

APPENDIX A

NOTICE OF VIOLATION

Advanced Radiation Services  
Elizabeth, New Jersey 07201  
License No. 29-14171-01

Docket No. 30-8048

Based on the results of an NRC inspection conducted on June 5 and June 10, 1980 it appears that certain of your activities were not conducted in full compliance with NRC regulations as indicated below:

- A. 10 CFR 20.101(a) limits the whole body exposure of an individual in a restricted area to one and one quarter rems per calendar quarter, except as provided by 10 CFR 20.101(b). Paragraph (b) allows a whole body exposure of three rems per calendar quarter provided certain specified conditions are met.

Contrary to this requirement, an individual in your employ working at field sites received a whole body radiation dose of 1.270 Rems during the second calendar quarter of 1979 and the conditions of Paragraph (b) were not met.

This is an infraction.

- B. 10 CFR 20.405(a) requires that you submit within 30 days, a report to the Commission concerning each exposure to radiation in excess of any applicable limit in Part 20 or in your license. 10 CFR 19.13(d) requires that this report be submitted to the individual exposed.

Contrary to these requirements, as of June 10, 1980, you failed to report to the Commission, and to the individual exposed, the exposure described in Item A.1 above.

This is an infraction.

- C. Condition 10 of your license requires that licensed material be stored at 1079 East Grand Street, Elizabeth, New Jersey.

Contrary to this requirement, as of June 10, 1980, licensed material is regularly stored in two transporting vehicles, parked at a location in Iselin, New Jersey which is not a temporary job site.

This is an infraction.

- D. 10 CFR 20.105(b) requires that radiation levels in unrestricted areas be limited so that if an individual were continuously present in the area, he could not receive a dose in excess of 2 millirems in any hour or 100 millirems in any seven consecutive days.

Contrary to this requirement, on June 5, 1980, radiation levels existed outside the perimeter of your restricted area during field radiography of such a magnitude that if an individual had been continuously present in the area, he could have received a dose in excess of 2 millirems in one hour.

This is an infraction.

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

Contrary to this requirement, on June 5, 1980, the pocket dosimeter worn by a radiographer at a temporary field site at the Exxon Refinery, Linden, New Jersey was not recharged on that date.

This is an infraction.

- F. 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 this requirement, as of June 5, 1980, the pocket dosimeters used by your radiographers have not been checked for correct response to radiation.

This is an infraction.

- G. Condition 12.C of your license requires that sealed sources authorized for use other than radiography be leak tested in accordance with 10 CFR 34.25, which requires that each sealed sources be tested for leakage at intervals of six (6) months.

Contrary to this requirement, as of June 10, 1980, you have failed to perform the required leak tests on your nominal 15 millicurie Cobalt-60 source used for instrument calibration since it was purchased, a period of several years.

This is an infraction.

- H. 10 CFR 71.5 requires that you transport licensed material outside the confines of your plant in compliance with 49 CFR parts 170-189. 49 CFR Part 173.394(b) requires that Type B quantities of special form radioactive materials be packaged in a Type B packaging approved by the U.S. Nuclear Regulatory Commission.

Contrary to this requirement, on June 5, 1980, a Type B quantity of Iridium-192 in special form was transported in a packaging which had not been approved by the U.S. Nuclear Regulatory Commission.

This is an infraction.

- I. 10 CFR 34.27 requires each licensee maintain current utilization logs, which shall be kept available for two years from the date of the recorded event, for inspection by the Commission.

Contrary to this requirement, on June 5, 1980, no utilization logs covering the period June 15, 1979 thru July 14, 1979 were available for inspection.

This item is a deficiency.

- J. 10 CFR 20.401(b) requires that you maintain records showing the results of monitoring required by 10 CFR 20.205(c), "Procedures for picking up, receiving, and opening packages."

Contrary to this requirement, as of June 10, 1980, you have failed to maintain records of the monitoring you performed of an incoming package containing more than three curies of cobalt-60 received by you on May 10, 1980.

This item is a deficiency.

APPENDIX B

OFFICE OF INSPECTION AND ENFORCEMENT MEETING SUMMARY

Subject: RESULTS OF INSPECTION CONDUCTED ON JUNE 5, and 10, 1980

On July 10, 1980, a representative of Advanced Radiation Services met with NRC Region I personnel at the Region I Office in King of Prussia, Pennsylvania. The attendance list is attached as Appendix C.

During the meeting, NRC representatives reviewed the items of noncompliance identified during the inspection conducted on June 5 and 10, 1980. NRC representatives indicated that the inspection results demonstrated a deterioration of the licensees radiation safety program and a need for stronger management controls, a more effective audit program, more specific training in NRC regulations and additional emphasis on records.

It was stressed that a comprehensive system of management controls and audits was necessary to ensure that required procedures were being followed at all times and to evaluate the effectiveness of training. Additionally, it was stressed that a speedy resolution must be made of the recurring problem of licensed material being stored at an unauthorized location.

Enforcement options available to the Commission were reviewed.

The Advanced Radiation Services representative indicated a commitment to operate in a safe fashion in compliance with regulations and to resolve the problem of storing licensed material at an unauthorized location within thirty days. He further indicated that the following actions have been taken:

1. Negotiations have begun for leasing a facility in Edison, New Jersey for storing the licensed material.
2. Radiographic personnel have been instructed to charge their dosimeter at the beginning of each shift and complete all records in a timely fashion.
3. The mobile dark rooms have been equipped with two functioning dosimeter chargers.
4. Arrangements have been made to return the calibration source to a supplier and have survey instruments calibrated by an authorized vendor.

APPENDIX C

ATTENDANCE LIST

NRC

Mr. J. Allan, Deputy Director, Region I  
Mr. J. Kinneman, Chief, Materials Radiological Protection Section  
Mr. F. Costello, Radiation Specialist, Materials Radiological Protection  
Section  
Mr. C. Rowe, Radiation Specialist, Materials Radiological Protection  
Section

Advanced Radiation Services, Inc.

Mr. A. Kurtz, President