

PART I-LICENSE, INSPECTION, INCIDENT/EVENT, AND ENFORCEMENT HISTORY

1. AMENDMENTS AND PROGRAM CHANGES:
(License amendments issued since last inspection, or program changes noted in the license)

| <u>AMENDMENT #</u> | <u>DATE</u> | <u>SUBJECT</u> |
|--------------------|-------------|-------------------------------------|
| #19 | 01/30/2001 | add treadmill room, response to NOV |
| #20 | 12/24/2003 | move treadmill room |
| #21 | 09/27/2004 | renewal |

2. INSPECTION AND ENFORCEMENT HISTORY:
(Unresolved issues; previous and repeat violations; Confirmatory Action Letters; and orders)

Last inspection 08/23/2000: 1 SL IV violation for failure to add treadmill room to license

3. INCIDENT/EVENT HISTORY:
(List any incidents, or events reported to NRC since the last inspection. Citing "None" indicates that regional event logs, event files, and the licensing file have no evidence of any incidents or events since the last inspection.)

None

PART II - INSPECTION DOCUMENTATION

1. ORGANIZATION AND SCOPE OF PROGRAM:
(Management organizational structure; authorized locations of use, including field offices and temporary job sites; type, quantity, and frequency of material use; staff size; delegation of authority)

This was a small regional hospital that served the Juneau, Alaska area. The nuclear medicine department consisted of one camera and a small hot lab with a treadmill room located separately. Dr. Gordon Blair was the Radiation Safety Officer and reported to Mr. Robert Valliant, the Hospital Administrator. Mr. Frank Sis was the Imaging Coordinator and was delegated the responsibility for the day-to-day performance of the radiation safety program.

The nuclear medicine department received one 1.5 Ci Mo-99/Tc-99m generator weekly each Monday afternoon. The nuclear medicine department is open Monday-Friday each week during normal business hours. Program audits and other health physics services had been performed by Empiricos Health Physics. Instrument calibrations had been performed by Quality Assurance Services, Chula Vista, California.

The previous nuclear medicine technologist, who had worked at the facility for perhaps 14 years, retired in November 2003. Since that time, the facility has been having a great deal of difficulty in hiring a permanent replacement. Accordingly, from November 2003-June 2004, the licensee had hired several temporary nuclear medicine technologists as follows:

Technologist A: November 3, 2003-January 31, 2004

Technologist B: January 22, 2004-April 30, 2004

Technologist C: March 22, 2004-April 19, 2004

Technologist D: April 29, 2004-May 15, 2004

Technologist E: May 10, 2004-present on the date of this inspection but stated that his last date of employment with the hospital would likely be some time in August 2004

2. SCOPE OF INSPECTION:

(Identify the inspection procedure(s) used and focus areas evaluated. If records were reviewed, indicate the type of record and time periods reviewed)

Inspection Procedure(s) Used: 87130

Focus Areas Evaluated: 03.01, .02, .03, .04, .05, .06, .07

Specifically reviewed records not limited to: program audits, instrument calibrations, radiation surveys, training, and personnel dosimetry.

3. INDEPENDENT AND CONFIRMATORY MEASUREMENTS:

(Areas surveyed, both restricted and unrestricted, and measurements made; comparison of data with licensee's results and regulations; and instrument type and calibration date)

Ludlum Model 2401-P survey meter, NRC # 21192G, calibrated 08/07/2003

The inspector surveyed the hot lab, the imaging room, and the immediately adjacent areas. All readings were found to be within the range of the licensee's surveys of the areas.

4. VIOLATIONS, NCVs, AND OTHER SAFETY ISSUES:

(State the requirement, how and when the licensee violated the requirement, and the licensee's proposed corrective action plan. For NCVs, indicate why the violation was not cited. Attach copies of all licensee documents needed to support violations.)

Three Severity Level IV violations were issued for:

A. 10 CFR 20.2104(a) requires, in part, that for each individual who is likely to receive in a year, an occupational dose requiring monitoring pursuant to 10 CFR 20.1502, the licensee shall: (1) determine the occupational radiation dose received during the current year, and (2) attempt to obtain the records of cumulative occupational radiation dose.

Contrary to the above, from November 2003 to June 2004, the licensee employed several temporary nuclear medicine technologists who were likely to receive in a year an occupational radiation dose requiring monitoring pursuant to 10 CFR 20.1502, and the licensee either: 1) failed to determine the individual's occupational dose received during the current year; or 2) made no attempt to obtain the records of the individual's cumulative occupational radiation dose.

B. License Condition 14 of Byproduct Materials License 50-17686-01, Amendment No. 20, requires, in part, that the licensee shall conduct its program in accordance with License Application dated January 25, 1994. Item 9.4 of that application states, in part, that the licensee will follow the model procedure for personnel external monitoring contained in Appendix D to Regulatory Guide 10.8, Revision 2.

Item 1 of the model procedure in Appendix D to Regulatory Guide 10.8, Revision 2, states, in part, that the Radiation Safety Officer (RSO) will promptly review all exposure reports. Item 2 of the model procedure states, in part, that all individuals who are occupationally exposed to ionizing radiation on a regular basis will be issued a whole body monitor that will be processed on a monthly basis. Item 3 of the model procedure states, in part, that all individuals who, on a regular basis, handle radioactive material will be issued an extremity monitor that will be processed on a monthly basis.

Contrary to the above, in several instances in 2004, the licensee employed temporary nuclear medicine technologists who handled radioactive material and were occupationally exposed to ionizing radiation on a regular basis, and the licensee either: 1) failed to issue the individuals whole body and extremity monitors; or 2) failed to have the RSO review their exposure reports.

C. License Condition 14 of Byproduct Materials License 50-17686-01, Amendment No. 20, requires, in part, that the licensee shall conduct its program in accordance with letter dated December 29, 2000. Item 2 of that letter states, in part, that those individuals who work in the vicinity of licensed material and in the course of employment are likely to receive in a year an occupational dose of radiation over 100 millirem will be provided training in accordance with Appendix A to Regulatory Guide 10.8, Revision 2. Appendix A to Regulatory Guide 10.8 states, in part, that personnel will be instructed before assuming duties with, or in the vicinity of, radioactive materials. Appendix A further states, in part, that the instruction include the following subjects: applicable regulations and license conditions, each individual's obligation to report unsafe conditions to the RSO, appropriate response to emergencies or unsafe conditions, and the worker's right to be informed of occupational radiation exposure.

Contrary to the above, from November 3, 2003 to June 21, 2004, the licensee employed at least one temporary nuclear medicine technologist who was likely to receive in a year an occupational dose of radiation over 100 millirem, and the training provided to the individual did not include: applicable regulations and license conditions, each individual's obligation to report unsafe conditions to the RSO, appropriate response to emergencies or unsafe conditions, and the worker's right to be informed of occupational radiation exposure.

5. PERSONNEL CONTACTED:
(Identify licensee personnel contacted during the inspection, including those individuals contacted by telephone.)

Use the following identification symbols:

Individual(s) present at entrance meeting

* Individual(s) present at exit meeting

* Gordon T. Blair, M.D., Radiation Safety Officer

* Robert Valliant, Hospital Administrator

Frank Sis, Imaging Supervisor

Robery Oakley, Nuclear Medicine technologist

Eric Hotchkiss, Human Resources Assistant

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