

MOBILE DIAGNOSTICS, LLC
2547 3RD AVENUE
HUNTINGTON, W.VA. 25703

To: Janice Nguyen
Health Physicist
NRC Region 1

From: Curtis Nichols, CNMT
Mobile Diagnostics

Re: Inspection Information

Attached you will find the shipping manifests for the date of May 17, 2011 and a copy of the procedures you requested. Mobile Diagnostics is currently working on a complete Policy and Procedure Manual. A copy of the testing for the Hazmat training has been sent to you via email.

I have put together a request for an amendment for the license to add Dr. Rodger Blake as an authorized user, to remove Dr. Robert Davis as an authorized user and to add James Norweck as RSO to the Mobile Diagnostic Radioactive Materials License.

Regards,
Curtis

REC'D IN LAT.

8-25-11 *gen*

09/13/11
Rec'd in DNMS

Pharmalogic of West Virginia
Radiopharmacy
Bourboursville, West Virginia, USA
Shipper's Report

Printed: 05-17-2011 02:33

Cust ID: WVH1024 (Case: 2)

Run: 1

Shipping Date/Time: 05-17-2011 04:30

Shipper: Mobile Diagnostics
Nuclear Medicine Department
2547 3rd Ave.
Huntington, WV 25703
304.522.7000

Ship To: Mid-Ohio Valley - Mobile Diagnostics
Nuclear Medicine Department
Pro-Imaging
2547 3rd Ave.
Huntington, WV 25703
304-522-7000

BILL OF LADING

Radioactive Material, Type A package, 7, UN 2915
USA DOT 7A TYPE A

Rx #	RM	Radio Nuclide	Chemical Form	Phys. Form	Cal. Date Time	Cal. Activity	Volume or Quantity	Activity at Time of shipment
1036908	Tc99m	Sestamibi	Sestamibi	Liq.	05-17-11 09:40	30.000 mCi	0.610 ml	54.385 mCi
1036909	Tc99m	Sestamibi	Sestamibi	Liq.	05-17-11 10:00	30.000 mCi	0.634 ml	56.513 mCi
1036910	Tc99m	Sestamibi	Sestamibi	Liq.	05-17-11 10:20	30.000 mCi	0.659 ml	58.724 mCi
1036911	Tc99m	Sestamibi	Sestamibi	Liq.	05-17-11 10:40	30.000 mCi	0.685 ml	61.022 mCi
1036912	Tc99m	Sestamibi	Sestamibi	Liq.	05-17-11 11:00	30.000 mCi	0.711 ml	63.410 mCi
1036913	Tc99m	Sestamibi	Sestamibi	Liq.	05-17-11 11:20	30.000 mCi	0.739 ml	65.891 mCi
1036914	Tc99m	Sestamibi	Sestamibi	Liq.	05-17-11 13:00	30.000 mCi	0.896 ml	79.830 mCi
1036915	Tc99m	Sestamibi	Sestamibi	Liq.	05-17-11 13:20	30.000 mCi	0.931 ml	82.953 mCi
1036916	Tc99m	Sestamibi	Sestamibi	Liq.	05-17-11 13:40	30.000 mCi	0.967 ml	86.199 mCi
1036917	Tc99m	Sestamibi	Sestamibi	Liq.	05-17-11 14:00	30.000 mCi	1.005 ml	89.572 mCi
1036918	Tc99m	Sestamibi	Sestamibi	Liq.	05-17-11 14:20	30.000 mCi	1.044 ml	93.076 mCi

Total Rx(s): 11

Total Activity: 29.288 GBq (791.575 mCi)

Label Required: ☒ Radioactive (White I) ☐ Radioactive (Yellow II) ☐ Radioactive (Yellow III)

Trans. Index at 1 Meter

mR/hr 1 Meter Reading 1.05 Background

mR/hr Surface Reading 0.5 Background

DPM Wipe Test

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Shipped By WJD

Date: 5-17-11 Time: _____

Received By _____

Date: _____ Time: _____

Pharmalogic of West Virginia
Radiopharmacy
Bourboursville, West Virginia, USA
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Nuclear Medicine Department
2547 3rd Ave.
Huntington, WV 25703
304.522.7000

Ship To: Mid-Ohio Valley - Mobile Diagnostics
Nuclear Medicine Department
Pro-Imaging
2547 3rd Ave.
Huntington, WV 25703
304.522.7000

BILL OF LADING

Radioactive Material, Type A package, 7, UN 2915
USA DOT 7A TYPE A

Rx #	RM-Radio Nuclide	Chemical Form	Phys. Form	Cal. Date Time	Cal. Activity	Volume or Quantity	Activity at Time of shipment
1036868	Tc99m Sestamibi	Sestamibi	Liq.	05-17-11 09:00	15.000 mCi	0.706 ml	25.183 mCi
1036869	Tc99m Sestamibi	Sestamibi	Liq.	05-17-11 09:20	15.000 mCi	0.734 ml	26.169 mCi
1036870	Tc99m Sestamibi	Sestamibi	Liq.	05-17-11 09:40	15.000 mCi	0.763 ml	27.193 mCi
1036871	Tc99m Sestamibi	Sestamibi	Liq.	05-17-11 10:00	15.000 mCi	0.792 ml	28.257 mCi
1036872	Tc99m Sestamibi	Sestamibi	Liq.	05-17-11 10:20	15.000 mCi	0.823 ml	29.362 mCi
1036873	Tc99m Sestamibi	Sestamibi	Liq.	05-17-11 10:40	15.000 mCi	0.856 ml	30.511 mCi
1036874	Tc99m Sestamibi	Sestamibi	Liq.	05-17-11 12:00	15.000 mCi	0.998 ml	35.574 mCi
1036875	Tc99m Sestamibi	Sestamibi	Liq.	05-17-11 12:20	15.000 mCi	1.037 ml	36.966 mCi
1036876	Tc99m Sestamibi	Sestamibi	Liq.	05-17-11 12:40	15.000 mCi	1.077 ml	38.412 mCi
1036877	Tc99m Sestamibi	Sestamibi	Liq.	05-17-11 13:00	15.000 mCi	1.119 ml	39.913 mCi
1036878	Tc99m Sestamibi	Sestamibi	Liq.	05-17-11 13:20	15.000 mCi	1.163 ml	41.477 mCi

Total Rx(s): 11

Total Activity: 13.284 GBq (359.018 mCi)

Label Required: ☒ Radioactive (White I) ☐ Radioactive (Yellow II) ☐ Radioactive (Yellow III)
☒ Trans. Index at 1 Meter
☒ mR/hr 1 Meter Reading ☒ Background
☒ mR/hr Surface Reading ☒ Background
☒ DPM Wipe Test

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Shipped By [Signature]

Date: 5/17/11

Time: _____

Received By _____

Date: _____

Time: _____

MOBILE DIAGNOSTICS, LLC
POLICY AND PROCEDURES
Packaging & Transporting Nuclear Substances

PURPOSE

To describe the procedure for verifying packaging and safe transporting of nuclear substances to physician offices for medical use.

AUTHORIZATION

Radiation Safety Officer
Certified Nuclear Technologist

SCHEDULE

Whenever a requirement for transporting nuclear substances arises.

EQUIPMENT AND MATERIALS

Disposable gloves
Geiger Mueller Meter
Absorbent paper wipes
Shipping Documents
Nuclear Substance Transport System

PROCEDURE

A. Verification:

1. Verify with the order for nuclear substances and quantities.
2. Verify that limits on nuclides and quantities will not be exceeded. Clarify nuclides and quantities of order are allowed by Radioactive Material License.
3. Maintain record in files.

B. Personnel Protection:

1. Before verifying radiopharmaceutical packages, personnel shall don waterproof gloves and a button lab coat.

C. Checking the radiopharmaceutical container:

1. Survey all surfaces of the container using a GM meter.
2. Record the maximum surface exposure reading on the shipping papers.
3. Take a exposure rate measurement at one meter distance from the container side with the highest exposure reading
4. Using an absorbent paper, wipe 300cm² of the outer surface of the shipping container.
5. Place wipe in a plastic test tube and count wipe in the spectro analyser.
6. Determine wipe net cpm and compare to contamination limits.
7. Notify the radiopharmacy immediately if contamination exceeds removable contamination limits.
8. Enclose the packing slip in the transport case and close the transport case top.

9. Multiply the maximum one meter measurement in mSv/hr by 100 and record as the transport index (TI) on the shipping papers. If reading in mR/hr, record mR/hr as the transport index.

- a. a TI of less than 0.05 is recorded as 0.0
- b. round up to the nearest 10th place (one digit to the right of the decimal)
- c. no units are used

D. Shipping Category

1. If the maximum surface measurement exceeds mSv/hr or the TI exceeds 10, STOP, Do not ship the package! Notify the RSO immediately! Place the shipping container behind shielding.
2. If the maximum surface measurement exceeds 0.5 mSv/hr OR the TI exceeds 1.0, but neither exceeds the limits in C.1. above, check the box on the shipping papers for Yellow III.
3. If the maximum surface measurement is between 0.005 mSv/hr and 0.5 mSv/hr AND the TI is less than or equal to 1.0, check the box on the shipping papers for Yellow II
4. If the maximum surface measurement is less than 0.005 mSv/hr AND the TI is 0.0, check the box on the shipping papers form for White I.

E. Shipping Papers

1. Verify that the shipping papers have the following information completed:
 - a. Appropriate category checked (White I, Yellow II or III)
 - b. Ship to address
 - c. Transport Index (if applicable)
 - d. Removable contamination test results
 - e. ID of instruments used for measurements
 - f. Maximum surface radiation exposure measurement
 - g. Date and time
 - h. Initials of surveyor
2. Shipping paper accompanies the CSA during delivery. Papers are marked delivered upon delivery at final destination, and returned to manufacturing facility. Records retained for 3 years from date of shipment.

MOBILE EMERGENCY PROCEDURE

A calibrated operational survey meter will be kept in cab of van at all times when radioactive materials are being transported in van.

A Spill decontamination kit will be kept in cab of van at all times when radioactive materials are being transported in van.

Chief Nuclear Technologist

Curtis Nichols

[REDACTED]

RSO

James Norweck

Office 304-522-1550 ext 234
Cell [REDACTED]

Emergency Management

Kentucky

502-564-3700

After hours 800-225-2587

West Virginia

304-550-4537

Ohio

614-722-7221

NRC Operation Center

301-816-5100

IN THE EVENT OF AN ACCIDENT

1. Verbally and physically restrict access to accident site until proper survey of exiting hazards.
2. Visually inspect cases to determine extent of damage to cases and/or radioactive doses.
3. Using survey meter survey accident site to determine extent of radioactive contamination.
4. If no radioactive hazard exists move doses to secure site.
5. If radioactive spill is detected secure site and follow emergency spill procedure.

Emergency Spill Procedures and Contact Numbers

MINOR SPILLS

- 1) **Notify.** Notify persons in the area that a spill has occurred.
- 2) **Prevent the Spread.** Cover the spill with absorbent paper.
- 3) **Clean Up.** Use disposable gloves and remote handling tongs. Carefully fold the absorbent paper and pad. Insert into a plastic bag and dispose of in the radioactive waste container. Include all other contaminated materials such as disposable gloves.
- 4) **Survey.** With a GM survey meter, check the area around the spill, your hands and clothing for contamination.
- 5) **Report.** Report incident to the Radiation Safety Officer.
- 6) **Record.** Maintain an accurate record of all of the above following the spill.

MAJOR SPILL

- 1) **Clear the Area.** Notify all persons not involved in the spill to vacate the room.
- 2) **Prevent the Spread.** Cover the spill with absorbent pads, but do not attempt to clean it up. Confine the movement of all personnel potential contaminated to prevent the spread.
- 3) **Shield the Source.** If possible, the spill should be shielded but only if it can be done without further contamination or without significantly increasing your radiation exposure.
- 4) **Close the Room.** Leave the room and lock the door(s) to prevent entry.
- 5) **Call for Help.** Notify the Radiation Safety Officer immediately.
- 6) **Personnel Decontamination.** Contaminated clothing should be removed and stored for further evaluation by the Radiation Safety Officer. If the spill is on the skin, flush thoroughly and then wash with mild soap and lukewarm water.
- 7) **Reports.** Maintain an accurate record of the above following a major spill:

Radiation Safety Officer: James Norweck, MS, DABR

Office Phone No.: 304-522-1550 x 234

Cell Phone No.: [REDACTED]

Chief NM Technologist: Curtis Nichols, R.T. (N)

Office Phone No.: 304-522-7000

Cell Phone No.: [REDACTED]

Date 10/29/2009

6. As soon as extent of situation is determined notify Chief Nuclear Technologist and RSO of situation.

SECURITY

All van windows will be closed and doors will be locked anytime radioactive materials are present in the van.