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Energy/
Environment
Systems Division

January 11, 1990

Ms. Elizabeth Ullrich
Region I
Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Subject: RESULTS OF ROYERSFORD SAMPLE ANALYSES - ADDITIONAL DATA

Dear Ms. Ullrich:

We have completed the strontium 90, uranium, and plutonium analyses on the samples of secondary digester sludge, for which other analytical data were provided in Table 2 of my December 14, 1989 transmittal. The results are:

Radionuclide ^a	Radionuclide Concentration (pCi/g of Solids)	
	Sludge (5.7% solids) (10/23/89)	Dewatered Sludge (29.3% solids) (10/24/89)
Sr-90	16.4 ± 0.5	16.7 ± 0.7
U-234	3.5 ± 0.1	3.6 ± 0.2
U-235	0.1 ± 0.1	0.1 ± 0.1
U-238	1.9 ± 0.1	1.8 ± 0.1
Pu-238	0.1 ± 0.1	0.1 ± 0.1
Pu-239/240	0.1 ± 0.1	0.1 ± 0.1

^aUncertainties represent the 95% confidence levels, based only on counting statistics; additional laboratory uncertainties of ± 6 to 10% have not been propagated into these data.

Table 1 in my December 14 correspondence did not include the data on the percent solids content of the samples; those values are:

Sample Date	% Solids
8/15	2.7
8/16	3.8
8/17	4.0
8/18	7.6
8/21	3.0
8/22	6.6
8/23	3.9

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Data which were previously reported for pressed, dewatered sludge cake (Table 3 in the June 15, 1989 and July 27, 1989 correspondence) are in units of pCi/g of sample, as received - not pCi/g of solids. The solids content of those samples ranged from 17.8 to 32.6%; solids content on the individual samples can be provided, if needed for your files or calculations.

If you need any additional information, please contact me at FTS 626-3305.

Sincerely,



James D. Berger, Director
Environmental Survey and
Site Assessment Program

JDB:jls

cc: G. Sjoblom, NRC/NMSS (6H3)
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