

Los Alamos

NATIONAL LABORATORY

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Date: March 20, 2000
In Reply Refer To: ESH-18/WQ&H:00-0085
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Ms. Barbara Hoditschek
Surface Water Quality Bureau
New Mexico Environment Department
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, New Mexico 87502

SUBJECT: MONTHLY STATUS REPORT FOR FEBRUARY 2000, RLWTF AT TA-50

Dear Ms. Hoditschek:

This report addresses operations at Los Alamos National Laboratory's Radioactive Liquid Waste Treatment Facility (RLWTF) at TA-50 for February 2000.

Operational Changes

The only significant operational change during February 2000 was a 27 percent increase in influent flows to the RLWTF. A small portion of this increase is attributable to discharges from the boiler and cooling tower associated with the interim mechanical evaporator. The remaining increase has been attributed by the RLWTF to an increase in research activity at the Laboratory.

During February 2000, the RLWTF operated overtime (typically 7am-8pm) in order to treat the daily influent entering the facility and to reduce the volume of Electrodialysis Reversal (EDR) treatment unit reject (concentrate) water which was stockpiled prior to the start-up of the interim mechanical evaporator. The RLWTF continues to operate on a batch treat/batch discharge regime.

Since the Reverse Osmosis (RO) treatment unit returned to service on December 10, 1999, the RLWTF's effluent has consistently met the U.S. Department of Energy's Derived Concentration Guide (DCG) for gross alpha particle activity of 30 pCi/L. During February 2000, the sum of the fractions for radionuclides in the RLWTF's effluent was less than the DCG value of 1. Worth noting, in February 2000 the RLWTF discharged a batch of effluent from the RO treatment unit with a gross alpha particle activity of 0 pCi/L (+/- 2 pCi/L).

Facility Upgrades

On January 31, 2000, the interim mechanical evaporator was placed into service at the RLWTF to treat the EDR reject (concentrate) water (Note: the EDR treats the RO reject water resulting in a volume reduction of 6:1). The interim evaporator treats the EDR reject water by reducing the



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volume 4:1 (e.g., 80,000 gallons of EDR concentrate is reduced 20,000 gallons of evaporator bottoms). The distillate from the evaporator is being stored in the two 20,000 gallon temporary storage tanks recently installed at the RLWTF. During February 2000, one distillate tank was discharged through NPDES Outfall 051 meeting all NPDES, NMED Ground Water Discharge Plan, and Department of Energy DCG limits.

Please contact me at 667-7969 if you would like additional information regarding this report.

Sincerely,



Bob Beers
Water Quality and Hydrology Group

BB/tml

Enclosures: a/s

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