

U.S. NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT

Region I

Report No. 80-02  
Case No. NRC-1-80-72  
License No. N/A Priority N/A Category N/A  
Licensee: Non-Licensee  
Radioactive Material in Public Domain

Facility Name: N/A

Investigation at: Fanwood, New Jersey

Investigation conducted: September 19 to November 7, 1980

Investigators:

<u>Raymond H. Smith</u> Raymond H. Smith, Investigator	<u>4/10/81</u> date signed
<u>John E. Glenn</u> John E. Glenn, Radiation Specialist	<u>4/10/81</u> date signed
<u>Claude Rowe</u> Claude Rowe, Radiation Specialist	<u>4/13/81</u> date signed

Reviewed by:

<u>Robert T. Carlson</u> Robert T. Carlson, Director, Enforcement & Investigation Staff	<u>4/10/81</u> date signed
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### SUMMARY

On September 19, 1980, the NRC Region III, Chicago, Illinois office notified the NRC Region I office that Mallinckrodt, Inc., had reported the apparent presence of Mallinckrodt molybdenum-99/technetium-99m generators at a private residence in Fanwood, New Jersey. The police in Fanwood, New Jersey had responded to a complaint from a private citizen and found boxes labeled radioactive material sitting on the driveway at a private residence.

Two Radiation Specialists from the NRC Region I office arrived in Fanwood, New Jersey on the evening of September 19, 1980, and after meeting with the police and borough officials proceeded to the location of the private residence. A representative of the New Jersey Bureau of Radiation Protection and a representative of the New Jersey Bureau of Emergency Response were at the residence when they arrived. A representative of the United States Priority Transport Corporation (USPTC) was also present at the residence and confirmed that the occupant of the residence was a subcontractor of one of their contractors involved in transporting the generators.

A total of eleven generators were identified at the residence and were located on the driveway in front of a garage. Four generators had intact lead shielding and seven generators had no lead shielding. The occupant stated that he had received the generators from a USPTC contractor for temporary storage, but that he had removed the lead from some of the generators for sale. Radiation measurements of the generators at contact were 20 milliroentgens per hours and, 25 milliroentgens per hour with measurements in the immediate vicinity of the generators at waist level of one to two milliroentgens per hour. These measurements were obtained after the generators had been moved by representatives of the State of New Jersey.

Radiation measurements were performed inside the buildings at the residence and also on the grounds of the residence. Numerous cartons marked "Radioactive Materials" were observed being used for storage. The radiation survey results revealed the residence and grounds to be free of radioactive material with the exception of the generators. The generators were repackaged by the Radiation Specialists and transported by them to the NRC Region I location for storage.

An investigation was initiated as a result of the generators being found at a private residence. The investigation determined the transport method for generator delivery and the return of spent generators. The occupant of the residence advised the investigators, and also provided a signed statement, how he had obtained four of the generators from the transport contractor for temporary storage and how he obtained seven of the generators without the transport contractors knowledge. The lead from seven of the generators had been removed by the occupant and sold.

The statements made by the residence occupant and the radiation measurements of the generators indicated that byproduct material of a quantity requiring an NRC License was present and not secured in an unrestricted area (as defined in Part 20, Title 10, Code of Federal Regulations) for a period of four or five weeks. These statements and measurements also indicated that the occupant was not exposed to radiation in excess of the limits specified in Part 20, Title 10, Code of Federal Regulations. It could not be determined whether any individuals, other than the occupant, were exposed to the radiation from the generators during the period of time they were present at the residence. Based on radiation measurements made, the location of the materials, and the statements of the occupant, it is unlikely that other individuals were exposed.

During February 1981, ten of the generators and all columns from the generators which had contained radioactive molybdenum-99 were disposed of as radioactive waste. One generator was maintained for demonstration purposes.

PURPOSE OF INVESTIGATION

The purpose of this investigation was to determine the circumstances surrounding the eleven molybdenum 99/technetium-99m generators found at a private residence in Fanwood, New Jersey on September 19, 1980.



### BACKGROUND

At about 6:00 p.m. on September 19, 1980, Region III notified Region I that Mallinckrodt, Inc., of St. Louis, Missouri had reported the apparent presence of Mallinckrodt generators at a private residence in Fanwood, New Jersey. A response team consisting of two radiation specialists, J. Glenn and C. Rowe, met at the Region I office and left for Fanwood at about 8:00 p.m.

The response team met briefly with Fanwood police and borough officials at 10:00 p.m. before going to a residence at 150 South Avenue in Fanwood. Generators and generator packing materials were observed to be located on a driveway at this address. Exhibit 1 is a photograph obtained from the Fanwood police showing the location and condition of these materials on the afternoon of September 19. Exhibit 2 is a close-up photograph obtained from the Fanwood police showing one of the Mallinckrodt generators and was taken on the evening of September 19, 1980. Exhibit 3 is two photographs taken by the NRC response team on arrival and shows the arrangement of the generators on the driveway and those in a carton. The generators had been moved and monitored by representatives of the State of New Jersey prior to the NRC teams arrival.

The NRC response team made measurements using a Digi/master exposure ratemeter (serial No. 03503) last calibrated on August 21, 1980 and an Eberline RO-2 Ion Chamber (serial No. 606) last calibrated on August 21, 1980. Average exposure rates measured in the immediate vicinity of the generators were 1-2 milliroentgens per hour (mR/hr) at waist level. Contact exposure rates at the surface of the generators were 20 mR/hr with the ion chamber and 25 mR/hr with the Digi/master ratemeter. Filter paper wipes were taken of the generators and no contamination was detected when wipes were counted in a low background area using the Digi/master ratemeter with the beta shield in the open position.

The NRC response team identified eleven (11) generators on the driveway. Four (4) generators had intact lead shielding while seven (7) generators had no lead shielding. The NRC team members determined the presence of lead shielding by lifting each generator by the handle. Three of the generators with lead shielding had labels indicating the activity of molybdenum-99/technetium-99m. The labels had been removed from the eight other generators. Two of the labeled generators had been manufactured on August 29, 1980 and were calibrated to contain 1.5 and 1.0 curies respectively at 8:00 p.m. on that date. One labeled generator had been manufactured on September 5, 1980 and was calibrated to contain 1.0 curie at 8:00 p.m. on that date. Accounting for radioactive decay, the labeled generators contained a total of 43 millicuries of molybdenum-99 on September 19, 1980 at 8:00 p.m.

Mr. Robert Lowry, occupant of the house at 150 South Avenue in Fanwood, stated that he was a subcontractor for United States Priority Transport Corporation and had received the generators from Mr. John McKay, a contractor with the same carrier. Mr. Lowry stated the generators had been given to him for temporary storage but that he had removed lead from some of the generators for sale. He stated the lead had been sold to Federal Metals in South Plainfield,

New Jersey. He stated that he had no other radioactive materials in his possession and had not disposed of any radioactive material. Mr. Martin Friedman, President, United States Priority Transport Corporation was present at the residence and stated that Mr. Lowry was a subcontractor employed by Mr. McKay. Mr. Friedman stated that Mr. Lowry was not authorized to store or packages at his residence.

The NRC team made a survey of the grounds at 150 South Avenue. Additional measurements were made by Mr. Frank Cosolito and Mr. James Ross of the New Jersey Bureau of Radiation Protection and the New Jersey Bureau of Emergency Response, respectively. No evidence of any additional radioactive material was found on the basis of measured radiation levels. However, additional boxes and packaging materials were found.

A search warrant (Exhibit 4) was obtained by the Fanwood police to search the buildings at 150 South Avenue. Radiation measurements inside the buildings, a residence and separate garage, revealed no additional radioactive materials. Numerous boxes marked "Radioactive Materials" were observed being used for storage of household items. Mr. Lowry stated that he had obtained the boxes from hospitals and had not received or disposed of any radioactive materials with these boxes.

The NRC team repackaged the generators, signed a receipt (Exhibit 5) to Mr. Lowry for the generators, and returned all of the identified generators to safe storage at the Region I office. Mr. Lowry was questioned by the NRC team to learn if any individual may have been exposed by the generators. Mr. Lowry stated that no one other than himself had worked with, or close to, the generators. He stated that he had not touched the columns in which the molybdenum-99 was contained when he removed the lead shielding and that his hands had been close to each column for no more than five (5) seconds. Mr. Lowry also stated that he had been wearing a whole body film badge while removing the lead from the seven generators. Mr. Martin Friedman stated the film badge would be processed and the results reported to the NRC. Based on Mr. Lowry's statements there is no evidence indicating that any individual was exposed in excess of the limits in Part 20, Title 10, Code of Federal Regulations. Based on his statements, it appears that licenseable quantities of byproduct material were left, unsecured, in an unrestricted area from early Tuesday morning, September 16, 1980 until the evening of September 19, 1980. Radiation levels in the immediate vicinity, at two or three feet from the generators, were measured in excess of the limits (2 millirem in any one hour) for an unrestricted area as set forth in 10 CFR 20.105(b). No person other than Mr. Lowry is known to have been in the immediate vicinity of the generators.

DETAILSContract Carrier

On September 24, 1980, NRC Investigators R. Smith and J. Glenn met with Mr. Martin D. Friedman, President and Mr. Robert F. MacDonald, Vice-President - Operations of United States Priority Transport Corporation (USPTC) located in Wheatley Heights, New York.

Mr. Friedman and Mr. MacDonald provided the following information in substance:

The Corporation had been in business about five years and the major portion of business was the transportation of radioactive material. Lease equipment and labor is used for transporting cargo in 12 states.

The Corporation had a contract with Mallinckrodt, Inc., and other pharmaceutical firms for the delivery and handling of products. The investigators observed the contract with Mallinckrodt.

The transport system consists of primary owner operators and secondary owner operators which are responsible to USPTC for transporting cargo in accordance with Department of Transportation Regulations. By lease agreement, USPTC has exclusive use and control of equipment during the period that cargo is in the vehicle.

Mr. John McKay was a primary owner operator and had obtained the services of Mr. Robert Lowry for USPTC.

Generators are shipped by truck from Mallinckrodt in St. Louis, Missouri to a location in East Rutherford, New Jersey. An agent for Mallinckrodt then tenders the generators to transport operators of USPTC, for delivery to medical facilities.

Some medical facilities have an agreement with Mallinckrodt for the return of spent generators. These are placed in a carton and a Bill of Lading accompanies the carton. The USPTC operator picks up the spent generators, returns them to Mr. John McKay who delivers them to a representative of Medical Delivery Service, Long Island, New York, who delivers them to Medical Emergency Delivery, New York City, New York who is the agent for Mallinckrodt.

The total generators delivered by USPTC for all contracts was about 90 each week and about 30 spent generators are returned each week.

Interview of Mr. John McKay by NRC Investigators R. H. Smith and J. E. Glenn  
on September 24 and 25, 1980

Mr. McKay stated that he was an owner operator contractor for the United States Priority Transport Corporation (USPTC) and had signed a contract with them regarding the transportation of radioactive material. Mr. McKay also stated that Mr. Robert Lowry worked for him as a driver of his own vehicle for the transportation of radioactive material and that this was arranged by a verbal agreement between them.

Mr. McKay described the events beginning September 16, 1980, when he asked Mr. Lowry to hold some spent generators for him. These events are contained in a statement signed by Mr. McKay (Exhibit 6).

Interview of Mr. Robert L. Lowry by NRC Investigators R. H. Smith and J. E. Glenn  
on September 25, 1980

Mr. Lowry stated that he was a subcontractor for Mr. John McKay involved in transporting radioactive material and that his services were provided by a verbal agreement between he and Mr. McKay. Mr. Lowry stated that he used his own private vehicle for the service.

Mr. Lowry described the events surrounding the generators found at his residence on September 19, 1980, and these are contained in a statement signed by Mr. Lowry (Exhibit 7).

Mr. Lowry stated that the generators stored in front of the garage at his residence had been covered by a canvas and evidently the canvas was blown off the material on September 18 or 19, 1980.

Mr. Lowry also stated that it was a routine practice for all drivers to keep returned generators at their residence for an indefinite period. Mr. Lowry provided the following information in substance.

Returned generators are picked up from Medical Facilities when the new generators are delivered. When a driver completes a delivery route he is free to return to his residence and this is usually in the early morning hours. The drivers have a meeting place designated to meet in the late evening hours to obtain their cargo for delivery. At this time the driver deliver returned generators to a designated individual such as Mr. McKay.

Mr. Lowry appeared to be knowledgeable in the construction of generators and the potential radiological health protection problems associated with them.



Status of Generators

The eleven generators received on September 20, 1980 were brought back to Region I for safe storage. After it became evident that no further active investigation was required, Dr. Glenn called Mr. James McClellan, Mallinckrodt Nuclear, Maryland Heights, Missouri to arrange transfer of the generators. Mr. McClellan stated that since the lead had been removed from seven generators Mallinckrodt Nuclear would prefer that the generators be disposed of by the NRC. In February 1981, the decayed generators were surveyed and disposed of. Columns which had contained radioactive molybdenum-99 were placed in drums for disposal as radioactive waste. One generator, with the column removed, was kept for demonstration purposes. This generator, identified by the manufacturing tag 1.0-162, was one of four generators containing lead shielding on September 19, 1980. This generator was identified as coming from Lot #1020072 manufactured on September 5, 1980.

## Exposure Evaluation

Each of the eleven generators was examined at the Region I office and all eleven (11) generator columns containing the molybdenum-99 were found. For three generators with no lead shielding, radiation levels were measured at background levels. Two generators with no shielding were estimated to have been manufactured on August 22, 1980 based on the measured radiation levels (3.8 to 4.5 mR/hr at contact). The other two generators with lead shielding removed were estimated to have been manufactured on August 29, 1980 on the basis of measured radiation levels (15 to 18 mR/hr at contact). From these measurements and Mr. Lowry's statements, it appears that Mr. Lowry's hands were no closer than 1 centimeter to a maximum of 46 millicuries for about 5 seconds. It is estimated that Mr. Lowry's hands received a dose of about rem while removing molybdenum-99 columns from the lead shielding.

Exhibit 8 shows the dosimeter results for the film badge exposure of Mr. Robert L. Lowry. According to a representative of USPTC this result is for the period from July 15, 1980 to September 19, 1980. This badge exposure result was of the same magnitude as other badge exposures received by Mr. Lowry and another USPTC driver in previous months.

It is not certain whether any individuals other than Mr. Lowry were in the immediate vicinity of the generators while they were located at the private residence in Fanwood, New Jersey.

INVESTIGATOR'S NOTE: Based on radiation measurements of the generators, the location of the generators at the residence, and the statements made by the occupant regarding the generators, it is unlikely that other individuals were exposed.

Status of Investigation

The status of this investigation is CLOSED.

EXHIBITS

- \*1. Photograph of materials found at residence.
  - \*2. Photograph of Mallinckrodt generator at residence.
  - \*3. Photographs of materials found at residence.
  - 4. Copy of Search Warrant
  - 5. Copy of Material Receipt
  - \*6. Statement of John McKay
  - \*7. Statement of Robert L. Lowry
  - 8. Copy of Film Badge Dosimeter Results
- \*NOTE: Denotes copies, originals maintained at Region I.

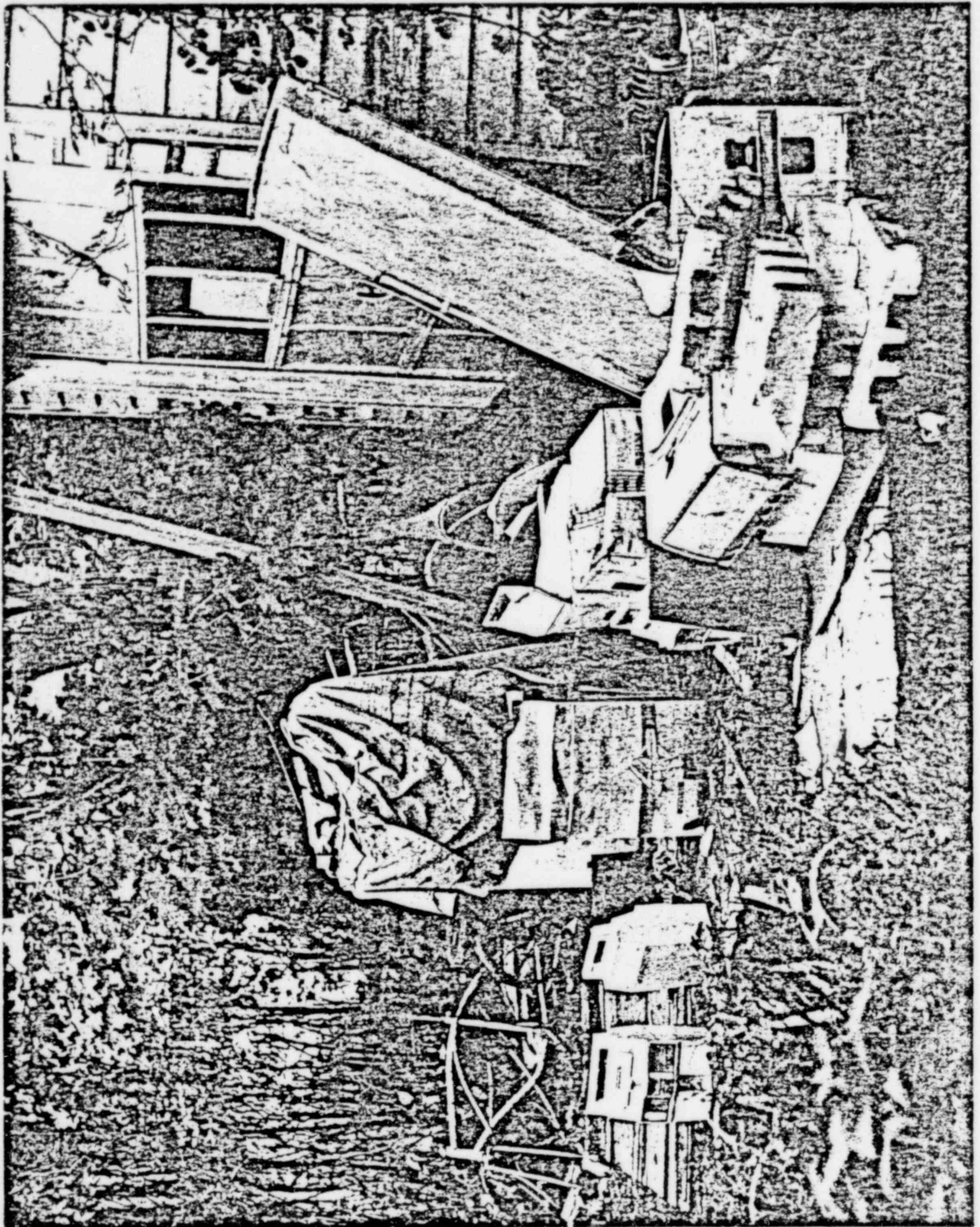
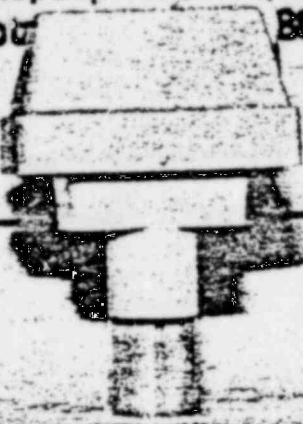


EXHIBIT 1



To elute, depress plunger  
and rotate 80°



100-107



Ultra-TechneKow<sup>®</sup> FM

UTK-FM<sup>™</sup>

TECHNETIUM Tc99m GENERATOR

Parent Molybdenum-99 prepared from  
Fission Produced Molybdenum

Store At Room Temperature (Below 35°C)

RT2/79 Canadian License No. 175

**WARNING**

Radioisotopes, produced by nuclear reactors or other accessories, should be used only by physicians who are qualified by specific training in the use and safe handling of radioisotopes and whose competence and training have been approved by an individual agency or agencies already licensed in the use of radioisotopes. In the possession of sterile, pyrogen-free Sodium Phosphate Tc 99m.

United States (U.S.A.) law prohibits distribution without prescription.

This generator, its manufacture and use are covered by one or more of the following U. S. patents: 3,122,122; 3,148,987; 3,123,025; 3,077,987.

For additional information see package insert.

Mallinckrodt, Inc.  
St. Louis, Missouri 63134

100-107  
Total Act. (Tc99m)  
1.5 Ci  
As of 8:00 PM  
CENTRAL TIME  
  
23 AUG 77  
000 0000070  
000 13 000 80  
  
CAUTION  
RADIOACTIVE  
MATERIAL  
51077

MOLYBDENUM-99 DECAY CHART			TECHNETIUM-99m DECAY CHART		
HALF-LIFE 66.7 HOURS		PERCENT	HALF-LIFE 6.02 HOURS		PERCENT
DAYS	REMAINING		HOURS	REMAINING	
0	100		0	100	
1	77.9		1	100	
2	60.7		2	100	
3	47.3		3	100	
4	36.8		4	100	
5	28.7		5	100	
6	22.4		6	100	
7	17.4		7	100	
8	13.6		8	100	
9	10.5		9	100	
10	8.1		10	100	
11	6.2		11	100	
12	4.8		12	100	
13	3.7		13	100	
14	2.8		14	100	

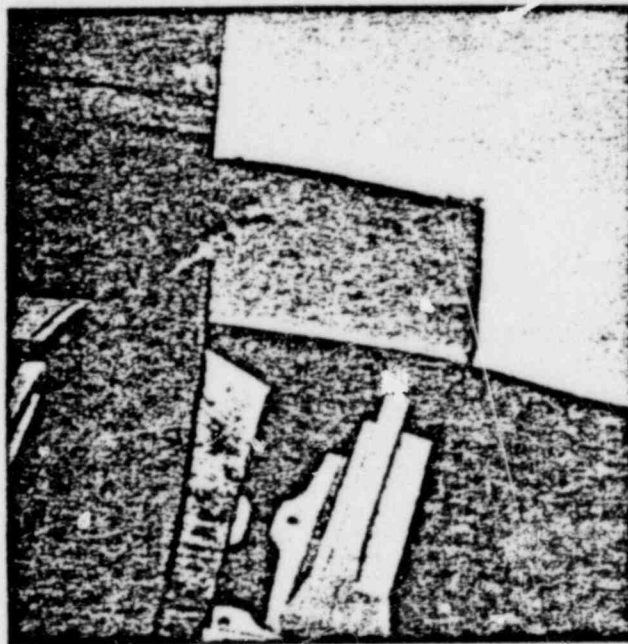


EXHIBIT 3

STATE OF NEW JERSEY)  
COUNTY OF UNION ) ss.:

SEARCH WARRANT

TO ANY LAW ENFORCEMENT OFFICER:

1. This matter being opened to the Court under oath by  
Det. Brian L. Bantz and John Glenn  
on application for the issuance for a search warrant for the  
(x) premises ( ) person ( ) vehicle described below, and the  
Court having reviewed the ( ) affidavit of (X) testimony of the  
said Det. Brian L. Bantz and John Glenn  
and being satisfied therefrom that located therein and thereon

blue plastic containers used to hold vials of radioactive material,  
vials of radioactive material, radioactive materials, objects  
that have been contaminated radioactively, packing slips or  
documents relating to the shipment of radioactive material  
including the right to photograph the entire premises, evidence  
of ownership or occupancy  
and that probable cause exists for the issuance of such warrant;

2. You are hereby authorized to search the (X) premises des-  
cribed below ( ) person described below ( ) vehicle described  
below and to serve a copy of this warrant on such person or on the  
person in charge or control of such premises; ( ) and to follow  
telephone lines wherever they may lead;

3. You are hereby ordered, in the event you seize any of the  
aforementioned contraband, to give a receipt for the property so  
seized to the person from whom it was taken or in whose possession  
it was found, or in the absence of such person to leave a copy of  
this warrant together with such receipt in or upon the said prem-  
ises from which the property is taken.

4. All information contained in the ( ) affidavit (X) testi-  
mony under oath furnished in support of the application for this  
search warrant is expressly incorporated herein by reference and  
the executing officers are directed to familiarize themselves with  
the contents thereof.

- 5. You are further authorized to execute this warrant between  
the hours of anytime of day or night within one (1) days  
from the issuance hereof, and thereafter to forthwith make prompt  
return to me with a written inventory of the property seized here-  
under.

6. The following is a description of the premises.

150 South Ave., Fanwood, N.J., is described as a white house located on the south west corner of South Ave., and Fourth St., in Fanwood, N.J. There is an unattached garage on the rear of the property with a driveway leading to Fourth St.

7. Given and issued under my hand at Fanwood, Union County,  
New Jersey at 10 90'clock A. M., this 20 day of SEPTEMBER

*Melvin S. Whitten*  
Municipal Judge  
Borough of Fanwood

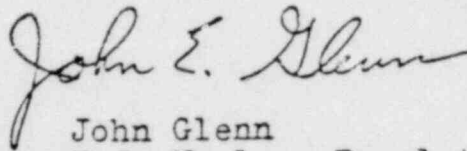
Page two of two pages

EXHIBIT 4 (Page 2 of 2)



20 September, 1980

Removed from the premises of 150 South Ave., Fanwood, N.J., eleven (11) generators, containing molybdenum-99 technetium-99m. Taken during the execution of a search warrant, dated 20 September, 1980, at 0109 AM.



John Glenn  
U.S. Nuclear Regulatory Comm.  
631 Park Ave.  
King of Prussia, Pa. 19406

EXHIBIT 5



Edison Inn  
Edison, New Jersey  
September 25, 1988

I, John McKay, hereby make the following voluntary statement to Mr. Raymond H. Smith who has identified himself to me as an Investigator with the U.S. Nuclear Regulatory Commission. I make this statement freely with no threats or promises of reward having been made to me. Mr. Smith is writing this statement for me at my request.

John McKay

I am presently a contractor of the United States Priority Transport Corporation, P.O. Box 522, Wheatley Heights, New York and have signed a written contract with them regarding the transportation of radioactive material. Mr. Robert Lowry worked for me as a driver of his own

vehicle involved in the transportation of radioactive material. Mr. Lowry and I had a verbal agreement regarding this work rather than a written contract or agreement and to the best of my knowledge, Mr. Lowry did not have a written contract or agreement with the United States Priority Transport Corporation.

On September 16, ~~1980~~<sup>1988</sup> 1980, I and the other delivery drivers met at the Medi Physics facility for pick up. At this time the drivers had collected from 8 to 10 generators for return that they had picked up on September 15, 1980. I found that I could not place the return generators in my vehicle due to available space and I asked Mr. Robert Lowry to take the

John McFarley

generators and hold them until the next day on September 17, 1980.

On Tuesday September 16, 1980 I was ready to leave the Medi Physics facility about 11:00 p.m. which was previous to the arrival time there for Mr. Lowry. I called Mr. Lowry and asked him to keep these another day and he agreed.

On Wednesday evening September 17, 1980 Mr. Lowry brought 8 generators for return and I found that I could only load four of them. Mr. Lowry was to hold the remaining four for another day. On Thursday September 18, 1980 I left the Medi Physics facility about 11:00 PM and did not see or contact Mr. Lowry about the 4 generators.



On Friday September 19, 1980, at about 5:00 PM I received a telephone call from Mr. Robert Mac Donald, United States Priority Transport Corporation regarding the generators that had been reported to him as being at the residence of Mr. Robert Lowry and requested that I go there and attempt to retrieve the generators.

John H. May

Upon my arrival at the residence of Mr. Robert Lowry I was informed - by a representative of the Fenwood, New Jersey Police Department that I would not be able to remove the generators. I then left the location to continue my obligations of delivering radio active material shipments.

During the period of time that Mr. Lowry worked for me he was not engaged in the <sup>Mo-99</sup> delivery of generators. Mr.

Lowry's agreement of working for me was terminated by Mr. Martin D. Friedman, United States Priority Transport Corporation on the evening of September 19, 1980 and he has not worked for me since that date.

I give permission to the U.S. Nuclear Regulatory Commission (NRC) to use this statement and its contents, including my identity in any reports issued for public information or during any investigation conducted by the NRC.

11/11/80  
11/11/80  
11/11/80

I have read the foregoing statement consisting of six hand written pages. I have made any necessary corrections and have initialed them in ink. I have signed the left hand margin on each page. This statement is



the truth to the best  
my knowledge and belief

John McKay  
JOHN MCKAY  
September 25, 1980  
11:30 am

Witnessed:

Raymond H. Smith  
RAYMOND H. SMITH

John E. Glenn  
JOHN E. GLENN

John McKay

Edison Inn  
Edison, New Jersey  
September 25, 1980

I, Robert L. Lowry, hereby make  
the following voluntary statement  
to Mr. Raymond H. Smith who has  
identified himself to me as  
an Investigator with the U.S.  
Nuclear Regulatory Commission.  
I make this statement freely  
with no threats or promises of  
reward having been made to me.  
Mr. Smith is writing this  
statement for me at my request.

I was a sub-contractor of  
Mr. John McKay involved  
in the delivery and trans-  
porting radioactive material  
up to last Friday, Septem-  
ber 19, 1980 when my  
services were terminated.  
These services have been  
provided to Mr. McKay based

Robert L. Lowry

on a verbal agreement, I have not signed a written contract or agreement with the U.S. Priority Transport Corporation, P.O. Box 522, Wheatly Heights, New York.

On September 16, 1980, I and other drivers met at the Medi Physics facility for pick up. At this time Mr. McKay could not place the returned Mo-99 generators in his truck, because of space. These had been brought in by the other drivers. Mr. McKay asked me to hold the generator for him until the next day and I agreed. I believe that there were a total of 8 generators. These were placed in my vehicle and after completing my delivery I returned to my residence.

Robert L. Young



at 150 South Avenue, Fairwood, New Jersey, where they were stored in front of my garage and covered by a canvas.

On September 16, 1980, Mr. McKay called me and asked me to hold the generators for another day. On September 17, 1980, I met Mr. McKay at the Medi Physics facility with the 8 generators for him to return. At this time Mr. McKay could only take 4 of the generators and I took the other four back to my residence. I did not see Mr. McKay on September 18, 1980 regarding the other 4 generators.

On September 19, 1980, a representative of the Fairwood Police Department came to my residence and informed me of a complaint they had

received regarding the presence of radioactive material. To my knowledge, this referred to the generators which I had stored in front of my garage and covered with a canvas.

The total of 11 Mo-99 generators which were found at my residence on September 19, 1980 included the 4 generators I was holding for Mr. McKay.

Robert L. Long

I had obtained the other 7 generators over a period of four or five weeks while at the Medi Physics facility. The drivers routinely bring generators for return to this location and place them near Mr. McKay's vehicle for him to load. I observed that ~~while~~ Mr. McKay was inside the facility and at this time I took one or more



of the returned generators over a period of four to five weeks until I had a total of seven. These were taken for the purpose of removing the lead for disposal by sale as a means of increasing my income. I believe I removed the lead from the generators on September 16 or 17, 1980 and sold the lead to Federal Metals located in South Plainfield, New Jersey.

In the past 13 years I have picked up lead from hospitals, by purchasing from the hospital and reselling the lead. In these cases the purchase involved only the lead.

During the period of four or five weeks that these generators were stored in front of my garage I have

Robert L. Long

no reason to believe that any members of the public or my family were exposed to radiation from the generators.

I believe that I probably was wearing my film badge dosimeter when I removed the lead from the seven generators. Based on my knowledge of the structure of the generators I do not feel that I received an excessive amount of radiation. I did not open the four Mo-99 generators that I was holding for Mr. McKay.

I give permission to the U.S. Nuclear Regulatory Commission (NRC) to use this statement and its contents, including my identity in any reports issued for public information or during any investigation conducted by the NRC.

Robert L. King

I have read the foregoing statement consisting of seven handwritten pages. I have made any necessary corrections and have ~~corrected~~ ~~initialed~~ them in ink. I have signed the first <sup>six</sup> pages in the left hand margin. This statement is the truth to the best of my knowledge and belief.

Robert L. Lowry

ROBERT L. LOWRY

September 25, 1980

WITNESSED:

03:15 PM

Raymond H. Smith

RAYMOND H. SMITH

John E. Glenn

JOHN E. GLENN



# Radiation Selection Company

P.O. BOX 1414 • SUNNYVALE, CALIFORNIA 94088  
PHONE (408) 733-8700

101780 3 3  
STATE AND DISTRICT NO.  
71580 B1480

ACCOUNT NUMBER: 4515  
GROUP NUMBER: 11

## DOSIMETRY REPORT

MONTHLY

SOCIAL SECURITY NUMBER	LAST NAME FIRST INITIAL	GRADE	EMPLOYEE ID	MONTHLY DOSE (mrem)		CUMULATIVE DOSE (mrem)											
				THIS MONTH	PREVIOUS MONTH	START DATE	OTHER START DATE	CALIBRATION	NON-INITIALING	INITIALING	NON-INITIALING	INITIALING					
A025	LOWRY B																