

August 27, 2003

2003 SEP -2 PM 1: 30

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

SUBJECT:

REPORT FOR ANALYSIS OF SMEAR SAMPLES FROM THE BROADWAY ELEMENTARY SCHOOL EXIT SIGN, CAMDEN, NEW JERSEY (INSPECTION REPORT NO. 99990001/2003-004) [RFTA 03-001]

Dear Ms. Ullrich:

The Environmental Survey and Site Assessment Program (ESSAP) of the Oak Ridge Institute for Science and Education (ORISE) received eleven smear samples that you collected on August 18, 2003 at Broadway Elementary School in Camden, New Jersey. The smear samples were counted for tritium using a liquid scintillation analyzer (Procedure AP2, Revision 13 and Procedure CP4, Revision 2). The analytical data are presented in Table 1.

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

Please contact me at (865) 241-3242 or Wade Ivey at (865) 576-9184 should you have any questions.

Sincerely,

Dale Condra

Laboratory Manager

Environmental Survey and

Site Assessment Program

RDC:WPI:ar

Enclosure

cc:

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File/877

| Distribution approval and concurrence: | Initials | Date |
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ORISE TABLE 1

CONCENTRATIONS OF TRITIUM IN SMEAR SAMPLES BY LIQUID SCINTILLATION ANALYSIS AP2, REVISION 13 AND CP4, REVISION 2 BROADWAY ELEMENTARY SCHOOL CAMDEN, NEW JERSEY

| ESSAP Sample ID | NRC Region I Sample ID | Tritium ^a Concentrations (dpm/smear) |
|-----------------|---------------------------|--|
| 877R001-1 | 1 | $3,680 \pm 140^{b}$ |
| 877R001-2 | 2 | 1829 ± 91 |
| 877R001-3 | 3 | $223,300 \pm 7,900$ |
| 877R001-4 | 4 | 1,468 ± 74 |
| 877R001-5 | 5 | 430 ± 43 |
| 877R001-6 | 6 | 2,320 ± 110 |
| 877R001-7 | 7 | 576 ± 49 |
| 877R001-8 | 8 | 982 ± 65 |
| 877R001-9 | 9 | 6,450 ± 200 |
| 877R001-10 | 10 | $94,200 \pm 2,600$ |
| 877R001-11 | 11 | 38 ± 19 |

^aThe average MDC is 29 dpm/smear for a 5 minute count for smears.

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