

PDR

NOV 16 1989

License No. 50-17446-01

Testing Institute of Alaska  
2114 Railroad Avenue  
Anchorage, Alaska 99501

Attention: Mr. Donald M. Lockman  
President

Gentlemen:

Thank you for your letter dated October 9, 1989 informing us of the steps you have taken to correct items which we brought to your attention in our letter dated September 11, 1989. Your corrective actions will be verified during our next inspection.

We have no further questions at this time regarding the results of your investigation into the use of licensed material during July 1989 at the Tesoro Refinery, North Kenai, Alaska.

Your cooperation with us is appreciated.

Sincerely,

*Original Signed*

Robert J. Pate, Chief  
Nuclear Materials Safety and  
Safeguards Branch

bcc w/cy ltr dtd 10/9/89:  
Docket File  
G. Cook  
B. Faulkenberry  
J. Martin  
A. Johnson  
J. Zollicoffer  
State of Alaska

bcc w/o copy of ltr dated 10/9/89:  
M. Smith

REGION V *AK*  
DSkov/joan *DM* RThomas *RJP*  
11/1/89 *11/2/89* *11/6/89*

REQUEST COPY ] REQUEST COPY ] REQUEST COPY ]  
YES / NO ] YES / NO ] YES / NO ]

SEND TO PDR ]  
YES / NO ]

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# Testing Institute of Alaska, Inc.

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NRC  
REGION V  
2114 Railroad Avenue  
Anchorage, Alaska 99501  
(907) 276-3440  
Welding / Quality  
Inspection / Integrity

89 OCT 02 1989 12:34

United States  
Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D. C. 20555

Re: LICENSE NO. 50-17446-01  
DOCKET NO. 030-12770  
SUBJECT: RESPONSE TO LETTER OF ALLEGED VIOLATIONS OF NRC REQUIREMENTS

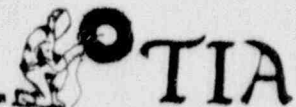
In your letter dated September 11, 1989 to the Testing Institute of Alaska, Inc., reference paragraph four: You wish a reply describing in particular those actions taken or planned to improve the effectiveness of our overall management control system.

The plans for a more effective management control system of the Testing Institute is to hire more personnel to be assigned to specific management control areas, and to raise the rates of our services to our customers to be able to afford the additional personnel. The additional personnel will be assigned the duties of checking over the report forms received from the radiographer for completeness, instruct field personnel of their requirements, and coordinate the timely events necessary for compliance with the NRC regulations.

In paragraph five, you relate concern about radiographic personnel being instructed to perform radiation level surveys of source guide tubes and the circumference of exposure devices following each exposure during radiography. The Testing Institute of Alaska will make definite efforts in instruction of these surveys, both in a letter form to each radiographer and assistant radiographer, and verbal instruction during our upgrading periodic training program.

In paragraph six, you have stated you were informed that during July 1989 at the Tesoro Refinery in North Kenai, Alaska, an individual was permitted to perform work associated with licensed activities without wearing the appropriate dosimetry, and high radiation areas were not posted with the required signs, and restricted areas were not maintained under adequate surveillance to protect against unauthorized entry.

In my investigation of these alleged violations, I have found no cause for the allegations except that a past employee was disgruntled over not being guaranteed a job with numerous hours at a high rate of pay. The individual I suspect of making these allegations is Bob Taylor who worked for the Testing Institute of Alaska a total of five days, all during the Tesoro Refinery inspection of Tank #66.



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On July 20, 1989, a three-man crew was dispatched from Anchorage to Kenai to perform several tests on Tank #66 at Tesoro's refinery in North Kenai. This tank was an existing large storage tank (approximately 85 feet in diameter) for fuel that required radiography of some old welds on the vertical plates of the tank walls, vacuum box tests, and magnetic particle tests of the floor welds.

The radiographer assigned to the radiography was Don Gilhousen. The crew assigned to the vacuum box and magnetic particle tests were Inspector Randy Denardi, with helper Robert Taylor. Don Gilhousen and Randy Denardi were assigned film badges and dosimeters as required, and Randy Denardi would assist Don Gilhousen as needed. Randy Denardi is also a qualified radiographer and both are long-time employees of the Testing Institute. Bob Taylor was not assigned a film badge or pocket dosimeter as he would not be working in any way associated with our licensed material. Bob Taylor worked with Randy Denardi, performing the vacuum box and magnetic particle tests during the two days of 7-20-89 and 7-21-89.

The sequence of events during those two days of inspection were as follows:

Don Gilhousen set up the radiographic film and location markers on the outside of the tank and then the radioactive source in position on the inside of the tank, while Randy Denardi and Bob Taylor performed the vacuum box and/or magnetic particle inspections on the floor welds on the inside of the tank. Don Gilhousen and Randy Denardi both stated that the proper signs were in place before any radiographic exposures were made. The proper signs were said to have been posted on the only entrance to the inside of the tank at the manways, and outside of the tank at the unrestricted areas. High radiation signs were posted at the proper locations, both outside and inside of the tank on the ladders needed to reach the locations being radiographed, as well as on the equipment bucket used to carry the small tools with the source.

When Don Gilhousen was set up and ready to make an exposure, he had Bob Taylor leave the tank with him, and Randy Denardi became Don Gilhousen's assistant, with Bob Taylor then being outside of the restricted area while the exposure was being made. Randy Denardi would crank out the source on the inside of the tank, monitoring the inside area, while Don Gilhousen would monitor the outside area. After Randy Denardi cranked the source back into the camera, locked and monitored the source, Bob Taylor was then permitted back into the tank to assist Randy Denardi in continuing the vacuum box and/or the magnetic particle inspections. At this point, Don Gilhousen is setting up the new radiographic film and repositioning the source for the next exposure, which was then conducted in a similar manner throughout those two days of inspection. At no time during those two days did Bob Taylor become involved with the usage of the licensed material.

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The following week Tesoro refinery requested more radiography be performed and two crews were requested for Tuesday, Wednesday and Thursday (7-25 through 7-27-89). A five man crew was dispatched to the Tesoro refinery to perform these additional radiography inspections. The crew consisted of three radiographers: Don Gilhousen, Randy Denardi and Steve Lockman, as well as two helpers, Robert Taylor and Bill Malay, all of whom were assigned film badges and pocket dosimeters. During these inspections the proper signs were again placed and proper monitoring of the radiation areas was performed. Each of the two sources were in the possession of qualified radiographers on the inside of the tank. The outside of the tank was monitored by a qualified radiographer with the additional assistance of the two helpers outside of the restricted areas.

The need for this many people was due to the added height of the welds to be inspected as ladders were used and the helpers held the ladders while the radiographers repositioned the film and sources. The Tesoro refinery required this work be performed at night while no other workers were in the area, and also provided two-way radios to each of our employees so they all would be in direct communication with each other to prevent any occurrence of an accident. Enclosed are copies of the Inspector's Daily Diaries, copies of inspection reports and copies of the utilization logs for these days. In my investigation I found no irregularities or violations.

In response to Appendix "A" - Notice of Violation:

Item A:

1. The reason this violation occurred is due to the radiographer's use of two survey meters. One was placed on the opposite side of the source tube and camera, and the other was carried by the radiographer. The radiographer felt the survey of the area immediately opposite on both sides of the source and source tube was sufficient to comply with the requirements of the survey.
2. To correct any further mistakes in interpretation of the survey requirements, instruction has been given to all radiographers and assistants that a complete survey of the entire length of the source tube and the entire circumference of the exposure device will be made after each exposure.
3. Future instruction will be given similar to that which has been given in this matter.
4. Full compliance has been achieved.

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## ITEM B:

1. The survey in this instance was made but not properly recorded.
2. The entry has been made from the notes of the survey.
3. A better control on recordings is being planned for the near future.
4. Additional personnel have been hired to begin work on 10-9-89 and full compliance has been achieved.

## ITEM C:

1. An error was made by not entering the transportation index due to an oversight.
2. A reprimand has been given to the radiographer who failed to enter the T.I. He stated he will not make this error in the future.
3. The management control system has been changed to keep this from occurring.
4. Full compliance has been achieved.

## ITEM D:

1. The lack of registration was due to an oversight of not being aware of the requirements.
2. The registration, in accordance with 10CFR 71.12 (c) (3) is being complied with.
3. Future need for registration will be performed in a timely manner.
4. The date of full compliance will be when we receive confirmation back from the director that he has received our registration and acknowledges compliance.

If any further information is needed, please advise.

Respectfully submitted,



Donald M. Lockman  
Radiation Safety Officer

DML:rd/encls.

cc: United States Nuclear Regulatory Commission  
Regional Administrator  
Robert R. Pate, Chief  
Nuclear Materials Safety and Safeguards Branch  
Region V  
1450 Maria Lane, Suite 210  
Walnut Creek, CA 94596