#### UNITED STATES



#### NUCLEAR REGULATORY COMMISSION

**REGION IV** 

URANIUM RECOVERY FIELD OFFICE BOX 25325 DENVER, COLORADO 80225

MAR 0 2 1994

URF0:DCW Docket No. 40-8084 X61163

MEMORANDUM FOR: Docket File No. 40-8084

FROM: Dana C. Ward, Project Manager

SUBJECT:

ENVIRONMENTAL MONITORING REPORT REVIEW FOR THE RIO ALGOM MINING CORP., LISBON MILL, FIRST HALF OF 1993

By letter dated August 30, 1993, Rio Algom ' semiannual environmental monitoring report covers the period January through June 19 with License Condition No. 22 of Source M bg Corp. (RAMC) submitted a be Lisbon Mill. The report submittal was in accordance license SUA-1119.

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Environmental monitoring requirements for the Lisbon Mill are specified in License Condition No. 51 of SUA-1119. The Lisbon Mill was in a standby status until November 4, 1992, when their license was amended for possession only. The review of the submitted data is presented below.

# BACKGROUND

RAMC operates four environmental monitoring stations for radon, airborne particulates, and direct radiation. Two stations, EM-1 and EM-2, are located at the restricted area boundary. A background station, EM-6, is located 10.5 miles northwest of the mill. The fourth station, EM-4, is a nearest-residence monitor located about 1 mile north of the property boundary. The predominate wind direction for the facility is from the monthwest.

#### Airborne Particulates

All gross results were less than 5 percent of the maximum permissible concentration (MPC) for unrestricted areas. The highest values reported for the sampling period for each ruclide sampled was 1.6 E-15 uCi/ml for Th-230, 1.6 E-14 uCi/ml for Pb-210, 2.1 E-15 uCi/ml for Ra-226, and 3.2 E-15 uCi/ml for U-nat. The high value for Th-230 at 1.6 E-15 uCi/ml was from the EM-2 monitoring location and represents 2 percent of the MPC.

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#### Radon

The highest value reported was 12.7 percent of the MPC for monitoring station EM-2. The background value obtained during this time period was 8.3 percent of the MPC.

## Surface Water

The licensee samples at one location only for surface water. The collected water is analyzed for U-nat and Ra-226. All results were less than 1 percent of the respective MPCs.

# Direct Radiation

Four locations were monitored for direct radiation during the report period. Background averaged 14.0 mRem/qtr, with the highest gross reading of 20.0 mRem obtained for the second quarter of 1993.

# Ground Water

Ground-water results are reviewed separately by the staff to verify compliance with Criterion 5 of Appendix A of 10 CFR 40.

# CONCLUSION

The staff concludes that RAMC has implemented an environmental monitoring program and submitted all data in accordance with license requirements. No area: of concern were noted during the staff review of the data provided. No further action is therefore necessary.

ma C Ward

Dana C. Ward Project Manager

Case Closed: X61163

bcc: Docket No. 40-8084 PDR/DCS URFO r/f DDChamberlain, RIV DBSpitzberg, RIV LCamper, RIV LLUR Branch, LLWM, 5E2 DCWard O:\DCW\808493-4.REV

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