

Los Alamos

NATIONAL LABORATORY

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

Date: July 21, 1997
In Reply Refer To: ESH-18/WQ&H-97-0219
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, MAY 1997**

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 21 releases (1,660,225 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
Steven R. Rae
Group Leader
Water Quality and Hydrology Group

SR:MS/rj



15601

*Capt. ✓
Look*

LANL(TA-50) Permit

*LANL/DOE/TA-50
LAAO/Ken Zamora/NPDES*

Thomas Todd/Ken Zamora
ESH-18/WQ&H-97-0219

-2-

July 21, 1997

Enclosures: a/s

Cy: D. Erickson, ESH-DO/DD, w/enc., MS K491
M. Saladen, ESH-18, w/enc., MS K497
S. Hanson, CST-13, w/enc., MS E518
D. Moss, CST-13, w/enc., MS E518
B. Koch, DOE/LAAO, w/enc., MS A316
N. Weber, NMED/DOE OB, w/enc., Santa Fe, New Mexico
WQ&H File, w/enc., MS K497
CRM-4, w/enc., MS A150

RECEIVED
JUL 25 1997
DOE OVERSIGHT BUREAU

TA-50-1 EFFLUENT DISCHARGE and % REMOVAL MAY, 1997

15-Jul-1997 10:11 AM

Page 1

	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-MAY-97		1.600E-07		
Sr-89					
DOE Derived Concentration Guidelines 2.E-05 (uCi/ml) 20.0 E-9 (Ci/L)					
M Sr-89	31-MAY-97	1.000E-11	2.600E-11		
Sr-90					
DOE Derived Concentration Guidelines 1.E-06 (uCi/ml) 1.0 E-9 (Ci/L)					
M Sr-90	31-MAY-97	6.000E-12	2.000E-12	66.7 %	
Cs-137					
DOE Derived Concentration Guidelines 3.E-06 (uCi/ml) 3.0 E-9 (Ci/L)					
M Cs-137	31-MAY-97	2.000E-10	2.000E-10	0.0 %	
U-235					
DOE Derived Concentration Guidelines 5.E-06 (uCi/ml) 5.0 E-9 (Ci/L)					
M U-235	31-MAY-97	2.000E-10	2.000E-13	99.9 %	
Pu-238					
DOE Derived Concentration Guidelines 4.E-08 (uCi/ml) 40.0 E-12 (Ci/L)					
M Pu-238	31-MAY-97	2.400E-08	6.100E-11	99.7 %	X
Pu-239					
DOE Derived Concentration Guidelines 3.E-08 (uCi/ml) 30.0 E-12 (Ci/L)					
M Pu-239	31-MAY-97	9.000E-08	2.500E-11	100.0 %	
Am-241					
DOE Derived Concentration Guidelines 3.E-08 (uCi/ml) 30.0 E-12 (Ci/L)					
M Am-241	31-MAY-97	6.700E-08	1.800E-10	99.7 %	X

Effluent discharges MAY, 1997 = 21
Total liters discharged = 1660225

ESH-18 DOCUMENT LOG

ESH-18:97-WQ&H- 2219 Author: Mike Saladen
 ESH-18:97-AI# _____ ESH-DO:97-AI# _____

GROUP OFFICE USE ONLY

DESCRIPTION	NAME	DATE	ACTUAL TIME
Received from Mailbag or from Author	Mike	7/18/97	-
Completed Initial Word Processing	Ramona	7/21/97	8:40 am
Completed Final Word Processing			
Sent to Author for Signature	Ramona	7/21/97	8:43 am
Sent to Division Office for Signature			
Returned From Division Office			
Completed Final Distribution			

I have reviewed the enclosed document which I have prepared and its attachments (if applicable) and agree that all revisions have been completed and it is ready for distribution.

Signature: Mike Saladen Date: 7/21/97

Comments: _____

