

Materials Licensing Branch
US NRC Region III
2443 Warrensville Road, Suite 210
Lisle, IL 60532-4352
(F) 630-829-9782

RE: Documents for removing old HDR source
License #24-32604-01
Docket #030-37082

January 10, 2022

Dear Magdalena R. Gryglak

I am including the old MicroSelectron source documentations:

1. Elekta receipt of old MicroSelectron source.
2. Source return document.
3. Shippers declaration for dangerous goods.

Please contact me if you need any additional information.

Sincerely,



Iris Ouyang, MS, RSO
Chief Medical Physicist
Missouri Cancer Associates
1705 E Broadway, Suite 100
Columbia, Missouri 65201
573-874-7800 ext 2167
Email: iris.ouyang@usoncology.com

Ouyang, Iris Y

From: Elekta SupportPlus <clmsupportplus@elekta.com>
Sent: Monday, November 8, 2021 2:08 PM
To: Ouyang, Iris Y
Subject: [EXTERNAL] Source Disposal Notification

CAUTION: This email was sent from an EXTERNAL source. Use caution when clicking links or opening attachments



This is your notice that the source with serial number D36R0517, from USO MISSOURI CANCER ASSOCIATES_RADIATION ONCOLOGY for afterloader S/N was received by the supplier on 11/1/2021 with an activity of 2.6 Ci in container 2758C6.

Regards,

Source Logistics

This is an automated message, please do not reply.



Confidentiality Notice: This e-mail message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure, or distribution is



Source Return Document (USA)
Container Type ADIC (Part No. 081040)

DO NOT REMOVE THIS DOCUMENT FROM THE TRANSPORT BUCKET

Hospital name:		MISSOURI CANCER ASSOCIATES		Address:		RAD ONC	
City:		COLUMBIA		State/Country:		MO USA	
Container serial no. (nnnn-Cn):		Afterloader serial no. (nnnnn):		Source serial no. (D36xxxxnn):		No. of runs:	
2758C6		20268		D36R0517		422	
No.	Item (see Source Return Procedure, part no. 190062)				Elekta certified source handler		
1.	Are you Elekta-certified for source exchanges?				<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Remark	
2.	Dose rate above the source channel (without lid) should be lower than on the side of the container				<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Remark	
3.	Source is locked (locking lever down)				<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Remark	
4.	Source is in channel 2: Length of source cable extending from the unload tube			$\leq 480 \text{ mm}$	<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Remark	
	Source is in channel 1: Open locking lever, push source to the bottom of the channel and lock the source cable again (locking lever down)						
5.	Source information label on the container matches actual source				<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Remark	
6.	Container lid is closed: both nuts fastened and lid locked with the key				<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Remark	
					$\leq 50 \text{ mrem/h}$ or $\leq 500 \mu\text{Sv/h}$		
7.	D_s : Surface dose rate at the hot spot on top of the bucket				2		
8.	D_s : Surface dose rate at the hot spot on the side of the bucket				7		
9.	D_{1m} : Dose rate at the hot spot at 1 meter from the bucket				0.2		
10.	Radioactive contamination on the transport bucket			$\leq 0.4 \text{ Bq/cm}^2$	<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Remark	
11.	Are the measurements within specification?				<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Remark	
12.	Transport Index (TI)			$TI \leq 0.6$	0.2		
13.	Source activity				105.30	GBq	
14.	Labels are correctly placed and filled in (II-Yellow and address labels)				<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Remark	
15.	Shipping documents are completed and signed				<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Remark	
16.	Are there quality issues to be reported about the source, container, packaging, labeling, error code 227/228, etc.? If yes: tick 'Remark', describe the issue at the bottom and attach the RMA labels.				<input checked="" type="checkbox"/> No	<input type="checkbox"/> Remark	
17.	Are the RMA labels attached on the container and transport bucket?				<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	
18.	Source return document is enclosed, the lid is screwed tightly on the transport bucket and secured with the blue sealing wire. Tick 'Pass' if done immediately after completing this form.				<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Remark	
Elekta certified source handler:			Signature:		Date (YYYY-MM-DD):		
MICHAEL CRABTREE					2021-10-22		

Include the white original in the transport bucket.

For any questions call +1 855 693 5358 or e-mail to source.logistics@elekta.com

Remarks:
Attach the RMA labels on the container and transport bucket

SHIPPER'S DECLARATION FOR DANGEROUS GOODS

(Provide at least three copies to the airline.)

Shipper ELEKTA, INC. IN CARE OF: Missouri Cancer Associates Med Lab Bldg 100 1705 E. Broadway Columbia MO 65204	Air Waybill No. 529152714844 Source S/N: D36R0517 Page 1 of 1 Pages Shipper's Reference Number (optional): 275866 WHOLESALE: 20268
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Consignee ALPHA-OMEGA SERVICES, INC. 1202 BIGWOODS-STARKE ROAD VINTON, LA 70533 PHONE: (337) 233-5720
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Completed using FH-18
recognized system

WARNING

Failure to comply with all respects with the applicable
Dangerous Goods Regulations may be in breach of
the applicable law, subject to legal penalties.Two completed and signed copies of this Declaration must
be handed to the operator

TRANSPORT DETAILS

This shipment is within the
limitations prescribed for:
(delete non applicable)

Airport of Departure

PASSENGER
AND CARGO
AIRCRAFT☒ PASSENGER
☒ CARGO
☒ AIRCRAFTAirport of Destination: **HOUSTON, TX**

Shipment type: (delete non-applicable)

☒ NON-RADIOACTIVE ☒ RADIOACTIVE

NATURE AND QUANTITY OF DANGEROUS GOODS

UN Number or Identification Number, proper shipping name, Class or Division (subsidiary risk), packing group (if required), and all other
required information.

UN 3332, RADIOACTIVE MATERIAL, TYPE A PACKAGE, SPECIAL FORM 7,
IRIDIUM - 192, 1 TYPE A Package x 105.30 GBq,
II - YELLOW, TI = 0.2,
33 cm L x 33 cm W. x 41 cm H.
SPECIAL FORM CERTIFICATE D/0070/S-96, REVISION 7, ATTACHED
USA DOT 7A

Additional Handling Information

RADIOACTIVE MATERIAL FOR MEDICAL USE

I hereby declare that the contents of this consignment are fully and
accurately described above by the proper shipping name, and are in all
classified, packaged, marked and labelled/placarded, and are in all
respects in proper condition for transport according to applicable
International and National Governmental Regulations. I declare that
all of the applicable air transport requirements have been met.

(800) 424-8300 ACCT# 16068

24-hour number/Emergency Response Number

Name of Signatory

Date

Signature

(see warning above)

MICHAEL CRABTREE
ENGINEER
22 OCT 2021
COLUMBIA MO USA
Michael Crabtree

FOR RADIOACTIVE MATERIAL SHIPMENT ACCEPTABLE FOR PASSENGER AIRCRAFT, THE SHIPMENT CONTAINS RADIOACTIVE MATERIAL INTENDED FOR USE IN OR INCIDENT TO
RESEARCH, MEDICAL DIAGNOSIS, OR TREATMENT. ADR EUROPEAN TRANSPORT STATEMENT; CARRIAGE IN ACCORDANCE WITH 1.1.4.2.1

Pavon, Martha

From: Gryglak, Magdalena
Sent: Tuesday, January 11, 2022 12:34 PM
To: Pavon, Sandy; Pavon, Martha
Cc: Tomczak, Tammy
Subject: FW: RE: RE: Request to remove Ir-192 source and device
Attachments: NRC MicroSelectron source removal documentation.pdf; 629270 Additional Information 665.pdf

Good afternoon,

Please place the document in ADAMS.
Thank you

MG

From: Ouyang, Iris Y <Iris.Ouyang@USONCOLOGY.COM>
Sent: Monday, January 10, 2022 12:01 PM
To: Gryglak, Magdalena <Magdalena.Gryglak@nrc.gov>
Cc: Ouyang, Iris Y <Iris.Ouyang@USONCOLOGY.COM>
Subject: [External_Sender] RE: RE: Request to remove Ir-192 source and device

Here it is. Please let me know if you need anything else.
Thank you,

Iris