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# Texas Department of Health

Robert Bernstein, M.D., F.A.C.P.  
Commissioner

1100 West 49th Street  
Austin, Texas 78756  
(512) 458-7111

Robert A. MacLean, M.D.  
Deputy Commissioner  
Professional Services  
Hermas L. Miller  
Deputy Commissioner  
Management and Administration

March 30, 1983

Robert J. Doda  
State Agreements Program, Region IV  
U. S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 1000  
Arlington, Texas 76012

Dear Bob:

Enclosed you should find a copy of Russ Meyer's investigation at Gulf Nuclear concerning the New York shipping incident. If you have any questions, please call.

Sincerely,

John R. Haygood, Administrator  
Radioactive Materials Branch  
Compliance and Inspection  
Bureau of Radiation Control  
(512) 835-7000

Enclosure

*Sent to Moya Campbell  
4-25-83*

8502120102 840726  
PDR FOIA  
HOLMES84-529 PDR

TEXAS DEPARTMENT OF HEALTH  
AUSTIN TEXAS  
INTER-OFFICE

JH-BIP 26

THRU: Richard A. Batliff, P.E., Director  
Division of Compliance and Inspection  
Files

FROM Charles R. Meyer TO

SUBJECT Complaint from N.R.C. - Gulf Nuclear - License #11-2995.

On March 7, 1983, Nolan Perry and I met with Mr. C. P. Hopcraft to inquire about a complaint filed with the Agency thru the NRC. The complaint stated that Gulf Nuclear had shipped a 200 Ci Ir-192 radiography source which had exceeded the levels of radiation that the D.O.T. allows for transport of radioactive materials. Mr. Hopcraft verified that Gulf Nuclear had received the empty source changer and verified the shielding problem and returned the source changer to the manufacturer for repair. Mr. Hopcraft stated that, since that incident, Gulf Nuclear has instituted a program to verify that each depleted uranium casting did provide adequate shielding by placing a source (strength unspecified) in each camera, prior to pouring in their epoxy filler. He stated that those castings, which failed would be returned to the manufacturer for repair.

I then asked how the repair would be accomplished. He stated the manufacturer would drill or cut out the area where shielding was inadequate and then epoxy a "plug" of solid depleted uranium in its place, presumably in a fashion that does not result in a further loss of shielding. (see attachment).

Violations:

TRCR Section 21.401(d)

Records of surveys required to establish compliance with this section did not uniquely identify the survey instrument used.

TRCR Section 41.100

Radiation levels at the surface of and at three feet from the surface of the container used to ship sealed source Serial No. 6864 (200 Ci of Ir-192) were found to be in excess of those allowed by 49CFR 173.393(1).

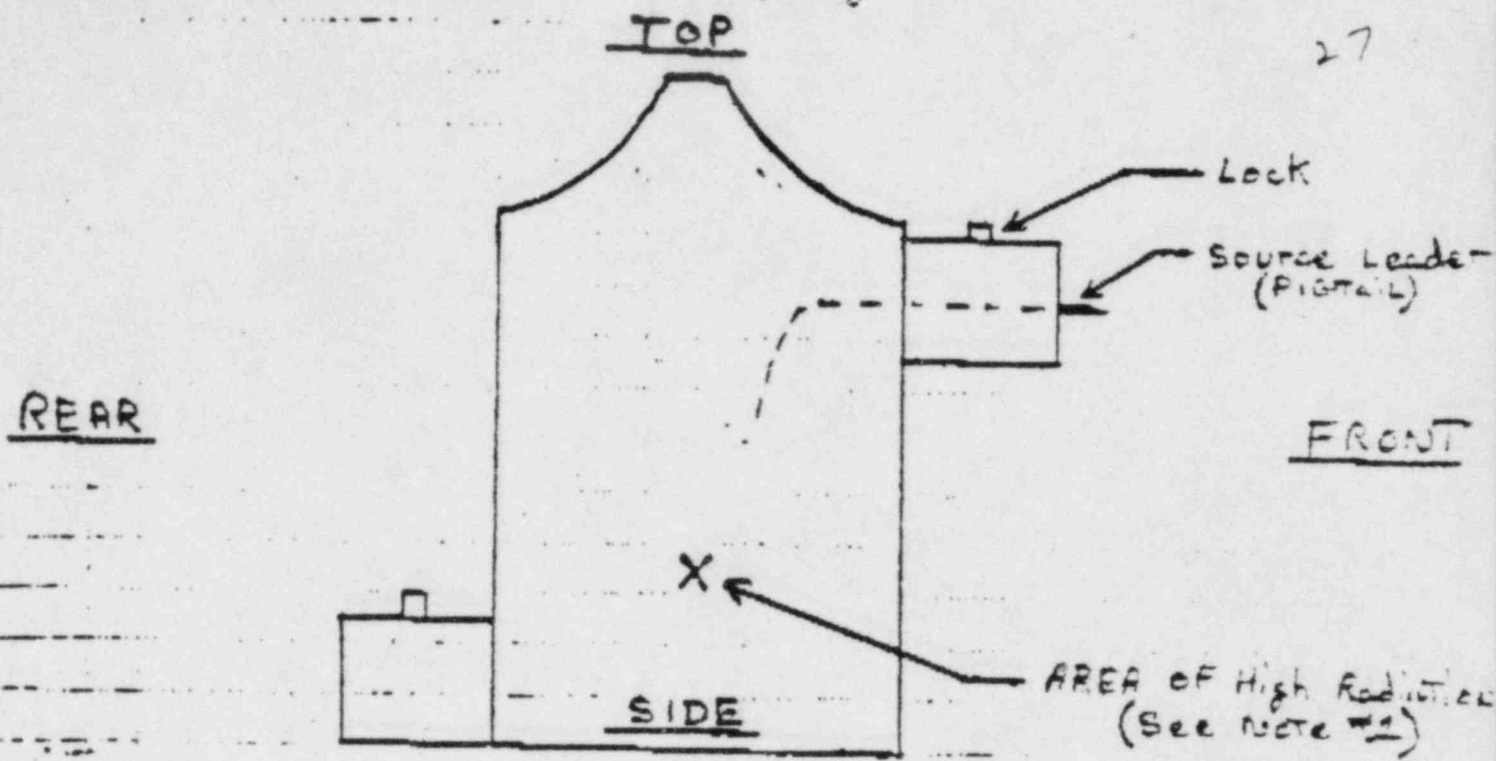
SIGNED Charles R. Meyer  
DATE March 24, 1983

GULF NUCLEAR  
 model U110A Shipping Container

DATE: 1-26-

1/26/83

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NOTE #1: AREA OF HOT SPOT IS APPROX. 1/2" IN DIAMETER ON SURFACE OF SHIPPING CONTAINER. BEAM SPREAD EQUATED ABOUT 3" AT A DISTANCE OF 3' FROM THE CONTAINER.

Survey Readings

Tance	From Overpack (AS Received)		Shipping Container (Removed Overpack)	
	HOT SPOT (max)	Other areas (max)	HOT SPOT (max)	Other Areas
Direct	Greater Than 1R	15 mR	Greater Than 1R	160 mR
6"	950 mR	2 mR	Greater Than 1R	20 mR
3'	100 mR	1 mR	150 mR	8 mR

Surveys Taken By: AF [signature]

# Radiation Survey Log Sheet

ROUTINE  
 SPECIAL

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Survey No.  
**N 74099**

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Date  
**1/27/83**

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Time  
**1300-1700**

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RWP No.

---

Air Sample Log Sheet No.

818-108 M 9-87

LOCATION Rx Bldg EL 251 N. Hall @  
Source Storage Area

INSTRUMENTS USED #      # 25412 # 1097 # 159 # 40

Culie Pie    Teletector    ~~Idytec~~    ~~Naic~~    R-5

SMEARS USED         Paper Towel         Atomic Wipe    2 Disc

DESCRIPTION OF SURVEY RADIATION AND CONTAMINATION SURVEY OF 200E  
SOURCE FOR SOURCE LEAK TEST AND DOSE RATE OF PIG  
WITH SOURCE INSIDE PIG

SURVEY CONDITIONS, RESULTS, AND REMARKS

FOUND:

SOURCE LEAK TEST: 2 SMEARS TAKEN

	* 1	* 2
ALPHA -	1 cpm	1 cpm
BETA -	85.6 cpm	97 cpm

$$\# \text{ mCi} = \left[ \frac{4.5 \times 10^{-7} \text{ mCi / cpm}}{\text{CF}} \right] (\text{NET cpm})$$

# mCi  $\beta$ -X SMEARABLE =  $2.78 \times 10^{-6}$  mCi < 0.001 mCi

# mCi  $\alpha$  SMEARABLE =  $7.79 \times 10^{-7}$  mCi < 0.001 mCi

**GULF NUCLEAR, INC.**

202 MEDICAL CENTER BLVD. WEBSTER, TEXAS 77598 (713) 332-3581

UNDATED

**PACKING SLIP**

29

ST. NO.  
142800

ORDER # 6256

INVOICE NUMBER	INVOICE DATE
H39822	

**BILL TO:**

NUCLEAR ENERGY SERVICES, INC  
SHELTER ROCK ROAD  
DANBURY, CT 06810

**SHIP TO:**

N.E.S.  
C/O-NIAGARA MOHAWK POWER CORP.  
9 MILE POINT UNIT 1, LAKE ROAD  
SCRIBA, NY 13093  
ATTN: R. ZIEBER

SHIPPED VIA	TERMS	ORDER DATE	TAKEN BY	CUSTOMER P.O. #	DATE SHIPPED
FEDERAL	NET 30 DAYS	1/24/83	PAGE	N31543	

SPECIAL INSTRUCTIONS: \_\_\_\_\_ PAGE 1

QTY ORDERED	QTY SHIPPED	DESCRIPTION	QTY BACK ORD.	DISC	EXTENDED AMOUNT
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1		1 RG-13 200 CI IRIDIUM-192 SOURCE S/N-6864	0		
---	--	---	---	--	--

*1 Drum*

SUB-TOTAL

FRT. IN | FRT. OUT

FREIGHT TOTAL

SALES TAX

TOTAL

\*\*\*\*\* RADIATION INSPECTION RECORD \*\*\*\*\*

PRINCIPAL RADIOACTIVE CONTENT *IR-192*

GROUP *III* ACTIVITY OF CONTENTS *200* MC

RADIATION AT SURFACE OF PACKAGE *170* MR

RADIATION ONE YARD FROM PACKAGE *7.0m* MF



GULF NUCLEAR, INC.

202 MEDICAL CENTER BLVD. WEBSTER, TEXAS 77598 (713) 332-3581

February 24, 1983

Mr. Lewis Calvisino  
State of New York  
Department of Labor  
Division of Safety and Health  
Radiological Health Unit  
Two World Trade Center  
New York, New York 10047

Dear Mr. Calvisino:

Please accept this letter as a follow-up for the evaluating of a source changer that had a hot spot at the Nine Mile Point Unit #1 Nuclear Generating Station in Oswego, New York on January 26, 1983.

This changer, Model U-110A S/N-13 was received here on February 22, and the following test was performed:

- (1) A 100 Curie Ir-192 source was placed in the locked position.
- (2) Using a Victoreen 592B survey meter readings were taken around the changer.
- (3) Approximately 2 inches from the bottom in the middle of the changer on one side a high radiation area was detected.

Since a major overhaul is needed to correct this deficiency, the changer, S/N-13, has been removed from our shipping inventory and returned to manufacturing.

I hope this information is beneficial to you and that something of this nature does not occur due to Gulf Nuclear, Inc. If I can be of further assistance to you, please let me know.

Respectfully,

*C.P. Hopcraft*  
C.P. Hopcraft,  
Vice President

cc: Otis Gamble  
Dr. Roy Parker  
Edward Leach  
Ms. Myu Cambell

CPH/bpq

March 30, 1983

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-IV-83-10B

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by NRC staff on this date.

FACILITY: Gulf Nuclear, Inc.  
Webster, Texas  
(Texas Agreement  
State Licensee)

Licensee Emergency Classification:  
 Notification of Unusual Event  
 Alert  
 Site Area Emergency  
 General Emergency  
 Not Applicable

SUBJECT: EXPOSURE TO AMERICIUM-241

This is to provide an update on the americium-241 exposure incident involving Gulf Nuclear, inc., a Texas licensee.

On March 25, 1983, the licensee filed a lawsuit against the Texas Health Department (and Department officials) for improperly suspending Gulf Nuclear's radioactive materials license on March 21, 1983. (Under Texas law, a license may not be suspended until after a hearing is held.) The State corrected this technicality on March 28, 1983, by issuing an emergency order to cease radioactive material handling operations at the Webster facility.

Also, on March 28, 1983, the Texas Attorney General filed a lawsuit asking for fines of \$25,000 for each violation and for each day of violation. Violations cited in the suit included: (1) shipments of radioactive materials on commercial passenger flights to Mexico during 1980 and 1981, (2) cesium-137 soil contamination within the Webster facility, and (3) possession of radioactive material in excess of that allowed in the license. The Attorney General has "closed" the licensee's files at the Bureau of Radiation Control while any litigation is pending.

There continues to be strong media interest concerning this matter.

CONTACT: R. J. Doda, RIV 728-8139

DISTRIBUTION:

H. ST.	MNBB	Phillips	E/W	Willste	MAIL:
Chmn PaTadino	EDO	NRR	IE	NM'S	DOT: Trans Only
Comm. Gilinsky	PA		OIA	RES	DMB (Original)
Comm. Ahearne	MPA		AEOD		INPO
Comm. Roberts	ELD				NSAC
Comm. Asselstine					

SECY  
ACRS  
CA  
PDR Regions: \_\_\_\_\_  
Air Rights  
SP

Licensee: \_\_\_\_\_  
(Reactor Licensees)

SAP	TPB	PAC	DV	RA-RIV
RJDoda/nh	GDBrown	CEWisner	RLBangart	JCollins
3/29/83	3/30/83	3/ /83	3/4/83	3/30/83

8304040235

3/30 faxed to Comm. for dispatch 8.43