



**Veterans
Administration**

OCT 24 1989

In Reply Refer To:

663/11R

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

SUCJ: Reply to a Notice of Violation
Docket No. 030-03367
License No. 46-00990-01

This correspondence refers to the safety inspection conducted on August 10 and 11, 1989 and the subsequent "Notice of Violation" letter of October 11, 1989. This response will address each of the six violations as described in that letter.

A. Violation: Security of licensed material in the Nuclear Medicine radiopharmacy.

Corrective Action: The window between the injection room and the radiopharmacy has been modified to reduce the size of the opening to 20 X 20 cm. Also, a convex mirror has been installed in the main Nuclear Medicine Service hallway to facilitate the observation of personnel in the radiopharmacy area.

B. Violation: Appropriate surveys had not been made to determine the concentrations of licensed material in the ash residue prior to disposal.

Reason for Violation: The survey procedure used by the Radiation Safety Officer did not include the use of an appropriate survey instrument, nor were the results recorded in microcuries per gram.

Corrective Action: Ash residue analysis is currently conducted according to the following procedure; Analysis of ash residue is accomplished the morning after radioactive animal carcasses are incinerated. Three one gram samples of ash are obtained from varying levels within a one cubic foot sampling taken from the incinerator prior to ash disposal. The three samples are analyzed using a Ludlum 261 single channel analyzer with a well counter. Ash residues containing only ¹³⁷S are analyzed using a Ludlum 2200 single channel analyzer and a Nuclear Associates STB-3 "drawer" style counting probe. Counting efficiency is determined using appropriate standards and the results are recorded in microcuries program. This procedure was instituted on August 16, 1989.

8911010132 891024
NRC LIC30
46-00990-01 PIC

IE07
/1

SUBJ: Reply to a Notice of Violation
Docket No. 030-03367
License No. 46-00990-01

C.1. Violation: Annual refresher training had not been provided to all authorized users.

Reason for Violation: Absence of a good mechanism for determining which employees had or had not received annual radiation safety refresher training.

Corrective Action: A master list (database) of all General Medical Research employees is now contained in the RSO computer. The fields within this database contain the employee name, social security number, Principal Investigator, laboratory location, most recent training date, University of Washington Radiation Safety Course attendance verification, and iodination training verification. The database is linked to the computer tickler file program so that automatic notification is achieved two weeks before annual refresher training is due. This database is currently in use and will assist the RSO in determining compliance with initial and annual refresher training requirements.

Twenty-nine members of the Building Management staff were provided annual radiation safety refresher training on August 31, 1989. Ancillary worker refresher training records are also linked to the computer tickler file program.

C.2. Violation: Radioactive contaminated waste was found in two of the bags of nonradioactive trash collected from the nuclear medicine laboratory area.

Reason for Violation: Since the trash surveyed by the Nuclear Regulatory Commission inspector had been removed from all areas of the nuclear medicine laboratory, including the patient rest room, it was not possible to ascertain whether the sources of the activity detected within the two bags was patient excreta as we suspect, or material not detected during the daily contamination survey procedure. Neither the NRC inspector or the RSO attempted to open the bags of waste to further investigate the findings because of the potential biohazards involved with the waste. Nonetheless, it was assumed that the trash was inadequately surveyed before being discarded.

SUBJ: Reply to a Notice of Violation
Docket No. 030-03367
License No. 46-00990-01

Corrective Action: Daily contamination surveys will be modified to include those trash containers which have a high probability of containing radioactively contaminated articles. Those articles which are detected as being radioactive will be sequestered for decay according to established procedures. This corrective action will be instituted immediately.

C.3 Violation: Records of wipe surveys with negative results conducted in laboratories using tritium had not been maintained.

Reason for Violation: The RSO felt that since the survey results were negative, they did not need to be maintained as part of the record.

Corrective Action: All negative laboratory survey results, tritium or otherwise, have been saved and are integrated as part of the survey records beginning with March, 1989.


C.4. Violation: Thyroid bioassays had not been conducted during the fourth quarter of 1988 as required.

Reason for Violation: The RSO was on vacation during December, 1988, and the individual providing coverage during this time was unaware of the exact deadline for thyroid bioassays.

Corrective Action: The periodicity of this function is currently contained in the tickler file program of the RSO computer. This program actively notifies the RSO two weeks before bioassays are due.

If you require further information regarding these matters, please contact Mr. Michael Simmons, RSO, at FTS# 396-1789.

Sincerely,


J. T. Krageck
Director

cc:
Regional Administration
Region V