

September 14, 2004

Mr. Gene Bonano
U.S. Nuclear Regulatory Commission
Region III
801 Warrenton 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 ^a by Ac-228 |
|-----------------|--------------------------|-------------------------------|
| 1622S0001 | 1 | 1.59 ± 0.24 ^b |
| 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 |

^aThe 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.

^bUncertainties represent the 95% confidence level, based on total propagated uncertainties.