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Docket File 40-8348
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40-8348/GRK/86/05/30/0

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URFO:GRK
 Docket No. 40-8348
 SUA-1223, Amendment No. 6
 04008348020E

MEMORANDUM FOR: Docket File No. 40-8348

FROM: Gary R. Konwinski, Project Manager
 Licensing Branch 2
 Uranium Recovery Field Office, Region IV

SUBJECT: DECOMMISSIONING AND DECONTAMINATION OF THE
 A-3 IN SITU LEACH SITE

Background

By licensing action and letter dated April 26, 1986, URFO recommended that the A-3 In Situ Leach site should be relieved from further stabilization monitoring requirements and that the site have the wellfields appropriately abandoned. In response to the above cited correspondence, Minerals Exploration Company (MEC) submitted, by cover letter dated May 8, 1986, a final closure plan for the facility.

Site Closure

The closure plan for the facility includes abandoning all wellfield and monitor wells and decontaminating the site to unrestricted release limits. The well casings will be filled with bentonite or equivalent drilling mud from their completion depth to the water table. From the water table to the land surface, the casings will be filled with dry soil. The casing will then be excavated to a depth of at least 2 feet and the surface disturbance backfilled. The only well associated with the site that will not be abandoned is the fresh water well. This well will be retained for regional ground water monitoring purposes.

Decontamination of the site to unrestricted release limits has been proposed by MEC. Verification that radium-226 soil contents are less than 5 pCi/gm/100m² above background will be determined by combining gamma surveys with actual soil sampling and laboratory analysis for radium-226. MEC has begun preliminary work on this program. Five areas and a background location have been surveyed by MEC. The data collected to date is shown in Table 1.

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DATE : 86/05/30					

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Table 1

<u>Area Surveyed</u>	<u>Number of Gamma Readings</u>	<u>Mean uR/hr</u>	<u>Soil Sample @ Gamma Reading</u>	<u>Ra-226 Content</u>
Wellfield A	41	21	24 uR/hr	3.3
Former Process Building Site	42	22	25 uR/hr	3.9
			32 uR/hr	3.1
Wellfield B	25	19	20 uR/hr	2.7
Inundation Area	36	23	25 uR/hr	2.0
			34 uR/hr	2.0
			38 uR/hr	3.8
Discharge Channel	15	21	27 uR/hr	4.8
Background	20	19	19 uR/hr	1.4
			19 uR/hr	2.2

The radium-226 analyses and the gamma readings associated with the sample locations indicate that the site has readings typical of background as well as less than the 5 pCi/gm. Based upon these values no radium-226 contamination has been found at the site. However, the licensee has stated that any areas which have radium-226 values above background will have the contaminated soil excavated and disposed of in the MEC tailings impoundment.

Conclusion

Based on the closure plan submitted by MEC, the staff finds that their well abandonment procedure is not in keeping with State of Wyoming requirements and therefore recommend that all wells be abandoned in accordance to State of Wyoming standards. The staff would also recommend that a final site closure gamma survey complete with soil surveys be performed by the staff. The staff would therefore recommend that Source Material License SUA-1223 be amended by adding License Condition No. 14 to read as follows:

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14. The licensee shall abandon the wellfields and monitor wells in accordance with State of Wyoming requirements. Additionally, the licensee shall excavate, remove and dispose of, in their tailings impoundment, soil which exceeds a radium-226 concentration of 5 pCi/g/100m² above background based upon sampling of the first 15 centimeters below the ground surface.

Upon final site abandonment and decontamination, the licensee shall request a URFO closure survey.

/s/
Gary R. Konwinski, Project Manager
Licensing Branch 2
Uranium Recovery Field Office
Region IV

Approved by:

/s/
Edward F. Hawkins, Chief
Licensing Branch 2
Uranium Recovery Field Office, Region IV

OFC	: URFO	: URFO	:	:	:	:	:
NAME	: Gkonwinski/lv	: EHawkins	:	:	:	:	:
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