

11/7/97

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College of William & Mary  
ATTN: Richard L. Kiefer, Ph.D.  
Radiation Safety Officer  
Department of Chemistry  
P.O. Box 8795  
Williamsburg, VA 23187-8795

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT  
REQUEST DATED May 2, 1997 (Docket No. 030-31503,  
Control No. 257470)

Dear Dr. Kiefer:

This letter is in reference to your submission dated May 2, 1997 requesting termination of NRC License No. 45-03499-09. The following information is needed to continue our review of the requested licensing actions.

10 CFR 30.36(j)(2) requires that as part of the final step in decommissioning, the licensee shall conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey, unless the licensee demonstrates in some other manner that the premises are suitable for release in accordance with the criteria for decommissioning in 10 CFR Part 20, Subpart E (Federal Register, July 21, 1997, Vol. 62, No. 139, pp. 39058-92)(copy enclosed). The licensee shall, as appropriate:

- (1) report levels of gamma radiation in units of millisieverts (microRoentgen) per hour at one meter from the surfaces, and report levels of radioactivity, including alpha and beta, in units of megabecquerels (disintegrations per minute or microcuries) per 100 square centimeters-removable and fixed-for surfaces, megabecquerels (microcuries) per milliliter for water, and becquerels (picocuries) per gram for solids such as soils or concrete; and
- (2) specify the survey instrument(s) used and certify that each instrument is properly calibrated and tested.

Your submission dated May 2, 1997, did not include adequate documentation of the radiation surveys conducted in and around the premises where licensed activities were carried out. Specifically:

- A. No report of gamma radiation level surveys was given. Please provide survey results for areas in which gamma emitters were used or stored (i.e., selenium-75). As noted above, you may choose to demonstrate in another manner that these readings are unnecessary.

- B. The levels of radioactivity reported in your submission dated May 2, 1997, were given in units of counts per minute (cpm), and not in the units described above. Please report your smear data in units as described above.
- C. No indication of counter efficiencies was given as part of your smear data. Also, no indication of minimum detectable activities (MDAs) was given as part of your smear data. Please provide the efficiencies used and MDAs calculated in evaluating your samples. For your information, we have enclosed Sections 6, 7 and 8 (partial) of NUREG 5849 (Draft), "Manual for Conducting Radiological Surveys in Support of License Termination," dated June 1992, to assist you in your evaluation.
- D. Please specify the survey instruments used in your evaluation and certify that each instrument was properly calibrated and tested.

Our review of your license amendment request will continue upon receipt of the above requested information. Please provide two copies of your reply and refer to Control Number 257470. If you wish, replies may be transmitted via electronic facsimile (FAX) to (404) 562-4955. You should then mail the original copy of any electronically transmitted documents.

If we do not receive a reply from you within sixty (60) days from the date of this letter, we shall assume that you do not wish to pursue your application.

If you have any questions, please call me at (404) 562-4728, or e-mail me via the Internet at [bap@nrc.gov](mailto:bap@nrc.gov).

Sincerely,

Bryan A. Parker, Radiation Specialist  
Materials Licensing/Inspection Branch 1  
Division of Nuclear Materials Safety

Enclosures:

- 1 Federal Register, July 21, 1997, Vol. 62, No. 139, pp. 39058-92
- 2) NUREG 5849 (Draft), "Manual for Conducting Radiological Surveys in Support of License Termination," dated June 1992. [Sections 6, 7 and 8 (partial)]