

August 26, 2010

Mr. John J. Miller  
Radiation Safety Officer  
International Isotopes, Inc.  
4137 Commerce Circle  
Idaho Falls, ID 83401

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR REVIEW OF THE MODEL  
NO. 5979 PACKAGE LIMITED AUTHORIZATION

Dear Mr. Miller:

By application dated July 12, 2010, International Isotopes, Inc., submitted a request to the U.S. Nuclear Regulatory Commission for limited authorization extending the use of the expired transportation package Model No. 5979, Certificate of Compliance No. 5979. The application requests use of the package until October 1, 2011.

In connection with our review, we need the information identified in the enclosure to this letter. To assist us in scheduling staff review of your response, we request that you provide this information by September 15, 2010. If you are unable to provide a response by that date, our review may be delayed. To assist us in re-scheduling your review, you should include a new proposed submittal date and the reasons for the delay.

Please reference Docket No. 71-5979 and TAC No. L24457 in future correspondence related to this request. The staff is available to meet to discuss your proposed responses. If you have any questions regarding this matter, I may be contacted at (301) 492-3292.

Sincerely,

**/RA/**

Michele M. Sampson, Sr. Project Manager  
Licensing Branch  
Division of Spent Fuel Storage and Transportation  
Office of Nuclear Material Safety  
and Safeguards

Docket No. 71-5979  
TAC No. L24457

Enclosure: Request for Additional Information

cc w/encl: E. Redmond, NEI

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Request for Additional Information  
International Isotopes, Inc.  
Docket No. 71-5979  
Certificate of Compliance No. 5979  
Model No. 5979

By application dated July 12, 2010, International Isotopes, Inc., (INIS or the applicant) submitted a request to the U.S. Nuclear Regulatory Commission for limited authorization extending the use of the expired transportation package Model No. 5979, Certificate of Compliance No. 5979. The applicant requests use of the package until October 1, 2011. This request for additional information (RAI) identifies information needed by the U.S. Nuclear Regulatory Commission (NRC) staff in connection with its review of the amendment.

Each individual RAI describes information needed by the staff for it to complete its review of the application and to determine whether the applicant has demonstrated compliance with the regulatory requirements of 10 Code of Federal Regulations Part 71 (10 CFR Part 71). The NRC Regulatory Issue Summary 2008-18, "Information on Requests for Extending Use of Expiring Transportation Packages" (RIS 2008-18) was used by the staff in its review of the application.

**RAI-1** Provide shipment information, to include: number of shipments; number of packages per shipment; packaging serial number, end use of the radioactive material; shipment origin and destination; mode; and general timeframe. This information should describe all shipments requested for approval during the period November 1, 2010, through the requested expiration date.

The application does not provide a description of the requested shipments. Staff may only consider authorizing those specific shipments detailed in an application.

This information is required to assess compliance with 10 CFR 71.31.

**RAI-2** Provide additional justification for continued use of the package to fully address all potential Reasons for Requesting Extended Use. If there are any adverse impacts that will result from failure to conduct the shipment, these should also be detailed.

The intent of RIS 2008-18, was to allow a transition period for applicants who had made a good faith effort, but did not meet the October 1, 2008, transition date. The application does not provide a compelling reason as to why use of this expired package, nearly two years after the package expired, is still justified. The application should detail any actual adverse impacts that will result for each requested shipment, if the shipment were not authorized.

This information is required to assess compliance with 10 CFR 71.31.

**RAI-3** Provide a description of the compensatory measures that will be used to provide an equivalent level of safety for each shipment requested. Examples of compensatory measures that may be considered are detailed in RIS 2008-18.

The Model No. 5979 expired package design may lack safety enhancements included in designs which meet all current regulatory requirements. The application does not

include a safety justification for continued use which details the measures which will be taken for each shipment to ensure safety.

This information is required to assess compliance with 10 CFR 71.31.

**RAI-4** Provide a description of INIS' role in development of a plan and schedule to acquire a replacement package.

INIS had indicated that the replacement package proposed in the previous application for continued use of the Model No. 5979 package, dated December 22, 2008, would be ready for use by November 1, 2010. The current application notes INIS' continued reliance upon Alpha-Omega Services, Inc., for development of a replacement package, Docket No. 71-9316. Staff notes that a RAI was issued for Docket No. 71-9316, on December 24, 2009, and that no response has been provided. INIS did not provide any information indicating what actions they have taken to ensure a timely transition to the replacement package design. An extended period of nearly eight months with no response to staff's request does not appear to show a continued good faith effort to transition away from the expired packaging.

This information is required to assess compliance with 10 CFR 71.31.