



July 31, 2015

U.S. Nuclear Regulatory Commission Region III  
Material Licensing Section  
2443 Warrenville Road, Suite 210  
Lisle, Illinois 60532-4352

Attention: Patricia Pelke

Subject: Request for Amendment of NRC License No. 24-02261-03

To Whom It May Concern:

The Boeing Company ("Boeing") requests an amendment to NRC Byproduct Material License No. 24-02261-03 to support the activity described below.

Boeing is under contract to perform radiation effects testing on test articles for the U.S. Air Force. Part of this testing activity requires neutron irradiation of the test article at White Sands Missile Range ("WSMR"). Subsequent to the irradiation, the test article will be transferred to Boeing St. Louis, MO for engineering work on or around August 7, 2015. The neutron irradiation is anticipated to induce low levels of radioactivation products. Boeing's Radiation Effect Laboratory ("BREL") in Seattle, WA routinely utilizes the fast burst reactor at WSMR for semi-conductor irradiation testing. Historically, WSMR has identified Au-198, W-187, and Sb-126 nuclides in irradiated semi-conductor components with a total activity less than 5 MBq.

This particular test type requires the activated test article to be shipped from WSMR to the Boeing St. Charles facility (2600 N. Highway 94, St. Charles, MO) located 12 miles away from the Tract II East and West Complex, St. Louis, Missouri. Boeing will possess the test article for approximately three weeks to complete installation of additional flight test hardware. This installation work involves basic disassembly of the test article. Except for a ballast, the test article will be shipped from Boeing St. Charles to Eglin Air Force Base ("AFB"), Florida at the completion of the installation work.

Radiation levels from the test article is anticipated to decay to levels indistinguishable from background prior to shipping the test article to Eglin AFB. Until the test article is fully decayed to background levels, the test article and any associated components from disassembly shall be handled with appropriate radiological controls to ensure material accountability and minimal personnel radiation exposure. Boeing is seeking a license amendment to allow for the possession of the aforementioned radioactivated test article at the Boeing St. Charles site under the supervision of the St. Louis Radiation Safety Officer ("RSO").

We appreciate your expedited handling due to the time sensitive nature of this testing and can provide additional information upon request. If you need any further information please feel free to contact me at 314-233-0278 (desk) or 314-302-2451 (cell).

Sincerely,

A handwritten signature in black ink, appearing to read "M J Kohls".

Michael J. Kohls  
Environment, Health & Safety, RSO  
The Boeing Company

**Tomczak, Tammy**

---

**From:** Pelke, Patricia  
**Sent:** Monday, August 03, 2015 9:37 AM  
**To:** Tomczak, Tammy  
**Cc:** Forster, Sara  
**Subject:** FW: [External\_Sender] Request for Amendment of NRC License No. 24-02261-03 (Boeing St. Louis)  
**Attachments:** 2015-07-31 STL License Amdt Request.pdf

**Importance:** High

Tammy,  
Please process this in as an amendment to the subject license no. and assign the action to Sara. Thanks -  
Patty

---

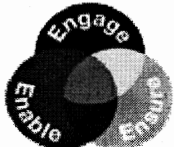
**From:** Cueva, Louie [mailto:[louie.cueva@boeing.com](mailto:louie.cueva@boeing.com)]  
**Sent:** Monday, August 03, 2015 8:57 AM  
**To:** Pelke, Patricia  
**Cc:** Croft, Charles R; Kohls, Michael J; Pickering, John J  
**Subject:** [External\_Sender] Request for Amendment of NRC License No. 24-02261-03 (Boeing St. Louis)

Ms. Pelke,

This email serves as a follow-up to our conversation on Friday, July 31, 2015 regarding an expedited license amendment request for the Boeing St. Louis site. This amendment is to allow the Boeing St. Louis site to receive a test article that will be neutron activated at White Sands Missile Range. Based on process knowledge of this type of testing conducted for the Boeing Radiation Effects Lab in Seattle we expect the test article to decay to levels indistinguishable from background during the few weeks Boeing will have possession of the test article. Ultimately the test article will be returned to the U.S. Air Force.

Per your request I have attached the request letter from Michael Kohls, the St. Louis RSO. We can provide any further information necessary to facilitate the amendment process. Thanks again for your attention and expeditious handling of this matter.

**Louie Cueva**  
*Boeing Radiation Health Protection*  
Enterprise Environment, Health & Safety  
425.234.8478 desk | 206.653.5754 mobile  
[louie.cueva@boeing.com](mailto:louie.cueva@boeing.com)



EO&T Diversity & Inclusion Council Member