



**PITTSBURGH APPLIED RESEARCH CORPORATION**

UNIVERSITY OF PITTSBURGH APPLIED RESEARCH CENTER  
100 William Pitt Way • Pittsburgh, PA 15238 • 412-826-5000

Telex 5106019265

Facsimile 412-826-5009

RICHARD G. JEWELL  
President

412-826-5146

October 25, 1990  
License No. 37-28394-01  
File No. FR-16

United States Nuclear Regulatory Commission  
Region I  
475 Allendale Road  
King of Prussia, PA 19406  
Atten. John D. Kinneman, Chief  
Nuclear Materials Safety Section B  
Division of Radiation Safety and Safeguards

Re: Routine Inspection No. 030-31207/90-001

Gentlemen:

We have received your letter (attached), regarding your inspection of our activities, and are furnishing this response in accordance with your instructions.

Wipe Sample Analyses

A radioactivity measurement laboratory has been set up at the University of Pittsburgh Applied Research Center. The laboratory is under the direction of Dr. Donald Rhodes who has his consulting practice at the Research Center and who has been hired by Pittsburgh Applied Research Corporation as the site Radiological Safety Officer. This laboratory is equipped with instrumentation for the analysis of a complete range of alpha-, beta-, and gamma-emitting radionuclides. The laboratory was put into operation on October 10, 1990.

All wipe samples for leak tests of sealed radioactive sources and for the evaluation of radioactive contamination are currently being analyzed in this laboratory.

Disposal of Radioactive Material in Sewerage System

Our Radiation Protection Procedures for Radioactive Material, submitted as Attachment 10E of our application for License No. 37-28394-01, require written authorization by the Radiological Safety Officer for the disposal of

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radioactive material in the sanitary sewerage system. The purpose of this requirement is to assure that calculations of concentrations are made prior to any release in order to demonstrate compliance with the provisions of 10CFR, Part 20.303. At the time of your inspection, the release of radioactive material into the sanitary sewerage system had not yet been authorized.

On October 11, 1990 authorization was provided to personnel in the Chemical Fate Laboratory to dispose in sewerage up to 30 microcuries of carbon-14, in water soluble form, during the remainder of 1990. In conjunction with this authorization, calculations of concentrations were made to assure compliance with 10CFR, 20.303.

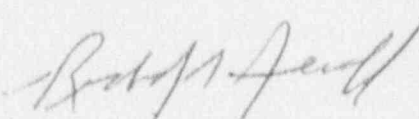
#### Training

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In accordance with your request, we confirm that training will be provided to users of licensed radioactive material covering the procedures and requirements specific to our NRC license.

As part of this program, training was provided to users of radioactive material on October 3, 1990. This training included the presentation of information on radiation and radioactivity in general, a description of radiation units and units of radioactivity and procedures for the procurement, use, and disposal of radioactive material. Training was also provided on contamination control and general radiological safety measures.

We trust this fulfills the requirements of your letter. Please let us know if you have any questions or need additional information.

Sincerely,

  
Richard G. Jewell,  
President

In duplicate



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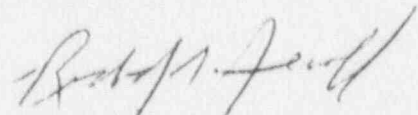
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Richard G. Jewell,  
President

In duplicate



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PENNSYLVANIA 19406

OCT 09 1990

Docket No. 030-31207

License No. 37-28394-01

Pittsburgh Applied Research Corporation  
ATTN: Richard G. Jewell  
President  
100 William Pitt Way  
Pittsburgh, Pennsylvania 15238

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OCT 1 1990

PITTSBURGH APPLIED  
RESEARCH CORPORATION

Gentlemen:

Subject: Routine Inspection No. 030-31207/90-001

On September 18, 1990, Mark C. Roberts of this office conducted a routine safety inspection at the above address of activities authorized by the above listed NRC license. The inspection was an examination of your licensed activities as they relate to radiation safety and to compliance with the Commission's regulations and the license conditions. The inspection consisted of observations by the inspector, interviews with personnel, and a selective examination of representative records. The findings of the inspection were discussed with Dr. Donald Rhodes at the conclusion of the inspection.

Based on the results of this inspection, it appears that your activities were not conducted in full compliance with NRC requirements. A Notice of Violation is enclosed as Appendix A and categorizes each violation by severity level in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (Enforcement Policy). You are required to respond to this letter and in preparing your response, you should follow the instructions in Appendix A.

Based on discussions at the conclusion of the inspection, we understand that, since your facility has a specific license of its own and is no longer under the license of the University of Pittsburgh, you will confirm the previous calculations for disposal of licensed material by release to the sanitary sewer system. We further understand that although radiological safety training was provided to workers under the University of Pittsburgh license, individuals currently utilizing licensed material will be trained on the specific license material procurement and waste disposal requirements of this new license. Please confirm these understandings in your reply to this letter.

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 your reply will be placed in the Public Document Room.

The responses directed by this letter and the accompanying 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.

~~9011010020 (2)~~

Pittsburgh Applied Research Corporation 2

Your cooperation with us is appreciated.

Sincerely,

*John M. Cottell*  
for John D. Kinneman, Chief  
Nuclear Materials Safety Section B  
Division of Radiation Safety  
and Safeguards

Enclosure:  
Appendix A, Notice of Violation

cc:  
Public Document Room (PDR)  
Nuclear Safety Information Center (NSIC)  
Commonwealth of Pennsylvania  
Donald Rhodes, Radiation Safety Officer



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
476 ALLENDALE ROAD  
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~~9011010020~~ (20)

Pittsburgh Applied Research Corporation 2

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Sincerely,

*fr* *James M. Costello*  
John D. Kinneman, Chief  
Nuclear Materials Safety Section B  
Division of Radiation Safety  
and Safeguards

Enclosure:  
Appendix A, Notice of Violation

cc:  
Public Document Room (PDR)  
Nuclear Safety Information Center (NSIC)  
Commonwealth of Pennsylvania  
Donald Rhodes, Radiation Safety Officer



APPENDIX A  
NOTICE OF VIOLATION

Pittsburgh Applied Research Center  
Pittsburgh, Pennsylvania 15238

Docket No. 030-31207  
License No. 37-28394-01

As a result of the inspection conducted on September 18, 1990, and in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (Enforcement Policy) (1990), the following violation was identified:

Condition 10 of License No. 37-28394-01 limits the use of licensed material to the licensee's facility at the University of Pittsburgh Applied Research Center, 100 William Pittway, Pittsburgh, Pennsylvania and Condition 13D of License No. 37-28394-01 authorizes leak tests to be performed by the licensee or by persons specifically licensed by the Commission or an Agreement State to perform such services.

Contrary to the above, as of September 18, 1990, leak tests of sealed sources possessed under License No. 37-28394-01 were routinely evaluated at the Radiation Safety Officer's office in his home in Plum Boro, Pennsylvania. This location of use is not authorized under license 37-28394-01, nor does the Radiation Safety Officer possess a specific license to perform leak test services at this location.

This is a Severity Level IV violation. (Supplement IV)

Pursuant to the provisions of 10 CFR 2.201, the Pittsburgh Applied Research Center is hereby required to submit to this office within thirty days of the date of the letter which transmitted 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. Where good cause is shown, consideration will be given to extending this response time.

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APPENDIX A  
NOTICE OF VIOLATION

Pittsburgh Applied Research Center  
Pittsburgh, Pennsylvania 15238

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~~9011010023 (IP)~~

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