



Oak Ridge
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November 17, 1988

Manpower Education,
Research, and Training
Division

Dr. Germaine LaRoche
Nuclear Materials Safety
and Safeguards
Mail Stop 6H3
Nuclear Regulatory Commission
Washington, DC 20555



Dear Dr. LaRoche:

ORAU has reviewed the six volume report, prepared by Nuclear Energy Services, describing the decontamination actions and pre-and-post-decontamination status for five areas which have been requested for unrestricted release at the B. P. Chemical Plant in Lima, Ohio. These areas are the Truck Warehouse, Center Warehouse, Main Warehouse, A-Frame Warehouse, and A-Frame Truck Bay.

The following comments are offered for consideration in evaluating this request and are directed toward those items requested as exceptions.

1. In general, the patterns and characteristics of the residual contamination in these areas are similar to those observed in the Catalyst Plant. The levels are, however, typically lower. Review of the data did not disclose any contaminated areas, unidentified by Nuclear Energy Services.
2. The soil below all five areas has been requested as an exception. Of 42 samples taken from 18 locations, only 3 exceed the 35 pCi/g limit for uranium. These samples contained 44, 66, and 642 pCi/g. Two of these samples were collected near a contaminated drainline which runs between the Main and Center Warehouses. Because of the small fraction of the subfloor soil which is contaminated above 35 pCi/g, it is felt that the average concentration will likely be within the guideline level.
3. Surface contamination levels inside the drainline between the Main Warehouse and Center Warehouse range up to 10,150 $\mu\text{Ci}/100\text{ cm}^2$, which is below the maximum guideline level of 15,000 but above the average value of 5000. Because there is not adequate information provided to calculate the true average over 1 m^2 area and because water in the line probably resulted in a reduction of measurement sensitivity, it is suggested that this pipe be filled with grout to prevent future use.
4. Portions of the cinderblock walls in the Center Warehouse have been requested for exception; these are the east wall of the Bathroom and the north wall of the Break Room Stairwell. It is suspected that some of the measurements may be misleadingly high, because they represent the maximum, based on a small probe area (about 15 cm^2), and averaging over the adjacent 100 cm^2 area has not been taken into consideration. With such an approach these areas may not have required an exception.

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5. The I-beams in the Center Warehouse Locker Room also represent surface areas which may have averaged to within guideline levels, when actual probe area, relative to 100 cm^2 and 1 m^2 , is taken into consideration. The contamination on these surfaces is isolated and relatively inaccessible.
6. With the exception of the A-Frame Warehouse roof, all roofs were replaced. The A-Frame Warehouse roof is contaminated slightly above the guideline values; the average alpha level is reported as $7430 \text{ dpm}/100 \text{ cm}^2$. ORAU was not able to locate data supporting this level in the NES reports.

If you have any questions regarding these comments, contact me or Jim Berger at FTS 626-2908 or 626-3305, respectively.

Sincerely,



Michele R. Landis, Team Leader
Radiological Site Assessment Program

MRL:jle

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