Kennecott Minerals Company

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July 15, 1982

Kennecott

Mr. Glen D. Brown
US Nuclear Regulatory Commission
Region IV, Office of Inspection and Enforcement
Technical Inspection Branch
611 Ryan Plaza Drive
Suite 1000
Arlington, TX 76012

Dear Mr. Brown:

USAEC Source Material license number SUA-1106 (attached) expired December 31, 1976. This letter is therefore submitted in application to terminate this USAEC Source Material license, and to release for unrestricted use the Verona pilot plant facility and area. All USNRC guidelines for decontamination of facilities and equipment prior to release for unrestricted use or for termination of license for byproduct, source, or special nuclear materials (June 1980) have been complied with as of this date.

The Verona pilot plant and area are located at Kennecott Minerals Company's property in Bingham Canyon, Utah. The facility was used for testing methods for recovery of natural uranium from mine water which is used to leach minerals from the copper mine waste dumps. The Verona test facility has been inactive since before the license expired in December 1976. We now wish to scrap the structure and release the area to other use.

I have been in contact with Mr. J. Bruce Carrico of the Material and Licensing Branch (attached letter - J. Carrico, April 1, 1982) who has sent a memorandum to your office concerning our case.

We commissioned Mr. Ron E. Berg, Radiation Protection Officer, for Wyoming Minerals Corporation, USNRC Source Material License SUA 1315, to perform the radiation survey of the pilot plant facilities and conduct any decontamination necessary to release the facility. The following are the results of the surveys and decontamination procedures performed.

An initial survey was conducted on February 12, 1982 (attached letter - R. Berg, February 17, 1982) at which time alpha swipe tests from the exterior surfaces of the eluent columns, associated piping, valves, support structures, and interior surfaces that were accessible, were found to be free of contamination.

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Localized contamination was identified in the solvent extraction building during this survey.

A second survey was conducted on February 19, 1982 (attached letter - R. Berg, February 26, 1982) after Mr. Berg reviewed the engineering drawings of the Verona Pilot Plant and had identified areas of potential contamination. Alpha swipe tests were again taken and found to be free of contamination. An eluent holding tank was found to contain 125 gal. of 6.5 gpl of uranium-bearing solution. The solvent extraction building was decontaminated at this time and the contaminated drums were removed to WMC facilities, for further decontamination. The total amount of material involved was less than 0.5 kilo of U₃O₈. Mr. Berg recommended that further alpha swipe tests be taken when the piping was further disassembled. He also made recommendations for the disposition of the eluent holding tank.

A final survey was taken on June 29, 1982 (attached letter - R. Berg, July 8, 1982) after all piping was disassembled and available for alpha swipe tests. Again no contamination was found in these tests. A post-decontamination survey was made of the solvent extraction building, the results showed alpha contamination well below the guidelines proposed by the NRC.

At this time a gamma survey was conducted of the entire structure and all related equipment. No Gamma radiation was found that exceeded the background level.

On July 13, 1982 the 100 gallons of 7.0 gpl U₃O₈ solution was disposed of by diluting to approximately 10 times the original volume and draining into the leach solution stream from the waste dumps. The eluent tank was then removed to the "p"-plant yard for further cleaning. Alpha swipe tests were taken inside the tank (attached letter - R. Berg, July 15, 1982). No radiation in excess of the guidelines was found.

We currently have a contract let to scrap the Verona pilot plant facilities; this is being held pending approval from your office. If there are any areas which require further elaboration please call me at (801) 322-8343. Your expediency in this matter is appreciated.

R. B. Folsom

Sincerely,

Radiation Protection Officer

RBF:cis

cc: J. B. Carrico
USNRC Material Licensing Branch