



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

January 18, 2012

Docket No. 03012630  
Control No. 576549

License No. 01-00126-16

Steven V. Howard, C.H.P.  
Radiation Safety Officer  
Department of the Army  
U.S. Army Aviation and Missile Command  
U.S. Army TMDE Activity

AMSAM-TMD-SR, Building 5417  
Redstone Arsenal, AL 35898-5000

SUBJECT: DEPARTMENT OF THE ARMY, REQUEST FOR ADDITIONAL INFORMATION  
CONCERNING APPLICATION FOR AMENDMENT TO LICENSE, CONTROL  
NO. 576549

Dear Mr. Howard:

This is in reference to your letter dated December 12, 2011 requesting to amend Nuclear Regulatory Commission License No. 01-00126-16. Your letter proposed inspection and maintenance procedures to support 10 CFR 36.61 requirements. In order to continue our review, we need the following additional information:

1. 10 CFR 36.23(a) requires that the doors and barriers must not prevent any individual in the radiation room from leaving. Your procedures do not seem to address this requirement. Please place a test into your procedure.
2. 10 CFR 36.23(a) requires that it must not be possible to move the sources out of their shielded position if the door is open. Your procedures did not test this requirement. Please place a test into your procedure.
3. 10 CFR 36.31(b) requires the console to indicate when the sources are in transit. Your procedure did not specifically check for the transit indication. Please include a check for the transit condition in section 4 (i.e. both lights on or both lights off).
4. 10 CFR 36.23(c) requires a radiation monitor must be provided to detect the presence of high radiation levels in the radiation room of a panoramic irradiator before personnel entry. The monitor must be integrated with personnel access door locks to prevent room access when radiation levels are high. Please incorporate operability of this requirement into your procedure.

5. 10 CFR 36.23(d) requires that the source control must automatically activate conspicuous visible alarm as well as audible alarm prior to sources moving from the shielded position. Your submitted procedures did not check this conspicuous visible alarm. Please amend 2.c. to note the visible as well as the audible alarm.
6. 10 CFR 36.23(f) requires that each radiation room of a panoramic irradiator must contain a control that prevents the sources from moving from the shielded position unless the control has been activated and the door or barrier to the radiation room has been closed within a preset time after activation of the control. Your submitted procedures did not appear to address this requirement or check to ensure the circuit times out. Please add this to your procedures.
7. 10 CFR 36.23(g) requires each entrance to the radiation room of a panoramic irradiator be posted as required by 10 CFR 20.1902. Please add a check of this posting into your procedures.
8. The fire alarm checks you submitted in section 5 does not specify that the smoke and heat detectors are checked for operability for smoke and heat detection as required by 10 CFR 36.61(8). Please confirm that the smoke and heat detectors are checked for operability in section 5.

Current NRC regulations and guidance are included on the NRC's website at [www.nrc.gov](http://www.nrc.gov); select **Nuclear Materials; Med, Ind, & Academic Uses**; then **Licensee Toolkits, see our toolkit index page**. You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-866-512-1800. The GPO is open from 8:00 a.m. to 5:30 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 No. 576549. If you have any technical questions regarding this deficiency letter, please call Dennis Lawyer at (610) 337-5366.

If we do not receive a reply from you within 30 calendar days from the date of this letter, we will assume that you do not wish to pursue your application.

Sincerely,

***Original signed by Elizabeth Ullrich***

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

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**SUNSI Review Complete: DLawyer**

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| NAME   | DLawyer / <b>DL</b> / |   | EUllrich / <b>BU</b> / |   |         |  |  |  |
| DATE   | 1/18/2012             |   | 1/18/12                |   |         |  |  |  |

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