



DEFENSE LOGISTICS AGENCY
DEFENSE NATIONAL STOCKPILE CENTER
1745 JEFFERSON DAVIS HIGHWAY
ARLINGTON, VIRGINIA 22202

40-341



IN REPLY
REFER TO

DNOSC-O (Kevin Reilly/703-607-3227/jnp)

03 AUG 1994

SUBJECT: Survey of Unaffected Roof Area

Mr. Dominick A. Orlando
Project Manager
Division of Low Level Waste Management and Decommissioning
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

Dear Mr. Orlando:

As discussed in our teleconference on 3 August 1994, the need to establish new background levels for the unaffected roofs is now apparent. The enclosed letter from RUST Federal Services clearly outlines how we plan to establish new background levels and how we will proceed to survey the unaffected roofs of the nine buildings that previously stored thorium nitrate.

Should you have any questions or this methodology does not meet your approval please contact me as soon as possible so we may further discuss this issue.

Thank you for your assistance and cooperation in this remedial action.

Sincerely,

F. KEVIN REIDLY
Environmental Protection
Specialist

Encl

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PDR ADOCK 04000341
C PDR

NLD

RUST FEDERAL SERVICES INC.

140 Stoneridge Drive
Columbia, SC 29210
Tel: (803) 779-0900

August 3, 1994

Mr. Kevin Reilly
DLA/DNSC-O
1745 Jefferson Davis Highway
Suite 100, Crystal City Square #4
Arlington, VA 22204

Ref: (a) Phonecon between Nick Orlando (NRC), F. Kevin Reilly (DLA) and
RUST, of 3 August, 1994.

Subject: Survey of Unaffected Roof Areas.

Dear Kevin,

The following is RUST's recommendation for proceeding with "unaffected area" roof survey of the previously identified nine (9) buildings. Rust will establish a new background level for the roofs prior to continuing the unaffected survey of the roofs. The background will be determined as follows:

A minimum of ten (10) background measurements will be taken on the roof of a building of similar roof construction but not located in the controlled area. These measurements will be used to determine the actual number of background measurements required to establish the upper limit of the 95% confidence level (formula 8-22, page 8.15 of NUREG 5849).

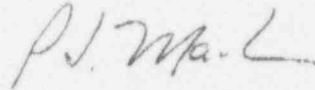
Once the actual number of calculated background points have been collected the average and standard deviation of the background will be calculated. The upper limit of the 95% confidence level is determined by the average background plus 2 standard deviation as calculated above.

For example if the average background is $3650 \text{ dpm}/100\text{cm}^2 \pm 60 \text{ dpm}/100\text{cm}^2$ we would use $(3650 + (2 \times 60)) = 3770 \text{ dpm}/100\text{cm}^2$ as the upper limit of the 95% confidence level. Therefore, anything greater than $3770 \text{ dpm}/100\text{cm}^2$ would be considered potentially contaminated.

Rust will scan 10% of the surface of the unaffected roof for indications of contamination greater than 25% of the guideline. In addition, 30 randomly selected locations will be surveyed for fixed contamination for each roof.

If you have any questions, please contact me at (410) 768-0549.

Sincerely,

A handwritten signature in dark ink, appearing to read "P.J. Malich", with a long horizontal flourish extending to the right.

Phillip J. Malich
RUST Federal Services
Project Manager