



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

APR 20 1994

Docket: 030-32304
License: 43-27362-01

Met-Chem Testing Laboratories
of Utah, Inc.
ATTN: Wayne Hansen, President
369 West Gregson Avenue
Salt Lake City, Utah 84115-3440

SUBJECT: RESPONSE TO NRC INSPECTION REPORT 030-32304/94-01

Thank you for your letter of April 12, 1994, in response to our letter and Notice of Violation dated March 15, 1994. We have reviewed your reply and find it responsive to the concerns raised in our Notice of Violation. We will review the implementation of your corrective actions during a future inspection to determine that full compliance has been achieved and will be maintained.

Sincerely,

Charles L. Cain

Charles L. Cain, Chief
Nuclear Materials Inspection Branch

cc:
Utah Radiation Control Program Director

268003

9404270049 940420
PDR ADOCK 03032304
C PDR

JE07

Met-Chem Testing Laboratories
of Utah, Inc.

-2-

bcc w/copy of licensee letter:
DMB - Original (IE-07)
LJCallan
SJCcollins
DDChamberlain
RAScarano
MMessier, OC/LFDCB (4503)
WLFisher
CLCain
GLGuerra
NMIB
MIS System
RIV Files (2)

RIV:NMIB	C:NMIB <i>the</i>			
GLGuerra <i>GLG</i>	CLCain			
04/20/94	04/20/94			

Met-Chem Testing Laboratories
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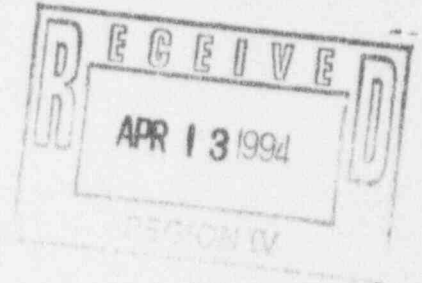
RIV:NMIB	C:NMIB <i>the</i>			
GLGuerra <i>GL</i>	CLCain			
04/20/94	04/00/94			



MET-CHEM TESTING LABORATORIES INC.
369 W. Gregson Ave. • Salt Lake City, Utah 84115-3440 • (801) 487-0801

April 12, 1994

Mr. Samuel J. Collins
Director
U.S. Nuclear Regulatory Commission
Division of Radiation Safety and Safeguards
Region IV
611 Ryan Plaza Drive - Suite 400
Arlington, Texas 76011-8064



Subject: Response to Notice of Violation #030-32304/94-01
License # 43-27362-01

Dear Mr. Collins:

VIOLATION A: 10 CFR 34.11(d)(1) requires, in part, that an applicant have an inspection program that requires the observation of the performance of each radiographer and radiographer's assistant during an actual radiographic operation at intervals not to exceed 3 months.

License Condition 18 incorporated the inspection program containing the requirements stated in 10 CFR 34.11(d)(1) as submitted in the licensee's application dated September 14, 1992 and the letter dated February 19, 1993, into license 43-27362-01.

Contrary to the above, the licensee had not observed the performance of radiographers and radiographer's assistants involved in radiographic operations at intervals not to exceed 3 months. For example, the performance of three radiographers had not been observed during the respective intervals of August 20, 1993 to January 14, 1994; August 20, 1993 to January 4, 1994; and September 10, 1993 to January 27, 1994. Each of these intervals were in excess of 3 months.

CAUSE: Due to the work load through December 1993 and January 1994, the above incidents were due to oversight.

CORRECTIVE ACTION: Enclosed is a copy of the radiographers/assistant radiographers recent performance observations (on-site reviews).

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94-0769

Mr. Samuel J. Collins
Nuclear Regulatory Commission
April 12, 1994
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FURTHER
ACTION:

After each on-site has been performed a copy will be inserted into the Assistant Radiation Safety Officer's monthly review book. At the start of each month she will pull the paperwork that needs to be taken care of for that month. If the on-site falls near the first of a month, it will be put in with the paperwork for the month before.

DATE FOR
COMPLIANCE:

Immediately

VIOLATION B:

10 CFR 71.5(a) requires that a licensee who transports licensed material outside of the confines of its plant or other place of use, or who delivers licensed material to a carrier for transport, comply with the applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation (DOT) in 49 CFR Parts 170 through 189.

49 CFR 172.403(c) defines the categories of labels to be applied to radioactive materials packages and requires, in part, that: (1) packages with a transport index (T.I.) less than or equal to 1.0 be labeled "Yellow-II" and (2) packages with a T.I. greater than 1.0 be labeled "Yellow-III".

Contrary to the above, between January 31 and February 26, 1994, the licensee transported outside the confines of its plant 100 curies of cobalt-60 in a package that was improperly labeled. Specifically, the package had a "Yellow-II" label and marked with a T.I. of 1 when a T.I. of 4 had been previously measured and also confirmed during the inspection. This package should have been labeled "Yellow-III".

CAUSE:

Miscommunication between the radiographer, who measured the shipping container and cobalt-60 camera after it was delivered to Met-Chem, and the Radiation Safety Officer. The Radiation Safety Officer thought the radiographer was talking about the camera itself and called Amersham at which time he was told the camera could be shipped in the crate which would make it a Yellow-II. However, it was the crate which should have been marked as Yellow-III.

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The radiographer who took the cobalt-60 out into the field should have also told the Radiation Safety Officer that the crate was improperly marked. However, when transporting the crated camera he measured the outside of the special trailer, our transport container for cobalt cameras, placing it in the Yellow-II category (see enclosed copy of his Utilization Log/Transportation Document).

CORRECTIVE
ACTION:

The proper stickers (Yellow-II) have been placed on our cobalt transport container (trailer) and the radiographers and assistant radiographers have been instructed to make sure these stickers are in place before transporting a cobalt camera.

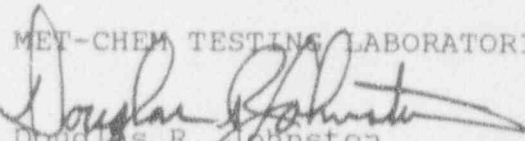
Radiographers and radiation safety personnel have also been re-instructed to report any discrepancy between radiation readings taken upon receipt of a radioactive source and those recorded by the shipper immediately to the Radiation Safety Officer and make sure he understands exactly what the discrepancy is.

FURTHER
ACTION:

The Radiation Safety Officer or Assistant Radiation Safety Officer will double check all paperwork on sources received to make sure all paperwork/sources from a supplier and internal paperwork are in compliance before transporting outside the confines of Met-Chem's plant.

DATE OF
COMPLIANCE: Immediately.

MET-CHEM TESTING LABORATORIES


Douglas R. Johnston
Vice President/General Manager

DRJ/sh
Enclosures



UTILIZATION INSPECTION AND DOSIMETER LOG No 20203

WEEK OF 1-31-94 TO 2-5-94
 CUSTOMER BARRICK Gold

TESTING LABORATORIES OF UTAH INC
 369 W Gregson Ave Salt Lake City, Ut 84115
 (801) 487-0801

STORAGE LOCATION: LAB STORAGE
 PORTABLE DARKROOM

DEVICE MAKE		DEVICE MODEL		DEVICE S/N		SOURCE MODEL		SOURCE S/N			
<u>Akersham Corp</u>		<u>680B</u>		<u>3118</u>		<u>424-14</u>		<u>2456</u>			
DATE	LOCATION	SHIPPING CONTAINER		SURVEY METER			RADIOGRAPHER ASSISTANT	DOSIMETER			
		TRANSPORT INDEX MR AT ONE METER	MR AT 6" 50 MR MAX.	MAKE	S/N	MCTL S/N		OUT*	IN	TOTAL**	
SUN											
MON											
TUE	<u>BARRICK Gold</u>	<u><1</u>	<u>#2</u>	<u>NDS Prod</u>	<u>1467</u>	<u>CO-4</u>	<u>B Fitzgerald</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
WED	<u>Barrick Gold</u>	<u><1</u>	<u>#2</u>	<u>ND 2000</u>	<u>3-94</u>	<u>100.7</u>	<u>B Anderson</u>	<u>0</u>	<u>10</u>	<u>10</u>	<u>0</u>
THUR	<u>Barrick Gold</u>	<u><1</u>	<u>#2</u>	<u>NDS</u>	<u>1467</u>	<u>CO-4</u>	<u>B FITZGERALD</u>	<u>0</u>	<u>10</u>	<u>10</u>	<u>0</u>
FRI				<u>NR 2000</u>	<u>3-10-94</u>	<u>100.7</u>	<u>B ANDERSON</u>	<u>0</u>	<u>10</u>	<u>10</u>	<u>0</u>
SAT											

INSPECTION OF EXPOSURE DEVICE

DAY	EXPOSURE DEVICE				CRANK ASSEMBLY				SOURCE TUBES				DRIVE CABLE & SOURCE CONN.				RADIOGRAPHER NAME		
	SURFACE RAD. MR/HR		LOCKS FITTINGS LABELS	SAFETY PLUGS & THREADS	LOOSE HARDWARE		FREEDOM OF MOVEMENT		THREADS	CLEAR OPENINGS		LOOSE FITTINGS		EXCESS WEAR		GOOD FIT			
	OUT	IN	OK	OK	YES	NO	YES	NO	OK	YES	NO	YES	NO	YES	NO	YES		NO	
SUN																			
MON																			
TUE	<u>75</u>	<u>75</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>B Anderson</u>
WED	<u>75</u>	<u>75</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>B Fitzgerald</u>
THUR	<u>75</u>	<u>75</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>B Fitzgerald</u>
FRI																			
SAT																			

PHYSICAL SURVEY OF RADIATION AREA

SUN	MON	TUE	WED	THUR	FRI	SAT	MR HR	FT	SC	SUN	MON	TUE	WED	THUR	FRI	SAT	MR HR	FT	SC
			<u>2</u>	<u>2</u>			<u>MR</u>						<u>2</u>	<u>2</u>			<u>MR</u>		
			<u>250'</u>	<u>250'</u>			<u>FT</u>						<u>200'</u>	<u>200'</u>			<u>FT</u>		
			<u>w FE 0</u>	<u>w FE 0</u>			<u>SC</u>						<u>w Pb FE 0</u>	<u>w Pb FE 0</u>			<u>SC</u>		
			<u>2</u>	<u>2</u>			<u>MR</u>						<u>2</u>	<u>2</u>			<u>MR</u>		
			<u>200'</u>	<u>200'</u>			<u>FT</u>						<u>200'</u>	<u>200'</u>			<u>FT</u>		
			<u>w FE 0</u>	<u>w FE 0</u>			<u>SC</u>						<u>w Pb FE 0</u>	<u>w Pb FE 0</u>			<u>SC</u>		

* Out starting point must be less than 10 MR
 ** If total is in excess of 50 MR complete other side.
 *** Surveys must be made and recorded each time locations or conditions change.
 SC = Shield code W = Tungsten FE = Steel C = Concrete PB = Lead D = Other

HAZARDOUS MATERIAL TRANSPORTATION DOCUMENTATION

THE FOLLOWING MUST BE COMPLETED AS REQUIRED PRIOR TO TRANSPORTING HAZARDOUS MATERIALS.

"A" MET-CHEM TESTING LABS
 369 WEST GREGSON AVE
 SALT LAKE CITY, UTAH 84115

"C" Converted Inn
 MOTEL ADDRESS (NAME)
100 Main Street
 (STREET)
Elko NV
 (CITY AND STATE)

"B" BARDICK Cold
 SITE ADDRESS (NAME)

 (STREET)
CARLEN NV
 (CITY AND STATE)

"D"
 SECOND SITE ADDRESS (NAME)

 (STREET)

 (CITY AND STATE)

(RQ) RADIOACTIVE MATERIALS, SPECIAL FORM, N.O.S., 7, UN2974
 USA/9035 /B(U) SHIPPING CONTAINER TYPE B
 RADIOACTIVE YELLOW II ~~ISOTOPE 192~~ / COBALT 60
 TRANSPORT INDEX (mR @ 1 meter) SHOWN BELOW
 EMERGENCY TELEPHONE NUMBER 801/487-0801

SUNDAY	_____ FROM _____ TO _____ TO _____	Surface Radiation of Shipping Container _____ mR
	DATE _____	Transport Index _____
	REMARKS _____	*CERTIFICATION SIGNATURE _____
MONDAY	_____ FROM _____ TO _____ TO _____	Surface Radiation of Shipping Container _____ mR
	DATE _____	Transport Index _____
	REMARKS _____	*CERTIFICATION SIGNATURE _____
TUESDAY	<u>2-1</u> FROM <u>A</u> TO <u>C</u> TO <u>B</u> TO _____	Surface Radiation of Shipping Container <u>.05</u> mR
	DATE _____	Transport Index <u>1</u>
	REMARKS _____	*CERTIFICATION SIGNATURE <u>Anderson</u>
WED.	<u>2-2</u> FROM <u>B</u> TO <u>C</u> TO _____ TO _____	Surface Radiation of Shipping Container <u>.05</u> mR
	DATE _____	Transport Index <u>2.1</u>
	REMARKS _____	*CERTIFICATION SIGNATURE <u>B. J. Hall</u>
THURS.	<u>2-3</u> FROM <u>C</u> TO <u>B</u> TO <u>A</u> TO _____	Surface Radiation of Shipping Container <u>.5</u> mR
	DATE _____	Transport Index <u>4</u>
	REMARKS _____	*CERTIFICATION SIGNATURE <u>B. J. Hall</u>
FRIDAY	_____ FROM _____ TO _____ TO _____	Surface Radiation of Shipping Container _____ mR
	DATE _____	Transport Index _____
	REMARKS _____	*CERTIFICATION SIGNATURE _____
SAT.	_____ FROM _____ TO _____ TO _____	Surface Radiation of Shipping Container _____ mR
	DATE _____	Transport Index _____
	REMARKS _____	*CERTIFICATION SIGNATURE _____

* 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.

EXCESSIVE EXPOSURE EXPLANATION

When 50 MR in one day is exceeded, you must complete this section and explain circumstances why exposure is 50MR or more. Explanation should include the work condition, shielding, etc. (Use additional paper if required).

DATE	MR RECEIVED	EXPLANATION