

APPENDIX B

U. S. NUCLEAR REGULATORY COMMISSION

REGION IV

URANIUM RECOVERY FIELD OFFICE

NRC Inspection Report: 40-8926/89-02
Docket: 40-8926

License: SUA-1492

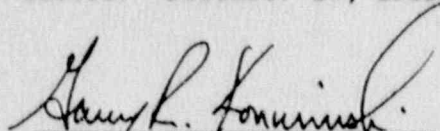
Licensee: State of Wyoming
Department of Environmental Quality
Herschler Building
122 West 25th Street
Cheyenne, Wyoming 82002

Facility: Bison Basin Mine

Inspection At: Riverton, Wyoming

Inspection Conducted: December 14, 1989

Inspector:



Gary R. Konwinski, Project Manager
Team Leader

12-18-89

Date

Approved:



Ramon E. Hall, Director

12/19/89

Date

Inspection Summary

Inspection Conducted On December 14, 1989 (Report 40-8926/89-02)

Areas Inspected: Announced reactive inspection of radioactive waste management. The specific area reviewed included an alpha survey of a private residence in Riverton, Wyoming.

The inspection involved a total of 2 inspector hours onsite by one inspector.

Results: Within the one area inspected, one violation, no deviations, and no open items were identified by the inspector.

DETAILS1. Persons Contacted

*Mark Kerr, Landmark Reclamation, DEQ contractor

**Mark Moxley, Senior Environmental Specialist, State of Wyoming,
Department of Environmental Quality (DEQ)

*Denotes those present at the exit interview.

**Denotes individuals informed of exit interview via telephone.

2. Licensee Action On Previous Inspection Findings

No violations, deviations and one open item was identified during the December 14, 1989, inspection. The open item concerned incomplete decontamination of the floor drains and south sump at the former processing site. Licensee records indicated that the sump and drains were now decontaminated to unrestricted release limits, thereby closing a previous open item (40-8926/8901-01).

3. Radioactive Waste Management

The inspection was a result of an October 20, 1989, memorandum that was an attachment to the "Bison Basin Decommissioning Project Final Report, 1989." The decommissioning report was under staff review when it was noted that a memorandum indicated that liner materials were diverted to a Riverton residence on or about October 19, 1989, and were retrieved for disposal on October 20, 1989. The State of Wyoming, through its contractor, Landmark Reclamation, is reclaiming the Bison Basin solution mining site as authorized under Source Material License SUA-1492. As a portion of the decommissioning work, byproduct materials and other contaminated wastes were disposed of in a uranium mill tailings impoundment. It was discovered by Landmark Reclamation that some of the evaporation pond lining material was not taken to the tailings impoundment for disposal, but rather, diverted to a private residence in Riverton, Wyoming.

The procedures under which the Bison Basin site was to be decommissioned and decontaminated had been incorporated into Source Material License SUA-1492. Additional information on decommissioning in an August 3, 1989, Bison Basin submittal indicated that the decommissioning contractor shall haul all solids and liquids to the designated disposal site. These commitments were incorporated into License Condition No. 10 of Source Material License SUA-1492. The haulage of the liner materials to the Riverton residence was therefore noted as a violation of this license condition.

To determine the degree of contamination, the inspector performed alpha surveys of the interior and exterior of the residence as well as a subdivision utility line. The results of these surveys are shown below:

Location	Counts/Minute	Disintegration/Minute/100 cm ²
<u>Outside of House</u>		
Concrete driveway @ street	Background	Background
Concrete driveway @ house	Background	Background
Concrete walkway to backyard	3.5	0.63
Concrete walkway in backyard	2.2E1	3.96
At gate to backyard	2.3E1	4.14
Soil @ west side of house foundation	2.2E4	3,960
Soil @ south side of house foundation	3.1E4	5,580
Soil @ house foundation near front step	1.1E5	19,800
Soil @ east side of house foundation	2.1E4	3,780
Backyard near property fence	1.1E1	1.98
West yard	3.7E4	6,660
<u>Inside of House</u>		
Carpet at front door	1.1E1	1.98
Living room carpet	1.3	0.23
Rear house door	1.4E2	25.2
Laundryroom floor	1.6	0.29
Kitchen floor	1.4	0.25
Kitchen counters	1.0	0.18
Gas & water utility line	3.2E3	576

The results of these surveys indicate that the elevated alpha readings are consistently located adjacent to the home's foundation, but not found in the backyard where the liner material had been temporarily located. Similar readings are found at a utility right-of-way southeast of the home. Due to the extent of elevated readings, the inspector concluded that they represent a potential vicinity property, rather than contamination due to diversion of pond liner materials.

One violation, no deviations, and no open items were identified by the inspector.

4. Exit Interview

The inspector met with the licensee representative as identified under item No. 1, and as noted, discussed the inspection findings with the licensee via telephone. The licensee reviewed their activities upon discovery of the diversion. Furthermore, they committed to review their files to determine if any other contractor errors took place during the decommissioning work.

8926/GRK/89/12/15/INSP

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Docket File No. 40-8926

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Suspense File

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*w/766

GKonwinski

RCPD, WY

WDEQ (2)

CONCURRENCE:

DATE:

GKonwinski/URFO/1v

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12-18-89

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