


L/N. 37-23341-C

030-20934

 Oak Ridge
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Energy/
Environment
Systems Division

June 17, 1992

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

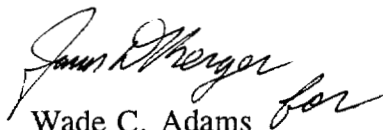
SUBJECT: DATA RESULTS FOR ROYERSFORD SLUDGE SAMPLES

Dear Ms. Ullrich:

Enclosed are the results of gamma spectroscopy and Strontium-90 analyses performed on samples submitted by the Royersford Wastewater Treatment Plant. Data are in units of activity per gram of dry solids.

If you have any questions regarding this data, please contact me at 615/576-0065.

Sincerely,



Wade C. Adams
Health Physicist/Project Leader
Environmental Survey and
Site Assessment Program

WCA:dac

Enclosure

cc: J. Kinneman, NRC/Region I
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TABLE 1
RADIONUCLIDE CONCENTRATIONS MEASURED
IN SLUDGE SAMPLES (10% TO 20% SOLIDS) FROM
ROYERSFORD WASTEWATER TREATMENT PLANT

RADIONUCLIDE CONCENTRATION (pCi/g-dry weight)				
DATES AND TIMES (1992)				
Radionuclide	5/29/91 - 1200	6/7/91 - 1455	6/11/91 - 1345	6/12/91 - 1330
Cr-51	--- ^a	---	---	---
Mn-54	370 ± 23 ^b	487 ± 30	84 ± 12	312 ± 4.0
Co-58	<96	<98	<73	40 ± 42
Fe-59	---	---	---	---
Co-60	829 ± 43	954 ± 49	358 ± 37	622 ± 64
Zn-65	386 ± 27	314 ± 22	60 ± 17	255 ± 41
Sr-90	27.0 ± 0.6	9.2 ± 0.4	30.2 ± 0.7	7.6 ± 0.3
Nb-95	---	---	---	---
Zr-95	---	---	---	---
Ag-110m	<8.0	13.6 ± 3.7	<6.4	<9.6
Sb-125	6.3 ± 3.7	<9.4	<8.1	<11
Cs-134	14.0 ± 2.0	7.3 ± 1.6	5.5 ± 2.5	7.2 ± 3.7
Cs-137	112.1 ± 6.6	90.5 ± 5.3	87 ± 10	74.1 ± 9.5

^aRadionuclide not identified in sample. Results for Cr-51, Fe-59, Nb-95, and Zr-95 not considered meaningful because of large correction factor necessary to adjust detection sensitivity of procedure for multiple half-life decay between collection and analysis dates.

^bUncertainties represent the 95% confidence levels based on counting statistics.