

February 12, 1990

Docket No. 030-29882
License No. 37-28004-01
EA 90-12

TEI Analytical Services, Inc.
ATTN: Mr. Gary Weiss
Radiation Safety Officer
Post Office Box 534
Washington, Pennsylvania 15301

Gentlemen:

Subject: NOTICE OF VIOLATION
(NRC Inspection No. 90-001)

This letter refers to the NRC inspection conducted on January 4, 1990 at your facility in Washington, Pennsylvania, and continued in the Region I office on January 17-18, 1990 upon receipt and review of information sent to us with your letter dated January 9, 1990. The inspection report was sent to you on January 22, 1990. The inspection was conducted to review the circumstances associated with a violation of NRC requirements which occurred during the performance of radiography activities at a temporary field site in Gould City, Michigan in December 1989. The violation involved a radiation exposure of 36.27 rems to the palm of the right hand of a radiographer's assistant, an amount in excess of the regulatory limit. The violation was promptly identified by your staff, and promptly investigated and reported to the NRC. During the inspection, other violations of NRC requirements were identified. The violations are described in the enclosed Notice of Violation (Notice). On January 25, 1990, an enforcement conference was conducted with you and a member of your staff to discuss the violations, their causes, and your corrective actions.

The exposure occurred when the radiographer's assistant used his right hand to disconnect the guide tube from the radiography device. At the time, the source was located in the guide tube approximately five inches from the device. The assistant apparently believed that the source was in the fully retracted position since he had cranked the source to a position where he thought it was fully stopped, and was able to actuate the lock on the device, which under normal conditions, can only occur when the source is fully retracted. It is possible the environmental and operating conditions that existed may have contributed to this occurrence.

Notwithstanding the possibility of other contributing factors, the NRC is concerned that the overexposure primarily occurred because the assistant did not perform an adequate survey, as required, prior to disconnecting the guide tube. The survey was inadequate in that it did not include the entire circumference of the device nor the guide tube to verify that the sealed source was

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in the shielded position. This violation, which is set forth in Section I.B of the enclosed Notice, is also of particular concern to the NRC because Information Notices had been issued in the past to all radiography licensees concerning, in part, the importance of proper conduct of radiography activities, including the performance of adequate surveys of the device and guide tube (Reference: Information Notice (IN) 84-45: "Recent Serious Violations of NRC Requirements by Radiography Licensees," IN 87-45: "Recent Safety-Related Violations of NRC Requirements by Industrial Radiography Licensees," and IN 88-66: "Industrial Radiography Inspection and Enforcement").

The NRC recognizes that the enforcement history at your facility has been good, as evidenced by the fact that only one violation was identified during the previous two NRC inspections of your license in 1988 and 1989. The NRC also acknowledges the prompt response by the individual in immediately reporting this incident to you (the Radiation Safety Officer, (RSO)), and the prompt actions by you in investigating and reporting the incident and initiating corrective actions (including retaining a consultant to evaluate the event in particular, and the radiation safety program in general). Nonetheless, this incident represents a significant performance failure by the radiographer's assistant during the conduct of licensed radiographic activities, and demonstrates the importance of all of your employees strictly adhering to all regulatory requirements in the future to ensure these activities are conducted safely.

The violations associated with this overexposure have been classified in the aggregate at Severity Level III in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (Enforcement Policy) (1989), because they involve a radiation exposure in excess of the regulatory limit. A civil penalty is normally considered for a Severity Level III violation or problem. However, after consultation with the Director, Office of Enforcement, I have decided that a civil penalty will not be proposed in this case because the escalation and mitigation factors set forth in the Enforcement Policy, allow the total mitigation of the base civil penalty. After reviewing the factors in the Enforcement Policy, the NRC determined that a partial basis existed for 50% escalation of the penalty because of the prior notice provided by the NRC in the Information Notices; however, this was fully mitigated because your prior enforcement history has been good, your corrective actions were prompt and extensive, and you promptly reported this self disclosing event to the NRC. The other factors in the policy were considered and no further adjustment was deemed appropriate.

Another violation identified during this inspection is described in Section II of the Notice and is classified at Severity Level IV.

You are required to respond to this letter and the enclosed Notice, and should follow the instructions specified in the Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further action is needed to ensure compliance with regulatory requirements. Furthermore,

we emphasize that any recurrent violation of the terms of the license in the future may result in more significant enforcement action, such as civil penalties, or modification, suspension or revocation of your license. Therefore, you should reiterate to your employees the importance of strict adherence to all requirements, including the need to perform adequate surveys.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are now subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Sincerely,

Original Signed By
WILLIAM T. RUSSELL
William T. Russell
Regional Administrator

Enclosure:
Notice of Violation

cc w/encl:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
Commonwealth of Pennsylvania

bcc w/encl:
 Region I Docket Room (w/concurrences)
 SECY
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 H. Thompson, DECS
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 from OE
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