

E.I. du Pont de Nemours and Company, Inc.  
Experimental Station E322/327A  
P.O. Box 80322  
Wilmington, DE 19880-0322  
January 26, 2005

Steven Courtemanche, Health Physicist  
U.S. Nuclear Regulatory Commission Region I  
Commercial and R&D Branch  
Division of Nuclear Materials Safety  
475 Allendale Road  
King of Prussia, Pennsylvania 19406-1415

Subject: *E.I. du Pont de Nemours and Company, Inc.; Request for Additional Information Concerning Application for Amendment to License (No. 07-00455-27), NRC Control Number 136095.*

Dear Mr. Courtemanche:

I am responding to your request for additional information to continue the review from your phone request January 24, 2005 with regard to the amendment of our existing NRC license.

**1. re. Submitted changes to the December 2, 2004 application Item 5. Radioactive Material Table 5-1 Sealed Radioactive Sources for compliance with 10 CFR 30.32(g).**

Provide clarification of the request for deletion, as to the final disposition of the Nickel 63, Krypton 85 and Polonium 210 sealed sources to be deleted and the status of the leak test.

**RESPONSE:**

- 1) Nickel 63 - The Agilent Technologies Inc., Electron Capture Detector with integral 15mCi, Ni-63 sealed source (Model 19233, S/N L6966) was returned to the vendor August 26, 2003 for disposal.
- 2) Krypton 85 - The two TSI Inc., Static Charge Neutralizers with integral 2mCi Kr-85 sealed source (Model's TSI-3012, TSI-3077) were incorrectly added to the license by the Radiation Safety Officer at that time. The units were ordered by a DuPont employee in May 1995 for a consultant in Manchester, United Kingdom and use at that United Kingdom site. The units were delivered to the Chestnut Run site by mistake and the equipment crate was not unpacked and immediately shipped to the Manchester, United Kingdom consultant and site. The units were never intended to be received by the Chestnut Run Plaza site.
- 3) Polonium 210 - As of 1997 we were, as recognize by the Radiation Safety Officer at that time, no longer in possession of two static charge neutralizers Model P-2021,  $\leq 0.5\text{mCi}$ , S/N's 32768 and 32769 listed on the Chestnut Run Plaza site inventory. Therefore the request to delete Polonium 210 from the license. A search of the records, then and currently to respond to this application, do not identify whether the units were disposed by our radioactive waste process or returned to the vendor prior to 1997 or after 1997.

136095  
NMSS/RGNI MATERIALS-002

I trust that this letter meets your requirements for the information you requested. If you have any questions or comments regarding this submittal, feel free to call or eMail me.

Sincerely,



Keith A. Swain

Sr. Consultant Safety, Health and Environmental/Acting Radiation Safety Officer

E.I. du Pont de Nemours and Company, Inc.

Experimental Station E322/327A

P.O. Box 80322

Wilmington, DE 19880-0322

Phone's: Work - (302) 695-6853; Cell - [REDACTED]

Attachment's

- 1) Letter: Transfer of Sealed Source: DuPont to Agilent Technologies, Inc., August 26, 2003
- 2) Letter: Notification to U.S. Nuclear Regulatory Commission pursuant to 10 CFR 31.5(8), August 26, 2003, reporting the transfer of the Agilent Technologies, Inc., sealed source.
- 3) Leak Test Certificate for the Agilent Technologies, Inc., sealed source.
- 4) Letter: Agilent Technologies, Inc. Receipt of Radioactive Devices.

**PERSONAL INFORMATION WAS REMOVED  
BY NRC. NO COPY OF THIS INFORMATION  
WAS RETAINED BY THE NRC.**



## DuPont Facilities Services

Radiation Safety Office  
DuPont Experimental Station  
P.O. Box 80249  
Wilmington, DE 19880-0249  
(302) 695-9632

c.c.: L. Lin  
T.A. Lee

August 26, 2003

Agilent Technologies, Inc.  
**Attention: ECD LAB**  
2850 Centerville RD  
Wilmington, DE 19808-1610

### TRANSFER OF SEALED SOURCE

The following sealed source is being transferred from DuPont's Chestnut Run Plaza, NRC License 07-00455-27, to your facility for disposal per Purchase Order number LCHS2193

| Radionuclide | Activity | Model # | Serial # | Manufacturer    |
|--------------|----------|---------|----------|-----------------|
| Ni-63        | 15 mCi   | 19233   | L6977    | Hewlett Packard |

A copy of the latest leak test certificate is attached.

A notice of the transfer is being sent to the U.S. Nuclear Regulatory Commission (NRC) per 10 CFR 31.5(8) even though the transfer is under a specific byproduct license of limited scope. Please sign a copy of this letter and return it to the Experimental Station Radiation Safety Office to acknowledge the transfer, or provide a similar acknowledgement form. Feel free to return the acknowledgement by fax (302) 695-4032 (Fax)

Please call me at (302) 695-2737 if you have any questions.

Sincerely,

  
Augusto Cordova  
Radiation Safety Officer

(Return a copy of this letter by fax or paper mail, or its equivalent)

Acknowledgment sealed sources listed above were received:

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Date: \_\_\_\_\_

10/22/98  
v 1.1



## DuPont Facilities Services

DuPont Company  
Experimental Station  
Radiation Safety Office  
P.O. Box 80249  
Wilmington, DE 19880-0249  
(302) 695-9632  
(302) 695-4032 (Fax)

cc: L. Lin  
T. A. Lee

August 26, 2003

Director of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Sir/Madam,

Pursuant to 10 CFR 31.5(8), the DuPont Chestnut Run Plaza is reporting the transfer of a licensed device containing byproduct material. This sealed source is eligible to be under a general license through Hewlett Packard, or under a specific NRC license. As part of an Electron Capture Detector, it was placed under NRC specific license of limited scope, #07-00455-27, assigned to the DuPont Chestnut Run Plaza. The sealed source is described below:

Hewlett Packard Electron Capture Detector Model 19233, S/N L6977, SSD  
Registry No. NR348D109B, containing 15 mCi nickel-63

The device has been returned to the vendor, Agilent Technologies, Inc, a Hewlett Packard Company subsidiary, ECD Laboratory, 2850 Centerville Rd, Wilmington, DE 19808-1610, (302) 633-8519, NRC License 07-28762-02G.

Please feel free to contact me by phone, (302) 695-2737, if you have any questions.

Sincerely,

A handwritten signature in cursive script, reading "Augusto Cordova".

Augusto Cordova  
Radiation Safety Officer

**Tracer Technologies  
International, Inc.**

26800 Fargo Ave. Suite B  
Cleveland, Ohio 44146  
Phone (216) 464-9300  
FAX (216) 464-6141

**CERTIFICATE OF LEAK TEST**

DuPont  
Experimental Station E272/215  
Route 141 & Henry Clay  
Wilmington DE 19880-0272

This sealed source was tested for leakage of its radioactive material as follows:

|                  |                 |              |                |
|------------------|-----------------|--------------|----------------|
| Manufacturer:    | Hewlett Packard | Serial #:    | L6977          |
| Model #:         | 19233           | millicuries: | 15             |
| Radioisotope:    | Ni-63           | Tested By:   | J. Conover Jr. |
| Source Location: | CRP711/2002     | Test Number: | CR06           |
| Test Date:       | 7/11/03         |              |                |

The total removable amount of activity was analyzed to be:

**0.0000 microcuries**

Laboratory Analysis Number AAH326

Method: ☒ Wipe ☐ Other

☐ Analysis indicated 0.005 microcurie or more of removable radioactivity. NRC/Agreement State regulations require that the source be removed from service and decontaminated or repaired or replaced as appropriate. Notify the proper regulatory agency about leaking source.

☒ Analysis indicated less than 0.005 microcurie of removable radioactivity. The source may continue to be properly used. The source is due for leak testing on or before: **11-Jan-04.**

Analyzed By: WRL  
Signature: \_\_\_\_\_  
Name: Wallace R. Loder, Jr.  
Date: 29-Sep-03

Approved By: Wallace Loder Jr.  
Signature: \_\_\_\_\_  
Name: Wallace R. Loder, Jr.  
Title: Radiation Safety Officer

**This certificate should be retained for inspection by appropriate regulatory agency.**

The above analysis was performed on a Packard Instruments 2300TR Liquid Scintillation Counter.  
It is calibrated by a NIST traceable standard for the isotope defined above.

This Leak Test Evaluation is authorized by the  
State of Ohio Department of Health  
Bureau of Radiation Protection  
License # 03225180072



2850 Centerville Road  
Wilmington, DE 19808

DuPont Experimental Station  
P.O. Box 80249  
Wilmington, DE 19880-0249

8/28/03

Reference: **Receipt of Radioactive Device(s)**

To Whom It May Concern:

This letter is to notify you that the Electron Capture Detector(s) listed below have been returned to, and are in possession of, Agilent Technologies Inc., 2850 Centerville Road, Wilmington, DE 19808, USA for further disposition.

| <u>Serial Number</u> | <u>Model Number</u> | <u>Date Received</u> | <u>Local Visa Number</u> |
|----------------------|---------------------|----------------------|--------------------------|
| L6977                | 19233-69570         | 8-27-03              | NA                       |

Please understand that this letter does not relieve you of your responsibility to notify either your state nuclear regulatory agency (if you reside in an Agreement State) or the Nuclear Regulatory Commission (if you do not) of the transfer in accordance with 10 CFR 31.5 (c) (8) (i) and (ii).

Please contact your local Agilent Technologies, Inc. service representative if you have any questions.

Regards,

David S. Bennett  
Radiation Safety Office, U.S. Operations