

AMERICAN NUCLEAR CORPORATION

40-4492

JOHN C. FERGLISON, PRESIDENT
TELEPHONE (307) 265-7912

December 20, 1990

RETURN ORIGINAL TO PDR. HQ.

550 NORTH POPLAR, SUITE 6
P.O. BOX 2713
CASPER, WYOMING 82602

Air and Toxics Division
U. S. Environmental Protection Agency
Region VIII
999 18th Street, Suite 500
Denver, CO 80202-2405

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USNRC
MAIL SECTION
DOCKET CLERK

ATTN: Irwin Dickstein, Director

RE: Radon-222 Emanation From Uranium Mill Tailings

Dear Mr. Dickstein:

American Nuclear Corporation (ANC) is the owner of a uranium mill tailings facility located in Fremont County, Wyoming. The mill tailings are being reclaimed in accordance with ANC's US-NRC License No. SUA-667. Reclamation construction at the site is anticipated to be completed by the end of 1992, exclusive of topsoil placement, with stabilization, acceptable groundwater restoration, and complete site acceptance by US-Department of Energy (DOE) at an undetermined later date. This letter is to advise you that long term stabilization of the facility is physically impossible to complete by December 15, 1991. ANC seeks US-EPA's advice on how we may negotiate a compliance agreement that is realistic for the facility and eliminates enforcement action under Section 113 of the Clean Air Act.

In order for the US-EPA, Region VIII, to understand the situation at ANC's Gas Hills facility, a summary of the facility's history of operations, standby, decommissioning, decontamination, and reclamation activities follows:

The Gas Hills uranium district was discovered in 1953. The uranium trends range from surface outcrops to several hundred feet deep. The area has been the center of extensive uranium mining activity since the mid 1950's. The radioactive material present in the Gas Hills environment has been introduced through these mining endeavors and through the naturally occurring outcropped nature of the uranium deposits. The area is elevated above "normal" background compared to other areas of Wyoming such as Cheyenne or Casper, due to these naturally occurring uranium deposits that exist in the Gas Hills uranium district. Mining operations have been suspended in the Gas Hills and the principle activities in the area are mine reclamation and livestock grazing. The closest residence is approximately 10 miles from the facility.

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Certified By *Mary C. Hood*

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ANC's Gas Hills facility contains 550 acres situated in Sections 28 and 29, Township 33N, Range 90W, Fremont County, Wyoming. The uranium processing mill operated from 1959 to 1982 and processed approximately 8,070,000 cubic yards of uranium ore. Waste from the process circuit was deposited, through approved best practical technology, into Tailings Ponds No. 1 & 2. There are approximately 1,350,000 and 6,720,000 cubic yards of mill tailings in Ponds No. 1 and No. 2, respectively.

The facility is presently being reclaimed in accordance with ANC's US-NRC's License No. SUA-667 and State of Wyoming Mining Permit No. 352. The uranium processing mill has been demolished and buried on site and an interim cover has been placed on Tailings Pond No. 1 and 2. Tailings Pond No. 2 is presently under reclamation construction activities with planned completion by the end of 1991, exclusive of topsoil placement. Reclamation construction of Tailings Pond No. 1 is scheduled for completion by the end of 1992, exclusive of topsoil placement. This schedule is based on the assumption that there will be no complications from site specific characteristics or regulatory authorizations. Topsoil will be placed on the tailings ponds when the Wyoming Department of Environmental Quality (WDEQ) has determined that the radon barrier material meets State soil and stabilization requirements.

The site is presently a restricted area, due to the presence of radioactive materials, and will continue to be a restricted area when it is turned over to the US-DOE for long term care and maintenance. Air, water, and personnel monitoring programs are presently required through ANC's US-NRC SUA-667 license conditions and are required until final stabilization is achieved and the site is accepted by the appropriate agencies.

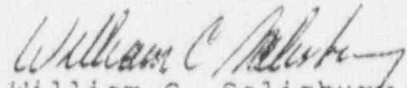
The operation, decommissioning, decontamination, and reclamation plans are in compliance with all the appropriate regulatory guidelines addressing the issues of personnel exposure, exposure to closest residence, and release of radioactive materials off site (air and water effluent) being identified. The guidelines that ANC abides and conforms to, regarding personnel exposure and health related monitoring, via the US-NRC License No. SUA-667 is 10 CFR Part 20. As the regulations change, for employee (occupational) and public (effluent releases) exposure, ANC is responsible to conform to such changes.

Throughout ANC's operation and in accordance with US-NRC License No. SUA-667 monitoring has been performed annually. The results are compiled semiannually in accordance with 10 CFR 40.65 and submitted to the US-NRC's Uranium Recovery Field

Office, Denver, Colorado for review and verification that compliance with all regulatory guidelines have been met. Radon-222 concentrations for the last four years have been compiled and the mean background (upwind) level is 1.17 pCi/l, with a minimum and maximum downwind concentration of 0.8 and 3.8 pCi/l, respectively.

Please advise as to how ANC should proceed to negotiate a site specific compliance agreement that is in line with our US-NRC and WDEQ license requirements.

Sincerely,


William C. Salisbury
Manager, Special Projects

cc: US-NRC, Denver, Colorado (Ramon Hall)