From: Poy, Stephen
Sent: Thursday, August 20, 2009 1:40 PM
To: Kime, Traci
Subject: FW: Clarifications
Attachments: Revised D&L sections.doc

From: John J. Miller [mailto:jjmiller@intisoid.com]
Sent: Friday, July 17, 2009 11:18 AM
To: Poy, Stephen
Cc: KCA0863@aol.com
Subject: RE: Clarifications

Stephen,

I believe the revised Description and Label sections of the application address the 3 comments. As far as comment Number 3, the description section failed to acknowledge the full range of the BMCY design as per the drawing. I think the tables I provide in the revised description section is a better means of describing the dimensions. I have copied the revised sections below and have attached as a Word document as well.

Description:

These sources consist of a Cobalt-57 or Ge-68 uniformly dispersed in high impact epoxy casting resin (Emerson & Cuming Stycast 1264 or equivalent). The epoxy containing the dispersed radioactivity is poured into a cylindrical plastic (HDPE or equivalent) housing that contains a thin layer of cured non-radioactive epoxy to seal the bottom and provide a non-radioactive barrier. After the radioactive epoxy resin cures, it is capped with a thin layer of non-radioactive epoxy to seal the top and provide a non-radioactive barrier. After the top non-radioactive epoxy layer cures, a plastic disc (HDPE or equivalent) is attached to the cylinder with nylon (or equivalent) allen screws. A thread adhesive is applied to the allen screws prior to attaching the top and bottom discs to the cylinder walls. After the source has been completely assembled a clear epoxy resin is used to backfill the allen heads so that disassembly without destruction of the source is not possible.

The Model BMCY source is designed with a range of dimensions, the minimums and maximums are provided in the table below.

Model BMCY Minimum Source Dimensions

Overall Diameter		Active Diameter		Overall Height		Active Height	
3.36 in	(8.53 cm)	2.36 in	(6.0 cm)	3.0 in	(7.6 cm)	2.35 in	(6.0 cm)

Model BMCY Maximum Source Dimensions

Overall Diameter		Active Diameter		Overall Height		Active Height	
8.9 in	(22.6 cm)	7.9 in	(20.0 cm)	12.4 in	(31.5 cm)	11.83 in	(30.0 cm)

Refer to Attachment 1, DWG RAD020309-1 for further detail. BMCY cylinder sources with a active matrix of less than 2.6 inches in diameter are limited to a maximum of 5 millicuries activity.

Dimensions of the Model BMNT source design are provided in the table below.

Model BMNT Source Dimensions

Overall Diameter		Active Diameter		Overall Height		Active Height	
7.5 in	(19.1 cm)	4.0 in	(10.2 cm)	5.0 in	(12.7 cm)	4.0 in	(10.2 cm)

Refer to Attachment 2, DWG B900101 for further detail.

Labeling:

One label each is applied to the source and storage shield. These labels are applied to the top of the cylinders and storage shield. Each label includes the following information;

- The radioisotope;
- The activity content in millicuries (mCi) and megabecquerels (MBq);
- The reference date;
- The source model and serial number;
- A "CAUTION: RADIOACTIVE MATERIAL" warning statement;
- A magenta trefoil symbol on a yellow background;
- And the designer's name and logo.

Additional safe handling instructions are included with the source.

Please let me know if these revisions address the comments.

John

From: Poy, Stephen [mailto:Stephen.Poy@nrc.gov]
Sent: Thursday, July 16, 2009 1:29 PM
To: John J. Miller
Cc: Bhachu, Ujagar; Jankovich, John
Subject: Clarifications

Mr. Miller,

Thank you for clearing up the details with the Microshield calculations for us.

I have a few more questions in order to complete the registration for the BMNT57 and BMCY68.

1) In the Description section of the BMNT57/BMCY68 application, the units used to describe the source are in English units, but the model name of the BMCY68 is defined in metric units. To avoid confusion we need these units to be consistent. Could you send us a description in metric units ?

2) In the Labeling section of the BMNT57/BMCY68 application, it is unclear the number of labels that will be used on the sources and it is unclear the location of the labels. Could you clarify this ?

3) Lastly in the calculations you submitted for the Model BMCY 12. It shows that the dimensions of this source are 7.9 inches in diameter and 11.83 inches in height. These dimensions are greater than the maximum dimensions of the source outlined in the Description section. Could you clear up the discrepancy ?

Sincerely,

Stephen Poy

Sealed Source and Device Registrations
Licensing Branch
Division of Materials Safety and
State Agreements
Office of Federal and State Materials and
Environmental Management Programs
U.S. Nuclear Regulatory Commission

phone: 301 415 7135
fax: 301 415 5955
email: stephen.poy@nrc.gov
mail stop: T-8E24

E-mail Properties

Mail Envelope Properties (DC2088DF7F51A8499309AA4A35D0C1E01EB2B996A0)

Subject: FW: Clarifications
Sent Date: 08/20/2009 1:40:07 PM
Received Date: 08/20/2009 1:40:07 PM
From: Poy, Stephen

Created By: Stephen.Poy@nrc.gov

Recipients:
Traci.Kime@nrc.gov (Kime, Traci)
Tracking Status: None

Post Office:
HQCLSTR02.nrc.gov

Files Size Date & Time
MESSAGE 72051 08/20/2009
Revised D&L sections.doc 34614

Options
Expiration Date:
Priority: olImportanceNormal
ReplyRequested: False
Return Notification: False

Sensitivity: olNormal
Recipients received: