



RAYTHEON COMPANY
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August 1, 1978

Mr. Paul R. Guinn
Radioisotopes Licensing Branch
Division of Fuel Cycle & Material Safety
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Re: License No. 06-18105-01
Mail Control No. 93684

Dear Mr. Guinn:

The additional information which you requested in your letter about the radiation survey program and emergency procedures under the referenced license are submitted below. In addition please consider this letter an application to amend the information previously submitted by adding the following materials to Item 6 (a) and 6 (b):

1. Barium 133 0.5 mCi
2. Cerium 141 10.0 mCi

These materials are required to adjust Gamma Camera type XL-91 to customer specifications. The amendment fee as listed in the revised fee schedule 170.31.3 (2) is enclosed.

Item 14. Radiation Protection Program

- (a) Sealed Sources - Sealed sources (having a half life of 30 days or more) will undergo wipe testing with smear paper, every 6 months, using a commercial kit provided by and analyzed by Interex Nuclear and Laboratory Supplies, Inc., 3 Shattmore Road, Natick, MA 01760, whose license is 20-14082-02.
- (b) Liquid Sources - All handling of liquid source material will be carried out in a restricted area suitably marked with radiation warning signs to

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prevent access by unauthorized persons. Smoking, eating or drinking will not be allowed in this area. A bench topped with a lipped metal tray and lined with absorbent paper will be located in the area.

A shielded syringe, disposable gloves and aprons, remote handling tongs, shielding materials and monitoring equipment will be maintained in the facility.

After any liquid sources have been used, all handling equipment will be decontaminated by washing with soap and water or using a commercial cleaner. A check of the work area, the equipment used and waste water will be made with a survey meter with a G-M or scintillation probe for residual contamination.

The used, disposable gloves and aprons will be placed in shielded containers for natural disintegration. Before disposal they will also be checked with a survey meter.

- (c) Personnel Monitoring - All individuals involved in the handling and use of radioactive sources and materials will wear Gardray Film Badges provided monthly and processed by R. S. Landauer, Jr. & Co.
- (d) Storage - All radioactive sources and materials will be stored in accordance with the "Procedure for Handling Radioactive Materials" (submitted with renewal application March 20, 1978).
- (e) Spill Procedure - The liquid sources will be short-lived radionuclides. In the case of a spill the operator will be checked to see if his clothing or body has become contaminated. If the worker is not contaminated, he may proceed with cleaning up the area, by wiping up the spilled material and placing it in a shielded container for natural disintegration. A commercial cleaner will also be used to assure complete removal of the contamination, and the area and operator checked with a survey meter.

If it is found that the operator's clothing is contaminated, clothing will be removed and body checked for radioactivity. Radioactive areas will be washed with soap and water, scrubbing with a soft brush. A cleaner suitable for use on the skin may be used. Waste water will be held for natural disintegration.

The contaminated clothing should be placed in a shielded container for natural disintegration and checked for radioactivity before being returned to the individual for laundering.

- (f) Emergency Procedures - In the case of fire or other disaster, the area containing radionuclides will be cordoned off and signs posted to restrict unauthorized entrance. Then the area will be checked with a G-M or scintillation survey meter to determine degree of activity and location.

If no contamination exists, the radioactive materials will be checked for leakage and placed in a labeled restricted storage facility.

If contamination exists, an operator wearing disposable protective clothing and using a survey meter will locate the source and place it in a shielded container and proceed with the spill decontamination procedure.

When the clean-up has been completed, the operators will be monitored for any radioactive material on their clothing or bodies and the same procedures followed as in the event of a spill.

Persons to be notified in case of emergency are Stanley Lapidus or Israel Metal.

Under Item 10. Radiation Detection Instruments:

Please add: Victoreen Thyac III
Radiation Detected: Alpha, Beta, Gamma
Sensitivity Range: 0.2 - 20.0 mR/hr, 0-800,000 cpm
Use: Surveying

Very truly yours,



Richard J. Merrow
Assistant Company Safety Director

THE MACHLETT LABORATORIES, INCORPORATED
STAMFORD, CONNECTICUT 06907

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PAY TO THE ORDER OF U.S. NUCLEAR REGULATORY COMMISSION

\$40.00

The Facility and Company