

(11-82)  
10 CFR 30.36(d)(1)(iv)  
10 CFR 40.42(d)(1)(iv)  
10 CFR 70.38(d)(1)(iv)

# CERTIFICATE OF DISPOSITION OF MATERIALS

(All items MUST be completed, please print)

LICENSEE NAME AND ADDRESS

Boehinger Mannheim Diagnostics, Inc.  
9115 HAGUE ROAD  
INDIANAPOLIS, INDIANA 46250

LICENSE NUMBER

13-17999-05E

LICENSE EXPIRATION DATE

MAY 31, 1987

THE LICENSEE OR ANY INDIVIDUAL EXECUTING THIS CERTIFICATE ON BEHALF OF THE LICENSEE CERTIFIES THAT: (Check and/or complete the appropriate item(s) below.)

## A. MATERIALS DATA (Check one and complete, as necessary)

- ☐ 1. NO MATERIALS HAVE EVER BEEN POSSESSED OR PROCURED BY THE LICENSEE UNDER THIS LICENSE.
- OR
- ☐ 2. ALL MATERIALS PROCURED AND/OR POSSESSED BY THE LICENSEE UNDER THE LICENSE NUMBER CITED ABOVE HAVE BEEN TRANSFERRED ON

DATE

TO

WHICH HAS NRC LICENSE NUMBER

OR

- ☐ 3. ALL MATERIALS PROCURED AND/OR POSSESSED BY THE LICENSEE UNDER THE LICENSE NUMBER CITED ABOVE HAVE BEEN TRANSFERRED ON

DATE

TO

WHICH HAS LICENSE NUMBER

ISSUED BY THE STATE OF

AN AGREEMENT STATE PURSUANT TO SECTION 274 OF THE ATOMIC ENERGY ACT OF 1954, AS AMENDED, AND THE ENERGY REORGANIZATION ACT OF 1974.

OR

- ☒ 4. MATERIALS HAVE BEEN DISPOSED OF IN THE FOLLOWING MANNER. (Describe specific disposal procedures—if additional space is needed, use the reverse of this form, or provide attachments)

RADIOACTIVE WASTE SHIPMENT WAS MADE TO  
ADCO SERVICES, INC. #26185. SEE ATTACHED  
DOCUMENTATION.

## B. OTHER DATA

- ☒ 1. OUR LICENSE HAS NOT YET EXPIRED; PLEASE TERMINATE IT.
- ☐ 2. WAS A RADIATION SURVEY CONDUCTED TO CONFIRM THE ABSENCE OF LICENSED RADIOACTIVE MATERIALS AND TO DETERMINE WHETHER ANY CONTAMINATION REMAINS ON THE PREMISES COVERED BY THE LICENSE? (Check one)
- ☐ NO
- ☐ YES, THE RESULTS (Check one)
- ☐ ARE ATTACHED, OR
- ☐ WERE FORWARDED TO NRC ON (Date)

3. THE PERSON TO BE CONTACTED REGARDING THE INFORMATION PROVIDED ON THIS FORM

NAME

IVA SUE SMITH

TELEPHONE NUMBER

317-845-2386

4. MAIL ALL FUTURE CORRESPONDENCE REGARDING THIS LICENSE TO

9115 HAGUE ROAD INDIANAPOLIS, IND. 46250

8507120638 850619

REG3 LIC30

13-17999-04G PDR

RETURN

DIRECTOR, DIVISION OF FUEL CYCLE AND MATERIAL SAFETY  
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS  
U.S. NUCLEAR REGULATORY COMMISSION  
WASHINGTON, DC 20555

CERTIFYING OFFICIAL

SIGNATURE

Iva Sue Smith  
IVA SUE SMITH

PRINTED NAME AND TITLE

MGR. - Regulatory Affairs

DATE

4/30/85

CONTROL NO. 78900

April 23, 1985

Ms. Iva Sue Smith  
Manager, Regulatory Affairs  
Boehringer Mannheim Diagnostics, Inc.  
9115 Hague Road - P.O. Box 50100  
Indianapolis, IN 46250

Dear Ms. Smith:

This correspondence serves to document direct radiation surveys performed on April 22, 1985. These surveys were performed to measure any residual contamination levels associated with the use of I-125 labelled RIA kits and to determine the relative amount of radioactivity remaining in used RIA kits as well as a small amount of radioactive waste.

The instrument utilized to perform these surveys was a Ludlum Model 177 Portable Ratemeter equipped with a Ludlum Model 44-3 thin crystal NaI probe. The detection efficiency at contact was determined on the date of this survey and was calculated to be  $2.07E05$  cpm/uCi for I-129 which corresponds to  $2.6E05$  cpm/uCi for I-125. The average background counting rate was measured to be approximately 60 cpm. This corresponds to a minimum detectable activity (MDA) of approximately  $9.0E-05$  uCis.

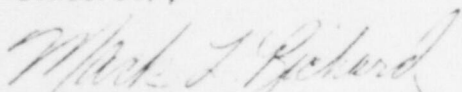
There were two areas monitored for residual contamination levels. These areas were the Quality Assurance Microbiology/Immunology Laboratory where the RIA procedures were carried out and the "finished goods" cooler which was used for storage. Surveys were made of all benches, lab equipment, hoods, shelves, and floors in these areas. No contamination levels above background were detected.

A group of expired RIA kits being stored in the Receiving/Distribution Warehouse were monitored. The radiation levels around these kits varied depending on geometry; however, radiation levels on the order of three times the background level were easily detectable at one foot from the kits. Based on the results of the survey, these kits should be treated as radioactive waste and disposed accordingly.

A partially filled 30 gallon radioactive waste drum was also surveyed. There were no measurable radiation levels at the outer surface of the drum; however, radiation levels equivalent to approximately three times background were noted inside the drum at about one foot above the contents. This material should also be considered radioactive waste and disposed accordingly.

Should you have any questions regarding the aforementioned information or require further assistance in this matter, please do not hesitate to contact me.

Sincerely,



Mack L. Richard, M.S.  
Health Physicist

CONTROL NO. 78900

# CONTROL PROCEDURES MANUAL

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

Approval: ECN 04312 (10/14/83)

Wipe Test for monitoring radioactivity

Control Procedure No. 38

Purpose: To monitor the amount of residual radioactivity in the Riaphase work area.

Materials: 15 - 12 x 75 mm polystyrene culture tubes  
14 - cotton tipped wooden swabs Packard Gamma Counter

Procedure:

- 1.) Place one swab in all but one tube and number tubes 1-15. The empty tube serves as a background count for the tubes.
- 2.) Swab each area indicated on the diagram, making sure the tube number corresponds with the number of the area. After swabbing the area, break the swab off even with the top of the tube.
- 3.) Place all tubes into Packard Gamma Counter racks and load racks onto instrument. Run tubes on program 5.

## Parameters for Program 5

Assay Number: 5  
Radionuclide: 1  
Time: 1.0  
Count Mode, All/Odd/Even: 0  
Background: 0  
Screening: 0  
CPM/Dose: 0

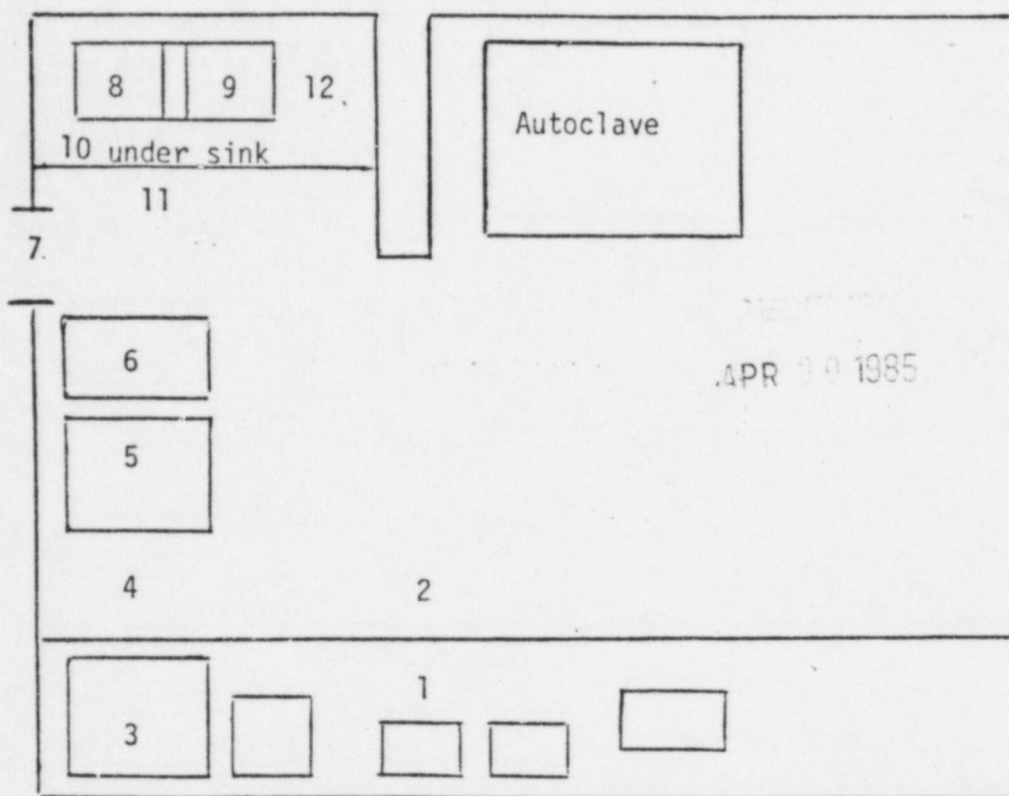
- 4.) After printout is complete, check all counts against count of blank tube with swab. Any area with more than twice the counts of the blank with swab should be decontaminated and rewiped.
- 5.) Decontamination: On benches with paper on top, replace paper. On other surfaces, use Radiowash according to directions on can.
- 6.) Enter results in wipe test book.
- 7.) To be performed weekly.



Microbiology/Immunology Q.C.

Laboratory Wipe Test

Date: 4-22-85



13 Area in cooler where Riaphase kits are stored.

Area #	CPM	Area #	CPM
1	17	9	20
2	20	10	20
3	16	11	15
4	15	12	9
5	19	13	17
6	24	14	Bckd 27
7	16	15	Bckd $\bar{c}$ swab 15
8*	58		

8\* (Retest) 35 (used Radiac Wash then did Retest 2)

8 Retest 2 15

Tech: Delana Stockbuck  
Supervisor: Connie Tellman

P.O. BOX 35 • TINLEY PARK, ILLINIOS 60477 • 312-429-1660

CITY \_\_\_\_\_ ST \_\_\_\_\_ PURCHASE ORDER # \_\_\_\_\_

DISCLAIMER: Upon acceptance of shipment, the materials therein become the sole property of ADCO SERVICES, INC.

TOTAL FOR EACH CLASS		PROPER SHIPPING NAME & HAZARD CLASS (PER 49 CFR 172.101)	ID NUMBER
# OF PACKAGES	WEIGHT (Pounds)		
		Radioactive Material, empty packages	UN2908
		Radioactive Material, fissile, n.o.s. — Radioactive Material	UN2918
		Radioactive Material, low specific activity, n.o.s. — Radioactive Material	UN2912
3	200	Radioactive Material, n.o.s. — Radioactive Material	UN2982
		Radioactive Material, limited quantity, n.o.s. — Radioactive Material	UN2910
		Radioactive Material, special form, n.o.s. — Radioactive Material	UN2974
		Radioactive Material, instruments and articles — Radioactive Material	UN2911
		Thorium Nitrate — Radioactive Material	UN2976
		Uranyl Acetate (RQ-5000/2270) — Radioactive Material	NA9180
		Uranyl Nitrate, solid (RQ-5000/2270) — Radioactive Material	UN2982

[illegible]

(7)		SHIPMENT TOTALS				
VOLUME cu ft	TOTAL # OF PACKAGES	SOURCE MATERIAL kgs	SPECIAL NUCLEAR MATERIAL (grams)			
			U-233	U-235	PLUTONIUM	TOTAL
8.0	2					

SUPPLIES DELIVERED: 1830 gms.

ACTIVITY					
ACTIVITY TOTALS					
<input type="checkbox"/> Curies	TRITIUM	C-14	Tc-99	I-129	ALL ISOTOPES
Millicuries <input checked="" type="checkbox"/>				0.017	4.52E-05
(10CFR20.311)					

THIS IS TO CERTIFY THAT THE MATERIALS NAMED IN THIS MANIFEST ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION AND ARE IN COMPLIANCE WITH ALL REQUIREMENTS APPLICABLE AT THE DESIGNATED DISPOSAL SITE, AND THAT THE MATERIALS ARE CLASSIFIED AND DESCRIBED IN ACCORDANCE WITH THE REQUIREMENTS OF 10CFR PART 61 OR EQUIVALENT STATE REGULATIONS.

- | Stability Class<br>Code |
|-------------------------|
| S - Stable              |
| N - Not Stable          |

\* ANY USE OF "OTHER" AS A DESCRIPTION MUST INCLUDE A WRITTEN AND SIGNED EXPLANATION ATTACHED TO THIS MANIFEST.

DRIVER'S SIGNATURE \_\_\_\_\_

Authorized Signature \_\_\_\_\_

14

Chickadee 11/4  
5-11-98

# This Memorandum

is an acknowledgment that a Bill of Lading has been issued and is not the Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

**ADCOM EXPRESS, INC.**  
(Name of Carrier)

Shipper's No. \_\_\_\_\_

Carrier's No. \_\_\_\_\_

RECEIVED, subject to the classifications and tariffs in effect on the date of the receipt by the carrier of the property described in the Original Bill of Lading.

**A7225 DUVAN DR., TINLEY PARK, IL 4-2619 85** FROM

The property described below in apparent good order, except as noted (contents and condition of contents of packages unknown, marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood through out this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property 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 property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classifications in effect on the date hereof, if this is a rail or a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.  
Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back thereof, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

CONSIGNED TO **BOEHRINGER MANNHEIM CORP.**

DESTINATION **INDIANAPOLIS** STATE **IND** COUNTY \_\_\_\_\_

(Mail or street address of consignee—For purposes of notification only)

ROUTE \_\_\_\_\_ DELIVERY ADDRESS \_\_\_\_\_  
(★ To be filled in only when shipper desires and governing tariffs provide for delivery thereat.)

DELIVERING CARRIER **ADCOM EXPRESS, INC.**

CAR OR VEHICLE INITIALS \_\_\_\_\_

No. Packages	Kind of Package, Description of Articles, Special Marks, and Exceptions	*WEIGHT (Subject to Correction)	Class or Rate	Check Column	NO.
1	30 gallon drum				
TOTAL WEIGHT $\frac{11}{17}$					

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:  
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor.) \_\_\_\_\_

If charges are to be prepaid, write or stamp here, "To be Prepaid."  
**PREPAID**

Received \$ \_\_\_\_\_  
to apply in prepayment of the charges on the property described hereon.

Agent or Cashier \_\_\_\_\_

Per \_\_\_\_\_  
(The signature here acknowledges only the amount prepaid.)  
Charges Advanced: \$ \_\_\_\_\_

**C.O.D. SHIPMENT**  
C. O. D. Amt. \_\_\_\_\_  
Collection Fee \_\_\_\_\_  
Total Charges \_\_\_\_\_

\* If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight."  
NOTE— Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.  
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \_\_\_\_\_ per \_\_\_\_\_

† The Fibre Boxes used for this shipment conform to the specifications set forth in the box maker's certificate thereon, and all other requirements of Consolidated Freight Classification. + Shipper's imprint in lieu of stamp; not a part of bill of lading approved by the Interstate Commerce Commission.

SHIPPER, PER \_\_\_\_\_

AGENT \_\_\_\_\_

PER \_\_\_\_\_

Permanent postoffice address of shipper, \_\_\_\_\_