

Los Alamos

NATIONAL LABORATORY

*Los Alamos National Laboratory
Los Alamos, New Mexico 87545*

Date: January 31, 1996
In Reply Refer To: ESH-18/WQ&H:96-044
Mail Stop: K497
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Mr. Joseph C. Vozella
Assistant Area Manager
Office of Environment and Projects
U.S. Department of Energy
Los Alamos Area Office
Los Alamos, New Mexico 87544

Mr. Daniel E. Glenn
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**

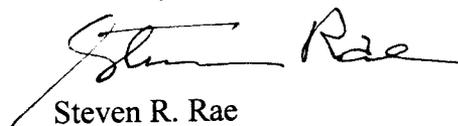
Dear Messrs. Vozella and Glenn:

Enclosed is the monthly monitoring report pertaining to NPDES Outfall 051 radioactive effluent quality data, as requested by DOE/LAAO. This report and future monthly reports will keep DOE/LAAO updated on DOE Derived Concentration Guideline (DCG) exceedances at this outfall. The report includes monthly values (monthly average) compared with the DCG values 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.

DCG results for each month are available in report form from CTS-13 approximately 45 days following the end of each monitoring period. Therefore, this report includes radioactive influent and effluent data for November, 1995. Additionally, there were a total of 21 discharges (1343991 liters) to Mortandad Canyon during the monitoring period. The DCGs were exceeded for Plutonium 238 (Pu₂₃₈), Plutonium 239 (Pu₂₃₉) and Americium 241 (Am₂₄₁).

Please contact Mike Saladen at 665-6085 or Alex Puglisi at 667-4882 if you have any questions or need additional information.

Sincerely,



Steven R. Rae
Group Leader, ESH-18
Water Quality and Hydrology Group

SR:MS/vc

Enclosures: a/s

Cy: D. Erickson, ESH-DO/DD, w/enc., MS K491
A. Puglisi, ESH-18, w/enc., MS K497
M. Saladen, ESH-18, w/enc., MS K497



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Mr. Joseph C. Vozella
Mr. Daniel E. Glenn
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Cy. (cont.):

S. Hanson, CST-13, w/enc., MS E518
D. Moss, CST-13, w/enc., MS E518
K. Zamora, DOE/LAAO, w/enc., MS A316
R. King, DOE/LAAO, w/enc., MS A316
N. Weber, NMED/DOE OB, Santa Fe, N.M., w/enc.
WQ&H File, w/enc., MS K497
CRM-4, w/enc., MS A150

R E C E I V E D

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DOE OVERSIGHT BUREAU

TA-50-1 EFFLUENT DISCHARGE and % REMOVAL NOVEMBER, 1995

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	DATE	INFLUENT	EFFLUENT	%REMOVAL	EXCEEDED DCG
TRITIUM					
		DOE Derived Concentration Guidelines	2.E-03 (uCi/ml)	2.0 x 10 ⁻⁶ (Ci/L)	
M	TRITIUM 30-NOV-95		4.300E-08		
Sr-89					
		DOE Derived Concentration Guidelines	2.E-05 (uCi/ml)	20 x 10 ⁻⁹ (Ci/L)	
M	Sr-89 30-NOV-95	1.000E-11	1.000E-11	0.0 %	
Sr-90					
		DOE Derived Concentration Guidelines	1.E-06 (uCi/ml)	1 x 10 ⁻⁹ (Ci/L)	
M	Sr-90 30-NOV-95	1.700E-11	6.000E-11		
Cs-137					
		DOE Derived Concentration Guidelines	3.E-06 (uCi/ml)	3.0 x 10 ⁻⁹ (Ci/L)	
M	Cs-137 30-NOV-95	3.000E-10	3.000E-10	0.0 %	
U-234					
		DOE Derived Concentration Guidelines	5.E-07 (uCi/ml)	500 x 10 ⁻¹² (Ci/L)	
M	U-234 30-NOV-95	2.000E-09	2.600E-11	98.7 %	
Pu-238					
		DOE Derived Concentration Guidelines	4.E-08 (uCi/ml)	40 x 10 ⁻¹² (Ci/L)	
M	Pu-238 30-NOV-95	2.100E-07	1.850E-10	99.9 %	X
Pu-239					
		DOE Derived Concentration Guidelines	3.E-08 (uCi/ml)	30 x 10 ⁻¹² (Ci/L)	
M	Pu-239 30-NOV-95	1.100E-08	3.050E-11	99.7 %	X
Am-241					
		DOE Derived Concentration Guidelines	3.E-08 (uCi/ml)	30 x 10 ⁻¹² (Ci/L)	
M	Am-241 30-NOV-95	1.100E-08	9.500E-11	99.1 %	X

Effluent discharges NOVEMBER, 1995 = 21
 Total liters discharged = 1343991