

September 14, 2004

Mr. Gene Bonano  
U.S. Nuclear Regulatory Commission  
Region III  
801 Warrenville Road  
Lisle, IL 60532-4351

**SUBJECT: REVISION TO ANALYTICAL RESULTS FOR SOIL SAMPLES FROM  
RAVENNA ARMY AMMUNITION PLANT, WEST TANK FARM,  
RAVENNA, OHIO [DOCKET NO. 040-08306] (RFTA NO. 04-001)**

Dear Mr. Bonano:

The Environmental Survey and Site Assessment Program (ESSAP) of the Oak Ridge Institute for Science and Education (ORISE) received 30 soil samples on August 16, 2004 that were collected at the Ravenna Army Ammunition Plant, West Tank Farm, Ravenna, Ohio, between August 10 and August 12, 2004. The samples were analyzed for Th-232 via the 911.07 keV Ac-228 photopeak by gamma spectroscopy (Procedure CP1, Revision 13). The Th-232 data are presented in Table 1. All 30 samples had activities less than the Th-232 derived concentration guideline level of 4 pCi/g.

ESSAP's Quality Control (QC) requirements were met for these analyses. The QC files are available for your review upon request.

The revision to the original letter report of September 10, 2004 was made to address the omission of the analytical data for NRC sample number 28. We apologize for the omission and any inconvenience it may have caused.

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SEP 20 2004

Mr. Gene Bonano

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If you have any questions, please call me at (865) 241-3242 or Wade Ivey at (865) 576-9184.

Sincerely,



Dale Condra  
Laboratory Manager  
Environmental Survey and  
Site Assessment Program

RDC:WPI:ar

Enclosure

cc: T. McLaughlin, NRC/NMSS/TWFN 7F27 E. Abelquist, ORISE/ESSAP  
E. Knox-Davin, NRC/NMSS/TWFN T8A23 T. Vitkus, ORISE/ESSAP  
File 1622

Distribution approval and concurrence:	Initials	Date
Technical Management Team Member	TQV	9/14/2004
Quality Manager	ATP	9/14/2004

# REVISED ORISE TABLE 1

## Th-232 CONCENTRATIONS IN SOIL SAMPLES PROCEDURE CP1 - REVISION 13 RAVENNA ARMY AMMUNITION PLANT RAVENNA, OHIO

ESSAP Sample ID	NRC Region III Sample ID	Th-232 <sup>a</sup> by Ac-228
1622S0001	1	1.59 ± 0.24 <sup>b</sup>
1622S0002	2	0.94 ± 0.22
1622S0003	3	1.38 ± 0.20
1622S0004	4	0.39 ± 0.10
1622S0005	5	0.94 ± 0.20
1622S0006	6	2.93 ± 0.33
1622S0007	7	0.94 ± 0.17
1622S0008	8	1.17 ± 0.20
1622S0009	9	1.14 ± 0.18
1622S0010	10	0.41 ± 0.10
1622S0011	11	0.43 ± 0.09
1622S0012	12	0.82 ± 0.14
1622S0013	13	0.37 ± 0.09
1622S0014	14	0.54 ± 0.14
1622S0015	15	1.12 ± 0.18
1622S0016	16	0.28 ± 0.08
1622S0017	17	0.49 ± 0.17
1622S0018	18	1.93 ± 0.24
1622S0019	19	0.85 ± 0.14
1622S0020	20	0.36 ± 0.09
1622S0021	21	1.08 ± 0.15
1622S0022	22	1.27 ± 0.24
1622S0023	23	2.70 ± 0.34
1622S0024	24	1.85 ± 0.23
1622S0025	25	0.96 ± 0.18
1622S0026	26	1.04 ± 0.18
1622S0027	27	1.07 ± 0.16
1622S0028	28	1.06 ± 0.18
1622S0029	29	1.15 ± 0.19
1622S0030	30	0.91 ± 0.15

<sup>a</sup>The average MDC for a 1 hour count of soil in a 0.5L Marinelli for Th-232 by Ac-228 is 0.14 pCi/g.

<sup>b</sup>Uncertainties represent the 95% confidence level, based on total propagated uncertainties.