NOTICE OF VIOLATION

MQS Inspection, Inc.
Elk Grove Village, Illinois

License No. 12-00622-07
Docket No. 030-04041
EA 90-149

During inspections conducted on May 1 and August 23, 1990, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions", 10 CFR Part 2, Appendix C (1990) the violations are listed below:

1. License Condition No. 20 requires that the licensee conduct its program in accordance with the statements, representations, and procedures contained in the application dated October 27, 1987 (with attached manual).

   The referenced manual, Radiation Safety and Control Program, 30.J.2, "Operating and Emergency Procedures," Section 6.1, requires that work be stopped immediately and the Radiation Safety Monitor/Facility Radiation Safety Officer contacted if a worker's dosimeter is saturated (off scale).

   Contrary to the above, during radiographic operations on April 19, 1990, a radiographer's self-reading dosimeter was noted to be discharged off-scale and radiographic operations were not immediately stopped nor were immediate contacts made. Specifically, a radiographer's dosimeter was observed to be offscale after completing 6 or 7 radiographs and the individual continued to perform at least 8 additional exposures before stopping work and notifying the facility radiation safety officer the next day.

   This is a Severity Level IV Violation (Supplement VI)

2. License Condition No. 20 requires that the licensee conduct its program in accordance with statements, representations, and procedures contained in the application dated October 27, 1987 (with attached manual).

   The referenced manual, Radiation Safety and Control Program, 30.J.2. "Operating and Emergency Procedures," Section 13.1.4, requires that upon assuring that the source is in a safe position, survey and lock the exposure device. This procedures shall be conducted after each exposure.

   10 CFR 34.22(a) requires that during radiographic operations, the sealed source assembly be secured in the shielded position each time the source is returned to that position.

   Contrary to the abcve:

a. During radiographic operations on April 19, 1990, a radiographer retracted a 56 curie iridium-192 source into the exposure device after each of at least 14 radiographs taken that day, but did not lock the exposure device or otherwise secure the sealed source assembly in the shielded position after the sixth or seventh radiographs.

b. During radiographic operations on May 9, 1990, a radiographer retracted a 46 curie iridium-192 source into the exposure device after each of 36 radiographs, and failed to lock or otherwise secure the sealed source assembly in the shielded position the exposure device after the 35th and 36th radiographs.

This is a Severity Level IV Violation (Supplement VI)

3. 10 CFR 34.43(b) requires that the licensee ensure a survey with a calibrated and operable radiation survey instrument is made after each 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.

Contrary to the above:

a. On April 19, 1990, a radiographer and a radiographer's assistant performed a series of at least 14 radiographic exposures and did not adequately survey the entire circumference of the radiographic exposure device after the sixth or seventh exposures to ensure the sealed source had been returned to its shielded position.

b. On May 9, 1990, a radiographer performed approximately 36 radiographic exposures and did not adequately survey the entire circumference of the radiographic exposure device after the last two exposures to ensure the sealed source had been returned to its shielded position.

This is a Severity Level IV Violation (Supplement VI)

4. 10 CFR 34.33(a) requires that during radiographic operations, each radiographer and radiographer's assistant wear a direct reading pocket dosimeter and that the pocket dosimeter be recharged at the start of each shift.

Contrary to the above, a radiographer failed to recharge his pocket dosimeter at the start of the shift on April 19, 1990. The radiographer's pocket dosimeter registered 40 millirem prior to initiating radiographic operations that day.

This is a Severity Level IV Violation (Supplement VI)

5. 10 CFR 34.31(a)(4) requires that the licensee not permit any individual to act as a radiographer until such individual has demonstrated his understanding of the instructions provided him, by successful completion of a written test.

   License Condition No. 20 requires that the licensee conduct its program in accordance with the statements, representations, and procedures contained in the application dated October 27, 1987 (with attached manual).

   The referenced manual, Radiation Safety and Control Program, 30.G.3, "Personnel Certification Procedure," Sections 6.1.4 and 6.4.4, require that the prerequisite for certification as a radiographer include satisfactory completion of a written examination. A score of 80% or greater is required for successful completion of the written examination.

   Contrary to this requirement, an individual acted as a radiographer on April 19, 1990 and on other prior occasions, and had not successfully completed the radiographer's written test.

   This is a Severity Level IV Violation (Supplement VI)

6. 10 CFR 34.33(a) requires that the licensee not permit any individual to act as a radiographer during radiographic operations, unless the individual wears a direct-reading pocket dosimeter and either a film badge or thermoluminescent dosimeter (TLD).

   Contrary to the above, the licensee permitted an individual to act as a radiographer during radiographic operations on May 9, 1990 and the individual failed to wear either a film badge or TLD.

   This is a Severity Level IV Violation (Supplement VI)

7. 10 CFR 34.29(b) requires that each entrance used for personnel access to a high radiation area in a permanent radiographic installation have both visible and audible warning signals to warn of the presence of radiation. The audible signal shall be actuated when an attempt is made to enter the installation while the source is exposed.

   Contrary to this requirement, the audible warning signal for the licensee's permanent radiographic installation at its Wilmington, Delaware facility would not in all cases actuate if an attempt were made to enter the installation's high radiation area. Specifically, the "electric eye" associated with the installation's audible warning system provided an alarm signal only for entries made through the entrance door and not for entries by the radiographer who was already inside the maze entrance where he initiated radiographic exposures.

   This is a Severity Level IV Violation (Supplement VI)

Pursuant to the provisions of 10 CFR 2.201, MQS Inspection, Inc. is hereby required to submit a written statement or explanation to the U. S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D. C. 20555, with a copy to the Regional Administrator, Region III, U. S. Nuclear Regulatory Commission, 799 Roosevelt Road, Glen Ellyn, IL 60137, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order may be issued to show cause why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Charles E. Norelius, Director
Division of Radiation Safety and
Safeguards

Dated at Glen Ellyn, Illinois
this 1st day of November 1990