

JAN 13 1985

Docket No. 30-04041

License No. 12-00622-07

MEMORANDUM FOR: William D. Axelson, Chief, Nuclear Materials Safety and Safeguards Branch, Region III

FROM: James H. Joyner, Chief, Nuclear Materials and Safeguards Branch, Region I

SUBJECT: ASSIST INSPECTION - MAGNAFLUX CORPORATION

Enclosed are a proposed Notice of Violation, an inspection report and draft field notes and Form 766 for inspection of the subject licensee at the Trevoise, Pennsylvania, Branch Office on October 17, 1984, an Alpha, New Jersey, field site on October 18, 1984, and an Indiana, Pennsylvania, field site on September 7, 1984. Five violations were identified during the inspection.

Original Signed By:
James H. Joyner

James H. Joyner, Chief, Nuclear Materials and Safeguards Branch, Division of Engineering and Technical Programs

Enclosures:

1. Proposed Notice of Violation
2. Region I Report No. 30-04041/84-XX
3. Draft Field Notes
4. Form 766

bcc w/encls:
Region I Docket Room (with concurrences)

RI:DETP
Joyner/ms

1/14/85

RI:DETP
Kinneman

T&V /84
1/8/85

OFFICIAL RECORD COPY

30-04041/84-01 - 0001.0.0
12/26/84

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NMS LIC30
12-00622-07 PDR

RETURN ORIGINAL TO
REGION I

IE:07

APPENDIX A
NOTICE OF VIOLATION

Magnaflux Corporation
Chicago, Illinois 60656

Docket No. 30-04041
License No. 12-00622-07

As a result of the inspections conducted on September 7, 1984 and October 17-18, 1984, and in accordance with the NRC Enforcement Policy (10 CFR 2, Appendix C), the following violations were identified:

- A. 10 CFR 34.29(b) requires that each entrance used for personnel access to the high radiation area in a permanent radiographic installation have both visible and audible signals to warn of the presence of radiation. The visible signal must be actuated by radiation whenever the source is exposed and the audible signal must be actuated when an attempt is made to enter the installation while the source is exposed.

Contrary to the above, on October 17, 1984, the permanent radiographic installation located in the licensee's Trevose, Pennsylvania, facility did not have the required warning signals. In Room #1, the audible signal was not operable and, in Room #2, both the audible and visual signal could be defeated by switching a switch to the off position.

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

- B. 10 CFR 34.41 requires that during each radiographic operation, the radiographer or radiographer's assistant maintain direct surveillance of the operation to protect against unauthorized entry into a high radiation area.

Contrary to the above, on October 18, 1984, at a field site in Alpha, New Jersey, direct surveillance over a radiographic operation was not maintained.

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

- C. 10 CFR 34.43(b) requires that a physical radiation survey be made after each radiographic exposure to determine that the sealed source has been returned to its shielded position. The entire circumference of the radiographic exposure device must be surveyed and, if the device has a source guide tube, the survey must include the entire length of the guide tube.

Contrary to the above, on October 17, 1984, a radiographer at the Trevose, Pennsylvania, facility failed to perform a survey that was adequate to determine that the sealed source had returned to its shielded position. A survey which was intended to meet this requirement was performed, but was

inadequate in that it did not include the entire circumference of the exposure device and the entire length of guide tube.

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

- D. 10 CFR 34.33(c) requires that pocket dosimeters be checked at intervals not to exceed one year for correct response to radiation. Acceptable dosimeters must read within plus or minus 30 percent of the true radiation exposure.

Contrary to the above, as of October 17, 1984, pocket dosimeters used at the Trevoise, Pennsylvania, facility were not determined to read within plus or minus 30% of the true radiation exposure when checked with an X-ray beam.

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

- E. 10 CFR 34.33(a) requires that pocket dosimeters be recharged at the start of each shift.

Contrary to the above, as of September 7, 1984, pocket dosimeters used at the Indiana, Pennsylvania, field site were not recharged at the start of each shift.

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

Pursuant to the provisions of 10 CFR 2.201, Magnaflux Corporation 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.

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 30-04041/84-XX

Docket No. 30-04041

License No. 12-00622-07

Priority I

Category C

Licensee: Magnaflux Quality Services
A Division of Magnaflux Corporation
7300 West Lawrence Avenue
Chicago, Illinois 60656

Facility Name: Magnaflux Quality Services

Inspection At: Indiana, Pennsylvania, Field Site

Inspection Conducted: September 7, 1984

Inspector: R. H. Ladun
R. H. Ladun

1-2-85
date

Approved by: John D. Kinneman
John D. Kinneman, Chief, Nuclear Materials
Section A, Nuclear Materials and
Safeguards Branch

1/8/85
date

Inspection Summary:

Inspection conducted on September 7, 1984 (Report No. 30-04041/84-XX)

Areas Inspected: Routine, announced inspection which was limited to a review of radiation safety procedures at a radiography field site in western Pennsylvania and a review of related records. The inspection was initiated during regular working hours and involved 3 hours on site by a regional-based inspector.

Results: One apparent violation was found - violation, failure to recharge pocket dosimeter at start of shift.

DETAILS

1. Persons Contacted

- *J. Metrovich, Manager, Magnaflux Corporation (Peabody Testing Service)
- *A. Dilts, Radiographer
- *W. Goodwin, Supervisory Radiographer
- *J. Metrovich, Radiographer Helper

*Denotes those present at the exit interview.

2. Background

Licensee initiated radiography operations at the Keystone Fossil Fuel Electric Generating Station (located near Indiana, Pennsylvania) on July 3, 1984. Radiography operations were being conducted during the day shift and were expected to last approximately 15 weeks. Two radiographers and a helper were assigned to the facility and one iridium-192 source (93 curie) was being used.

3. Radiation Protection Procedures

The inspector observed radiographic operations in the pump well house. The licensee's operating procedures were followed in accordance with the manual entitled "Radiation Safety and Control Program Operating and Emergency Procedures."

No violations were identified.

4. Personnel Radiation Protection - External

Observations by the inspector determined that each radiographer and helper wore a film badge and dosimeter. However, discussions with a radiographer indicated that he did not recharge the dosimeter at the start of each shift as required by 10 CFR 34.33(a). The individual explained that he recharged it whenever it read near half-scale.

Failure to recharge a pocket dosimeter at the start of each work shift is a violation of 10 CFR 34.33(a).

5. Survey Records

The inspector reviewed Radiation Safety Survey Reports (Magnaflux Form 30.22) for the months of August and September 1984. Forms were complete and indicated that each radiographer and assistant had recorded his daily dosimeter readings.

The licensee uses the R. S. Landauer, Jr., film badge service. Licensee representatives stated that the badges are turned in for processing biweekly.

No violations were identified.

6. Instruments

The inspector observed that two calibrated survey instruments were available for use at this field site. Both meters were fully operable at the time of the inspection.

No violations were identified.

7. Exit Interview

The inspector met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection. The inspector explained the scope of the inspection and identified the violation. The representatives advised that immediate corrective actions would be taken. The inspector advised that the results of the inspection would be forwarded to Region III for their evaluation and transmittal.

LICENSE NO: 12-00622-07

DOCKET NO. (s) 030-04041

PAGE OF

ATTACHED

- ☐ Appendix A
☐ Appendix B
☐ Appendix C
☐ Memo

INSPECTION REPORT NO. 84-XX

Magnaflux Quality Service
Scottsville Industrial Park
270 Andrews Road / Trevous, Pa. 19047

LICENSEE CONTACT: Dan Deavers

Telephone No: 215-322-4100

LICENSE NO: 12-00622-07

CATEGORY C1

PRIORITY: I

CATEGORY

PRIORITY:

CATEGORY

PRIORITY:

INSPECTION DATE (s): 10-17-84 Trevous

TYPE OF INSPECTION:

10-18-84 Field site

(G.J. Oliver Co, Alpha, New Jersey)

- ☐ SPECIAL ☐ ANNOUNCED
☒ ROUTINE ☒ UNANNOUNCED
☒ DAYSHIFT
☐ OTHER

SUMMARY OF FINDINGS AND ACTION

- ☐ NO NONCOMPLIANCE, CLEAR 591 ISSUED
☐ NO NONCOMPLIANCE, LETTER
☒ NONCOMPLIANCE, APPENDIX A

- ☐ ACTION ON PREVIOUS NONCOMPLIANCE, APPENDIX B
☐ NONCOMPLIANCE, 591 ISSUED
☐ SUPPLEMENTAL INFO, APPENDIX C

RECOMMENDATIONS
SEE BASIS IN APPENDIX C

- ☐ CHANGE CATEGORY TO:
☐ NEXT INSPECTION DATE:

- ☐ CHANGE PRIORITY TO:

PERSONS CONTACTED

We Lanagan, Mgr Trevous Office
D. Deavers, RSM & radiographer
R. Wick, radiographer
J. Bastardi, radiographer

INSPECTOR: J Davis / J McFadden

APPROVED: J Costello for 11-1-84

INSPECTION PLAN AND REPORT NUMBER _____ Page _____ of _____

Plan Approved: _____ Date: _____

Licensee: _____ License No. _____

Inspection Items	Scheduled for Inspection	Post Inspection Status	Module No.
Management Meeting - Entrance and Exit Interviews (Required)	✓	✓	307038
Program Requirements, (Fixed Site) MC 2830 (Required)	✓	✓	757108
Program Requirements, (Field Site) MC 2830 (Required)	✓	✓	757208
Followup on Noncompliance and Diviations	Clear 82-01 Inspection		927028
Independent Inspection Effort (Required)	✓	✓	927068
Transportation	✓	✓	867408

AREAS INSPECTED AND FINDINGS

Licensee: _____ License No: _____ Amendment No: _____

INSPECTION ITEM	CRITERIA	FINDING
1. <u>Management Control Systems</u>	Lic Cond <u>16</u>	<u>C</u>
Structure of organization as described in requirements?		
Scope of operations? (no. of sources, no. of radiographers, frequency of operation?)		
NOTES & REMARKS: Structure of organization remains the same since the last inspection. There are 13 radiographers and 1 assistant radiographer (0 trainee). Using 5 Iridium exposure devices (3 in Trevous, 1 at Salem, 1 at Oyster Creek) and 3 cobalt exposure devices in Trevous.		
2. <u>Training and Qualification of Personnel</u>	Lic Cond <u>16</u>	<u>C</u>
Training and retraining conducted as required?		
Written & oral exams conducted? Examination results reviewed by management?		
Instructions to workers per 19.127		
Supervision of radiographers assistants?		
NOTES & REMARKS: Inspectors reviewed training records. Record was complete and indicated that each radiographer passed a test and practical exam.		
3. <u>Licensee Internal Audits</u>	Lic Cond <u>16</u>	<u>C</u>
Scope and frequency of audits as required?		
Conducted by appropriate persons? Records maintained?		
Reviewed by management? Deficiencies identified & corrected?		
NOTES & REMARKS: RSO performs audits each quarter on the radiographers.		
4. <u>Inspection and Maintenance</u>	Lic Cond <u>16</u>	<u>C</u>
Program implemented? Cover devices and storage containers?		
Procedures implemented?		
Records maintained? Reviewed by management?		
NOTES & REMARKS: Inspector reviewed the records of the quarterly maintenance reports for the period June 82 to October 84. No problems were noted.		

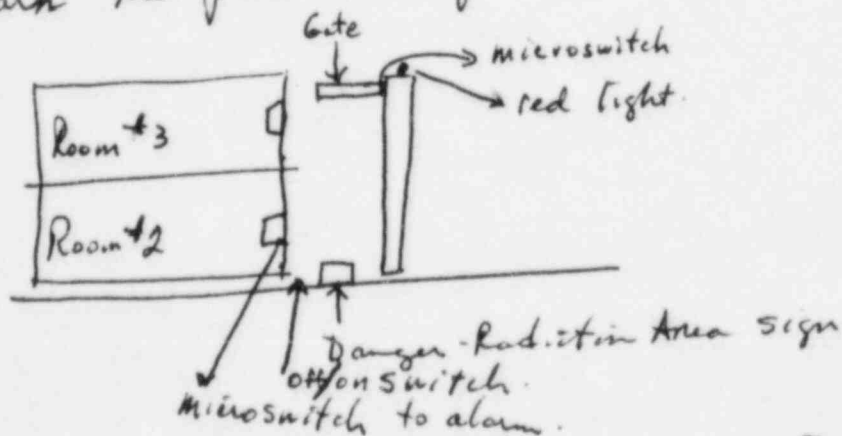
AREAS INSPECTED AND FINDINGS

Licensee: _____ License No: _____ Amendment No: _____

INSPECTION ITEM	CRITERIA	FINDING
5. <u>Operating & Emergency Procedures; Regulations</u>		<u>C</u>
Parts 19, 20, 34 and operating & emergency procedures furnished radiographers & assistants?	34.31(a)(2)	
Utilization log maintained? Contain required information? <i>OK</i>	34.27	
Quarterly inventories conducted? Contain required information? <i>OK</i>	34.26	
NOTES & REMARKS: <i>The inspector selectively review the utilization logs and quarterly inventories from June 82 thru October 84.</i>		
6. <u>Uses of Materials, Facilities and Equipment</u>		<u>S.L. IV</u>
Procurement and use as required? <i>OK</i>	Lic Cond <u>16</u>	
Facility as required by license? Access & controls as required?	Lic Cond <u>16</u> , 20.203(c)(2), 20.203(c)(3)	
Alarm devices & interlocks functioning?	34.29	
Devices locked? Devices & storage containers secured? Keys or access controlled?	34.22, 34.23, 20.207	
Field operations authorized? Access controlled and areas posted? <i>No</i>		
Survey meters calibrated & operable? Calibrated at 3-month intervals? 2-1000 mr/hr range?	34.24, 34.43	
Special equipment (shields, collimators) used as required?	Lic Cond <u>16</u>	
NOTES & REMARKS: <i>See other side</i>		
7. <u>Personnel Monitoring Control</u>		<u>C</u>
Each individual have badge & dosimeter? Dosimeter range 0-200 mr? Read and charged daily? Records maintained?	34.33	
Exposure records (NRC-4 or -5) maintained? Available for employee review?	34.33(a)	
Annual report to NRC? Termination reports to NRC?	20.102(b), 20.401(a)	
Reports to individuals?	20.407, 20.408	
Overexposures?	19.13	
	20.403, 20.405	
NOTES & REMARKS: <i>Each radiographer at the field site had a film badge and a pocket dosimeter (0-200 mr) which was zeroed prior to beginning of the shift. Exposure records were reviewed by the inspectors. No overexposures were detected. Reports were made to individual and the NRC</i>		

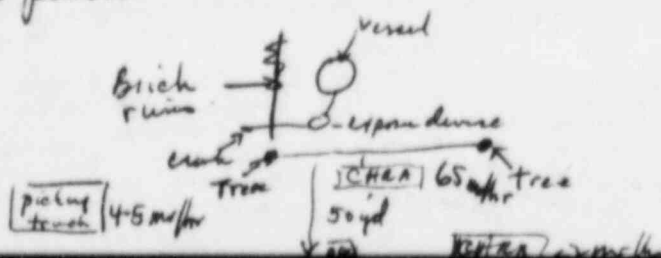
In Room #1 where ~~most of~~ the Co60 shots are taken they have a shield room with a Gammalarm. Have a red light outside room that is activated by radiation. The audible signal was not working when the door was opened. This interlock stopped working on Oct 11, 1984. (No work is planned for this room as of Oct 17, 1984.) They were shooting between 8AM and 330PM on 10/11/84. Sometime around 1PM Alarm stopped. Finished job at 330PM. No work in that Room since that time.

In Room #2 where Ir-192 shots are taken, they have an off-on switch which is connected to a gammalarm. If the switch is not activated then the alarm is bypassed. They have a 1/2-1" Diameter red light to warn the presence of radiation near a gate entrance.



At a Field site (G.L. Oliver Co, Alpha, N.J.) ~~on Oct 18, 1984~~ ~~at the field~~ two radiographers were radiographing vessels outside on the company property. They were using a collimator. One side had a rope barrier. 65 mR/hr was measured by the instrument at this barrier. About 200 feet in front of the rope barrier they had (7) Caution High Radiation signs on the ground.

Both the radiographers waited at their pick up truck during the exposures. While in this position, they could not observe the exposure area or if a person entered the high radiation area from the other side.



AREAS INSPECTED AND FINDINGS

Licensee: _____ License No: _____ Amendment No: _____

INSPECTION ITEM	CRITERIA	FINDING
8. <u>Leak Tests</u>	34.25	<u>C</u>

Performed by authorized persons & method?

Performed at 6-month intervals?

Records maintained? Any leaking sources?
Reports submitted?

NOTES & REMARKS:

Records of leak tests were reviewed between June 1982 to Oct 1984.
All sources were leak tested for returned to the mfg for
replacement. The inspector reviewed the May 9, 1983 report of L/T exceeding 0.005 uCi.
The source was L/T again and analyzed by another licensee. It is believed
that the contamination stems from the source wrapper which SL TV
was returned to the manufacturer.

9. <u>Surveys</u>	
Surveys conducted? Adequate?	20.201, 34.43(b) & (c)
Survey records maintained?	20.401(b), 34.43(c)
Radiation levels in unrestricted areas?	20.105

NOTES & REMARKS:

Records of surveys were reviewed between June 1982 to Oct 1984.
Record at field site stated 200ft from source there was 22 mR/hr in each direction.
(OVER)

10. <u>Posting and Labeling</u>	20.203, 19.11	<u>C</u>
CHRA, CRA, CRM posted? Meet requirements?		
Devices & storage containers labeled?		
Storage room or areas posted?		
Part 20, license, documents, procedures, notice of violations posted?	19.11(a)	
NRC-3 posted?	19.11(c)	

NOTES & REMARKS:

11. Other License Conditions

NOTES & REMARKS:

The inspector asked the licensee to simulate an exposure with both the IR-192 and Co-60 sources. After the source was returned to the shield position, the radiographer made a survey near the front of the exposure device. He did not survey the guide tube.

757108

- Radiography

757208

AREAS INSPECTED AND FINDINGS

Licensee: _____ License No: _____ Amendment No: _____

INSPECTION ITEM	CRITERIA	FINDING
12. <u>Independent Measurements</u>	20.105, 20.201, 34.21	_____
Verify licensee survey,		
Radiation levels at field site boundary?		
NOTES & REMARKS:		

NRC Instrument: Ludlum Model 3 Calibration Due Date: 8/21/84

13. <u>Receiving of Material</u>		<u>C</u>
Written procedures for pickup, receiving, opening packages?	20.205	
Survey of packages when received?	20.205(c)(1)	
Records of survey of packages?	20.401(b)	
NOTES & REMARKS:		

14. <u>Transportation</u>		<u>C</u>
Management controls, audit?		
Selection of packaging? Requirements for Type B packaging followed?	49 CFR 173.393-5, 10 CFR 71	
Preparation of packages for shipment	49 CFR 172, 173	
Filling & loading, closing?	49 CFR 172.300	
Markings & labelling?	49 CFR 172.402, 403	
Monitoring?	49 CFR 173.393	
Shipping papers, loading & placarding of vehicles?	49 CFR 172.200	
Reports of incidents?	49 CFR 171.15, 171.16	
Training program?		
Examination of packages?		

NOTES & REMARKS:

At Field site they were using an Industrial X-ray Co Model TR100 exposure device which is a Type B container (USA/5157B). Shipping papers were in order. Measurements made by the inspector

0.7 mR/hr at 3ft and 250 mR/hr at contact. Exposure device was properly labeled with a Radioactive Yellow II label and No. 100 was recorded.

AREAS INSPECTED AND FINDINGS

Licensee: _____ License No: _____ Amendment No: _____

INSPECTION ITEM	CRITERIA	FINDING
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15. Radiation Safety at Field Site

Evidence of "generally alleged unsafe practices"?

NOTES & REMARKS:

At the field site, the radiographers did not maintain direct surveillance of the area to protect against unauthorized entry into the high radiation area. The area where there wasn't direct surveillance did not have any ~~barriers~~ or sign posted either.

16. Independent Inspection Efforts

S.L. IV

They are using a X-RAY to calibrate the pocket dosimeters. They place the dosimeter on a lead plate 72 inches from the X-ray tube and using 50 KVP, 3Ma for 15 sec they exposed to dosimeters. They do not have any idea what the exposure should be to determine if they are $\pm 30\%$ of the true reading.

They ~~inspected~~ placed each of their dosimeters and Magnaflex placed 2 of their dosimeters in this exposure area. The ~~inspected~~ dosimeters read 42 and 54 mR. One of Magnaflex dosimeter read 70 mR, the other was discharged & they ~~then~~ discharged that dosimeter.

NOTES & REMARKS:

INSPECTION REPORT NUMBER _____

Page _____ of _____

APPENDIX A - DOCUMENTATION OF NONCOMPLIANCE

Licensee: _____

License No: _____

Reference	Basis for noncompliance
Report item <u>6</u> 10 CFR <u>34.29(b)</u> Lic Cond _____ Type n/c _____	① Room #1 audible alarm not working ② Room #2 alarm connected to a off/on switch which would render the system inoperable if switch is ^{in the} off position.
Report item <u>6 1/5</u> 10 CFR <u>34.41</u> Lic Cond _____ Type n/c _____	Radiographer's field did not have direct surveillance to protect against an unauthorized entry into the high radiation area.
Report item <u>16</u> 10 CFR <u>34.33(c)</u> Lic Cond _____ Type n/c _____	Pocket dosimeters were not checked to respond to $\pm 30\%$ of the correct response to radiation.
Report item <u>9</u> 10 CFR <u>34.43(f)</u> Lic Cond _____ Type n/c <u>SL. IV</u>	Radiographer did not survey the length of the guide tube after the exposure to determine that the source returned to its shield position.
Report item _____ 10 CFR _____ Lic Cond _____ Type n/c _____	
Report item _____ 10 CFR _____ Lic Cond _____ Type n/c _____	

INSPECTION REPORT NUMBER _____

Page _____ of _____

APPENDIX B - LICENSEE ACTION ON PREVIOUS INSPECTION FINDINGS

Licensee: _____

License No: _____

Identification and summary of action taken

Status

Report No: _____

Type n/c: _____

Describe: _____

Action taken:

OPEN

CLOSED

Report No: _____

Type n/c: _____

Describe: _____

Action taken:

OPEN

CLOSED

Report No: _____

Type n/c: _____

Describe: _____

Action taken:

OPEN

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Report No: _____

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Action taken:

OPEN

CLOSED

Report No: _____

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Action taken:

OPEN

CLOSED

Report No: _____

Type n/c: _____

Describe: _____

Action taken:

OPEN

CLOSED

INSPECTION REPORT NUMBER _____

Page ____ of ____

APPENDIX C - SUPPLEMENTARY INFORMATION

Licensee: _____ License No: _____

-
- ☐ Uncorrected/repeated noncompliance
 - ☐ Unusual occurrence, conditions, etc
 - ☐ Basis for change of Category or Priority

- ☐ Unresolved items
- ☐ Inspector's comments

INSPECTOR'S REPORT
Office of Inspection and Enforcement

Ladun, Richard
REVIEWER

INSPECTORS

LICENSEE/VENDOR	TRANSACTION TYPE	DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)	REPORT NO.	SEQ	MO	YR
Magnaflex Corporation	<input checked="" type="checkbox"/> I - INSERT <input type="checkbox"/> M - MODIFY <input type="checkbox"/> D - DELETE <input type="checkbox"/> R - REPLACE	03204041	8401	A	09	85
Chicago, Illinois				B		
				C		
				D		

PERIOD OF INVESTIGATION/INSPECTION	INSPECTION PERFORMED BY	ORGANIZATION CODE OF REGION/HQ CONDUCTING ACTIVITY (See IEMC 0530 Manpower Reporting—Weekly Manpower Reporting for code)
FROM TO	<input checked="" type="checkbox"/> 1 - REGIONAL OFFICE STAFF <input type="checkbox"/> 2 - RESIDENT INSPECTOR <input type="checkbox"/> 3 - PERFORMANCE APPRAISAL TEAM	REGION DIVISION BRANCH
MO DAY YR MO DAY YR	OTHER	1 C B
09 07 84 09 07 84		

REGIONAL ACTION (Check one box only)	TYPE OF ACTIVITY CONDUCTED (Check one box only)
<input checked="" type="checkbox"/> 1 - NRC FORM 591 <input type="checkbox"/> 2 - REGIONAL OFFICE LETTER	<input checked="" type="checkbox"/> 02 - SAFETY <input type="checkbox"/> 03 - INCIDENT <input type="checkbox"/> 04 - ENFORCEMENT <input type="checkbox"/> 05 - MGMT. AUDIT <input type="checkbox"/> 06 - MGMT. VISIT <input type="checkbox"/> 07 - SPECIAL <input type="checkbox"/> 08 - VENDOR <input type="checkbox"/> 09 - MAT. ACCT. <input type="checkbox"/> 10 - PLANT SEC. <input type="checkbox"/> 11 - INVENT. VER. <input type="checkbox"/> 12 - SHIPMENT/EXPORT <input type="checkbox"/> 13 - IMPORT <input type="checkbox"/> 14 - INQUIRY <input type="checkbox"/> 15 - INVESTIGATION

INSPECTION INVESTIGATION FINDINGS (Check one box only)	TOTAL NUMBER OF VIOLATIONS AND DEVIATIONS	ENFORCEMENT CONFERENCE HELD	REPORT CONTAIN 2790 INFORMATION	LETTER OR REPORT TRANSMITTAL DATE
<input checked="" type="checkbox"/> 1 - CLEAR <input type="checkbox"/> 2 - VIOLATION <input type="checkbox"/> 3 - DEVIATION <input type="checkbox"/> 4 - VIOLATION & DEVIATION	A B C D	A B C D	A B C D	MO DAY YR MO DAY YR
	05	1 - YES	1 - YES	

MODULE INFORMATION														MODULE INFORMATION													
REC-ORD	MODULE NUMBER INSP				PRIORITY	DIRECT INSPECTION EFFORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED TO DATE	STATUS	MODULE REQ. FOLLOWUP				PRIORITY	DIRECT INSPECTION EFFORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED TO DATE	STATUS	MODULE REQ. FOLLOWUP										
TYPE	NUMBER	PHASE	MANUAL CHAPTER	PROCEDURE NUMBER					LEVEL	TYPE	NUMBER	PHASE					MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL	TYPE	NUMBER	PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL		
B	1530703B	A	020																								
		B																									
		C																									
		D																									
B	15757110B	A	100																								
		B																									
		C																									
		D																									
B	15757210B	A	070	100																							
		B																									
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B	15427061B	A	060																								
		B																									
		C																									
		D																									

* CIRCLE SEQUENCE IF VIOLATION OR DEVIATION

DOCKET NO. (8 digits) OR LICENSE
NO. (BY PRODUCT) (13 digits)

REPORT

MODULE NUMBER

6

INSPECTOR'S REPORT

(Continuation)

Office of Inspection and Enforcement

03004041

NO.

SEQ.

5757201B

A

VIOLATION SEVERITY OR DEVIATION

SITE RELATED

B

1 2 3 4 5 6

A C

C

✓

B D

D

27

28

VIOLATION OR DEVIATION (Enter up to 2400 characters for each item. If the text exceeds this number, it will be necessary to paraphrase. Limit lines to 50 characters each.)

1.

2.

As a result of the inspections conducted on September 7, 1984 and October 17-18, 1984, and in accordance with the NRC Enforcement Policy (10 CFR 2, Appendix C), the following violations were identified:

- A. 10 CFR 34.29(b) requires that each entrance used for personnel access to the high radiation area in a permanent radiographic installation have both visible and audible signals to warn of the presence of radiation. The visible signal must be actuated by radiation whenever the source is exposed and the audible signal must be actuated when an attempt is made to enter the installation while the source is exposed.

Contrary to the above, as of October 17, 1984, the permanent radiographic installation located in the licensee's Trevose, Pennsylvania, facility did not have the required warning signals. It was noted that, in Room #1, the audible signal was not operable and, in Room #2, both the audible and visual signal could be defeated by switching a switch to the off position.

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

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NRC FORM 700 A <small>(11-81) IE MC 0535</small> INSPECTOR'S REPORT (Continuation) Office of Inspection and Enforcement	DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)		REPORT		MODULE NUMBER	4
	03064041		NO	SEQ	575721016	
			A		VIOLATION SEVERITY OR DEVIATION	
			B		1 2 3 4 5 6	
		C				
		D				

VIOLATION OR DEVIATION (Enter up to 2400 characters for each item. If the text exceeds this number, it will be necessary to paraphrase. Limit lines to 50 characters each.)

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B. 10 CFR 34.41 requires that during each radiographic operation, the radiographer or radiographer's assistant maintain direct surveillance of the operation to protect against unauthorized entry into a high radiation area.

Contrary to the above, on October 18, 1984, at a field site in Alpha, New Jersey, direct surveillance over a radiographic operation was not maintained.

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

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NRC FORM 700 A (11-81) IE MC 0535 INSPECTOR'S REPORT (Continuation) Office of Inspection and Enforcement	DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)		REPORT		MODULE NUMBER	4 VIOLATION SEVERITY OR DEVIATION 3 SITE RELATED A C B D
			NO.	SEQ.	57151721018	
	03004041		8401	A	1 2 3 4 5 6	
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VIOLATION OR DEVIATION (Enter up to 2400 characters for each item. If the text exceeds this number, it will be necessary to paraphrase. Limit lines to 50 characters each.)

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- C. 10 CFR 34.33(c) requires that pocket dosimeters be checked at intervals not to exceed one year for correct response to radiation.

Contrary to the above, as of October 17, 1984, pocket dosimeters used at the Trevoise, Pennsylvania, Branch Office were not checked to plus or minus 30% of the true radiation exposure when checked with an X-ray beam.

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

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**INSPECTOR'S REPORT
(Continuation)**

Office of Inspection and Enforcement

DOCKET NO. (8 digits) OR LICENSE
NO. (BY PRODUCT) (13 digits)

REPORT

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										B		VIOLATION SEVERITY OR DEVIATION						SITE RELATED	
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VIOLATION OR DEVIATION (Enter up to 2400 characters for each item. If the text exceeds this number, it will be necessary to paraphrase. Limit lines to 50 characters each.)

- D. 10 CFR 34.43(b) requires that a physical radiation survey be made after each radiographic exposure to determine that the sealed source has been returned to its shielded position. The entire circumference of the radiographic exposure device must be surveyed and, if the device has a source guide tube, the survey must include the entire length of the guide tube.

Contrary to the above, on October 17, 1984, a radiographer at the Treviso Branch Office failed to perform a survey that was adequate to determine that the sealed source had returned to its shielded position. A survey which was intended to meet this requirement was performed, but was inadequate in that it did not include the entire circumference of the exposure device and the entire length of guide tube.

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

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NRC FORM 700 A <small>(11-81) IE MC 0535</small> INSPECTOR'S REPORT (Continuation) Office of Inspection and Enforcement	DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)		REPORT		MODULE NUMBER	4	
			NO	SEQ			
	00004041		8401	A	57157121018	VIOLATION SEVERITY OR DEVIATION D	SITE RELATED A C B D
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VIOLATION OR DEVIATION (Enter up to 2400 characters for each item. If the text exceeds this number, it will be necessary to paraphrase. Limit lines to 50 characters each.)							
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- E. 10 CFR 34.33(a) requires that pocket dosimeters be recharged at the start of each shift.

Contrary to the above, as of September 7, 1984, pocket dosimeters used at the Indiana, Pennsylvania, field site were not being recharged at the start of each shift.

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

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