



Rio Algom

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June 15, 2000

Ms. Paula Cutillo
WDEQ/LQD
Herschler Building
122 West 25th Street
Cheyenne, WY 82002

RE: Corrective Action Report, West Evaporation Pond Leak
Permit to Mine 633, License SUA-1548, Docket 40-8964

Dear Ms. Cutillo:

Pursuant to Wyoming Department of Environmental Quality Permit to Mine 633 and NRC License condition 12.5, please find attached a monthly corrective action report describing the actions taken in response to a leak in the west evaporation pond discovered on March 19, 2000.

If you have any questions or comments regarding the submittal, please feel free to contact me at (307) 358-3744, ext. 62.

Sincerely,

John W. Cash
Supervisor, Environmental
& Regulatory Affairs

xc: J. Lusher-U.S. NRC (Div. of Low Level Waste Mgt. & Dec.) Rockville, MD
Certified Mail -7099 3220 0002 1631 3532
B. Ferdinand (RAMC-Smith Ranch Facility)
M. Freeman (RAMC-OKC Office)
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file

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Rio Algom Mining Corp.
Permit to Mine #633
License SUA-1548 Docket NO. 40-8964
Smith Ranch Facility

West Evaporation Pond Leak Corrective Action Report

During a routine inspection on the morning of March 19, 2000, a wellfield operator discovered that the west evaporation pond was leaking into the sump. Samples were collected the same day to determine the source of the water. The analytical results, shown below, confirm the west evaporation pond was the source of the water.

West Evaporation Pond Sump Sample Taken on 3/19/00

Chloride	Unat	Sulfate	Bicarbonate	Specific Cond.
14,000 mg/l	25 mg/l	13,000 mg/l	376 mg/l	51,200 micro-Siemens

Mr. John Lusher of the Nuclear Regulatory Commission and Ms. Paula Cutillo of the Wyoming Department of Environmental Quality-Land Division were contacted by telephone on March 22, 2000 and informed of the leak.

The contents of the west pond were immediately evacuated into the east pond to prevent further leakage and to aid in finding the leak. Two old patches were found to have partially lifted edges. Both patches were repaired on March 31, 2000 and the pond was slowly refilled beginning on April 1, 2000. Upon refilling the pond water began to very slowly seep into the sump again suggesting that either there was a third leak or that one of the patch jobs didn't hold. A sample was taken from the sump, results shown below, which confirmed the source of the leak as the west evaporation pond.

West Evaporation Pond Sump Sample Taken on 4/11/00

Chloride	Unat	Sulfate	Bicarbonate	Specific Cond.
13,000 mg/l	88 mg/l	11,000 mg/l	640 mg/l	47,100 micro-Siemens

Therefore, RAMC began lowering the pond level again on April 11, 2000. The pond was lowered at a slow rate so the level of the leak could be determined. A weekly sample taken on April 16, 2000 contained 12,120 mg/l chloride and had a specific conductance of 47,450 micro-Siemens. The pond level was lowered and two old patches were replaced. No water seeped into the sump again until May 19, 2000 at which point a monthly sample was taken with the following results:

West Evaporation Pond Sump Sample Taken on 5/19/00

Chloride	Unat	Sulfate	Bicarbonate	Specific Cond.
4,945 mg/l	31 mg/l	4,469 mg/l	414 mg/l	20,730 micro-Siemens

The pond was dewatered and an old patch on the bottom of the liner was replaced. The pond was refilled very slowly so the location of any additional leaks could be detected. The sump began to fill very slowly on June 14, 2000 when the water level in the pond reached 5' 11" or 1" below normal capacity. The water contained 4,029 mg/l of chloride and had a specific conductance of 17,220 micro-Siemens at 25 degrees Celsius. The pond level will be drawn down and the leak repaired. Higher quality patch kits containing HH-66 vinyl cement and vinyl laminated fabric have been purchased and are being used to make repairs.

All fluids have been contained in the sump.