



GPU Service Corporation
100 Interpace Parkway
Parsippany, New Jersey 07054
201 263-6500
TELEX 136-482
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May 12, 1980
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Mr. Paul Leech
U.S. Nuclear Regulatory Commission
Environmental Projects - Branch 2
7920 Norfolk Avenue
Mail Stop P-522
Bethesda, Maryland 20014


Dear Mr. Leech:

SUBJECT: PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT
REQUEST FOR INFORMATION

Enclosed is a document which is in response to a request for information from Mr. K. Shiu at Argonne National Laboratories regarding sludge characteristics in the Unit-2 containment sump. The document is entitled "Solids in Reactor Building Basement".

If you should have any questions regarding this, please do not hesitate to call me at (201) 263-6341.

Very truly yours,


R. M. Milford III
Licensing Engineer

RMM/jed
Enclosures

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METROPOLITAN EDISON COMPANY Subsidiary of General Public Utilities Corporation

Subject Solids in Reactor Building Basement

Location TMI

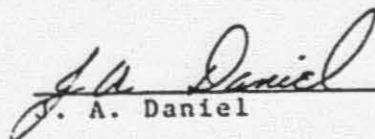
To R. Milford

Date April 29, 1980

Per your request of 4/25/80 regarding the above, the following information is provided:

1. ORNL letter, W.D. Shults to J. A. Daniel, September 14, 1979, Reported Analyses of Reactor Building Analyses. The bottom sample contained a greenish precipitate, 10% by volume, (4% after centrifuge) in amounts indicated on Attachment 1.
2. We estimate between 8,000 and 10,000 lbs. of wetted, packed solids. The basis for this is as follows:
 - a. 6363 gal/in (avg) precipitous matter in bottom 4 inches of containment water.
 - b. Precipitous matter, wet packed volume estimated at ~ 4% or between 900 and 1000 gallons.
 - c. Average bulk density of wetted packed solids is estimated at 68 lbs/ft³.

If I may be of further assistance, please call.


J. A. Daniel

JAD:dms

cc: R. W. Heward
G. K. Hovey
L. J. Lehman
J. R. Thorpe
E. G. Wallace
R. F. Wilson

Attachment 1

Solids from bottom sample (uCi/ml at 0800, 8/28/79, based
on total volume of bottom sample)

Isotope	Sample 1 ^a	Sample 2 ²
58Co	0.0055	0.0079
60Co	0.0011	0.0015
95Zr	0.037	0.061
95Nb	0.104	0.162
103Ru	0.042	0.078
106Ru	0.035	0.051
110mAg	0.0015	0.0025
113Sn*	0.015	0.021
125Sb	0.022	0.033
129mTe	0.277	0.514
131I	0.0108	0.016
134Cs	0.018	0.011
137Cs	0.078	0.049
140Ba	0.041	0.047
140La	0.106	0.122
141Ce	0.0034	0.0097
144Ce	0.0134	0.0446
89 + 90Sr	2.78	

^aTwo samples were taken at different times; they were centrifuged, washed, and -scanned.

*Tentative identification

Solids from bottom sample, neutron activation analysis
(units are ug/ml, based on total volume of bottom sample)

^{235}U	0.00459
In	0.16
^{129}I	0.07
Cu	54
Mn	0.62
Al	7
Ca	2

Spark source mass analysis of solids from bottom sample
(ppm) based on total volume of bottom sample

Ag	8*	Li	0.3
Al	8	Mg	7
B	3	Mn	1
Ca	2	Mo	1 ^b
Cd	0.5	Na	1
Co	0.1	Ni	10
Cr	2	P	0.4
Cs	0.5	Rb	0.3
Cu	54 ^a	S	5
Fe	10	Sr	0.2
I	0.7	Te	0.2
In	0.3	Tl	0.5
K	1	Zn	2
U			
U ^c	0.106	Pu ^c	0.00016
234U	0.022 AT %	238Pu	0.1 AT %
235U	2.35 AT %	239Pu	91.13 AT %
236U	0.065 AT %	240Pu	7.57 AT %
238U	97.56 AT %	241Pu	1.10 AT %
		242Pu	0.1 assumed

*May be some memory

^aInternal standard from NAA

^bStable Mo; not fission product

^cThermal emission mass resin bead analysis