

May 18, 1994

Mr. Walter J. Pasciak
Industrial Applications Section
United States Nuclear Regulatory Commission
Region 1
475 Allendale Road
King of Prussia, PA 19406-1415

Dear Mr. Pasciak:

Reply to a Notice of Violation

This letter is in response to the Notice of Violation we received following an inspection by Steve Shaffer and Richard Ladun of your office. This inspection occurred on April 19, 1994 and was conducted after we notified your office of a radiation exposure incident that occurred at our plant on April 11, 1994.

Your notice of violation identifies three apparent violations to which we provide the following response:

- A. . . . , the licensee did not ensure that services performed on a device possessed pursuant to a general license was performed in accordance with the instructions provided on the labels or by a person holding a specific license pursuant to 10 CFR Parts 30 and 32 or from an agreement state to perform such activities. Specifically the Kay-Ray Model 7063P gauge was removed by Eljer personnel, who were not trained, qualified or specifically licensed to perform such activities.

The reason for this violation can be attributed a number of factors. The Kay-Ray system involved in this incident was the only such piece of equipment in the plant. At the time of installation, 1988, a very few people in the plant were ever exposed to any sort of training or orientation regarding the equipment, the radiation source and the associated hazard. Installation was performed by Kay-Ray. The system, used to monitor the specific gravity, of a clay slurry being pumped through a pipe, was installed and used only for a short time. For production purposes other means of determining the specific gravity were preferred. The system was left in place and annually the shutter test and leak test were performed by GTS Instrument Services of Pittsburgh, PA.

As the equipment was not being used Eljer determined that it should be removed and disposed of. Contact was made with Adco Services, Inc. who disposed of radiation source used by Kay-Ray for the type of radiation source used by Kay-Ray were closing and disposal at this time would be advisable. Eljer were closing and proceeded to process the paperwork provided by Adco for the disposal of the radiation source.

When all of the paperwork had been completed Adco and Eljer agreed on the date that the source was to be picked up at the plant for transport to the disposal site. During discussions with Adco personnel Eljer was told that Eljer personnel could remove the radiation source and that the housing shutter could be closed before removal was undertaken.

At this point a maintenance staff remove order was generated to have the plant maintenance staff request the removal did not proceed to the maintenance source nor did they proceed, as a safety precaution, to close the shutter and lock it out. The Safety Department, aware of the radiation source that did not follow the work order through the operation made that a work order was performed. Assumptions were made that the maintenance department was aware of the radiation source and the requirement to remove the lock out. The radiation department proceeded to remove the equipment housing or without shutter installed on the equipment. On April 11, 1994, employee familiar with the equipment was transported to the shutter had been removed and locked.

At this point the persons requesting the removal did not indicate a radiation source nor did they proceed, as a safety precaution, to close the shutter and lock it out. The Safety Department, aware of the radiation source that did not follow the work order through the operation made that a work order was performed. Assumptions were made that the maintenance department was aware of the radiation source and the requirement to remove the lock out. The radiation department proceeded to remove the equipment housing or without shutter installed on the equipment. On April 11, 1994, employee familiar with the equipment was transported to the shutter had been removed and locked.

After recognizing the situation the employee and Safety Department. The shutter was closed and a consultant was notified of the situation. The radiologist at the Armstrong County Health Department immediately visited the plant and to investigate the situation and to determine if there was any exposure to the employees involved. The your office was notified of the situation.

As the equipment was not being used Eljer determined that it should be removed and disposed of. Contact was made with Adco Services, Inc. who informed Eljer that disposal sites for the type of radiation source used by Kay-Ray were closing and disposal at this time would be advisable. Eljer proceeded to process the paperwork provided by Adco for the disposal of the radiation source.

When all of the paperwork had been completed Adco and Eljer agreed on the date that the source was to be picked up at the plant for transport to the disposal site. During discussions with Adco personnel Eljer was told that Eljer personnel could remove the radiation source and that the housing shutter needed to be closed before removal was undertaken.

At this point a maintenance work order was generated to have the plant maintenance staff remove the equipment.

At this point the persons requesting the removal did not indicate to the maintenance department that the equipment contained a radiation source nor did they proceed, as a safety precaution, to close the shutter and lock it out. The Safety Department, aware of the radiation source and that a work order had been processed for removal of the source, did not follow the work order through the operation to insure that the lock out was performed. Assumptions were made that the maintenance department was aware of the radiation source and the requirement to lock out. The maintenance department proceeded to remove the equipment without recognizing the labeling on the source housing or the shutter lock out handle. The equipment was removed from its installed location on April 11, 1994, and transported to the maintenance shop. On April 12, 1994, employee familiar with the nature of the equipment recognized that the shutter had not been closed and locked.

Immediately after recognizing the situation the employee notified the Safety Department. The shutter was closed and locked.

The company medical consultant was notified of the situation and he in turn notified a radiologist at the Armstrong County Memorial Hospital. The radiologist immediately visited the plant to perform an investigation of the situation and to determine the extent of exposure to the employees involved. During this investigation the your office was notified of the incident.

Reoccurrences of the incident are not possible as the unit here involved was the only radiation source in use in the plant. It has now been removed from the premises and properly disposed of through Adco Services. No future installation of such equipment is anticipated.

- B. the licensed material, the gauge, was being stored on a pallet in the licensee's maintenance shop. The gauge was not locked to the pallet or secured in any other manner that would prevent unauthorized removal.

The Source was placed on the pallet when the maintenance personnel completed removal the equipment. When the shutter was discovered to be open and subsequently closed and locked, questions as to the severity of the situation lead Eljer to take a hands-off approach. Relocating the housing and locking it in a secure area was discussed and it was decided to leave it on the pallet in the maintenance shop where it could be seen and its presence verified.

During the investigation by NRC personnel on April 19, 1994 Eljer was informed of the requirement for isolating the housing source and securing it to prevent unauthorized removal. While the NRC personnel were present on April 19, 1994 the housing was placed in an unused locker in the maintenance shop. The locker was secured with a padlock and a hazard sign was posted.

This action was deemed by NRC personnel to satisfy the requirements of this standard. Complete compliance was achieved on April 19, 1994.

Further violations are not possible as this unit was the only radiation source in the plant. It has been removed from the plant. The purchase and use of similar devices is not anticipated.

Full compliance was achieved on April 19, 1994.

- C. the licensee had not posted the area around the pallet on which the licensed material was being stored. The gauge contained 500 millicuries of cesium-137, an amount in excess of 10 times the quantity specified in appendix C to 20.1001-20.2401.

As with Violation B above ignorance of the situation and requirements prompted Eljer to let well enough alone. At this time the housing shutter was closed and locked. The housing had been checked by a local radiologist who determined that the unit was "safe" and there was no leakage.

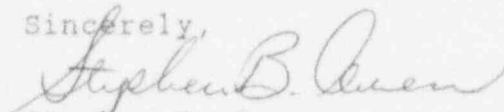
During the investigation by NRC personnel on April 19, 1994, Eljer was informed of this requirement for posting the area around the source housing. The NRC personnel instructed Eljer personnel in the proper way to post the area. When the housing was placed in the locker as described above a radiation label was placed on the door of the locker. This action was accomplished on April 19, 1994.

Future repeat occurrences of this violations will not happen as this unit was the only one in the Eljer facility and it has now been removed.

Full compliance of this requirement was achieved on April 19, 1994.

The cesium-137 source was removed from the Eljer maintenance shop by Adco Services, Inc. on April 26, 1994. This was the only radiation source in the plant. There are no plans to introduce similar devices into the plant in the future.

Sincerely,



Stephen B. Owen
Plant Engineer/Safety Director

cc: NRC, Wash.
File
C. Wachenhuth
P. DeSocio