

28 JUL 1981

✓ Docket No. 30-7022

Radiation Technology, Incorporated  
ATTN: Martin A. Welt, Ph.D.  
President  
Lake Denmark Road  
Rockaway, New Jersey 07866

Gentlemen:

Subject: Inspection No. 30-7022/81-01

This refers to the routine safety inspection conducted by Messrs. F. Costello, C. Rowe, and R. Shepherd of this office on April 2, 9, 21 and 22, 1981 of activities authorized by NRC License No. 29-13613-02, and to the telephone conversation between Mr. R. Buckley of your staff and Mr. F. Costello on June 10, 1981 and June 25, 1981, and to the discussions of our findings held by Mr. Costello with yourself at the conclusion of the inspection.

The inspection was an examination of activities conducted under your license as they relate to radiation safety and to compliance with the Commission's rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, measurements made by the inspector, and observations by the inspector.

Based on the results of this inspection, it appears that certain of your activities were not conducted in full compliance with NRC requirements, as set forth in the Notice of Violation, enclosed herewith as Appendix A. These items of noncompliance have been categorized into the levels described in the Federal Register Notice (45 FR 66754) dated October 7, 1980. You are required to respond to this letter and in responding should follow the instructions in Appendix A. This notice is sent to you pursuant to the provisions of Section 2.201 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations. We note that items A and B in the Notice of Violation were corrected prior to the completion of our inspection and therefore, no response with respect to these matters is required.

During discussions at the conclusions of the inspection, Mr. Costello noted that the most recent pH and conductivity values for the R&D pool were outside the specifications included with your November 18, 1970 letter. Please review the operation of your water treatment system to determine the cause of the apparent low pH and high conductivity in your R&D pool. We will review this matter during our next inspection.

TIB <i>FMC</i>	TIB <i>FMC</i>	E&I <i>RS</i>	DE&TI <i>FMC</i>	DE&TI <i>LD</i>	DE&TI	E&I
Costello/wb	Rowe	Shepherd	Kinneman	Joyner	T. Martin	Carlson
7/13/81	7/13/81	7/14/81	7/13/81	7/12/81	7/23/81	7/25/81

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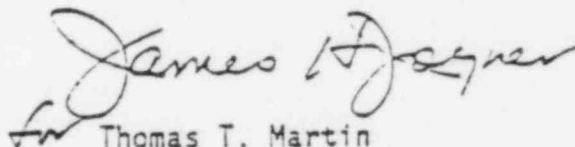
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28 JUL 1981

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and the enclosures will be placed in the NRC's Public Document Room. If this report contains any information that you (or your contractors) believe to be exempt from disclosure under 10 CFR 9.5(a)(4), it is necessary that you (a) notify this office by telephone within ten (10) days from the date of this letter of your intention to file a request for withholding; and (b) submit within 25 days from the date of this letter a written application to this office to withhold such information. Consistent with section 2.790(b)(1), any such application must be accompanied by an affidavit executed by the owner of the information which identifies the document or part sought to be withheld, and which contains a full statement of the reasons on the basis which it is claimed that the information should be withheld from public disclosure. This section further requires the statement to address with specificity the considerations listed in 10 CFR 2.790(b)(4). The information sought to be withheld shall be incorporated as far as possible into a separate part of the affidavit. If we do not hear from you in this regard within the specified periods noted above, the report will be placed in the Public Document Room. The telephone notification of your intent to request withholding, or any request for an extension of the 10 day period which you believe necessary, should be made to the Supervisor, Files, Mail and Records, USNRC Region I, at (215) 337-6223.

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

  
for Thomas T. Martin  
Director, Division of  
Engineering and Technical  
Inspection

Enclosures:

1. Appendix A, Notice of Violation
2. Office of Inspection and Enforcement Inspection  
Report Number 30-7022/81-01

bcc w/encls:

Region I Document Room (with concurrences)  
Chief, Operational Support Section (w/o encls)

cc:

Public Document Room (PDR)  
Nuclear Safety Information Center (NSIC)  
State of New Jersey

~~ENCLOSURES TRANSMITTED HEREWITH  
CONTAIN 10 CFR 2.790 INFORMATION~~

APPENDIX A

NOTICE OF VIOLATION

Radiation Technology, Incorporated  
Rockaway, New Jersey 07866

Docket No.: 30-7022  
License No.: 29-13613-02

As a result of the inspection conducted on April 2, 9, 21 and 22, 1981, and in accordance with the Interim Enforcement Policy, 45 FR 66754 (October 7, 1980), the following violations were identified:

- A. 10 CFR 20.203(c)(6)(viii) requires, in part, that each area in which there may exist radiation levels in excess of 500 rems in one hour at one meter from a sealed radioactive source that is used to irradiate materials have exit portals for processed materials equipped to detect and signal the presence of loose radiation sources that are carried toward such an exit and to automatically prevent such loose sources from being carried out of the area.

Contrary to this requirement, as of the date of the inspection, April 2, 1981, while in the continuous mode, you have been operating your sealed source irradiator which causes radiation levels to exist in excess of 500 rems per hour at one meter, without having the exit portal equipped as required.

This is a Severity Level IV Violation.

- B. Condition 20 of License No. 29-13613-02 authorizes the operation of the product conveyor system in a continuous mode under the direct supervision of, and in the physical presence of, the Radiation Safety Officer, as incident to testing of the conveyor interlock system.

Condition 16 of License No. 29-13613-02 requires that licensed materials be used in accordance with the statements, representatives and procedures contained in the application dated August 25, 1970 and October 12, 1977 and certain referenced letters. Your letter dated October 28, 1975 identifies Martin A. Welt as a Radiation Protection Officer. Your application dated October 12, 1977 identifies Robert Buckley as the Radiation Safety Officer.

Contrary to these requirements, as of the date of the inspection, April 2, 1981, you have operated the product conveyor system in a continuous mode under the direct supervision of an individual other than the individuals identified in your October 28, 1975 and October 12, 1977 correspondence.

This is a Severity Level V Violation.

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- C. Condition 8 of License No. 29-13613-02 limits your possession of cobalt-60 to a total of 782,200 curies in your AECL Type IR-47 irradiation unit and the R&D pool.

Contrary to this requirement, as of April 13, 1981, you possessed curies of cobalt-60 in your AECL Type IR-47 irradiation unit and in the R&D pool.

This is a Severity Level V Violation.

Pursuant to the provisions of 10 CFR 2.201, Radiation Technology Incorporated is hereby required to submit to this office within thirty days of the date of this Notice, a written statement or explanation in reply, including: (1) the corrective steps which have been taken and the results achieved; (2) corrective steps which will be taken to avoid further violations; and (3) the date when full compliance will be achieved. Under the authority of Section 182 of the Atomic Energy Act of 1954, as amended, this response shall be submitted under oath or affirmation.

The responses directed by this Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

Dated 28 JUL 1981

*James H. [Signature]*  
for Thomas T. Martin, Director  
Division of Engineering and  
Technical Inspection