



March 23, 2006

Ken Furey
Department of Health Services
Radiologic Health Branch
1500 Capitol Avenue, 5th Floor, MS 7610
Sacramento, CA 95814-5006

RE: Written Report of a Transportation Incident on March 22, 2006 for California Radioactive Materials License Number 6691-33, Cardinal Health, Palm Springs, CA.

Dear Mr. Furey,

This letter is a report of a transportation incident which occurred on March 22, 2006 involving the above referenced license. This report is being prepared pursuant to California Administrative Code Title 17 Section 30282. Below is Cardinal Health Nuclear Pharmacy Services' (Cardinal Health) description of the event.

Description of Event

On March 22, 2006, a package, containing a Mo-99/Tc-99m generator was offered for transport from our Colton, CA pharmacy (California Radioactive Materials License Number 5218-36) to our Palm Springs, CA. Upon arrival at its final destination the package had a higher transportation index (TI) than when, offered for transportation.

The package was offered by, Cardinal Health Colton, for transport to a contract courier, Tradewinds Courier Company. When the package was prepared for shipping the transportation index was determined to be one (1) with a surface reading of 50 mR/hr and was classified as a Yellow II shipment. During transport the internal shielding within the generator casing is believed to have shifted and the radiation profile of the package was altered. When the package was monitored at the Palm Springs location the package was determined to have a TI of 20 with a surface reading of 1000 mR/hr. The package had high readings on the top and the two opposing sides. There was also no removable contamination on the external or internal packaging. The Mo-99/Tc-99m generator was fully functional and able to yield an elution.

The Tradewinds driver and passenger, who transported the package, had the package in their possession for approximately one hour and 15 minutes (1.25 hours). During transport the package was placed approximately 86 inches away from the driver and the passenger. At approximately 60 inches from the package there was a ½" lead shield between the package and

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the cab of the vehicle. The exposure from the package was surveyed to be 8 mR/hr at 60 inches (at the lead barrel). The driver's exposure was calculated using the exponential absorption equation and the inverse square law. We determined the driver and passenger's total exposure from this package to be 2 uR each. The exposure to members of the public are assumed to be negligible, since the driver certified no stops were made during the transportation. Attached to this document are the Tradewinds driver's statement and a diagram of how the package was shipped.

Cardinal Health investigated the nature of this incident and determined the cause to be abnormal shifting of the shielding. We believe that during transport the package was dropped or shifted, which caused the shielding mechanism to break. As mentioned earlier the generator was able to yield a normal elution. The yield of this generator was compared to a normal generator. The damaged generator yielded 1248 mCi of activity. The normal generator yielded 2261 mCi of activity. The damaged generator had a surface reading of 300 mR/hr and the normal generator, with the larger yield, had a surface reading of 0.2 mR/hr. The manufacturer of the generator has been notified of this incident. It will be approximately three (3) months until the exposure level on the generator is low enough to disassemble the generator and identify the malfunction.

Cardinal Health uses the attached agreement to ensure proper training of contract couriers. We commit to notifying Tradewinds of this incident. Cardinal Health will complete this investigation when the generator can be safely disassembled.

If there are any questions regarding this event, please contact me at 614.757.3147.

Sincerely,



Willie Regits, PhD
Manager, Health Physics

/vp

Encl: Tradewinds Driver Statement & Vehicle Diagram
Tradewinds Contract Courier Agreement

CC: Donelle Krajewski
State of California - Radiologic Health Branch
1800 East Lambert Road, Suite 125
Brea, CA 92821
Ken Lambert
Nuclear Regulatory Commission - Region III
2443 Warrenville Rd. St. 210
Lisle, IL 60532-4352

Robert Bellizzi, RSO, Loc 32
Dennis Kephart, RSO, Loc 131
File Loc. 32, 131 (5)

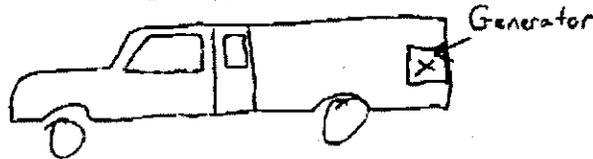
Tredewinds Courier

3/23/06

William G. Stovall
922 Aaron Dr.
Redlands, CA. 92374
Ph# 909-835-5192
CA Lic# C2860126

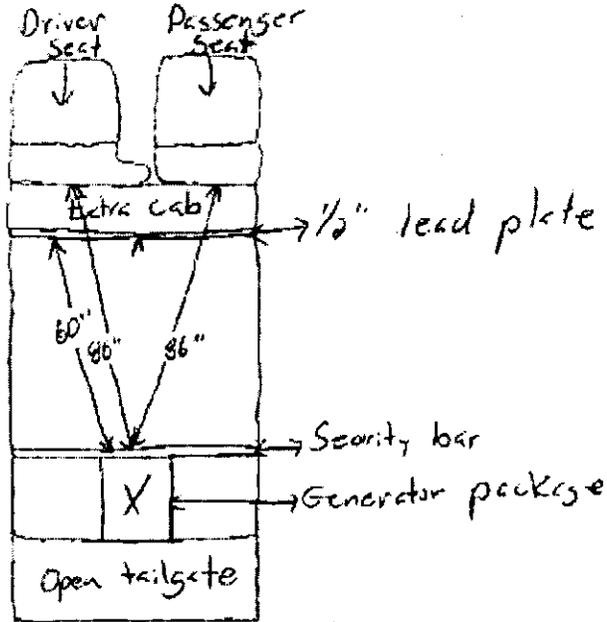
I picked up the Generator from Cardinal Rx
in Colton at 09:45am and drove to Cardinal
Palm Springs directly with no stops in between.
The Generator was placed in the bed of my
truck up against the tail gate and fastened
down.

William R. Stovall



Palm Springs Fed 760.322.6172

3/23/06
Courier Pick-up diagram



Contract Courier Duties

The Nuclear Pharmacy Services business of Cardinal Health, formerly Synco, ("Cardinal Health") has engaged your company to transport packages containing radioactive materials from Cardinal Health facilities to other businesses. Please type or print clearly the information below and return the completed form to each Cardinal Health facility that engages your services. This document does not take place of any other written contracts between Cardinal Health and your company.

Courier Company Name: TRADELIND ENTERPRISES, INC.
Contact Name: SID SMITH
Address: PO BOX - 1017
State, City, Zip: HILLSBORO, OR 97123
Telephone / Facsimile: 503-648-7103 / 503-640-9583
Emergency Telephone: _____

Please initial in the space provided next to each of the following statements.

All employees or contractors engaged by the Courier Company that transport radioactive materials have been trained in accordance with the requirements specified in the Code of Federal Regulations Title 49, Part 172.704. 

All employees or contractors engaged by the Courier Company that transport radioactive materials will follow the applicable paragraphs of the Code of Federal regulations Title 49, Part 177, in regards to shipping paper, blocking and bracing and separation distances. 

All employees or contractors engaged by the Courier Company that transport radioactive materials will follow the instructions given by Synco personnel in regards to location (address, room, drop box, etc.) to deliver the materials. 

All employees or contractors engaged by the Courier Company that transport radioactive materials have been instructed on the procedures for and importance of maintaining the security of radioactive materials throughout the delivery process (on person or in the vehicle). 

Print Name & Title:

SID SMITH / OWNER

Signature & Date:

 2-3-03

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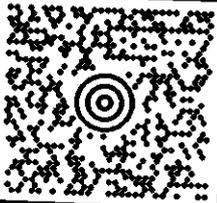
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