



December 6, 1974

Mr. Douglas M. Collins  
 Directorate of Licensing  
 Materials Branch  
 Atomic Energy Commission  
 Washington, D.C. 20545

Re: Control #50985

Dear Mr. Collins:

This is pertinent to our recent discussion wherein you requested more detailed information on any cask which we might use to transfer sources between our hot cells and the Labyrinth Irradiator. Reference is made to such a transfer on page 14 (Item 13.10.7) of our November 15, 1974 letter to you.

We do have an "in-house transfer cask" on the premises, which Isomedix inherited from a previous company. We have never used it for any purpose. Your call stimulated some rather lengthy discussions among us here, with this resultant conclusion:

The "in-house" cask, which does not have a DOT Special Permit number, will not be used for the transfer described. Because of economics, facility downtime, etc., it is most logical to make such transfers in conjunction with a receipt of new source material. Such a receipt will necessarily be in a DOT approved container. In view of the height the container must be lifted in order to lower it through the roof of the new irradiator, it makes more sense from a safety standpoint to utilize a cask that has been properly certified and licensed. Hence, our source transfer operations between the hot cells and new irradiator, or the reverse, will only be done with DOT approved containers. Any of the AECL F-numbered casks, for instance, would be typical for such a transfer. A description is enclosed.

Isomedix Inc. . 25 Eastmans Road, Parsippany, New Jersey (201) 385-1100  
 Mailing Address: Post Office Box 177, Parsippany, New Jersey 07054

CHICAGO DIVISION . 7528 Nagle Ave., Morton Grove, Illinois 60053 (312) 966-1100

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 REGULATORY OPERATIONS**

8507200200 850510  
 PDR FOIA  
 GLOWACK85-111 PDR

Mr. Douglas M. Collins

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December 6, 1974

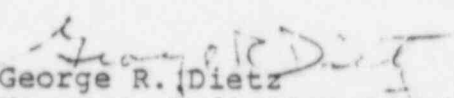
The transfer of the cask from the hot cell area to a point outside of the building where a crane would have access, would be as follows:

The cask would be lifted two or three inches off the floor with our 10-ton traveling crane, and moved to the limit of the crane to a point nearest an outside loading ramp. The cask would then be set on 3 heavy duty roller dollies (about 4" in height) and pushed to a point where the outside truck-mounted crane had access to it. The entire route of the cask is level, except for the ramp from the loading dock (floor level in building) to the outside driveway. The ramp is approximately 20 feet long, and drops about 6" over that length. Its slope is fairly small.

An alternative would be to roll the cask on dollies to the east side loading dock, load it onto a truck, and drive it to the north end of the building. In this case, the truck bed would be level with the floor of the building.

The lid of the cask would be securely bolted, using all bolts. Fire shields and shipping skids would normally not be used.

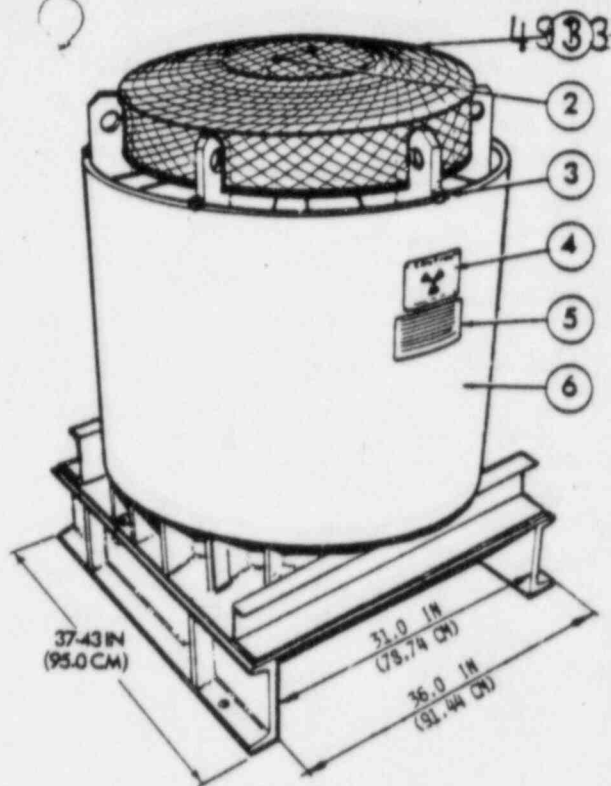
Very truly yours,

  
George R. Dietz  
Manager, Radiation Services

GRD:dp  
enclosure

# PARTS LIST

1. SHIELD COVER - 29.0 IN (73.66 CM) DIA  
x 8.0 IN (20.32 CM) HEIGHT
2. 1/4 - 20 x 1/2 IN LG HEX BOLT (2)
3. 1/2 - 13 x 1 IN LG SOCKET HD SCR (6)
4. RADIATION CAUTION PLATE -  
A.E.C.L. - SPEC DG0096 (2)
5. A.E.C.B. CERTIFICATION PLATE -  
A.E.C.L. - SPEC DG0097 (2)
6. FIRESHIELD (REMOVABLE) 1/4 IN STEEL  
- 37 1/4 IN (100.3 CM) O.D.
7. VERMICULITE PACKING
8. GASKET
9. 7/8 - 9 x 2 IN LG HEX BOLT (6)
10. WIRE SEAL
11. 3/8 IN N.P.T. PIPE PLUG
12. PLUG LIFT LUG
13. FLUSH TUBE
14. PLUG
15. REMOVABLE INSERT (SEE NOTE 6)
16. CAVITY - 18.87 IN x 6.37 IN DIA.  
(47.94 CM x 16.19 CM DIA).
17. DRAIN TUBE
18. 3/4 - 10 x 1 1/2 HEX BOLT
19. REMOVABLE SHIPPING SKID  
54.0 IN SQ (137 CM)
20. PRESSURE LINE FITTING
21. 3/8 IN STD PIPE PLUG



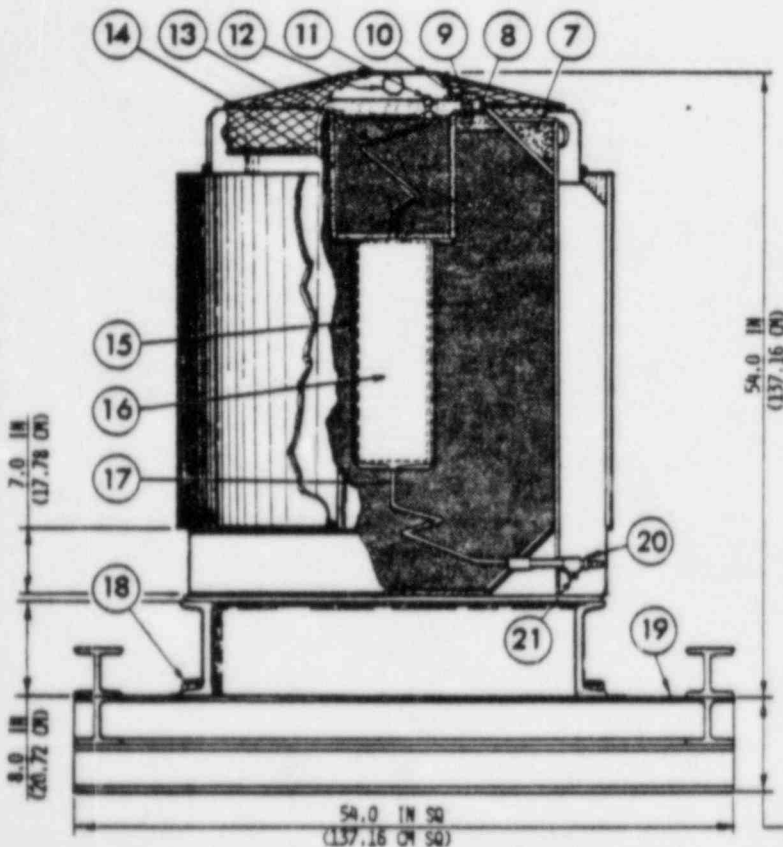
## NOTES

1. A.E.C.B. CERTIFICATE NO. - CON - U12
2. CONFORMS IN ALL RESPECTS TO I.A.E.A. TYPE B PACKAGING REQUIREMENTS AS SPECIFIED IN "REGULATIONS FOR THE SAFE TRANSPORT OF RADIOACTIVE MATERIALS, 1967 EDITION, SAFETY SERIES NO. 6", AND A.E.C.L. SPEC NO. DG 0086
3. SHIELDING - 10.5 IN (26.6 CM) LEAD - STEEL ENCASED
4. GROSS WEIGHT - 9400 LB (4263 KG)  
PLUG WEIGHT - 380 LB (172 KG)
5. FLOOR LOADING - (BASED ON PROJECTED FLOOR AREA)  
450 LB/SQ.FT. (0.225 KG/SQ.CM.) APPROX.
6. CAPACITIES \*

REMOVABLE CARRIER TYPES	SOURCE TYPES	MAXIMUM NO. SOURCES	MAXIMUM C <sub>i</sub> Co**	MAXIMUM C <sub>i</sub> Sb**
F-170	C-188 (OR EQUIV)	84-1 CARRIER ONLY	150,000	
F-179	C-190	18-1 CARRIER ONLY	100,000	
F-180	C-177 (OR EQUIV)	64-PER CARRIER (2 CARRIER CAPACITY)	150,000	
F-216	C-239	8-PER CARRIER (2 CARRIER CAPACITY)	150,000	
F-220	C-248	33-1 CARRIER ONLY	135,000	
F-128 (BUCKET)	C-232			50,000

\* THE QUANTITY OF COBALT 60 SHIPPED IS SPECIFIC ACTIVITY DEPENDENT (HEAT).

EG - 10 CI/G SLUG EQUIV C-188 75 KCI  
30 CI/G SLUG EQUIV C-188 110 KCI  
40 CI/G SLUG EQUIV C-188 130 KCI  
50 CI/G SLUG EQUIV C-188 150 KCI



ATOMIC ENERGY OF CANADA LIMITED  
COMMERCIAL PRODUCTS  
P.O. BOX 6300 POSTAL STATION "J" OTTAWA  
K2A 3W3

TITLE  
**C-BAR SHIPPING CONTAINER  
WITH FIRE SHIELD**

REF. DWG.	A06093	REVISED	NOV. 25, 1971
DATE	26 NOVEMBER 1965	No.	F-168
DRAWN	KB	CHECKED	CH
APPROVED	LW	REV.	H
SHEET 1 OF 1			

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