

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of
Photon Field Inspection, Inc.
1705 Boxwood
Saginaw, MI 48601

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Docket No. 030-19660
License No. 21-21010-01
EA 89-058

ORDER IMPOSING CIVIL MONETARY PENALTY

I

Photon Field Inspection, Inc. (the licensee) is the holder of Byproduct Material License No. 21-21010-01 issued by the Nuclear Regulatory Commission (NRC/Commission). The license authorizes the use of byproduct material to perform industrial radiography. The license was originally issued on September 15, 1982 and expired on September 30, 1987. A timely renewal application was filed, as of August 31, 1987, and the renewal is pending.

II

An inspection of the licensee's activities was conducted on April 6, 1989, at the licensee's facility in Saginaw, Michigan. The results of this inspection indicated that the licensee had not conducted its activities in full compliance with NRC requirements. A written Notice of Violation and Proposed Imposition of Civil Penalty was served upon the licensee by letter dated June 7, 1989. The Notice stated the nature of the violations, the provisions of the NRC's requirements that the licensee had violated, and the amount of the civil penalty proposed. The licensee responded to the Notice of Violation and Proposed Imposition of Civil Penalty (Notice) by letters received by the

NRC Region III office on July 27 and August 11, 1989. In its response, the licensee denied Violations B.2 and C and did not deny the remaining six violations. In addition, the licensee requested a reduction in the Severity Level and a reduction in the proposed civil penalty.

III

After consideration of the licensee's response and the statements of fact, explanation, and argument for mitigation contained therein, the NRC staff has determined, as set forth in the Appendix to this Order, that Violations B.2 and C require further evaluation by the NRC staff and therefore are being withheld from this escalated enforcement action at this time. The staff has also determined that the remaining six violations occurred as stated. After considering that: (1) the civil penalty was assessed equally among the eight violations, and (2) Violations B.2 and C constitute 25 percent of the violations, the amount of the civil penalty has been reduced by \$1,875 and a \$5,625 civil penalty should be imposed.

IV

In view of the foregoing and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205, IT IS HEREBY ORDERED THAT:

The licensee pay a civil penalty in the amount of \$5,625 within 30 days of the date of this Order, by check, draft, or money order, payable to the Treasurer of the United States and mailed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555.

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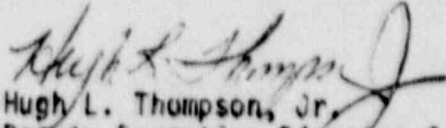
The licensee may request a hearing within 30 days of the date of this Order. A request for a hearing shall be clearly marked as a "Request for an Enforcement Hearing" and shall be addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Copies shall also be sent to the Assistant General Counsel for Hearings and Enforcement, Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555 and to the Regional Administrator, Region III, 799 Roosevelt Road, Glen Ellyn, IL 60137.

If a hearing is requested, the Commission will issue an Order designating the time and place of the hearing. If the licensee fails to request a hearing within 30 days of the date of this Order, the provisions of this Order shall be effective without further proceedings. If payment has not been made by that time, the matter may be referred to the Attorney General for collection.

In the event the licensee requests a hearing as provided above, the issues to be considered at such hearing shall be:

- (a) whether the licensee was in violation of the Commission's requirements as set forth in the Notice of Violation and Proposed Imposition of Civil Penalty referenced in Section II above, with the exception of Violations B.2 and C.; and
- (b) whether, on the basis of the violations, this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION


Hugh L. Thompson, Jr.
Deputy Executive Director for
Nuclear Materials Safety, Safeguards,
and Operations Support

Dated at Rockville, Maryland
this 30th day of October 1989

APPENDIX

EVALUATIONS AND CONCLUSIONS

On June 7, 1989, a Notice of Violation and Proposed Imposition of Civil Penalty (Notice) was issued to Photon Field Inspection, Inc. (licensee) for violations identified during a routine NRC inspection. The licensee responded to the Notice in two documents received by the Region III office on July 27 and August 11, 1989. In its response, the licensee denies Violations B.2 and C, and offers reasons why the Severity Level of all the violations should be reduced and why the civil penalty should not be imposed. The NRC's evaluation and conclusion regarding the licensee's arguments are as follows:

1. Restatements of Violations, Summary of Licensee's Response and NRC Evaluation of Licensee's Response

Restatement of Violation A

License Condition No. 10 limits storage of licensed material to a facility located at 300 Ames Street, Saginaw, Michigan.

Contrary to the above, as of April 6, 1989, the licensee has stored licensed material at a location other than that authorized by the license. Specifically, the licensee relocated its radiographic facility from 300 Ames Street, Saginaw, Michigan to 1705 Boxwood, Saginaw, Michigan in January 1989, has stored licensed material at that site since January 1989, and failed to inform the NRC and obtain approval prior to the move.

Summary of Licensee's Response

The licensee does not deny the violation.

NRC Evaluation of Licensee's Response

Since the licensee does not deny the violation, the violation remains as stated.

Restatement of Violation B

License Condition No. 16 requires, in part, that the licensee conduct its program in accordance with the statements, representations, and procedures contained in the referenced application and certain listed documents, and any enclosures thereto.

The licensee's referenced application, which was amended July 1, 1982, transmitted to NRC as an enclosure a revised Administrative Manual.

Subitem B.1

Section 8.D of this manual requires, in part, that periodic training be given by the Radiation Safety Officer to update radiographic personnel at least every 12 months and that the training be followed by a written and oral quiz.

Contrary to the above, as of April 6, 1989, the sole radiographer employed by the licensee had not been provided any periodic training and had not been given a written and oral quiz during the last twelve months.

Summary of Licensee's Response

The licensee does not deny the violation.

NRC Evaluation of Licensee's Response

Since the licensee does not deny the violation, the violation remains as stated.

Subitem B.2

Section 9.8 of this manual requires, in part, that a quarterly management audit be conducted in accordance with Form G of Appendix I, which includes audits of various records such as inventory, instrument calibration, and receipt and disposal records.

Contrary to the above, since October 5, 1988, the licensee has not conducted any management audits of records such as inventory, instrument calibration, and receipt and disposal records.

This is a repeat violation.

Summary of Licensee's Response

The licensee denied this part of the violation and stated that management audits have been conducted since October 5, 1988. The licensee stated that after review of all files related to radiography, a record of a quarterly management audit accomplished on January 3, 1989 was located. The licensee stated further that this record was not available during the inspection due to the unavoidable absence of the Radiation Safety Officer and the lack of knowledge as to the whereabouts of all records on the part of the technician who represented the licensee during the inspection.

NRC Evaluation of Licensee's Response

The NRC is continuing to evaluate the licensee's response to this violation. The licensee will be notified by separate correspondence of the NRC's conclusion regarding this violation and the licensee's response.

Restatement of Violation C

10 CFR 34.26 requires, in part, that the licensee conduct a quarterly physical inventory to account for all sealed sources received and possessed under the license. The records of the inventories shall also include the quantities of byproduct material.

Contrary to the above, between October 5, 1988 and April 6, 1989, the licensee failed to conduct a quarterly inventory of all sealed sources as required. In addition, the quantities of iridium-192 and cobalt-60 listed in 1988 quarterly

inventory records are incorrect in that they did not correspond to source manufacturer decay information or NRC calculated values.

This is a repeat violation.

Summary of Licensee's Response

The licensee denied the part of the violation that stated no quarterly inventories were conducted between October 5, 1988 and April 6, 1989. The licensee stated that after reviewing all files related to radiography, a record of a quarterly physical inventory accomplished on January 3, 1989 was located. The licensee stated further that this record was not available during the inspection due to the unavoidable absence of the Radiation Safety Officer and the lack of knowledge as to the whereabouts of all records on the part of the technician who represented the licensee during the inspection.

The licensee further stated that the source activity is not a requirement for quarterly inventory as per 10 CFR 34.26. The licensee claims that the quantity of material possessed is the requirement and, therefore, has instructed licensee staff when conducting inventories to record the quantity of material (i.e., number of sources) possessed rather than activity.

NRC Evaluation of Licensee's Response

The NRC is continuing to evaluate that part of the licensee's response to this violation which asserts that inventories were conducted. The licensee will be notified by separate correspondence of the NRC's conclusion regarding this part of the violation.

NRC disagrees with the licensee's interpretation that the word "quantities" in the phrase in 10 CFR 34.26 "quantities and kinds of byproduct material" refers only to the number of sources. An inventory record must be complete and accurate as to the description of the sealed sources being accounted for in the inventory. This is especially true of inventory records required by 10 CFR 34.26 because the radionuclide of choice in the majority of these sealed sources is iridium-192. Iridium-192 has a physical half-life of approximately 74 days, which necessitates exchanging a decayed source for a source of higher activity at a frequency of 2-5 times per year. Without a record of the activity of each source the "quantity" of iridium-192 cannot be determined. Therefore, the word "quantities" in the phrase "quantities and kinds of byproduct material" as stated in 10 CFR 34.26 should be interpreted to include the number of sources, the activity of each source at the time of inventory or on a specified assay date, and the serial number of each source. In addition, the licensee's example quarterly inventory form, submitted as attachment #4 in its response dated July 26, 1989, clearly indicates that the activity of the source in curies, is part of the information required to be recorded.

Restatement of Violation D

10 CFR 34.24 requires, in part, that each survey instrument used to conduct physical radiation surveys be calibrated at intervals not to exceed three months.

Contrary to the above, on July 5, 1988, more than three months after calibration, the licensee conducted physical radiation surveys with two survey instruments which were last calibrated on March 16, 1988.

Summary of Licensee's Response

The licensee does not deny the violation.

NRC Evaluation of Licensee's Response

Since the licensee does not deny the violation, the violation remains as stated.

Restatement of Violation E

10 CFR 34.25(b) requires, in part, that sealed sources be tested for leakage at intervals not to exceed six months.

License Condition No. 12.B exempts the licensee from the requirements of 10 CFR 34.25(b) as to radiography sources which are in storage and not being used. Such sources must be tested for leakage prior to any use or transfer unless they have been leak tested within six months prior to the date of use or transfer.

Contrary to the above, an Iridium-192 sealed radiographic source, last leak tested on October 9, 1987, was removed from storage and used for radiography on ten occasions between April 14 and June 23, 1988, and transferred to the source manufacturer in July 1988. Prior to such use and transfer, the sources had not been leak tested within the previous six months.

Summary of Licensee's Response

The licensee does not deny the violation.

NRC Evaluation of Licensee's Response

Since the licensee does not deny the violation, the violation remains as stated.

Restatement of Violation F

10 CFR 71.5(a) prohibits transport of licensed material outside the confines of a plant or other place of use, or delivery of licensed material to a carrier for transport unless the licensee complies with applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation (DOT) in 49 CFR Parts 170 through 189. 49 CFR 172.200-202 requires each person who transports hazardous material to describe the material on a shipping paper. 49 CFR 172.203(d) describes the required additional shipping paper entries for radioactive materials.

Contrary to the above, in January 1989, the licensee transported curie

quantities of radioactive material from its Ames Street facility to its Boxwood Street facility and failed to complete any shipping papers.

Summary of Licensee's Response

The licensee does not deny the violation.

NRC Evaluation of Licensee's Response

Since the licensee does not deny the violation, the violation remains as stated.

Restatement of Violation G

10 CFR 30.51(a) and (c)(1) require, in part, that persons who receive byproduct material pursuant to a license issued pursuant to Part 34 keep records showing the receipt of such byproduct material as long as the material is in their possession.

Contrary to the above, a record of receipt for byproduct material (cobalt-60 sealed source) received in approximately 1983 and currently in the possession of the licensee was not maintained.

Summary of Licensee's Response

The licensee does not deny the violation.

NRC Evaluation of Licensee's Response

Since the licensee does not deny the violation, the violation remains as stated.

II. Licensee's Request for Reduction in Severity Level and Reduction of Proposed Civil Penalty

Licensee's Request

The licensee protests the classification of Items D, E, and F as Severity Level III violations. It states that Severity Level III is unwarranted since no personnel were injured or overexposed due to radiation and that Items D, E, and F are violations of a "paperwork nature" only.

NRC Evaluation

The licensee is correct insofar as no personnel were injured or overexposed due to radiation, but is incorrect in assuming Items D, E, and F are each a Severity Level III violation. The Notice of Violation and Proposed Imposition of Civil Penalty clearly states that "these violations have been categorized in the aggregate as a Severity Level III problem (Supplement VI)." Separate severity levels have not been assigned to the individual violations in this case. The NRC enforcement policy, as delineated in 10 CFR Part 2, Appendix C, Section II.B.III, provides that violations may be evaluated in the aggregate

and a single severity level assigned for a group of violations. 10 CFR Part 2, Appendix C, Supplement VI(c)(b), states that Severity Level III can apply if there is:

"Breakdown in the control of licensed activities involving a number of violations that are related or, if isolated, that are recurring violations that collectively represent a potentially significant lack of attention or carelessness toward licensed responsibilities."

The licensee is also incorrect in asserting that Items D, E, and F are violations of a "paperwork nature" only. Item D is a violation concerning the use of a survey instrument which had not been tested for calibration at the proper frequency and Item E is a violation concerning the use of a sealed source overdue for leak testing. These items address the licensee's failure to perform certain required tasks within a specified time interval and are not "paperwork" violations. Item F is a violation concerning the lack of proper shipping papers during the transport of sealed sources of radioactive material. This violation could be viewed as a "paperwork" violation; nevertheless, the requirement to have shipping papers during the transportation of radioactive materials is one of significance. Shipping papers are essential for regulatory agencies and for emergency response personnel who may be responding to an accident involving a vehicle carrying radioactive material to ensure that hazards are correctly identified and controlled.

III. NRC Conclusion

After reviewing the licensee's response to the Notice, the NRC has concluded that the violations were properly categorized in the aggregate at Severity Level III. The licensee has not provided a basis for mitigation of the proposed civil penalty. The NRC is continuing its evaluation of Violations B.2 and C, which the licensee has denied, and both of these violations have been withheld from this enforcement action pending completion of this review. The licensee will be notified by separate correspondence of the NRC's conclusion regarding Violations B.2 and C.

Since Violations B.2 and C constitute 25 percent of the 8 cited violations, we have determined that the \$7,500 civil penalty should be reduced by \$1,875 to \$5,625.

Photon Field Inspection, Inc.

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