

INGHAM
REGIONAL MEDICAL CENTER
A McLAREN HEALTH SERVICE

March 14, 2011

United States Nuclear Regulatory Commission

Region III, Office of Materials Licensing
2443 Warrenville Road
Suite 210
Lisle, IL 60532-4352

RE: Amendment to NRC License 21-04073-01
Ingham Regional Medical Center

Dear Sir/Madam:

The purpose of this letter is to amend our current NRC license to reflect the following changes:

Item #1 We wish to amend our license to change the model of Varian HDR remote afterloader brachytherapy unit that will be used clinically. Please remove the Varian model GammaMed 12i.

Please remove the Iridium-192 sealed sources used in the old afterloader (Models RTS 721 or 724 or GammaMed 212 source assembly).


Please remove depleted uranium from our license as that was used for shielding in the GammaMed 12i.

Please change the strength and quantity for Iridium-192 Sealed sources (Varian Medical Systems Haan GmbH Model GammaMed 232) to one source not to exceed 12 curies; 20 curies total possession.

Please find enclosed a letter from the source manufacturer stating that they have received the final source from this unit and it will be disposed of by them. Also enclosed is a report from Varian Medical Systems demonstrating that the last source removed from the afterloader was not leaking and the afterloader was not contaminated.

Thank you for your cooperation. If you have any questions or require additional information, please contact our Radiation Safety Officer, Bryan G. Tollenaar at 517-975-7811.

Sincerely,



Patrick Salow, Interim CEO
Ingham Regional Medical Center

RECEIVED MAR 16 2011



Alpha-Omega Services, Inc.

Where Quality Means Exceeding Expectations

TO WHOM IT MAY CONCERN

This will hereby certify that Alpha-Omega Services, Inc., having it's HDR facility located at 1282 Bigwoods-Starks Road, Vinton, Louisiana, 70668, USA has received the following container and source:

- Date of returning container : 02/24/2011
- Container serial number : 679
- Connector number : 22-0044-10
- Source serial number : 22-01-0063-001-093010-10758-56
- Machine number : H630898-GM

From Ingham Regional Medical Center
Radiation Oncology
401 West Greenlawn Avenue
Lansing
MI
48910
USA

This container was originally shipped on behalf of Varian Medical Systems.

The source will be disposed of by Alpha-Omega Services, Inc., at it's HDR facility, located at 1282 Bigwoods-Starks Road, Vinton, Louisiana, USA on behalf of Varian Medical Systems. Alpha-Omega Services, Inc. is licensed by the state of Louisiana to perform this service.

David Mornic, Engineer
Alpha-Omega Services, Inc.
Tel. 337-589-5720
Fax 337-589-5955
aoslab@alpha-omegaserv.com

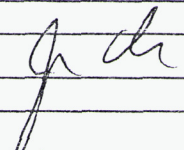
Hospital / Clinic / Institute	AL Serial #	Date
INGHAM REGIONAL MEDICAL CENTER	630898	14-Feb-11

Old Source Serial #	22-01-0063-001-093010-10758-56	Active Cycles	101
New Source Serial #		Dummy Cycles	428

Radiation Monitor Details	Survey Meter	Wipe Tester
Make / Model Number	Ludlum 2401-EW	Ludlum 2401-EW
Serial No.	256352	256352
Calibration Expiry Date	January 28, 2012	January 28, 2012

Test Description	Value	Maximum	Units	Measure Point
Background Wipe of Treatment Room	0	N/A	CPS Bq ⁽¹⁾	1-2 mm
Survey Afterloader - Old Source (all surfaces)	3	100	μSv / hr	5 cm
Wipe Shipping Container - New Source	n/a	2 x Background	CPS Bq ⁽¹⁾	1-2 mm
Survey Shipping Container - New source (top, sides, bottom)	n/a	2000	μSv / hr	Surface
Wipe New Source (after uncoiling from inside container)	n/a	2 x Background	CPS Bq ⁽¹⁾	1-2 mm
Survey Afterloader - New Source (top)	n/a	100	μSv / hr	5 cm
Survey Afterloader - New Source (sides)	n/a	100	μSv / hr	5 cm
Survey Afterloader - New Source (back)	n/a	100	μSv / hr	5 cm
Survey Afterloader - New Source (front)	n/a	100	μSv / hr	5 cm
Survey Afterloader - New Source (bottom)	n/a	100	μSv / hr	Surface
Survey Afterloader - New Source (all surfaces @ 1 metre)	n/a	10	μSv / hr	1 metre
Wipe Old Source (unloaded)	0	2 x Background	CPS Bq ⁽¹⁾	1-2 mm
Wipe Transport Safe Connector	0	2 x Background	CPS Bq ⁽¹⁾	1-2 mm
Survey Shipping Container - Old Source (top, sides, bottom)		700	μSv / hr	Surface
Shipping Container TI - Old Source ⁽²⁾	0.2	N/A	T.I.	N/A

Source Activity On Day Of Installation	n/a Ci
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Service Engineer:	Name: JESSE ARRUDA	Signature: 
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- (1) Delete units as appropriate.
 (1) The absolute radiation contamination limit is 4 Bq/cm² or 220 dpm/cm² (based on a 300 cm² wipe).

If a radiation wipe or survey is above the acceptable limit:

- Lock the wire in the shipping container.
- Lock the treatment room door.
- Contact the customer RSO.
- Contact your manager, your RSO, and VBT PSE.

- (2) Transport Index (T.I.) = Maximum radiation dose rate (μSv/hr) at 1 metre from package surface, divided by 10.

UPS CampusShip: View/Print Label

1. **Print the label(s):** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.
2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.
3. **GETTING YOUR SHIPMENT TO UPS**
Customers without a Daily Pickup
Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages.
Hand the package to any UPS driver in your area.
Take your package to any location of The UPS Store[®], UPS Drop Box, UPS Customer Center, UPS Alliances (Office Depot[®] or Staples[®]) or Authorized Shipping Outlet near you. Items sent via UPS Return ServicesSM (including via Ground) are also accepted at Drop Boxes.
To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations.

Customers with a Daily Pickup

Your driver will pickup your shipment(s) as usual.

FOLD HERE

GREENLAWN CAMPUS 5179757675 INGHAM REGIONAL MED CENTER GRN 401 W GREENLAWN AVE LANSING MI 48910	0.0 LBS LTR	1 OF 1
SHIP TO: REGION III, OFFICE OF MATERIALS LIC 6308299500 UNITED STATES NUCLEAR REG. COMM. SUITE 210 2443 WARRENVILLE RD. LISLE IL 60532-4352		
	IL 603 9-03 	
UPS NEXT DAY AIR TRACKING #: 1Z 421 845 01 9896 9817		1
		
BILLING: P/P		
Reference # 3: RAD. ONC.		
CS 13.1.08. WXP/E70 12.0A 01/2011		