



PITTSBURGH TESTING LABORATORY

ESTABLISHED 1881

INSPECTING ENGINEERS AND CHEMISTS

850 POPLAR STREET

PITTSBURGH, PA. 15220

AREA CODE 412 • TELEPHONE 922-4000

PLEASE REPLY TO:
P. O. BOX 1646
PITTSBURGH, PA. 15230

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June 19, 1979

Mr. Robert O. McClintock
U. S. Nuclear Regulatory Commission, Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Re: Letter dated June 14, 1979

Dear Mr. McClintock:

Thank you for your letter of June 14, 1979, regarding Mr. Jerman's findings of his visit of May 11, 1979.

We would like to clarify the first sentence of the second paragraph. The loss of two Cesium-137 sealed sources are in error. The lost material was Strontium-90 sealed sources in two radiation survey meters.

We are hereby informing you of the disposition of the two Cesium-137 and one Iridium 192 sealed sources which were located and stored by Finlay Testing Laboratories in Hawaii.

As reported to you by Mr. Jerman, we have hired a Certified Health Physicist, Gamma Corporation, Wahiawa, Hawaii, to package and transport the sealed sources to a designated disposal site.

We have received a letter dated June 6, 1979, from Gamma Corporation, explaining the disposition of the sealed sources. A copy of this letter is attached for your review. Please note that they mention it will take from 2 - 6 weeks to arrive at the disposal site. Once we receive the acknowledgement copies of the transfers, we will advise you.

For your information, we are attaching a copy of the Radioactive Material Transfer Reports, Leak Test Records, and Radioactive Shipment and Disposal Record signed by Mr. P. J. Manly, Gamma Corporation.

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688 316

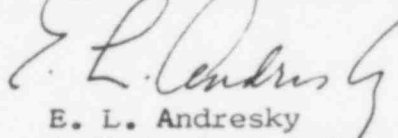
Mr. Robert O. McClintock
U. S. Nuclear Regulatory Commission, Region I

We are forwarding a copy of this letter with attachments
to Region V for their information.

Should you have any questions, please feel free to contact
me.

Very truly yours,

PITTSBURGH TESTING LABORATORY



E. L. Andresky
Radiological Safety Coordinator

cc: J. L. Munnerlyn, VP
NRC, Region V

ELA/ds



GAMMA CORPORATION

P.O. Box 430 / 228 Plum Street, Wahiawa, HI. 96786

June 6, 1979

Mr. Jim Munnerlyn
Pittsburgh Testing Laboratories
2955 SW Temple Street
Salt Lake City, Utah 84115

Dear Jim:

I finished packaging the three sources yesterday, and they are now ready for shipment. I have arranged with the shipper to pick them up tomorrow and send them to the disposal ground at the Hanford Reservation.

The sources were larger than I had expected, and I was unable to fit all three into one barrel. By the time I stacked the two cesium sources, there was no room for the Ir-192 source. So I repackaged them into two barrels, with the Ir-192 source and one Cs-137 in one barrel, and the other Cs-137 source in the other barrel.

Enclosed are your shipping papers, along with your copy of the Radioactive Shipment and Disposal Record and the leak tests of the sources. I have instructed Nuclear Engineering to send you their receipt copies of the shipping papers when they receive the sources.

The actual shipping time should be 2-6 weeks. The barrels must wait in Honolulu until a container is filled, and then will be shipped to Portland. From there they will be trucked to the Hanford Reservation.

Please let me know if you have any questions about the shipment. I should be able to trace things through the local Honolulu Freight office here.

Sincerely,

GAMMA CORPORATION

Philip J. Manly
Philip J. Manly, CHP
President

encl.

RECEIVED

JUN 11 1979

PITTSBURGH TESTING LAB.
SALT LAKE CITY, UTAH

688 318



PITTSBURGH TESTING LABORATORY

FORM 100-1
REV. 3-22-75

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RADIOACTIVE MATERIAL TRANSFER REPORT

DATE 6-4-79

PTL BRANCH OR AUTHORIZED SUPPLIER MAKING SHIPMENT Honolulu Hawaii

RADIOISOTOPE Cesium 137 STRENGTH 4.8c on June 1, 1965 CURIES
MILLICURIES
MICROCURIES

EXPOSURE DEVICE OR CONTAINER MODEL NUMBER (CHECK ONE)

- Gamma Model _____ Survey Meter Model _____
- PTL Model _____ Radionics Model _____ Source Changer Model _____
- Other authorized unit (describe) lead lined Steel Box 12" x 12" x 10"

SERIAL NUMBER OF DEVICE OR SOURCE CHANGER H-3 CAPSULE SERIAL NUMBER P

TRANSFERRED TO Nuclear Engineering Co., Richland Washington HOW SHIPPED _____

REASON FOR TRANSFER DISPOSAL TRANSFER RELOAD

D.O.T. Radioactive (Check One) WHITE I YELLOW II YELLOW III
Label Affixed to Container

APPROVED BY J. L. Mumery SIGNATURE PERSON PREPARING SHIPMENT Phil Manley SIGNATURE

CONDITION OF EQUIPMENT _____ NOTE ANY PHYSICAL OR OPERATING DISCREPANCY

REMARKS: _____

SURVEY READINGS AND LEAK TEST DATA

AT SURFACE OF SHIPPING CONTAINER 2 MR/HR AT 1 METER 0.5 MR/HR
MAXIMUM

LEAK TEST DATE 6-4-79 LEAK TEST DUE DATE _____

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PITTSBURGH TESTING LABORATORY

FORM RR-11
REV. 3-22-76

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RADIOACTIVE MATERIAL TRANSFER REPORT

DATE 6-4-79

PTL BRANCH OR AUTHORIZED SUPPLIER MAKING SHIPMENT Honolulu Hawaii

RADIOISOTOPE Cesium 137 STRENGTH 4.8^{pm} c on June 1, 1965 CURIES
MILLICURIES
MICROCURIES

EXPOSURE DEVICE OR CONTAINER MODEL NUMBER (CHECK ONE)

Gamma Model _____ Survey Meter Model _____

PTL Model _____ Radionics Model _____ Source Changer Model _____

Other authorized unit (describe) lined steel lead box 12" x 12" x 10"

SERIAL NUMBER OF DEVICE OR SOURCE CHANGER H-2 CAPSULE SERIAL NUMBER P

TRANSFERRED TO Nuclear Engineering Co HOW SHIPPED _____
Richland Washington

REASON FOR TRANSFER DISPOSAL TRANSFER RELOAD

D.O.T. Radioactive (Check One) WHITE I YELLOW II YELLOW III
Label Affixed to Container

APPROVED BY JL Munnely SIGNATURE PERSON PREPARING SHIPMENT Phil Manley SIGNATURE

CONDITION OF EQUIPMENT _____
NOTE ANY PHYSICAL OR OPERATING DISCREPANCY

REMARKS: _____

SURVEY READINGS AND LEAK TEST DATA

AT SURFACE OF SHIPPING CONTAINER 2 MR/HR AT 1 METER 0.5 MR/HR
LEAK TEST DATE 6-4-79 LEAK TEST DUE DATE _____

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PITTSBURGH TESTING LABORATORY

FORM RR-11
REV. 3-22-76

ESTABLISHED 1881
PITTSBURGH, PA.

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RADIOACTIVE MATERIAL TRANSFER REPORT

DATE 6-5-79

PTL BRANCH OR AUTHORIZED SUPPLIER MAKING SHIPMENT Honolulu Hawaii

RADIOISOTOPE IR-192 STRENGTH unk. CURIES
MILLICURIES
MICROCURIES

EXPOSURE DEVICE OR CONTAINER MODEL NUMBER (CHECK ONE)

Gamma Model _____ Survey Meter Model _____

PTL Model _____ Radionics Model _____ Source Changer Model _____

Other authorized unit (describe) Model 489 Gamma Ray Projector
Max 10c Cap.

SERIAL NUMBER OF DEVICE OR SOURCE CHANGER 44 CAPSULE SERIAL NUMBER M20.93 ?

TRANSFERRED TO Richland Washington HOW SHIPPED _____

REASON FOR TRANSFER DISPOSAL TRANSFER RELOAD

D.O.T. Radioactive (Check One) WHITE I YELLOW II YELLOW III
Label Affixed to Container

APPROVED BY J. L. Muenchly SIGNATURE PERSON PREPARING SHIPMENT Phil Wenley SIGNATURE

CONDITION OF EQUIPMENT _____ NOTE ANY PHYSICAL OR OPERATING DISCREPANCY

REMARKS: _____

SURVEY READINGS AND LEAK TEST DATA

AT SURFACE OF SHIPPING CONTAINER 2 MR/HR AT 1 METER 0.15 MR/HR
MAXIMUM

LEAK TEST DATE 6-5-79 LEAK TEST DUE DATE _____

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LEAK TEST RECORD

FACILITY NAME <i>Pittsburgh Testing Laboratories</i>		
ADDRESS <i>2825 A Koapaka Street</i>		
CITY <i>Honolulu</i>	STATE <i>HI</i>	ZIP <i>96819</i>
SOURCE LOCATION <i>Source vault</i>		
SOURCE SERIAL NUMBER <i>M20.93</i>		ISOTOPE <i>Ir-192</i>
CALIBRATION OF SURVEY METER CALIBRATION SOURCE: SERIAL NUMBER: <i>NES-255</i> ISOTOPE <i>Cs-137</i> ACTIVITY: <i>0.038 uCi</i> ON <i>6-5-79</i> CORRECTION FACTOR: $K = \mu\text{Ci}/\text{CPM} = \underline{2 \times 10^{-6}}$ MINIMUM DETECTABLE ACTIVITY: $\text{MDA} = 100K = \underline{0.0002 \mu\text{Ci}}$		
WIPE LOCATION	MEASURED COUNT RATE (BKG. SUBTRACTED)	ACTIVITY*
<i>Source container</i>	<i><100 cpm</i>	<i><MDA</i>
<i>Z</i>		
*ACCURACY OF RESULTS: 100% AT MDA, 12% AT 0.005 μCi		
THIS LEAK TEST HAS BEEN PERFORMED IN ACCORDANCE WITH NRC APPROVED PROCEDURES ON FILE UNDER NRC LICENSE 53-16847-01.		
PERFORMED BY <i>P. Manly</i>		DATE <i>6-5-79</i>



GAMMA CORPORATION

LEAK TEST RECORD

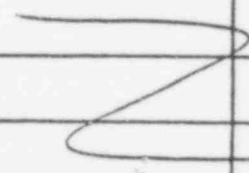
FACILITY NAME <i>Pittsburgh Testing Laboratories</i>		
ADDRESS <i>2825 A Koapuka Street</i>		
CITY <i>Honolulu</i>	STATE <i>HI</i>	ZIP <i>96819</i>
SOURCE LOCATION <i>Source vault</i>		
SOURCE SERIAL NUMBER <i>103</i>		ISOTOPE <i>Cs-137</i>
CALIBRATION OF SURVEY METER		
CALIBRATION SOURCE:		
SERIAL NUMBER: <i>NES-255</i> ISOTOPE <i>Cs-137</i>		
ACTIVITY: <i>0.038 uCi</i> ON <i>6-4-79</i>		
CORRECTION FACTOR: $K = \mu Ci / CPM =$ <i>2×10^{-6}</i>		
MINIMUM DETECTABLE ACTIVITY: $MDA = 100K =$ <i>$0.0002 \mu Ci$</i>		
WIPE LOCATION	MEASURED COUNT RATE (BKG. SUBTRACTED)	ACTIVITY**
<i>Source container</i>	<i>< 100 cpm</i>	<i>< MDA</i>
<i>[Signature]</i>		
*ACCURACY OF RESULTS: 100% AT MDA, 12% AT 0.035 μCi		
THIS LEAK TEST HAS BEEN PERFORMED IN ACCORDANCE WITH NRC APPROVED PROCEDURES ON FILE UNDER NRC LICENSE 53-16847-01.		
PERFORMED BY <i>PJ Manly</i>		DATE <i>6-4-79</i>



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688 323

LEAK TEST RECORD

FACILITY NAME <i>Pittsburgh Testing Laboratories</i>		
ADDRESS <i>2825 A Koapaka St</i>		
CITY <i>Honolulu</i>	STATE <i>HI</i>	ZIP <i>96819</i>
SOURCE LOCATION <i>Source Vault</i>		
SOURCE SERIAL NUMBER <i>102</i>		ISOTOPE <i>Cs-137</i>
CALIBRATION OF SURVEY METER		
CALIBRATION SOURCE:		
SERIAL NUMBER: <i>NES-255</i> ISOTOPE <i>Cs-137</i>		
ACTIVITY: <i>0.038 uCi</i> ON <i>6-4-79</i>		
CORRECTION FACTOR: $K = \mu Ci / CPM =$ <i>2×10^{-6}</i>		
MINIMUM DETECTABLE ACTIVITY: $MDA = 100K =$ <i>$0.0002 \mu Ci$</i>		
WIPE LOCATION	MEASURED COUNT RATE (BKG. SUBTRACTED)	ACTIVITY*
<i>Source container</i>	<i>< 100 cpm</i>	<i>< MDA</i>
		
*ACCURACY OF RESULTS: 100% AT MDA, 12% AT 0.005 μCi		
THIS LEAK TEST HAS BEEN PERFORMED IN ACCORDANCE WITH NRC APPROVED PROCEDURES ON FILE UNDER NRC LICENSE 53-16847-01.		
PERFORMED BY <i>P. Manly</i>		DATE <i>6-4-79</i>



GAMMA CORPORATION

688 324

P.O. Box 146
Morehead, Kentucky 40351
(606) 784-6611

P.O. Box 158
Sheffield, Illinois 61361
(815) 454-2624



NUCLEAR ENGINEERING COMPANY, INC.
P.O. Box 7246 • Louisville, Kentucky 40207
(502) 426-7160

Western Operations Headquarters
 P.O. Box 180
San Ramon, California 94583
(415) 837-1861

P.O. Box 578
Battley, Nevada 89003
San Ramon (415) 837-1561

P.O. Box 638
Richland, Washington 99362
San Ramon (415) 837-1561

RADIOACTIVE SHIPMENT AND DISPOSAL RECORD

No. 46387

Please complete this form for each shipment and distribute as marked.

CUSTOMER Pittsburgh Testing Laboratories DATE 6-5-79 Page 1 of 1 Pages
ADDRESS 2825A Koaopuka Street Honolulu HI CARRIER Honolulu Freight
MATERIAL DESCRIPTION sealed sources CONTAINER DESCRIPTION DOT 17H 55 gal drums

Item No.	Cubic Feet	Weight of Container	Gallons Liquid	Physical State	Chemical Form	mRem/hr @ surface	mRem/hr @ 3 ft.	Isotopes	Transport Groups	By-Product (milliCuries)	Source Kilograms	SNM grams	Label Used			
1	7.5	350 lb	-	solid	-	2	0.5	Cs-137, Ir-192	III	3500	-	-	II			
2	7.5	300 lb	-	solid	-	2	0.5	Cs-137	III	3500	-	-	II			
CERTIFICATION																
THIS IS TO CERTIFY THAT I HAVE READ AND UNDERSTAND THE REQUIREMENTS OF LICENSE #12-11-001-01 ISSUED TO NUCLEAR ENGINEERING COMPANY, INC. (NEC) BY THE NEVADA DEPARTMENT OF HRMAN. RESOURCES FOR THE RECEIPT AND DISPOSAL OF RADIOACTIVE MATERIALS AT PARTY NEVADA AS DESCRIBED IN PARAGRAPHS 5118, 5119, 5115, 5116, 5161 AND 5162 OF THE NEVADA REGULATIONS AND I FURTHER CERTIFY THAT THE MATERIALS IN THIS SHIPMENT ARE IN CONFORMITY WITH THOSE REQUIREMENTS.																
CUSTOMER _____																
BY <u>PJ Manly</u> TITLE <u>CHP</u>																
DATE <u>6-5-79</u>																
15.0	650 lb	-	TOTALS	TOTALS										7000	-	-

This is to certify that the above named articles 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. It is also certified that the articles are in compliance with all regulations applicable at the designated disposal site.

CUSTOMER COPY
Date 6-5-79 Authorized Signature PJ Manly Title Certified Nuclear Physicist

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