

# Los Alamos

NATIONAL LABORATORY

Los Alamos National Laboratory  
Los Alamos, New Mexico 87545

Date: April 17, 1998  
In Reply Refer To: ESH-18/WQ&H:98-0129  
Mail Stop: K497  
Telephone: (505) 665-1859

NPDES

Mr. Thomas Todd  
Area Manager  
U.S. Department of Energy  
Los Alamos Area Office  
Los Alamos, New Mexico 87544

Mr. Ken Zamora  
Assistant Area Manager  
Office of Facility Operations  
U.S. Department of Energy  
Los Alamos Area Office  
Los Alamos, New Mexico 87544

**SUBJECT: RADIOACTIVE WASTEWATER QUALITY AT NPDES  
OUTFALL 051, TA-50, BUILDING 1, FEBRUARY 1998**

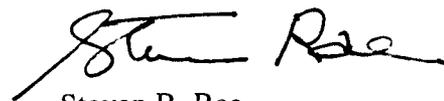
Dear Messrs. Todd and Zamora:

Enclosed is the monthly monitoring report pertaining to NPDES Outfall 051 for radioactive effluent quality data, as requested by DOE/LAAO. This report includes the monthly value (monthly average) compared with the DOE Derived Concentration Guidelines (DCG) value for each parameter analyzed. The monthly values are equal composites of all discharges that occurred during the month. Please note, this report also includes radioactive influent data for the TA-50 Treatment Facility and percent removal.

There were a total of 23 releases (1,897,399 liters) to Mortandad Canyon during the monitoring period from the TA-50 Treatment Facility. The DCGs were exceeded for Plutonium 238 (Pu238), and Americium 241 (Am241) during the monitoring period.

Please contact me at 665-1859 or Mike Saladen at 665-6085 if you have any questions or need additional information.

Sincerely,



Steven R. Rae  
Group Leader  
Water Quality and Hydrology Group



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CALM/1000-ASWA/PPDES

Thomas Todd/Ken Zamora  
ESH-18/WQ&H:98-0129

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April 17, 1998

SR:MS/mv

Enclosures: a/s

Cy: D. Erickson, ESH-DO/DD, w/enc., MS K491  
M. Saladen, ESH-18, w/enc., MS K497  
S. Hanson, EM-RLW, w/enc., MS E518  
D. Moss, EM-RLW, w/enc., MS E518  
D. Hall, EM-RLW, w/enc., MS E518  
J. Plum, DOE/LAAO, w/enc., MS A316  
J. Parker, NMED/DOE OB, Santa Fe, New Mexico, w/enc.  
WQ&H File, w/enc., MS K497  
CIC-10, w/enc., MS A150

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TA-50-1 EFFLUENT DISCHARGE and % REMOVAL FEBRUARY, 1998

13-Apr-1998 10:18 AM

	DATE	INFLUENT	EFFLUENT	%REMOVAL	EXCEEDED DCG
TRITIUM					
		DOE Derived Concentration Guidelines	2.E-03 (uCi/ml)	2.0 E-6 (Ci/L)	
M	TRITIUM	28-FEB-98	4.700E-09		
Sr-89					
		DOE Derived Concentration Guidelines	2.E-05 (uCi/ml)	20.0 E-9 (Ci/L)	
M	Sr-89	28-FEB-98	2.900E-10	2.000E-10	31.0 %
Sr-90					
		DOE Derived Concentration Guidelines	1.E-06 (uCi/ml)	1.0 E-9 (Ci/L)	
M	Sr-90	28-FEB-98	4.000E-12	2.000E-12	50.0 %
Cs-137					
		DOE Derived Concentration Guidelines	3.E-06 (uCi/ml)	3.0 E-9 (Ci/L)	
M	Cs-137	28-FEB-98	2.000E-11	1.700E-10	
U-235					
		DOE Derived Concentration Guidelines	5.E-06 (uCi/ml)	5.0 E-9 (Ci/L)	
M	U-235	28-FEB-98	6.900E-12	3.000E-13	95.7 %
Pu-238					
		DOE Derived Concentration Guidelines	4.E-08 (uCi/ml)	40.0 E-12 (Ci/L)	
M	Pu-238	28-FEB-98	2.400E-09	6.000E-11	97.5 % X
Pu-239					
		DOE Derived Concentration Guidelines	3.E-08 (uCi/ml)	30.0 E-12 (Ci/L)	
M	Pu-239	28-FEB-98	1.400E-09	2.500E-11	98.2 %
Am-241					
		DOE Derived Concentration Guidelines	3.E-08 (uCi/ml)	30.0 E-12 (Ci/L)	
M	Am-241	28-FEB-98	1.400E-09	6.900E-11	95.1 % X

Effluent discharges FEBRUARY, 1998 = 23  
 Total liters discharged = 1897399