

Medical Health Physics
M.C. 29-00
100 North Academy Avenue
Danville, PA 17822
570 271 7015 Tel
570 214 9248 Fax



Heal. Teach. Discover. Serve.

US Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, Pa. 19406-1415

NMSS

June 27, 2007

Licensee: Cancer Center of Wyoming Valley
50 Roosevelt Terrace, Wilkes-Barre, Pa. 18702
License: #37-27919-01 Last Amendment: #2
Subject: Termination of License

0303374-1

2007 JUL -2 AM 10:25
RECEIVED
REGION I

Please terminate NRC radioactive materials license #37-27919-01.

There were two radionuclides authorized for possession: (1) ^{192}Ir sealed sources for a Nucletron MicroSelectron HDR Remote Afterloader (2) Depleted uranium metal (105 kg) used as shielding in the collimator jaws for a linear accelerator.

The HDR device has not been in active clinical use for over 5 years and therefore source replacement has not occurred over that time period. Source(s) were returned to the manufacturer at the time of source depletion (as was standard procedure) and not replaced. The HDR device was in storage, but has been sold following a decision to discontinue HDR as a treatment option at this location.

The depleted uranium (DU) was transferred from the premises with the disposition of an old linear accelerator in 1995. The linear accelerator currently in use, a Varian Clinac 600C with serial number 188, does not have any depleted uranium shielding in its collimator jaws. This was confirmed in writing by the Varian Corporate Radiation Safety Officer on 6/25/07, who stated that Varian stopped using DU components in 1993 with serial number 172 of this model. As a final verification, to rule out a modification made without our knowledge, a radiation survey of the linear accelerator was performed showing no radiation levels above background.

Attached are Form 314, Varian RSO attestation, and survey report. We would appreciate your prompt review and expedited approval of this request.

Very Sincerely,

Catherine M. Anderko, M.S., CHP, DABR
Director, Radiation Safety Officer

Robert A. Rostock, M.D.
Cancer Center of Wyoming Valley

140748

NMSS/RGN1 MATERIALS-002

(6-2004)
10 CFR 30.36(j)(1); 40.42(j)(1);
70.38(j)(1); and 72.54(j)(1)

CERTIFICATE OF DISPOSITION OF MATERIALS

Estimated burden per response to comply with this mandatory collection request: 30 minutes. This submittal is used by NRC as part of the basis for its determination that the facility is released for unrestricted use. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0028), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

LICENSEE NAME AND ADDRESS

Cancer Center of Wyoming Valley, Assoc.
50 Roosevelt Terrace
Wilkes-Barre, PA. 18702

LICENSE NUMBER

37-27919-01

DOCKET NUMBER

030-33741 / SUB-1495

LICENSE EXPIRATION DATE

9-30-2010

A. LICENSE STATUS (Check the appropriate box)

- ☐ This license has expired. ☒ This license has not yet expired; please terminate it.

B. DISPOSAL OF RADIOACTIVE MATERIAL

(Check the appropriate boxes and complete as necessary. If additional space is needed, provide attachments)

The licensee, or any individual executing this certificate on behalf of the licensee, certifies that:

- ☐ 1. No radioactive materials have ever been procured or possessed by the licensee under this license.
- ☒ 2. All activities authorized by this license have ceased, and all radioactive materials procured and/or possessed by the licensee under this license number cited above have been disposed of in the following manner:
- ☒ a. Transfer of radioactive materials to the licensee listed below: Attachment shows transfer/disposal company & recipients of HDR unit & old linear accelerator.
- ☐ b. Disposal of radioactive materials:
- ☐ 1. Directly by the licensee:
- ☐ 2. By licensed disposal site:
- ☐ 3. By waste contractor:
- ☐ c. All radioactive materials have been removed such that any remaining residual radioactivity is within the limits of 10 CFR Part 20, Subpart E, and is ALARA.

C. SURVEYS PERFORMED AND REPORTED

- ☒ 1. A radiation survey was conducted by the licensee. The survey confirms:
- ☒ a. the absence of licensed radioactive materials
- ☐ b. that any remaining residual radioactivity is within the limits of 10 CFR 20, Subpart E, and is ALARA.
- ☒ 2. A copy of the radiation survey results:
- ☒ a. is attached; or ☐ b. is not attached (Provide explanation); or ☐ c. was forwarded to NRC on: _____ Date _____
- ☐ 3. A radiation survey is not required as only sealed sources were ever possessed under this license, and
- ☐ a. The results of the latest leak test are attached; and/or ☐ b. No leaking sources have ever been identified.

The person to be contacted regarding the information provided on this form:

NAME	TITLE	TELEPHONE (Include Area Code)	E-MAIL ADDRESS
Catherine M. Anderko	Director, Medical Health Physics, RSO	(570) 711-5917	
100 N. Academy Ave, Danville, PA. 17822-2900		Canderko@eisinger.edu	

C. CERTIFYING OFFICIAL

I CERTIFY UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT

PRINTED NAME AND TITLE

X ROBERT A. ROSTOCK MD

SIGNATURE

X [Signature]

DATE

6-27-07

WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECT. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

From: "Varti Vartanian" <Varti.Vartanian@varian.com>
To: "Andrew Jones" <aojones@geisinger.edu>
Date: 6/25/2007 5:21:45 PM
Subject: RE: Clinac 600C, SN 188

Hi Andrew,

Varian stopped manufacturing Clinacs with DU components as of 1993.

The serial number of the last unit for the 600C model that contained DU was 172. Survey of the unit is recommended to verify the absence of DU.

Regards,

Varti Vartanian
Corporate Radiation Safety Officer
Varian Medical Systems
Mail Stop: C255
Email: Varti.vartanian@Varian.com
Tel: 650-424-6663
Fax: 650-842-5051

-----Original Message-----

From: Andrew Jones [mailto:aojones@geisinger.edu]
Sent: Monday, June 25, 2007 11:41 AM
To: Varti Vartanian
Cc: Catherine Anderko
Subject: Clinac 600C, SN 188

Varti,

Would you please confirm that Varian Clinac 600C linear accelerator, SN 188 does NOT have depleted uranium?

Thanks

AJ

Andrew O. Jones, PhD
Director, Radiation Physics Group
Department of Radiation Oncology
Geisinger Medical Center
N. Academy Ave
Danville, PA 17822
570 271-6304

IMPORTANT WARNING: The information in this message (and the documents attached to it, if any) is confidential and may be legally privileged. It is intended solely for the addressee. Access to this message by anyone else is unauthorized. If you are not the intended recipient, any

Accelerator: Acceletronics Services, Inc
602 Gordon Drive
Exton, PA 19341

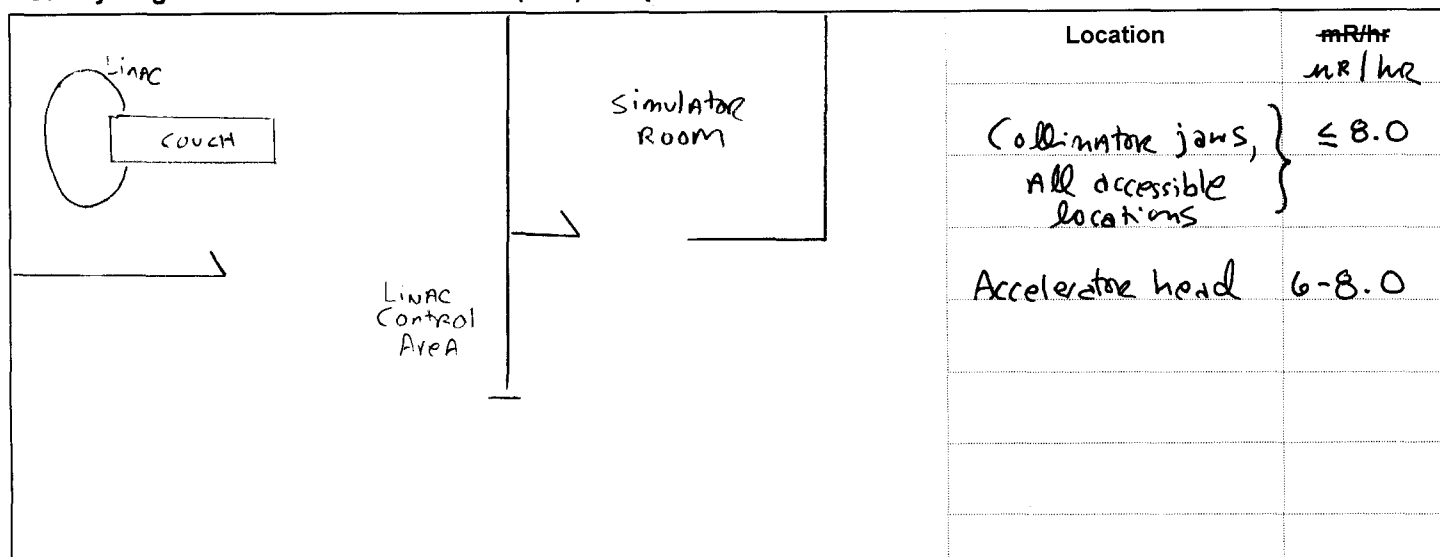
The accelerator was not sold at all, we kept some of the parts for spares and the remainder was disposed of through the company. It was dismantled beginning July 15, 2005.

HDR: Pro Cure Medical Systems International, Inc
PO Box 6789
Longmont, CO 80501 Taken away May 18, 2007

Company who purchased it: Beverly Oncology
120 West Beverly Blvd
Montebello, CA 90640

Geisinger Health System		Medical Health Physics Office Survey Report		Area / Location: Cancer Center of Wyoming Valley		Survey Type: Special: Termination																																																							
				Authorized User: Robert A. Rostock, M.D.		Radioisotopes in Use: Rule out presence of depleted uranium in linac collimator jaws																																																							
Surveyor's Name: Anderko, C.		Date of Survey: 6/27/07		Machines in Use: Varian 600 C Linac, Model 188																																																									
Compliance Items: (N/A)				<table border="1"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> <th></th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>1) Hot Lab door posting</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>9) Ion chamber operable, current calibration</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>2) CT / Linac room postings</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>10) GM operable, current calibration</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>3) RAM storage secure</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>11) DEP Linac license posted</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>4) Linac / Hot Lab authorized access only</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>12) Linac license conditions met <i>Amendment Filed</i></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>5) Personnel dosimetry in use <i>Landauer</i></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td>13) RSO Manual current and available</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>6) Variance log reviewed</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>14) QMP current and available</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>7) Source log book reviewed</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>15) CT registration form current and posted</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>8) Last staff training date: <u> </u>/<u> </u>/<u> </u></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>16) <i>02-40449</i> <i>4/3/08</i></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table>					Yes	No		Yes	No	1) Hot Lab door posting	<input type="checkbox"/>	<input type="checkbox"/>	9) Ion chamber operable, current calibration	<input type="checkbox"/>	<input type="checkbox"/>	2) CT / Linac room postings	<input type="checkbox"/>	<input type="checkbox"/>	10) GM operable, current calibration	<input type="checkbox"/>	<input type="checkbox"/>	3) RAM storage secure	<input type="checkbox"/>	<input type="checkbox"/>	11) DEP Linac license posted	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4) Linac / Hot Lab authorized access only	<input type="checkbox"/>	<input type="checkbox"/>	12) Linac license conditions met <i>Amendment Filed</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5) Personnel dosimetry in use <i>Landauer</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13) RSO Manual current and available	<input type="checkbox"/>	<input type="checkbox"/>	6) Variance log reviewed	<input type="checkbox"/>	<input type="checkbox"/>	14) QMP current and available	<input type="checkbox"/>	<input type="checkbox"/>	7) Source log book reviewed	<input type="checkbox"/>	<input type="checkbox"/>	15) CT registration form current and posted	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8) Last staff training date: <u> </u> / <u> </u> / <u> </u>	<input type="checkbox"/>	<input type="checkbox"/>	16) <i>02-40449</i> <i>4/3/08</i>	<input type="checkbox"/>	<input type="checkbox"/>
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Survey Diagram of Radiation Control Area (RCA) – map measurements are mR/hr:



Survey Instrument: Ludlum Model 1, S/N: 29433, Calibrated: 1-23-07, Check: OK, Background: 10.0 *mR/hr*
 Comments: 125 mR meter

DEP & NRC Form 3's need updated versions posted

HP Signature: <i>C. Anderko</i>	Date: 6-27-07	Last survey date and status: N/A	Survey Due:
Review By:	Date:		N/A

This is to acknowledge the receipt of your letter/application dated

6/27/2007, and to inform you that the initial processing which includes an administrative review has been performed.

☒ Termination 37-27919-01
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 140748.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

ORIGIN ID: OXCA
DAN ROWE
GEISINGER HEALTH SYSTEMS
100 N ACADEMY AV
DANVILLE PA 17822
UNITED STATES

Ship Date: 29JUN07
Actual Wgt: 1 LB
System#: 198610
Account: S 0185-0366-2

Part # 156148-434

TO: US NUCLEAR REG COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406

Ph:(570) 271-7015

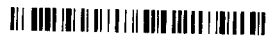
FedEx
Express

(US)

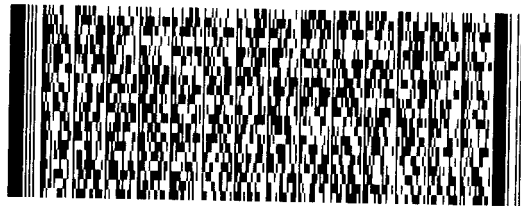


PKID: 910043211766

DPT: 04000170460050



Delivery Address
Barcode



PRIORITY OVERNIGHT

MON

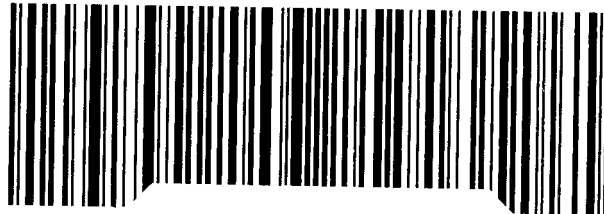
TRK# 9100 4321 1766 Form 0201

Deliver By:
02Jul07

PHL A2

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DSR

Z9 KPDA



21

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