(617) 893-6996

WALTHAM COMPASS CORPORATION
Manufacturer of Precision Instruments
609 MAIN STREET
WALTHAM, MASSACHUSETTS 02154

Reply To:
Waltham Compass Corporation
P. O. Box 417
Concord, MA 01742
Telephone: (203) 557-8270

May 10, 1975

Nuclear Regulatory Commission
Materials Branch
Washington, D. C. 20555

Attention: Mr. Nathan Bassin

Re: License No. 20-12943-01

Dear Sirs:

Responsive to your letter dated April 30, 1975 (55388), please be advised:

1. Radiation detection instruments (Item 10 Form NRC-313):
One Eberline E-120 survey instrument is available in the work area. This instrument is equipped with the HP-190 probe. The window thickness is 2 mgs/cm^2. The instrument is capable of detecting soft beta and gamma radiation. The sensitivity range is 0-50 mr/hr.

2. Instrument calibration (Item 11 Form NRC-313):
The survey instrument is calibrated every six months by our outside consultant Mr. M. Bolton at M.I.T. using N.B.S. certified standards.

3. Film badges (Item 12 Form NRC-313):
Film badges are supplied by ICN Tracerlab and worn by all personnel working with radioactive material. The badges are processed monthly when working with radioactive material.

4. Facilities (Item 13 Form NRC-313):
All personnel handling the unassembled parts will wear rubber gloves. All assembly of the parts will be done using soft-tipped tweezers. All radioactive parts are inventoried and stored in a locked cabinet at the end of the work day.

5. Radiation protection program (Item 14 Form NRC-313):
All personnel have received a 3 hour lecture from our outside consultant Mr. M. Bolton from M.I.T. The outline of the subject matter is attached. Also attached is a copy of the work area general radiation protection requirements and precautions which is posted in the work area.

GENERAL RADIATION PROTECTION REQUIREMENTS AND PRECAUTIONS

1. There shall be no smoking, eating or storage of food in this area.

2. Prior to performing operations on source of radioactive material, radiation levels will be measured. Handling tools or suitable remote-handling devices must be used.

3. After handling radioactive material hands shall be washed before leaving the work area.

4. Objects and equipment that may have been contaminated with radioactive material shall be surveyed for contamination prior to their removal from the work area. All contaminated items shall be decontaminated by Mr. M. Bolton prior to re-use.

5. Mr. Bolton shall be notified (253-2180) prior to the start of a new contract, when shipments of radioactive material arrive and prior to shipping radioactive material.

X X X

OUTLINE OF SUBJECT MATERIAL FOR 3 HOUR LECTURE

RADIATION PROTECTION TRAINING PROGRAM FOR WALTHAM COMPASS CORP.

1. Units and Definitions:
   - A. Exposure dose
   - B. Absorbed dose
   - C. Dose equivalent
   - D. Dose rate
   - E. Units for amount of radioactivity
   - F. Half life

2. Biological Effects of radiation:
   - A. History of radiation exposure
   - B. Sensitivity of cells to radiation damage
   - C. Acute exposure values and effects
   - D. Chronic exposure and effects
   - E. Threshold versus linear relation between dose and effects
   - F. Balancing risks versus benefits

3. Maximum Permissible Exposures (MPE):
   - A. Chronological development of MPE values
   - B. Current MPE values
   - C. Concept of least practical exposure

4. Control of Radiation Exposure:
   - A. Control of external exposure
     1. Distance 2. Time 3. Shielding
   - B. Control of internal exposure
     1. Criteria
     2. Routes of deposition
     3. Methods of control

5. Handling of Radiation Incidents or Emergencies

6. Compliance with Regulations:
   - A. NRC regulations (Parts 19 and 20)
   - B. Department of transportation (DOT)

6. Radioactive waste (Item 15 Form NRC-313):
All radioactive waste will be disposed of through the licensed waste disposal agency, Interex Corp.

We trust that in light of the foregoing your agency will see fit to reinstate our captioned license.

Any assistance you may render to the end that we can resume manufacture of compasses with card and crystal treated with Promethium-147 will be deeply appreciated.

Very truly yours,

WALTHAM COMPASS CORPORATION

Benjamin D. Pollack
Clerk (Secretary)

Enclosure