

# Los Alamos

NATIONAL LABORATORY

Los Alamos National Laboratory  
Los Alamos, New Mexico 87545

Date: March 17, 1998

In Reply Refer To: ESH-18/WQ&H:98-0096

Mail Stop: K497

Telephone: (505) 665-1859

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, JANUARY 1998**

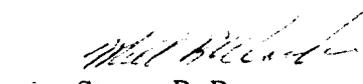
Dear Messrs. Todd and Zamora:

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 (1,823,422 liters) to Mortandad Canyon during the monitoring period from the TA-50 Treatment Facility. The DCGs were exceeded for Plutonium 238 (Pu238), Plutonium 239 (Pu239), 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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LARL/nov-HSWA/NPDES

NPDES

Thomas Todd/Ken Zamora  
ESH-18/WQ&H:98-0096

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March 17, 1998

SR:MS/rj

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, w/enc., Santa Fe, New Mexico  
WQ&H File, w/enc., MS K497  
CIC-10, w/enc., MS A150

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

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	DATE	INFLUENT	EFFLUENT	%REMOVAL	EXCEEDED DCG
TRITIUM					
DOE Derived Concentration Guidelines 2.E-03 (uCi/ml) 2.0 E-6 (Ci/L)					
M	TRITIUM 31-JAN-98		1.500E-08		
Sr-89					
DOE Derived Concentration Guidelines 2.E-05 (uCi/ml) 20.0 E-9 (Ci/L)					
M	Sr-89 31-JAN-98	2.300E-11	1.700E-11	26.1 %	
Sr-90					
DOE Derived Concentration Guidelines 1.E-06 (uCi/ml) 1.0 E-9 (Ci/L)					
M	Sr-90 31-JAN-98	2.000E-13	1.000E-11		
Cs-137					
DOE Derived Concentration Guidelines 3.E-06 (uCi/ml) 3.0 E-9 (Ci/L)					
M	Cs-137 31-JAN-98	1.600E-10	1.500E-10	6.2 %	
U-235					
DOE Derived Concentration Guidelines 5.E-06 (uCi/ml) 5.0 E-9 (Ci/L)					
M	U-235 31-JAN-98	4.600E-12	1.700E-12	63.0 %	
Pu-238					
DOE Derived Concentration Guidelines 4.E-08 (uCi/ml) 40.0 E-12 (Ci/L)					
M	Pu-238 31-JAN-98	1.200E-09	1.540E-10	87.2 %	X
Pu-239					
DOE Derived Concentration Guidelines 3.E-08 (uCi/ml) 30.0 E-12 (Ci/L)					
M	Pu-239 31-JAN-98	1.500E-09	9.100E-11	93.9 %	X
Am-241					
DOE Derived Concentration Guidelines 3.E-08 (uCi/ml) 30.0 E-12 (Ci/L)					
M	Am-241 31-JAN-98	8.400E-10	8.200E-11	90.2 %	X

Effluent discharges JANUARY, 1998 = 23  
 Total liters discharged = 1823422