

DISTRIBUTION

Docket File #40-8903
 PDR/DCS
 DBangart, RIV
 RHeyer
 MBrown, RCPD, NM
 LLW Branch, WMLU
 URFO r/f

40-8903/RSH/87/09/16/0

- 1 -

OCT 16 1987

URFO:RSH
 Docket No. 40-8903
 04008903160E

MEMORANDUM FOR: Docket File No. 40-8903

FROM: Ralph S. Heyer, Project Manager
 Licensing Branch 2
 Uranium Recovery Field Office, Region IV

SUBJECT: REVIEW OF THE SEMIANNUAL ENVIRONMENTAL MONITORING
 DATA FOR THE HOMESTAKE MINING COMPANY FOR THE FIRST
 HALF OF 1987.

By letter dated August 28, 1987, Homestake Mining Company (HMC) submitted an environmental monitoring report for the Milan Mill for the first half of 1987, in compliance with 10 CFR 40.65 and License Condition No. 15 of Source Material License SUA-1471.

It should be noted that HMC's environmental monitoring program was modified since the submittal of the semi-annual environmental report pursuant to recommendations made by NRC. A copy of the modified procedures for occupational and environmental monitoring was submitted June 19, 1987 and incorporated into SUA-1471 through the issuance of Amendment No. 2 on October 5, 1987. This memorandum documents the staff review of the data generated under the old environmental monitoring program.

Stack Sampling

Effluents from three yellowcake stacks (dryer, roaster and packaging room) are sampled isokinetically on a quarterly basis for particulates. A representative grab sample is collected semi-annually from two crusher building stacks and is analyzed for U-nat, Ra-226 and Th-230. The average release rates for U-nat did not exceed 2.6×10^{-3} Ci/qtr.

OFC :	:	8711030014	871016	:	:	:
-----	-----	PDR	ADDOCK	04008903	-----	-----
NAME :	:	C	:	:	:	:
-----	-----	-----	-----	-----	-----	-----
DATE :87/10/16	:	:	:	:	:	:

OCT 16 1987

Particulate Air Sampling

HMC performed continuous monitoring for airborne particulates at five locations, including the nearest resident and background. The air particulate data for U-nat, Ra-226, Th-230 and Pb-210 indicated all concentrations at the monitoring stations were below 10 percent of their respective unrestricted area MPC's.

Radon Monitoring

HMC has performed continuous passive sampling for radon at the five air particulate monitoring stations. Maximum net quarterly concentrations did not exceed 53 percent of the unrestricted area MPC.

Ground Water

HMC sampled five monitor wells during the first half of 1987. The samples were analyzed for U-nat, Ra-226, and Th-230. Only three gross concentrations exceeded 10 percent of the unrestricted area MPC, with the highest value being 49 percent of MPC. The upgradient wells and those located in the lower aquifer do not exhibit elevated levels of seepage indicator parameters.

Direct Radiation

HMC performed continuous monitoring for direct radiation at five sampling locations. Sampling and analyses were in accordance with SUA-1471. The highest exposure measured was 4.85 mR/week for the first quarter of 1987. The range of exposures was 2.07 - 4.85 mR/week for the first two quarters of 1987. These values have not varied appreciably from previous data.

Conclusion

The environmental monitoring conducted by HMC for the first half of 1987 was performed in accordance with License Condition No. 15 of SUA-1471.

OFC :	:	:	:	:	:	:	:
NAME :	:	:	:	:	:	:	:
DATE : 87/10/16	:	:	:	:	:	:	:

40-8903/RSH/87/09/16/0

- 3 - OCT 16 1987

The lower limits of detection were appropriate. No further action is necessary at this time.

/s/

Ralph S. Heyer, Project Manager
Licensing Branch 2
Uranium Recovery Field Office
Region IV

Approved by:

/s/

Harry J. Pettengill, Chief
Licensing Branch 2
Uranium Recovery Field Office
Region IV

Case Closed: 04008903160E

OFC	URFO	URFO	URFO	URFO			
NAME	RHeyer/db	PJGarcia	HJPettengill	RDSmith			
DATE	87/10/16		10/16				