



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION IV

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

FEB 18 1994

Docket: 030-32190  
License: 49-27356-01

Western Industrial X-Ray Inspection  
Company, Inc.  
ATTN: Mr. Larry Wicks  
P.O. Box 468  
Evanston, Wyoming 82931-0468

SUBJECT: DOSE ASSESSMENT FOR RADIOGRAPHER'S ASSISTANT

This is in response to your letter dated January 25, 1994, which provided a dose assessment for a radiographer's assistant as a result of an incident on July 31, 1993. This also refers to a teleconference between Messrs. Charles L. Cain and Mark R. Shaffer of this office and your Mr. Larry Wicks on February 10, 1994.

In your letter you estimated the assistant's dose as 200 millirem as a result of the incident. As you know, recent NRC inspections conducted at your facility on January 4, 5, 11, 13, and 18, 1994, disclosed that the assistant's pocket dosimeter registered offscale and beyond its 200 mR range as a result of the incident. Therefore, as we discussed during the teleconference, we find that your estimate of 200 millirem is not reasonable given this fact. We hereby request that you perform a further assessment of the assistant's exposure and provide us with a supplemental written response. In your response you should clearly identify the assumptions you considered in making your dose calculations such as the potential duration of the exposure and the distance of the source from the individual.

Also mentioned during the teleconference was our plan to have our contractor conduct a cytogenetic study on a blood sample to be obtained from the assistant. This study will assist in estimating an upper bound for the assistant's radiation exposure.

Finally, the teleconference provided you a summary briefing in regard to the findings of our inspection. We will provide you with a written report of these findings at a later date.

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Western Industrial X-Ray  
Inspection Company, Inc.

Please provide your response within 30 days of the date of this letter. Any questions in regard to this letter may be referred to the undersigned at (817) 860-8186.

Sincerely,

*Charles L. Cain*

Charles L. Cain, Chief  
Nuclear Materials Inspection Branch

cc:  
Wyoming Radiation Control Program Director

Western Industrial X-Ray  
Inspection Company, Inc.

bcc:

DMB - Original (IE-07)  
LJCallan  
JMMontgomery  
DDChamberlain  
LWCamper  
WLBrown  
GFSanborn  
WLFisher  
CLCain  
MRShaffer  
JLieberman, OE (7 H5)  
JEGlenn, NMSS/IMAB (6 H3)  
NMIB Files  
RIV Files (2)

RIV:NMIB	C:NMIB	EO	D:DRSS <i>DRSS</i>	
MRShaffer*	CLCain*	GFSanborn*	DDChamberlain	
02/ /94	02/ /94	02/ /94	02/18/94	

\*previously concurred

Western Industrial X-Ray  
Inspection Company, Inc.

bcc:

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