



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
URANIUM RECOVERY FIELD OFFICE
BOX 25325
DENVER, COLORADO 80225

OCT 2 1989

URFO:GRK
Docket No. 40-8904
04008904340E

MEMORANDUM FOR: Docket File No. 40-8904

FROM: Gary R. Konwinski
Project Manager

SUBJECT: REVIEW OF THE REPORT "SEMIANNUAL ENVIRONMENTAL MONITORING
REPORT, L-BAR URANIUM MINE, CIBOLA COUNTY, NEW MEXICO,"
FOR THE FIRST HALF OF 1989

BACKGROUND

The subject report was submitted by Intera Technologies on behalf of BP America for the L-Bar site on August 31, 1989, in response to License Condition Nos. 12, 29 and 30 of Source Material License SUA-1472.

License Condition No. 29 requires environmental monitoring for radium-226, thorium-230 and natural uranium in air, soil and vegetation. Air monitoring is required at the upwind Moquino site and the downwind north tailings site. License Condition No. 30 requires quarterly ground-water monitoring in several locations for various parameters. License Condition No. 12 requires the results of the environmental monitoring be reported in accordance with 10 CFR Part 40.65. Due to analytical problems with the contract laboratory, data for the second quarter is only available for ground-water monitoring.

DISCUSSION

Air Monitoring

1. Natural Uranium: The MPC for uranium in the unrestricted area is $5E-12$ $\mu\text{Ci}/\text{ml}$. At the Moquino location, the first quarter 1989 reading was $3.5E-16$ $\mu\text{Ci}/\text{ml}$ or .007 percent of the MPC. The first quarter reading at the north tailings location was $1.2E-15$ $\mu\text{Ci}/\text{ml}$ or .02 percent of the MPC. No data was available for the second quarter.
2. Thorium-230: The MPC for thorium-230 in the unrestricted area is $8E-14$ $\mu\text{Ci}/\text{ml}$. At the Moquino location, the first quarter reading was $1.7E-16$ $\mu\text{Ci}/\text{ml}$ or .02 percent of the MPC. The first quarter reading at the north tailings location was $2.0E-15$ $\mu\text{Ci}/\text{ml}$ or 2.5 percent of the MPC.

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3. Radium-226: The MPC for radium-226 in the unrestricted area is $3E-12$ $\mu\text{Ci/ml}$. At the Moquino location, the first quarter reading was $3.0E-18$ $\mu\text{Ci/ml}$ or .0001 percent of the MPC. The reading at the north tailings location for the first quarter was $4.9E-17$ $\mu\text{Ci/ml}$ or .002 percent of the MPC.

Direct Radiation

Direct radiation is measured by thermoluminescent dosimeters (TLDs) at the Moquino and north tailings locations. The reported values for the first quarter were 24.6 mRem/quarter for the Moquino location and 35.8 mRem/quarter for the north tailings location. Second quarter data was unavailable. The limit for individuals in the restricted area is 1250 mRem/quarter. The measured exposure rates at these locations were 1.9 and 2.9 percent of the 10 CFR Part 20 limits, respectively.

Radon

Radon was measured using Track-Etch devices. The first quarter results at the Moquino and north tailings locations were 2.5 pCi/l and 3.3 pCi/l, respectively. Second quarter results were unavailable. These values were 8.3 and 11 percent of the one-third working level MPC for the restricted area.

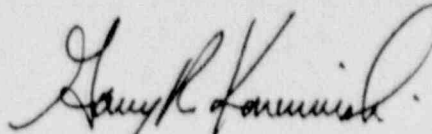
Ground-Water Monitoring

Included with this environmental monitoring report are the results of ground-water monitoring for the reporting period as well as updated historical monitoring data.

Ground-water monitoring at the site is presently being evaluated under the requirements specified in 10 CFR Part 40, Appendix A. Therefore, no evaluation of the ground-water data will be presented.

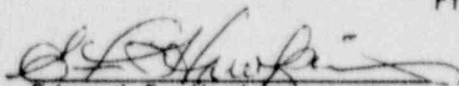
SUMMARY

The environmental monitoring report was submitted in accordance with the conditions of Source Material License SUA-1472, with the exception that second quarter radiological data were not available. These data will be included with the next environmental monitoring report. All values are well within regulatory limits with no significant trends noted. No further action is required at this time.



Gary R. Konwinski
Project Manager

Approved by:



Edward F. Hawkins
Branch Chief

Case Closed: 04008904340E

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