

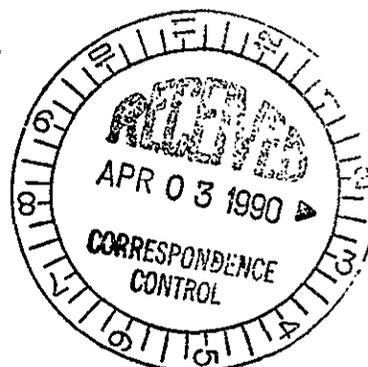


Department of Energy

Richland Operations Office
P.O. Box 550
Richland, Washington 99352

START

MAR 2 1990



Mr. Roger F. Stanley
Program Manager
State of Washington
Department of Ecology
Mail Stop PV-11
Olympia, WA 98504-8711

Dear Mr. Stanley:

INSPECTION OF SIMULATED HIGH-LEVEL WASTE SLURRY (SHLWS) PWO GROUTED CONTAINERS

As requested in your letter of February 9, 1990, all of the grouted PWO drums were externally inspected for signs of leakage. Although no drums were found to be leaking, eighteen drums with corrosion that could potentially result in leakage, were opened and inspected for free liquids. All of the drums were dry and no free liquid were found. The eighteen drums that were opened included drums numbered 1, 2, 10, 14, 18, 28, 59, 62, 63, 73, 91, 92, 97, 103, 113, 115, 127, and 135. There was no evidence on the pallets or in the bermed containment area that material had leaked from any drum.

Attached are analytical results from a composite sample of solid material previously collected from the outside of PWO drums. This material came from the annulus between the drum liner and drum wall and is the result of condensation and associated neutralization efforts. A review of the analytical results indicates that the solid materials from the PWO drums are non-hazardous. The ICP, AA and X-ray diffraction (XRD) analysis of the collected material indicates that there are no EP Toxic metals above regulatory limits, and that the quantity of sodium nitrate and sodium bicarbonate in the annulus (estimated 250 mL) is insufficient to regulate these drums of grouted waste.

We await your approval to dispose of the grouted PWO as nonhazardous waste in the Hanford Central Landfill.



3
1
9
0
7
8
7
1
1
0
6

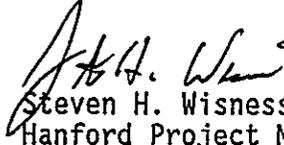
Mr. Roger F. Stanley

-2-

MAR 2 1990

Should you have any questions, please contact D. L. Duncan of the Department of Energy, Richland Operations Office on (509) 376-9333, or H. W. Slater of Pacific Northwest Laboratory on (509) 376-0575.

Sincerely,


Steven H. Wisness
Hanford Project Manager

ERD:DLD

Attachment

cc w/o att:

P. T. Day, EPA
M. T. Gordon, Ecology
T. D. Chikalla, PNL
W. J. Bjorklund, PNL
H. W. Slater, PNL
Administrative Record

90117870614

Composite Sample From PWO Drums¹
(Solid Material)

Element	Detection Limit ug/ml	Amount Detected ug/g
Al	.03	100
As	.03	<60
B	.01	-
Ba	.002	170
Ca	.01	3200
Cd	.004	<3
Ce	.04	810
Co	.01	-
Cr	.02	<10
Cu	.004	5
Dy	.004	60
Eu	.002	-
Fe	.005	2600
Cd	.10	-
K	.30	13000
La	.008	20
Li	.004	-
Mg	.06	-
Mn	.002	8
Mo	.01	2700
Na	.01	260000
Nd	.02	-
Ni	.02	-
P	.10	-
Pb	.06	<50
Ru	.05	-
Sb	.05	-
Si	.02	100
Sr	.002	-
Te	.06	-
Ti	.002	10
V	.01	-
Y	.007	30
Zn	.02	40
Zr	.008	7800
Ag	-	<60
Se	-	<10
Hg	-	<.5
pH	-	9.36
NaNO ₃ (XRD)	-	
NaHCO ₃ -H ₂ O (XRD)	-	

¹ From PNL Laboratory Report No. 871, dated 8/23/89, Request for Analytical Services No. 72943-3 (Analysis performed using ICP, AA, and XRD [X-Ray Diffraction]), (-) Indicates near detection limit.

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