



July 16, 1996

FAX (610) 337-5393

Ms. Kathleen Dolce  
Mr. Dick Ladum  
U.S. NUCLEAR REGULATORY COMMISSION  
Region 1  
475 Allendale Road  
King of Prussia, PA 19406

Re: Isomedix Operations Inc.  
Storage Cask

Dear Kathy/Dick,

Attached are the following:

- ▶ Summary of the Status of the Cobalt 60 storage
- ▶ July 6, 1988 Leak Test Results
- ▶ July 16, 1996 Leak Test Results

Please let me know if you have any questions on any of this information.

Best regards,

ISOMEDIX OPERATIONS INC.

James M. Kaiser  
General Manager

jmk/pey

Attachments

C/39

ITEM # 39

②

## STATUS OF COBALT 60 STORED IN GRAY CASK

In July, 1976, in the now decommissioned Parsippany, NJ Isomedix facility, we perceived a problem area when radiation instruments indicated higher than normal radiation levels in a pool storage area containing cobalt-60. The decision was made to dispose of all sources currently in use.

Following wipe testing, one source was identified as a potential leaker. This source was encapsulated in a stainless steel tube with a swage lock endcap, and together with all other sources, placed into a larger stainless steel container which was welded shut. The larger container was then placed inside the present gray cask.

Efforts were made in 1977 to dispose of the cask and contents through the following:

- Atomic Energy of Canada (Nordion)
- Neutron Products Inc.
- Chem Nuclear
- Babcock and Wilcox
- EG&G (Idaho Falls)
- Pacific Nuclear Systems
- Stock Equipment Company
- Nuclear Energy Services
- Wastechem
- Westinghouse

The problem on disposing was that the gray cask was not licenseable for shipment, nor were there any existing overpaks which could contain the heat load.

Current activity in the cask is approximately 13,000 curies (July 1996).

The offending source is encapsulated in the swage-locked tube, enclosed in a welded shut stainless cylinder, which is contained in the outer cask. We also have the option of welding the cask lid to the cask.

Wipe tests of the most accessible area to the container with the sources (i.e., by the cask lid) were taken semi-annually (all negative results) until approximately 1988. The July 1988 test is enclosed). A wipe test taken July 16, 1996 was also negative.

During the July 10, 1996 exit interview with NRC, we agreed that we would again undertake efforts to dispose of the cask and its contents now that Barnwell is once again open.