

BioSurface Technology, Inc.

64 Sidney Street  
Cambridge, MA 02139  
FAX: (617) 494-6561

(617) 494-8484

**BIO SURFACE  
TECHNOLOGY**

United States Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555


21 April 1994

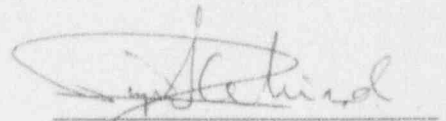
Re: Response to Notice of Violation  
Routine Inspection No. 030-30125/94-001  
License No. 20-28072-02

Dear Sir or Madam:

Pursuant to 10 CFR §2.201 and a letter from the United States Nuclear Regulatory Commission (USNRC) dated 21 March 1994, BioSurface Technology, Inc. (BTI) is submitting this response to a Notice of Violation. If you have any questions regarding this submission, please call me at (617) 494-8484.

Sincerely,

  
Christine Regan, M.Eng., RAC  
Manager, Regulatory Affairs

  
Olaniyi Kehinde  
Vice President, Technical Operations  
Radiation Safety Officer

Copy: Regional Administrator, USNRC, Region I  
Mark Citron

9404260264 940421  
PDR ADOCK 03030125  
C PDR

TE07

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### NRC Violations

10 CFR 71.5(a) requires, in part, that no licensee shall transport any licensed material outside the confines of his plant or other place of use, or deliver any licensed material to a carrier for transport, unless the licensee complies with applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation (DOT) in 49 CFR Parts 170-189.

### Violation 1

49 CFR 172.200(a) requires that each person who offers a hazardous material for transportation describe the hazardous material on the shipping paper.

Contrary to the above, on August 28, 1991, an AECL Model Gammacell 220 irradiator, serial number 208, containing approximately 4600 curies of cobalt-60, was transported from One Kendall Square in Cambridge, Massachusetts to 64 Sidney Street in Cambridge, Massachusetts, and shipping papers were not available for inspection.

### Response 1

BTI agrees with the observation that the shipping papers used during the transportation of the AECL Gammacell 220 irradiator from One Kendall Square in Cambridge, Massachusetts to 64 Sidney Street in Cambridge, Massachusetts were not available for inspection during the inspection conducted by NRC on 9 February 1994. However, we know that the properly completed shipping papers were available at the time of transportation of the irradiator in compliance with 49 CFR §172.200(a). Due to changes in personnel at BTI, the file containing the shipping papers used during the move could not be located during the 9 February 1994 inspection. BTI has obtained a copy of these shipping papers (please refer to Attachment 1) for our files and has, therefore, corrected this record keeping violation as of 5 April 1994.

## Violation 2

49 CFR 173.416 specifies, in part, the packages authorized for shipment of radioactive material in quantities exceeding the activity of special form radioactive material as listed in 49 CFR 173.435, and includes the requirement that the package or container be approved by the NRC,

49 CFR 173.435 establishes this value to be 7 curies for cobalt-60 in special form (the maximum A sub one quantity).

Contrary to the above, on August 28, 1991, approximately 4600 curies of cobalt-60 contained in an AECL Model Gammacell 220 irradiator, serial number 208, was transported from One Kendall Square in Cambridge, Massachusetts to 64 Sidney Street in Cambridge, Massachusetts and that package (container) was not approved by the NRC. Specifically, the Gammacell 220 had a foreign competent authority certificate, revalidated by the DOT, which allowed shipments made to or from locations outside the United States, but did not allow shipments to and from locations within the United States.

## Response 2

In accordance with USNRC's "Notice of Violation" which requests we state our "...basis for disputing the violation", BTI submits that we believe that we transported the AECL Model Gammacell 220 irradiator on August 28, 1991, in compliance with all applicable NRC and DOT regulations, and made said shipment in an approved container. BTI, in preparing for the move of the irradiator, tried to locate a container approved by NRC for transport within the United States and learned that no such container existed. At that time, our only viable option was to obtain a one time exemption for shipment of the irradiator within the United States in a Type (B) container approved for transport of the irradiator into or out of the United States.

On 13 December 1990, J. D. Bernardy, then Director, Regulatory Affairs for BTI, wrote to Mr. John White, then Supervisor, Licensing Materials Section, Nuclear Materials Safety & Safeguards Branch, USNRC Region I, requesting that License No. 20-28072-02 be amended to reflect a change in address and facilities to 64 Sidney Street in Cambridge, Massachusetts (refer to Attachment 2). On 22 February 1991, Mr. Bernardy submitted to Mr. White a request for one-time shipment authorization, using Type (B) packaging approved for import/export, for transport of the irradiator within Cambridge, Massachusetts (refer to Attachment 3). On 22 March 1991, BTI received an amended NRC Material License No. 20-28072-02 reflecting approval of the use of the irradiator at the new facility and incorporating, by reference in Section 3, Mr Bernardy's letters to USNRC of 13 December 1990 and 22 February 1991 (refer to attachment 4). As indicated in a letter from Mr. Bernardy to Mr. Terry Kehoe of Nordion International (refer to attachment 5), permission to transport the irradiator in the type B(U) packaging, granted Canadian Atomic Energy Control Board Approval Certificate No. CDN/2013/B(V), Rev 7 and US Department of Transportation Certificate USA/6125/B(U), Rev 7, is incorporated by reference to BTI's letter to the USNRC, Region I dated 22 February 1991 (refer to attachment 3) in the approval of the amendment to Material License No. 20-28072-02. Therefore, appropriate approval of the shipping container was obtained from NRC prior to shipment of the irradiator from One Kendall Square in Cambridge, Massachusetts to 64 Sidney Street in Cambridge, Massachusetts in type B(U) packaging approved by DOT for import/export.

Therefore, BTI believes that we were, and still are, in compliance with NRC and DOT regulations regarding the transport of radioactive materials in quantities exceeding the activity of special form radioactive material as listed in 49 CFR 173.435. No corrective steps are warranted at this time.

Attachments

Attachments 1 through 5 may be found on the following pages.



10 July, 1991

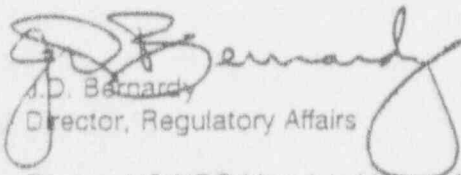
Mr. Terry Kehoe  
Nordion International, Inc.  
447 March Road/Chemin  
P.O. Box/C.P. 13500  
Kanata, Ontario  
Canada K2K-1X8

Dear Mr. Kehoe:

Pursuant to our discussions today, please find enclosed a copy of our NRC license permitting use of the Gammacell 220 at One Kendall Square and 64 Sidney Street. (Note Item number 10.) Permission to transport the unit in the type B(U) packaging, granted Canadian Atomic Energy Control Board Approval Certificate No. CDN/2013/B(V), Rev. 7 and US Department of Transportation Certificate USA/6125/B(U), Rev. 7, is incorporated by reference to BioSurface Technology, Inc.'s letter to the U.S. Nuclear Regulatory Commission, Region One dated 22 February 1991 in the amendment's approval. (Note Item 3 of the license. Letters of 22 February 1991 and 13 December 1990 are also enclosed.)

As we discussed, our move date is subject to completion of the 64 Sidney Street production facility's construction and certification. Move of the irradiator will be the final step of the process. Assuming construction completion by 12 July, the earliest possible irradiator move date would be about 31 July - 2 August. I will keep you informed as things develop and fix the exact move date more precisely. Please remember that moving the unit is likely to be a 2-3 day process, the most difficult part being rigging the unit out of One Kendall Square's basement location.

Sincerely,

  
J.D. Bernardy  
Director, Regulatory Affairs

Encs.: US NRC Materials License No 20-28072-02 Amendment No 2  
BioSurface Technology, Inc. letter dated 22 February 1991  
BioSurface Technology, Inc. letter dated 13 December 1990

cc: O. Kehinde, VP Tech Ops & RSU  
W. Kuri-Harcuch, VP, Ops & Proc Dev  
T. Surgenor, VP, Finance & Admin  
N. Weil, Dir, Engineering

bcc Ben B  
Dove C

*Niyi: Please remember to keep R. Johnson informed of potential date since he must do the wipe surveys, etc.*

*Navi: Please remember we'll need riggers, a qualified driver & dedicated 5 ton truck.*

*Thank JDB*

1a. EXPORTER (Name and address including ZIP code)

BIOINTERFACE TECHNOLOGY

64 LINEY STREET  
CAMBRIDGE, MASSACHUSETTS

ZIP CODE

2. DATE OF EXPORTATION

3. BILL OF LADING/AIR WAYBILL NO.

1b. EXPORTER EIN NO.

6. PARTIES TO TRANSACTION

Related  Non-related

4a. ULTIMATE CONSIGNEE

NORDION INTERNATIONAL INC.

447 MARCH ROAD

KANATA, ONTARIO K2K 1X8, CANADA

4b. INTERMEDIATE CONSIGNEE

5. FORWARDING AGENT

8. POINT (STATE) OF ORIGIN OR FTZ NO.  
CAMBRIDGE, MASS.

7. COUNTRY OF ULTIMATE DESTINATION  
CANADA

8. LOADING PIER/TERMINAL

CAMBRIDGE, MASS.

9. MODE OF TRANSPORT (Specify)

TRUCK

10. EXPORTING CARRIER

YELLOW FREIGHT

11. PORT OF EXPORT

12. FOREIGN PORT OF UNLOADING

KANATA, ONTARIO

13. CONTAINERIZED (Vessel only)

Yes  No

14. SCHEDULE B DESCRIPTION OF COMMODITIES, (Use columns 15-18)

MARKS, NOS., AND KINDS OF PKGS. (15)	O/F (16)	SCHEDULE B NUMBER (17)	QUANTITY - SCHEDULE B UNITS (18)	SHIPPING WEIGHT (Pounds) (19)
59346	F	9803.00.50.00	TYO	1,240 LBS

VALUE (U.S. dollars, cents)  
(Selling price or cost if not used)  
(20)

\$ 4900.00

21. VALIDATED LICENSE NO./GENERAL LICENSE SYMBOL

22. FCCN (When required)

23. Duty authorized officer or employee

The exporter authorizes the forwarder named above to act as forwarding agent for export control and customs purposes.

24. I certify that all statements made and all information contained herein are true and correct and that I have read and understand the instructions for preparation of this document, set forth in the "Correct Way to Fill Out the Shipper's Export Declaration." I understand that civil and criminal penalties, including forfeiture and fine, may be imposed for making false or fraudulent statements herein, failing to provide the requested information or for violation of U.S. laws on exportation (13 U.S.C. Sec. 305; 22 U.S.C. Sec. 401; 18 U.S.C. Sec. 1001; 50 U.S.C. App. 2410).

Signature

Confidential - For use only for official purposes authorized by the Secretary of Commerce (13 U.S.C. 301 (g)).

Title

Export shipments are subject to inspection by U.S. Customs Service and/or Office of Export Enforcement.

Date

25. AUTHENTICATION (When required)

SHIPPER  
**BIOSURFACE TECHNOLOGY INC.**  
**KENDALL SQUARE**  
**BUILDING 200**  
**CAMBRIDGE, MASS. 02139**  
**U.S.A.**

ISSUED AT SHIPPER'S REQUEST  
 SHIPPER'S REF. NO. **59346**

CONSIGNEE (OVERSEAS OR U.S.A. FOR EXPORT SHIPMENTS)  
**BIOSURFACE TECHNOLOGY**  
**64 SIDNEY STREET**  
**CAMBRIDGE, MASS.**  
**U.S.A.**

Received, subject to the circulations and tariffs in effect on the date of issue of this Original Bill of Lading or received subject to the Rules for the Carriage of Express and Non-Carload Freight Traffic and tariffs in effect on the date of issue of the original Shipping Contract (bill of lading), goods described below, in apparent good order, except as noted (contents and conditions of contents of packages unknown) marked, consigned and destined as indicated below, which said Company agree to carry to its usual place of delivery at said destination, if on its road, otherwise to deliver to another carrier on the route to said destination, if it mutually agreed, as to each carrier of all or any of said goods over all or any portion of said route to destination, and as to each party at any time interested in all or any of said goods. That every service to be performed hereunder shall be subject to all the terms and conditions (which are hereby incorporated by reference and have the same force and effect as if the same were severally, fully and specifically set forth herein).

1. approved by the Board of Transport Commissioners for Canada by General Order No. T-5 dated February 1, 1966 set forth in the Canadian Freight Classification and also available at all Railway agency stations and freight offices upon request, when said goods are carried by a rail carrier; or
2. of the bill of lading of the water carrier as provided in its tariff of Rules and Regulations when said goods are carried by a water carrier; or
3. of the bill of lading set forth in or prescribed by the relevant tariffs, classification, statutes and regulations pertaining to motor carrier's services when said goods are carried by a motor carrier; or
4. of the bill of lading prescribed by O.C. 986-79, April 4, 1979, when the said goods originating in Quebec are to be carried by a motor carrier;
5. or approved by the Board of Transport Commissioners for Canada by General Order No. T-43, set forth in the Rules for the Carriage of Express and Non-Carload Freight Traffic and also available at all express and railway agency stations and express and freight offices upon request, when said goods are carried by a rail carrier and which are agreed to by the shipper and accepted for himself and his assigns.

NOTIFY / CUSTOMS BROKER

ORIGINATING CARRIER	POINT OF ORIGIN <b>1 KENDALL SQUARE</b>
EXPORTING CARRIER	PORT OF LADING / EXIT
PORT OF DISCHARGE	PLACE OF DELIVERY <b>64 SIDNEY STREET</b>

PARTICULARS FURNISHED BY SHIPPER

PORT LADING

MARKS & NUMBERS	TOTAL NUMBER & KIND OF PACKAGES	DESCRIPTION OF GOODS	WEIGHTS	FOR CARRIER'S USE & CHARGES
<b>AS</b> <b>"EM"</b> <b>PS59346</b> <b>GC220</b> <b>#208R</b>	1 CASE	<b>RADIOACTIVE MATERIAL, N.O.S. CLASS 7</b> <b>UN2982, NORMAL FORM, COBALT 60</b> <b>APPROX., 4,712 CURIES (175 TBq)</b> <b>CHEMICAL FORM: ELEMENT</b> <b>PHYSICAL FORM: SOLID</b> <b>TRANSPORT INDEX:</b> <b>RADIOACTIVE YELLOW</b> <b>COMPETENT AUTHORITY CERT. NO.</b> <b>USA/6125/B(U), REV. 7</b> <b>AECB CERT. NO. CDN/2013/B(U), REV. 7</b> <b>PLACARD NOTATION: RADIOACTIVE</b> <b>STERILIZERS N.O.I. OTHER THAN</b> <b>CABINET TYPE CONTAINING RADIOACTIVE MATERIAL</b>	<b>9,700 LBS.</b> <b>4,400 KGS.</b>	<p>This is to certify that the above named materials are properly classified, described, packaged, marked and labelled and are in proper condition for transportation according to the applicable regulations of THE DEPARTMENT OF TRANSPORTATION.</p> <p>Signature _____</p>

WHERE REQUIRED BY THE TARIFF, SHIPPER MUST COMPLETE THE FOLLOWING					SHIPPER - SHOW AMOUNT OF
DIM. OF SHIPMENT	TOTAL CUBAGE	DIMENSIONAL WT.	TOTAL WT.	NO. XL PCS./PKGS.	
			<b>9,700 LBS</b>	<b>ONE</b>	<b>C.O.D.</b>

CHARGE TO (IF OTHER THAN SHIPPER OR CONSIGNEE)  
 C. AMOUNT \$

DELIVERY INSTRUCTIONS  
**24 HR. EMERGENCY TELEPHONE # NORDION INTERNATIONAL INC. 613-592-2790**  
 O. FEE \$  
 D. TOTAL \$

IF CHARGES ARE TO BE PAID, WRITE OR STAMP HERE "TO BE PREPAID" <b>PREPAID 91 AUGUST 27</b>	RECEIVED \$ _____ TO APPLY IN PREPAYMENT OF THE CHARGES ON THE PROPERTY DESCRIBED HEREIN. _____ AGENT OR CASHIER	DECLARED VALUE OF SHIPMENT \$ _____ VALUATION	INBOUND \$ _____ BEYOND \$ _____ OTHERS (SPECIFY) \$ _____
	SHIPPER <b>BIOSURFACE TECHNOLOGY</b>	CARRIER _____ CONSIGNEE _____ DATE _____ PER _____	DATE _____ PER _____



6

Placard Notation: \* RADIOACTIVE

SHIP TO: BIOSURFACE TECHNOLOGY 64 SIDNEY STREET CAMBRIDGE, MASSACHUSETTS U.S.A.	SHIPPER: BIOSURFACE TECHNOLOGY INC. 1 KENDALL SQUARE BUILDING 200 CAMBRIDGE, MASSACHUSETTS 02139 U.S.A.
DATE: 01 AUGUST 27	ORDER NO: PS 59346
CLASSIFICATION: (7) RADIOACTIVE MATERIAL <input checked="" type="checkbox"/> Normal Form <input type="checkbox"/> Special Form	CAR NO:
RADIONUCLIDE: COBALT-60	ROUTING:
CURIE CONTENT: 4,712 CURIES (175 TBq)	
LABEL: <input type="checkbox"/> RADIOACTIVE I (White) <input type="checkbox"/> RADIOACTIVE II (Yellow) <input type="checkbox"/> RADIOACTIVE III (Yellow)	
TRANSPORT INDEX: _____ <input type="checkbox"/> Type 'A' <input checked="" type="checkbox"/> Type 'B'	ORIGIN: <del>XXXXXX, CANADA</del> CAMBRIDGE, MASS.
MODEL: GC-220    SERIAL NO: 208R	WEIGHT OR VOLUME: 9,700 LBS.
CB Certificate: CDN/ 2013/B(U), REV. 7	USA Certificate: USA/ 6125/B(U), REV. 7
<b>RADIOACTIVE PLACARD</b> IN CANADA: Placard road vehicles/rail cars when transporting Radioactive I (white) OR Radioactive II (yellow) OR Radioactive III (yellow) labelled packages. IN USA: Placard road vehicles/rail cars when transporting Radioactive III (yellow) labelled packages only.	<b>SHIPPER'S CERTIFICATION</b> This is to certify that the above named materials are properly classified, described, packaged, marked and labelled, and are in proper condition for transportation according to the applicable regulations of Transport Canada and the United States Department of Transportation.
	SHIPPER'S SIGNATURE: _____

POTENTIAL HAZARDS

**HEALTH**      Radiation hazard may be internal due to breathing vapour or dust or contamination of skin, open cuts, etc. Radiation hazard may be external (like x-rays) from contamination on skin or exposure to unshielded material. Prolonged exposure may be a threat to health or life. Effects of radiation may be delayed.

EMERGENCY ACTION

Keep unnecessary people away. Keep upwind. Isolate hazard area (at least 50 meters - 164 ft). Wear self-contained breathing apparatus and full protective clothing. Delay cleanup until arrival of qualified radiation monitoring assistance.

**FIRE**            Small fires: Dry Chemical or CO<sub>2</sub>  
                       Large fires: Foam or water  
 Fight fire from maximum distance. Move undamaged packages from fire area if without risk. Do NOT move damaged packages.

**SPILL OR LEAK**        Do not touch spilled material or leaking or damaged packages.  
 Small Spills: Take up with sand, earth or other noncombustible absorbent material.  
 Large Spills: Dike for later decontamination and disposal. Do not enter the spill area unless absolutely necessary to save life. Limit entries to shortest possible time. Alternate persons for entry if possible.

**FIRST AID**      Call physician. Use standard first aid procedures. Remove contaminated clothing and shower with soap and water.

0102

INI NOIDRON

2089 389 019

CP:PI

16-50-10

RADIONUCLIDE: COBALT-60

ROUTING:

CURIE CONTENT: 4,712 CURIES (175 TBq)

LABEL:  RADIOACTIVE I (White)  
 RADIOACTIVE II (Yellow)  
 RADIOACTIVE III (Yellow)

TRANSPORT INDEX:  Type 'A'  Type 'B'

ORIGIN: ~~Canada, Ontario, Canada~~ CAMBRIDGE, MASS.

MODEL: GC-220 SERIAL NO: 208R

WEIGHT OR VOLUME: 9,700 LBS.

AECB Certificate: CDN/ 2013/B(U), REV.7

USA Certificate: USA/ 6125/B(U), REV.7

**RADIOACTIVE PLACARD**  
IN CANADA: Placard road vehicles/rail cars when transporting Radioactive I (white) OR Radioactive II (yellow) OR Radioactive III (yellow) labelled packages.  
IN USA: Placard road vehicles/rail cars when transporting Radioactive III (yellow) labelled packages only.

**SHIPPER'S CERTIFICATION**  
This is to certify that the above named materials are properly classified, described, packaged, marked and labelled, and are in proper condition for transportation according to the applicable regulations of Transport Canada and the United States Department of Transportation.

SHIPPER'S SIGNATURE: \_\_\_\_\_

POTENTIAL HAZARDS

**HEALTH** Radiation hazard may be internal due to breathing vapour or dust or contamination of skin, open cuts, etc. Radiation hazard may be external (like x-rays) from contamination on skin or exposure to unshielded material. Prolonged exposure may be a threat to health or life. Effects of radiation may be delayed.

EMERGENCY ACTION

Keep unnecessary people away. Keep upwind, isolate hazard area (at least 50 meters - 164 ft). Wear self-contained breathing apparatus full protective clothing. Delay cleanup until arrival of qualified radiation monitoring assistance.

**FIRE** Small fires: Dry Chemical or CO<sub>2</sub>  
Large fires: Foam or water  
Fight fire from maximum distance. Move undamaged packages from fire area if without risk. Do NOT move damaged packages.

**SPILL OR LEAK** Do not touch spilled material or leaking or damaged packages.  
Small Spills: Take up with sand, earth or other noncombustible absorbent material.  
Large Spills: Dike for later decontamination and disposal. Do not enter the spill area unless absolutely necessary to save life. Limit entries to shortest possible time. Alternate persons for entry if possible.

**FIRST AID** Call physician. Use standard first aid procedures. Remove contaminated clothing and shower with soap and water. Advise rescue personnel and physicians that person or equipment may be radioactively contaminated.

EMERGENCY - TELEPHONE

IN CANADA: 1. Local Police AND **NORDION INTERNATIONAL INC. 1-613-592-2790**  
2. Transport Canada (Canada) (613) 996-6666 (24 hour)  
IN U.S.A.: 1. State Police AND Chemtrec (800) 424-9300 (toll free)  
OR Coast Guard National Response Centre (800) 424-8802 (toll free)

PS 59346

DATE: 91 August 23

TO: F. DOWD

FROM: B. ENGLEHART

RE: PS 59346

DOCUMENTATION COVERING SHIPMENT OF GC 270 #208R

FROM Biosurface Technologies  
1 Kendall Square, Cambridge, Mass

TO Biosurface Technologies  
67 Andrew Street, Cambridge, Mass.

Return of Coating Materials to Pacific - Kanaka

Attached please find the following documentation:

	QUANTITY
<input checked="" type="checkbox"/> Shipping Labels (Black & White)	<u>2</u>
<input checked="" type="checkbox"/> Shipping Labels (Red)	<u>2</u>
<input checked="" type="checkbox"/> Stowage Labels (Green)	<u>2</u>
<input type="checkbox"/> Empty Labels	
<input checked="" type="checkbox"/> Category Labels (II & III)	<u>2 each</u>
<input type="checkbox"/> Truck Placards	
<input type="checkbox"/> Highway Route Controlled	
<input type="checkbox"/> Not Highway Route Controlled	
<input type="checkbox"/> Seafreight Container Placards	
<input checked="" type="checkbox"/> Yellow Danger Tags	<u>1</u>
<input type="checkbox"/> Red Danger Tags-Do Not Open	
<input checked="" type="checkbox"/> Wire Seals	<u>4</u>
<input checked="" type="checkbox"/> Truck Bill of Lading	<u>2</u>
<input checked="" type="checkbox"/> Emergency Response Form	<u>1</u>
<input checked="" type="checkbox"/> Package Certificates	
CDN/ <u>2013/B(u) Rev. 7</u>	<u>1</u>
USA/ <u>6125/B(u) Rev. 7</u>	<u>1</u>
SPECIAL FORM CERT. CDN/0010/S	
<input checked="" type="checkbox"/> U.S. Shipper's Export Declaration	<u>4</u>
<input checked="" type="checkbox"/> Canada Customs Invoice	<u>4</u>
<input type="checkbox"/> Shipping Instructions for the Return of	
<input type="checkbox"/> Cobalt 60	
<input type="checkbox"/> Gammacells	
<input type="checkbox"/> Empty Cobalt Containers	

BIOSURFACE TECHNOLOGY INC.  
 ONE KENDALL SQUARE  
 BUILDING 200  
 CAMBRIDGE, MASSACHUSETTS 02139  
 J.D. BERNARDY

SHIP VIA  
 YELLOW FREIGHT SYSTEM INC. - PREPAID

PAYMENT TERMS  
 NET 30 DAYS  
 EX WORKS KANATA, ONTARIO

INVOICE DATE  
 91 ~~Aug 12~~  
 SEPT 03

INVOICE NO.  
 50-5075

BIOSURFACE TECHNOLOGY INC.  
 ONE KENDALL SQUARE  
 BUILDING 200  
 CAMBRIDGE, MASSACHUSETTS 02139, U.S.A  
 ATTN: ACCOUNTS PAYABLE

CUSTOMER ORDER NO. & DATE  
 P.O. 4298-35

CUSTOMER NO.  
 84662

ORDER NO.  
 59346

ACTUAL SHIP DATE

ITEM	DESCRIPTION - CAT. NO	QTY. ORD.	QTY. SHIP.	UNIT PRICE	AMOUNT
1	RELOCATION OF GAMMACELL 220 S/N 208R FROM BIOSURFACE TECHNOLOGY 1 KENDALL SQUARE BUILDING 200 CAMBRIDGE, MASS. 02139 TO BIOSURFACE TECHNOLOGY 64 SIDNEY STREET CAMBRIDGE, MASS.		LOT	LOT	10035.00
2	SHIPPING MATERIAL CHARGES BY TRUCK TRANSPORT FOR PACKAGING FROM KANATA, ONTARIO, CANADA TO CAMBRIDGE, MASSACHUSETTS.				453.05

ROD SER. NO.	ISOTOPE	CONTAINER TYPE	NO. OF PACKAGES	FUNDS	TOTAL U.S. \$ 10,488.05
PHYSICAL FORM	MEAS. DATE	RETURNABLE <input type="checkbox"/> NON-RETURNABLE <input type="checkbox"/>	WEIGHT	SHIPMENT NO.	
NEM. FORM	TOTAL ACTIVITY	RADIATION	VOLUME	SHIPMENT DATE	
CONCENTRATION		AT SURFACE _____ M.R.H. AT ONE METRE _____ M.R.H.			



447 MARCH ROAD, P.O. BOX 13500  
 KANATA, CANADA K2K 1X8  
 TELEX 053-4162  
 TELEPHONE (613) 582-2790