed site encompasses approximately 550 acres of land of which approximately 80 acres consist of Tailings Pile 2 and 40 acres of Tailings Pile 1. Tailings Pile 2 reclamation activities are complete and Tailings Pond 1 activities are on hold. Additionally, the site has an active groundwater recovery and corrective action program.

Reclamation activities are targeted to restart in the Year 2002. Since the last inspection in April 1998, no site reclamation activities had been performed. After approval of the reclamation plan for Tailings Pile 1, activities will include the following: (1) windblown clean-up activities, (2) capping with clay (3) radon testing, and (4) placement of rip-rap rock.

#### 1.3 Conclusion

The inspector determined that the site was being maintained in accordance with the ANC Reclamation Plan, the license, and applicable NRC regulations for uranium mill sites.

## **2 On-site Construction (88001)**

### **2.1 Inspection Scope**

The NRC conducted an erosion control and geotechnical review to determine whether problems to the tailings impoundment construction or erosion controls existed such that damage or deterioration needed repair. The geotechnical engineering evaluation included physical observations of the reclaimed impoundment and dams.

A driving tour was conducted, to verify that site activities were being conducted in accordance with applicable regulations and the conditions of the license to ensure that controls were adequate to protect the health and safety of workers and the public. The inspector observed site conditions, of the two tailings ponds areas, and the decommissioned heap-leach area. Mr. Mark Moxley explained that WDEQ was monitoring Tailings Pond 1 settlement. Earthwork operations which had occurred since the time of the previous visit were observed. Construction records were not reviewed, nor were construction inspection operations conducted. The operations which had been performed were beyond the scope of reclamation activities being reviewed by headquarters staff.

The inspector performed radiological surveys using an NRC-issued microRoentgen meter calibrated to radium-226.

### **2.2 Observations and Findings**

Site fences were in good shape and the postings were appropriate. No problem areas were identified, and no health or safety hazard was identified during the site tour.

Exposure rate readings were 28-30 microR per hour ( $\mu\text{R/hr}$ ) on Tailings Pile 2, 40-45  $\mu\text{R/hr}$  on Tailings Pile 1 and background of 25  $\mu\text{R/hr}$ .

### **2.3 Conclusions:**

Due to the unique nature of the reclamation at ANC, no determinations regarding the adequacy of the work were made. There were no indications of unusual or excessive settlement or cover disruption as of the inspection date.

## **3 Exit Meeting Summary**

The inspector presented the inspection results to the State representative at the conclusion of the inspection on July 11, 2001. The State representative acknowledged the findings as presented.

**ATTACHMENT**

**PARTIAL LIST OF PERSONS CONTACTED**

Licensee

M. Moxley, Land Quality Division, District II Supervisor, WDEQ

**INSPECTION PROCEDURES USED**

IP	87654	Decommissioning Inspection Procedure for Uranium Mill Sites
IP	88001	On-site Construction

**ITEMS OPENED, CLOSED, AND DISCUSSED**

Opened

None

Closed

None

Discussed

None

**LIST OF ACRONYMS**

ANC	American Nuclear Corporation
CFR	Code of Federal Regulations
LC	license condition
NRC	Nuclear Regulatory Commission
RSO	radiation safety officer
WDEQ	State of Wyoming, Department of Environmental Quality



Tailings Pond #2 Main Drainage Channel Looking West



Gullying at Edge of Tailings Pond #2 Rock Cover Looking East



Top of Tailings Pond #2 Looking North West



Gullying in side of Tailings Pond #1 Looking North