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OAK RIDGE INSTITUTE FOR SCIENCE AND EDUCATION

December 15, 1993

Mr. Douglas M. Collins
Region II
U.S. Nuclear Regulatory Commission
101 Marietta Street, Suite 2900
Atlanta, GA 30323-0199

Subject: **DOCUMENT REVIEW OF THE CLEAN-UP AND RESURVEY REPORT FOR ITT ELECTRO-OPTICAL PRODUCTS DIVISION--ROANOKE, VIRGINIA [DOCKET FILE NO. 040-08761]**

Dear Mr. Collins:

The Environmental Survey and Site Assessment Program of the Oak Ridge Institute for Science and Education has reviewed the subject document and offers the enclosed comments for your consideration.

Please do not hesitate to contact me at (615) 576-5073 or Michele Landis at (615) 576-2908 should you have any questions.

Sincerely,

Timothy J. Vitkus
Environmental Project Leader
Environmental Survey and
Site Assessment Program

TJV:dac

Enclosure

cc: J. Henson, NRC/Region II
~~T. Mo, NRC/NMSS, 4E4~~
D. Tiktinsky, NRC/NMSS, 6E6
J. Swift, NRC/NMSS, 6H3
M. Landis, ESSAP
J. Berger, ESSAP
W. Adams, ESSAP
PMDA, 6E6
File/181

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P. O. BOX 117, OAK RIDGE, TENNESSEE 37831-0117

General Comments

1. Has the licensee characterized the original floor surface in the Landis Grinder and Glass Saw rooms? The confirmatory survey previously conducted by ESSAP, identified a number of locations exceeding the guideline values beneath the floor tiles. It appears that the licensee has addressed only those locations. The confirmatory survey is designed as a "spot check" of a sites overall radiological status and the data collected is not intended to replace a characterization survey.

2. The total surface area for each location which exceeded the 667 dpm/100 cm^2 derived limit, and the associated 1 m^2 weighted average, should be provided in order to demonstrate guideline compliance.

3. Smear sample results are provided for only a portion of the "fixed point" measurement locations. Although not the preferred methodology, removable activity guideline compliance can be inferred when total activity is below the removable activity guideline levels. However, the reported minimum detectable activity of the survey instrumentation, in some cases, exceeds the removable activity guideline of 200 dpm/100 cm^2. Therefore, compliance with the removable activity guideline cannot be demonstrated.

4. It is unclear to the reader, when two instruments are indicated under the instrument used column of the data sheets, which instrument acquired the reported data. Do the values reported represent alpha, beta, or alpha plus beta activity? If the presented data is for alpha plus beta activity, how was the data compared with the guidelines? In addition, the reported Tc-99 efficiency of 32.7% for the 43-68 gas proportional detector appears high. ESSAP's experience and the manufacturers specifications indicate a typical efficiency range of 20 to 28%.

5. Is there any data available which documents the radiological status of drains? Perhaps other access points such as drain junctions or manholes, where the building drains tie into a municipal sewer system or septic system, should be surveyed.