

National Aeronautics and Space Administration
Kennedy Space Center
Kennedy Space Center, FL 32899



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MS-16

Reply to Attn of: R. Scott/TA-A4A

September 24, 2013

US Nuclear Regulatory Commission, Region I
Attention: Mr. Dennis Lawyer, Health Physicist
2100 Renaissance Blvd, Suite 100
King of Prussia, PA 19406-2713

09-11149-03

REG-1001-13M0745

Subject: Response to NRC Docket No. 03014904, Control No. 581417, Request for additional information concerning application for renewal of license.

Dear Mr. Lawyer,

This letter is written in response to the subject request for additional information regarding our NASA KSC NRC license renewal application.

The following special condition is requested:

1. Special Condition requested is currently listed in Amendment No. 11 condition 17 H. and states "*The periodic leak test required by this Condition does not apply to sealed sources installed or maintained in readiness in space flight hardware (or backup space flight hardware) prior to launch*". The special condition requested would relieve us from the normal requirement that sealed sources be tested for leakage and/or contamination at intervals not to exceed six months or at the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or under equivalent regulations of an Agreement State.
2. Why this special condition is needed is that periodically sealed sources come configured within scientific experiments packaged and maintained in a flight hardware configuration to minimize exposure of the instrument to any environment or handling procedure that might compromise the functionality of the component.
3. The proposed compensatory safety measures to provide a level of health and safety equivalent to the normal license condition are as follows:
 - a. All sealed sources in a flight hardware configuration arrive on center with source leak test documentation.
 - b. Shipment receiving inspections are performed upon their arrival. As part of this receipt inspection contamination swipes are taken on the external surfaces of the

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flight hardware container housing the instruments containing the sealed sources to document no detectable levels of radioactive material contamination are present. In addition external dose rate measurements are recorded.

- c. The flight hardware containers are placed in controlled access clean room flight hardware storage facilities until they are needed in the payload processing facility where the science instruments containing the sealed sources are integrated on the payload prior to launch.

We believe the documented methodology stated above provides a level of health and safety equivalent to the normal license condition, given that the sources are shipped with an originators leak test documentation, external package monitoring is performed documenting absence of contamination and confirms radiation dose rates are at or near background levels on external shipping containers, and the fact that the instruments containing the sealed sources are held in access controlled flight hardware storage until required for payload integration prior to launch,

Should you have any questions regarding this information please contact me at 321-867-6958 or E-mail me at randall.e.scott@nasa.gov .

Sincerely,

A handwritten signature in cursive script that reads "Randall Scott".

Randall Scott,
KSC Radiation Protection Officer