

May 21, 2012

US Nuclear Regulatory Commission Region IV  
612 E. Lamar Boulevard, Suite 400  
Arlington, TX 76011-4125  
800-952-9677



Dear NRC Staff Members,

Reporting Org: The Boeing Company  
Region: Region IV  
Site: Maui Space Surveillance Site, Haleakala. State: Hawaii  
County: Maui  
License #: N/A General License

NRC Notified By: Jack Shockley II  
NRC Reporting Event #: 47932  
Notification Date: 17 May 2012  
Notification Time: 1423 HST  
Event Date: 16 May 2012  
Event Time: 1600 HST

Last Update Date: 05/18/2012  
Emergency Class: NON EMERGENCY  
IAEA CATEGORY 4

Manufacturer: NRD LLC. 2937 Alt Boulevard, PO Box 310. Grand Island, NY

10 CFR Section: 20.2201(a)(1)(i) - LOST/STOLEN LNM>1000X

#### LOST STATIC ELIMINATORS

During a review of our records on Thursday May 10<sup>th</sup> 2012 we noted a discrepancy concerning 4 NRD Nuclecel In Line Ionizer model number P-2021 1000. A thorough review of our records and a sweep of the facilities completed on Wednesday May 16<sup>th</sup> at 1600 HST failed to locate these devices and they were declared missing. Telephonic notification to the NRC was initiated on the May 17<sup>th</sup> at 1423 HST.

In accordance with Section 20.2201 subsection b (written reports) of the provisions for the US Nuclear Regulatory Commission's Requirements for General Licensees the following information is provided:

- (i) The materiel involved was 4 devices each containing 10 mCi of polonium 210 incased in a steel pressure welded cylindrical case each approximately 2.3 inches long and ½ inch in diameter.
- (ii) The circumstances under which the loss occurred were that one shipment of 2 devices, serial numbers A2HE600A and A2HE601A, were last known to have been delivered to our logistics center in August 2010 and there is no record of those two items having been returned to NRD LLC . These two items were received from NRD on 7/8/2010. A second set of two devices serial numbers A2HT541 and A2HT540 were last known to have been in a sealed package in the possession of a Boeing employee in March 2012. These two items were received from



NRD on 7/14/2011. NRD LLC has confirmed that their records do not reflect that these devices were returned to them.

- (iii) All devices are presumed lost and potentially disposed of as ordinary waste.
- (iv) Not Applicable. The casings of all devices were known to be intact at the time of loss and no exposure has occurred.
- (v) A thorough review of shipping records and site wide physical sweeps have been conducted and failed to account for the devices.
- (vi) At present no other accountable devices or materiel are known to be on site. In the event that these devices are found or that other accountable devices are received on the site the following actions will be taken immediately. All such devices will be subject to the accountability rules, requirements, and procedures established by the USAF Bioenvironmental Engineering Office (15AMDS/SGPB) Hickam AFB., Honolulu, HI. Boeing will establish a Radiation Program that will encompass all CFR requirements. Boeing will also have a Radiation Safety and Protection Program to include any additional requirements in accordance with the applicable Air Force Instructions. Boeing will coordinate with the acting Installation Radiation Safety Officer (IRSO) for the AFRL Det 15 site, and will ensure that all additional Air Force requirements have been met.

In accordance with 10 CFR 20.2201 Appendix C REPORTING LIMITS the following information is provided:

From 10CFE Appendix C the reportable limit for Po210 is 0.1uCi

halflife 138.4 days  
0.693147181 Ln(2)  
lambda 5.01E-003

Received (10mCi)	lost	elapsed days	remaining activity
07/01/10	05/17/12 686	N	0.3220 mCi
07/01/11	05/17/12	321	N 2.0036 mCi

0.3 mCi is 300 uCi = 3,000x reporting limit paragraph (i) applies (>1000x even allowing for decay)  
2 mCi is 20,000x reporting limit paragraph (i) applies (>1000x even allowing for decay).

Should you have any questions or concerns please contact Jack Shockley at (808) 280-4955 or [jack.shockley@boeing.com](mailto:jack.shockley@boeing.com).

A handwritten signature in black ink, appearing to read 'Dave DeYoung', written over a horizontal line.

Dave DeYoung  
Executive Director , Boeing Laser Technical Services  
Boeing Directed Energy Systems  
4411 The 25 Way Suite 350  
Albuquerque, NM 87109  
505 270 1874 cell  
[David.b.deyoung@boeing.com](mailto:David.b.deyoung@boeing.com)