



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

January 23, 2007

Docket Nos. 03005248
Control Nos. 136374
137187

License Nos. 29-01022-06

Stephen G. LaPoint
Director, Directorate for Safety
Department of the Army
U. S. Army Communications - Electronics Life
Cycle Management Command
Attn: AMSEL-SF-R
Fort Monmouth, NJ 07703-5024

SUBJECT: DEPARTMENT OF THE ARMY, REQUEST FOR ADDITIONAL INFORMATION
CONCERNING APPLICATION FOR RENEWAL OF LICENSE, CONTROL NOS.
136374 AND 137187

Dear Mr. LaPoint:

This is in reference to your letters dated February 23 and November 4, 2005, and March 14, 2006, requesting to renew Nuclear Regulatory Commission License No. 29-01022-06. As part of that renewal, a decommissioning funding plan is required in accordance with 10 CFR 30.35(c). In order to continue our review, we need the following additional information:

1. In order for the NRC to make a determination that an exemption to 10 CFR 30.32(g) is warranted pursuant to 10 CFR 30.11, you must provide additional supporting information demonstrating why the exemption is necessary and why compliance with the existing regulation is not feasible. It is not sufficient to state that such an exemption will allow you to maintain operational flexibility and eliminate the need for certain licensing actions without explaining the need for such flexibility and the reason that licensing actions impede your work. You should provide appropriate information describing your mission and activities with licensed materials, how these activities relate to the national defense and security, your need to respond quickly to changing situations, and other applicable information. Any specific information which you believe relevant, such as the number and variety of sealed sources you typically possess at any one time, number of authorized users that participate in research with the sources, examples of activities that have very short turn-around time, etcetera, may be included to support your request.

Please note that NRC staff has been advised that there is no legal basis for an applicant for a specific license to commit to using sources registered pursuant to 10 CFR 32.210 rather than comply with the regulations in 10 CFR 30.32(g) by listing, for each source or device to be used, the manufacturer and model number. However, 10 CFR 30.11 provides that the NRC may grant an exemption from the requirements of Part 30 if a specific licensee requests an exemption and provides sufficient information for the NRC to determine if such exemption is warranted, and will not endanger life or property or the common defense and security, and is otherwise in the public interest.

2. As stated in our letter dated June 13, 2005, 10 CFR 30.32(g) requires that an application for a specific license to use byproduct material in the form of a sealed source or in a device that contains a sealed source must either identify the source or device by manufacturer and model number as registered with the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or with an Agreement State; or contain the information identified in 10 CFR 32.210(c).
 - a. If you decide not to pursue the request for exemption from this requirement, you must provide this information for the sealed source(s) requested in your application.
 - b. Alternately, you may also possess and use sealed sources that are included in material classified as "any" under Item No. 7 of your NRC license without specifying model numbers, provided the limits in Item No. 8 are not exceeded. Please note that your current limits for unsealed radioactive material require the submission of a decommissioning funding plan (DFP) (see No. 3 below), so any changes in such authorizations could require a revision of the DFP and associated financial assurance to be provided.
 - c. If you cannot identify a manufacturer and model number for a given sealed source, and you cannot provide the equivalent information required by 10 CFR 32.210(c), then we will list these sources on your license "for storage only until disposal".
3. In your letter dated November 4, 2005, you requested certain changes in the authorized radionuclides, forms, and limits. Although these changes do reduce the quantities of unsealed radioactive materials, the sum-of-fractions determined using the unity rule in accordance with 10 CFR 30.35(d) still requires the submission of a decommissioning funding plan (DFP) in accordance with 10 CFR 30.35(c)(2).
 - a. Enclosed are two financial assurance worksheets, the first for your authorized materials and limits as listed on Amendment No. 59, and the second for the materials and limits requested in your letter dated November 4, 2005. This worksheet is one of several different methods that can be used to determine if a DFP must be submitted, or if a certification amount is acceptable. In both cases,
 - (1) for the broad scope authorization of radionuclides with atomic numbers 3 through 83 and for the item 'radionuclides with atomic numbers greater than 84', the most restrictive radionuclide is "any other alpha" for which the applicable quantity shown in Appendix C Table to Part 30 is 0.01 microcuries. At greater than 0.01 millicuries (mCi) [which is 1 E3 times the applicable quantity], the first level certification is required; at greater than 0.1 mCi [which is 1 E4 times the applicable value], the second level of certification is required; at greater than 1.0 mCi [which is 1 E5 times the applicable value], a DFP is required. The next most restrictive radionuclide is "any radionuclide other than alpha", which requires a DFP at greater than 10 mCi. With your current limit for byproduct materials

with atomic numbers 3 through 83 at 1000 millicuries per radionuclide [and 10 curies total], you reach a fraction of 100,000 considering only having the maximum quantity of one radionuclide of "any alpha emitter". Theoretically, you could have 10 different alpha radionuclides under this authorization. Reducing this limit to 10 millicuries per radionuclide still results in a fraction of 1000 for a single radionuclide "any alpha emitter", and will require a DFP.

- (2) On both tables, I assumed the tritium accelerator targets as 'unsealed'. If they are plated sources, they can be considered sealed, in accordance with 10 CFR 30.35. If they are unsealed materials, the applicable quantity is 1 millicurie, therefore the first level of certification is required if you are authorized for greater 1 curie of tritium alone; the second level if greater than 10 curies, and a DFP if greater than 100 curies alone. When added to the other unsealed byproduct materials authorized on the license, a DFP is required.
- (3) The applicable quantity for polonium-210 is 0.01 microcuries, therefore the amount of 10 microcuries alone does not require financial assurance. However, when added to the other unsealed byproduct materials authorized on the license, a DFP is required.
- (4) The applicable quantity for americium-241 is 0.01 microcuries, therefore the amount of 1.0 millicuries alone requires the second level certification amount. When added to the other unsealed byproduct materials authorized on the license, a DFP is required.
- (5) There are separate requirements for financial assurance for sealed or plated sources of byproduct material, for dispersible source material, for non-dispersible source material, for unsealed special nuclear material (SNM) and for sealed SNM. None of the materials in these categories require financial assurance under the current authorizations listed in Amendment No. 59, or in the proposed changes in the November 4, 2005, letter.

Please review these tables and determine if you wish to adjust any of the material authorizations from those requested in your November 4, 2005, letter. If you decide to remove unsealed material authorizations from the license, you may be required to provide survey or other data to show that no residual contamination remains from the use of those materials.

- b. If you determine that you do not wish to adjust any of the material authorizations to maintain your program, and a DFP is required, you should develop the DFP and cost estimate for financial assurance in accordance with the guidance found in NUREG-1757, "Consolidated NMSS Decommissioning Guidance", Volume 3, "Financial Assurance, Recordkeeping, and Timeliness" (NUREG-1757, Vol. 3), Section 4.1 and Appendix A.3. You may submit the DFP for review and approval

of the cost estimate prior to submitting the documents that will provide the financial assurance.

- c. When you prepare your revised financial assurance, you should be sure to include
- (1) a revised Statement of Intent showing the amount of the approved cost estimate, in accordance with Appendix A.16 of NUREG-1757, Vol. 3.;
 - (2) documentation verifying that the signatory is authorized to represent the licensee in providing the Statement of Intent, as described in Appendix A.16.3 of NUREG-1757, Vol. 3.;
 - (2) the "Certification of Financial Assurance" document, using the Model Certification of Financial Assurance shown in Appendix A.2.4 of NUREG-1757, Vol. 3.;
 - (3) a description of the means that will be used to adjust the site-specific cost estimate over the life of the facility, as described in Appendix A.3.2 of NUREG-1757, Vol. 3, and as required by 10 CFR 30.35(e) at intervals not to exceed 3 years.

Current NRC regulations and guidance are included on the NRC's website at www.nrc.gov; select **Nuclear Materials; Medical, Academic, and Industrial Uses of Nuclear Material**; then **Toolkit Index Page**. Or you may obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-888-293-6498. The GPO is open from 7:00 a.m. to 8:00 p.m. EST, Monday through Friday (except Federal holidays).

We will continue our review upon receipt of this information. Please reply to my attention at the Region I Office and refer to Mail Control Nos. 136374, and 137187. If you have any technical questions regarding this deficiency letter, please call me at (610) 337-5040.

In order to continue prompt review of your application, we request that you submit your response to this letter within 30 calendar days from the date of this letter.

Sincerely,

Original signed by Elizabeth Ullrich

Betsy Ullrich
Senior Health Physicist
Commercial and R&D Branch
Division of Nuclear Materials Safety

enclosures:

1. Financial Assurance Worksheet, Amendment No. 59
2. Financial Assurance Worksheet, letter dated November 4, 2005

S. LaPoint
Department of the Army

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cc w/enclosures:
Craig Goldberg, Radiation Safety Officer

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SUNSI Review Complete: EUllrich

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