



International Isotopes Inc.

August 29, 2012

John P. Jankovich, Ph.D.
U.S. NRC
FSME/DMSSA/LISD/LB
11545 Rockville Pike
MS TWFN 8E24
Rockville, MD 20852

Subject: Request to Amend NR-1235-S-108-S.

Dear Dr. Jankovich,

International Isotopes Inc. requests to amend Registry of Sealed Sources and Devices Safety Evaluation of Sealed Source number NR-1235-S-108-S to revise the Model designator from the BMNT57-YY to BMNT57-**DDHH**-YY, consistent with the designation used for the Model BMCY68-DDHH-YY, and to replace the two drawings included in the current SS&DR as Attachments 1 and 2 with 3 drawings.

The new drawings that have been provided are more legible and include additional design detail. The BMCY68 Bottom Options drawing now restricts the thickness and configuration of the Model BMCY bottom to 3 options, as described below.

The standard bottom consists of a solid piece of high density polyethylene (HDPE) or equivalent whose diameter is defined by the cylinder body and fixed thickness. Note that in the standard configuration the bottom plate and top plate of the source would be of the same diameter and thickness.

Bottom Options 2 and 3, also fabricated from HDPE or equivalent are within the minimum and maximum thickness of the current Model BMCY-68-DDHH-YY Source drawing (reference Attachment 1 of NR-1235-S-108-S) and are either machined with a groove (as indicated in Option 2) or female threaded connection (as indicated in Option 3) so that the source can be readily attached to the imaging device during calibration and reference testing.

There is no request to change the authorized range of dimension or activity associated with the radioactive source matrix, or to the methods or materials of fabrication.

There has been no change in the authorized ranges to the overall source geometry, except that the bottom dimension for the BMCY-68 has been limited to those indicated above.

There are no revisions needed to the current text of NR-1235-S-108-S, aside from changing the Model Designator from BMNT57-YY to BMNT-57-DDHH-YY.

Should you have any questions, please contact me by phone at (208) 524-5300 or by email at jjmiller@intisoid.com.

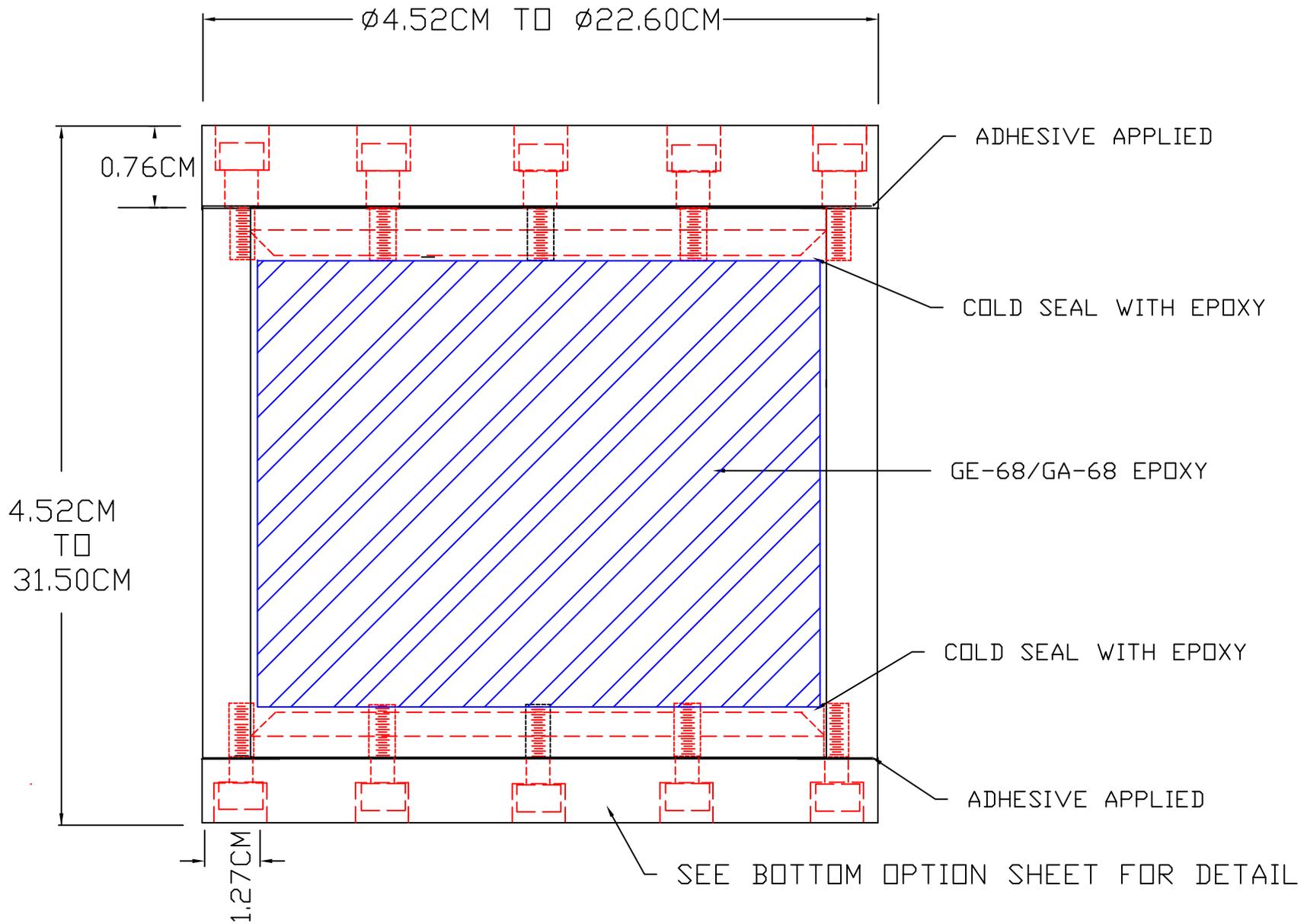
Sincerely,



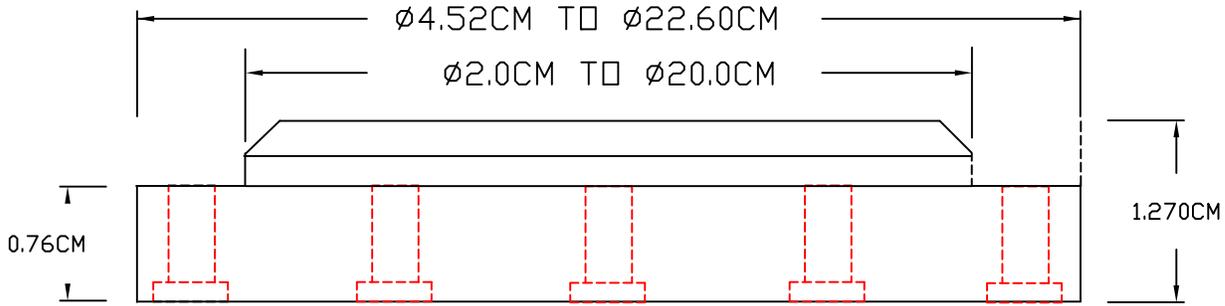
John J. Miller, CHP
Radiation Safety Officer

JJM-2012-26

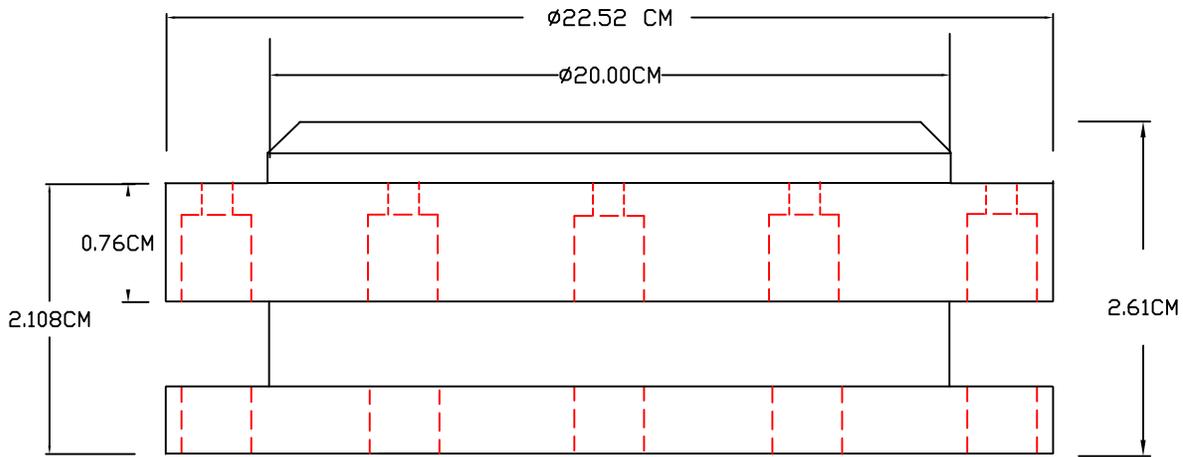
Enclosures as Stated



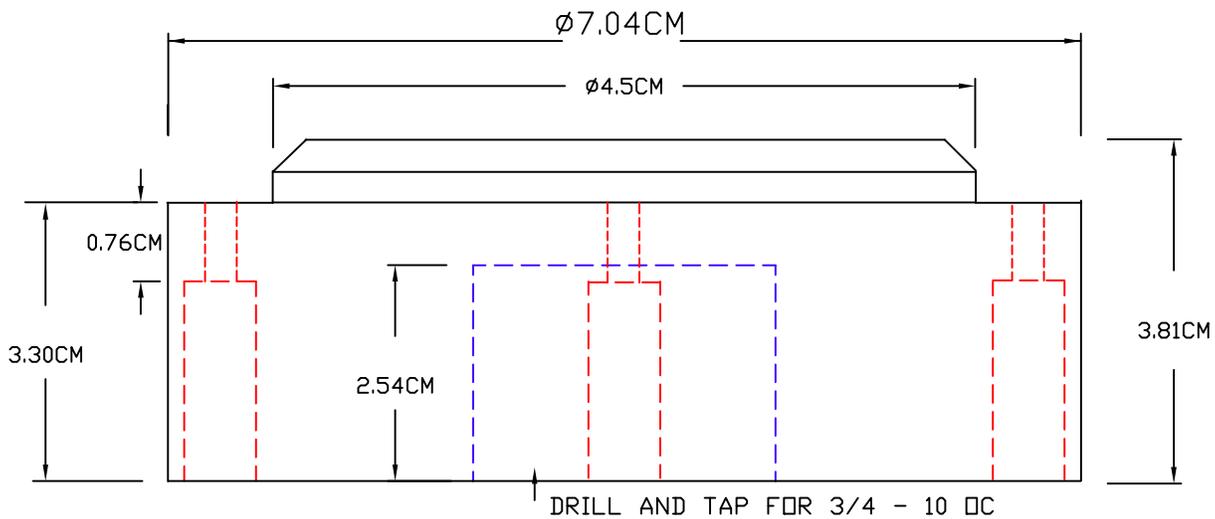
BMCY68-DDHH-YY MODEL



BMCY68 BOTTOM OPTION 1 (STANDARD)



BMCY68 BOTTOM OPTION 2 (SEIMENS ONLY)



BMCY68 BOTTOM OPTION 3 (X-CAL ONLY)

BMNT57-DDHH-YY MODEL

