



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

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

NOV 27 1990

URFO:CDMC  
Docket No. 40-8904  
04008904440E

MEMORANDUM FOR: Docket File No. 40-8904  
FROM: Cynthia D. Miller-Corbett, Project Manager  
SUBJECT: SEMIANNUAL GROUND-WATER MONITORING REPORT FOR SOHIO  
WESTERN MINING L-BAR URANIUM MINE, SUA-1472

By letter dated August 29, 1990, Sohio Western Mining Company submitted the L-Bar Semiannual Ground-water Monitoring Report to the NRC. This report includes ground-water quality data for the background well 29A, four point-of-compliance (POC) wells, and updated historical data for 12 additional wells as required in Source Material License SUA-1472 License Condition No. 31.

Chloride concentrations serve as indicators of changes or stability of ground-water quality. A review of the ground-water monitoring report reveals that chloride concentration levels are either relatively low and stable, or high, but decreasing.

The concentration of chloride in groundwater from POC wells 1A and 81, located southwest and northwest of the tailings, respectively, is approximately equivalent to the background concentration at well 29A. Based on a comparison of data from the previous two years, these wells exhibit stable ground-water quality conditions.

At POC wells 17B and 69, located due east and west of the tailings, respectively, the chloride concentration reported for ground-water samples is between 300 and 400 mg/l above background set at well 29A. Similarly, the ground-water data for monitoring wells in the vicinity of POC wells 17B and 69 show elevated chloride levels. A comparison of the most recent water quality data for POC wells 17B and 69 with monitoring data for the previous year indicates a trend towards a decrease in the characteristically high chloride levels. The tendency of high chloride levels to be concentrated in areas east and west of the tailings appears to confirm the ground-water flow analyses previously submitted by the licensee (January 1989) in which the presence of two contaminant plumes, one to the east and one to the west of the tailings is reported.

9012100212 901127  
PDR ADDCE 04008902  
C PDC

PM: URFO *CMC*  
CDMCorbett/db  
11/27/90

PM: URFO *[Signature]*  
ROGonzales  
11/27/90

DD: URFO *[Signature]*  
JEFHawkins  
11/27/90

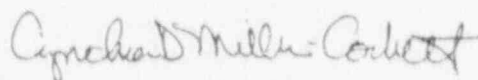
D: URFO: RIV  
REHall  
11/27/90

*[Handwritten signature]*  
1/0

NOV 27 1990

Radionuclide data indicate a general stability or decrease for concentrations in ground-water except for Ra-226 and Ra-228 concentrations which have increased over the past year. In addition, the combined concentration of these constituents detected in samples from POC wells 1A and 69 is greater than for the background concentration at well 29A. This apparent trend will be reviewed upon submission of the forthcoming annual corrective action plan review.

In summary, the review of the ground-water monitoring report submitted indicates that the licensee is in compliance with SUA-1472 License Condition No. 31. No further licensing action is required at this time.



Cynthia D. Miller-Corbett  
Project Manager

Case Closed: 04008904440E

bcc:

Docket File No. 40-8904  
PDR/DCS  
URFO r/f  
ABBeach, RIV  
LLO Branch, LLWM  
CDMCorbett  
ROGonzales  
BGarcia, RCPD, NM  
EMontoya, NM  
8904/440E/CDMC/90/1/26/M