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April 4, 1985

United States Nuclear Regulatory Commission
Region 1 Office
631 Park Avenue
King of Prussia, PA 19406

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MS 16

Attention: Mr. Lawrence F. Friedwan

RE: MAIL CONTROL #03466
DOCKET #030-22114

Gentlemen:

In response to your letter dated March 22, 1985, with regard to the above referenced application of a byproduct material license, we would like to offer the following additional information.

1. The sealed source model numbers which will be used in our Troxler Model 3400 Series Moisture-Density Gauge are as follows:

Cesium 137: Troxler Drawing No. A-102112
Will not exceed 9 mCi per source.

Am-241Be: Troxler Drawing No. A-102451
Will not exceed 44 mCi per source.

2. The name of the proposed supplier for our film badges is:

R. S. Landauer Company
2 Science Road
Glenwood, Illinois 60425
Phone: (312) 755-7000

Type B1 Badge that monitors both neutron and gamma rays will be provided. Exchange frequency will be quarterly.

3. Leak tests will be performed using the Troxler Model 3880 Leak Test Kit. Manufacturer's instructions will be followed with the individual wearing his film badge while performing the leak test procedure. Leak test will be performed every six (6) months.

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4. Our personnel will be provided with written device operating and emergency procedures. These procedures will include the following:

A. Radiation Safety Officer

- 1). Mr. John K. Schneider has been designated as the company Radiation Safety Officer and will assume the duties and responsibilities that include the following:
 - a. To ensure that all terms and conditions of the license are being met and that the information contained in the license is up-to-date.
 - b. To ensure that the equipment has been leak tested in the required timely manner and that the leak test is performed in the manner prescribed by the equipment manufacturer.
 - c. To ensure that the use of the equipment is only by individuals that have been authorized by the Radiation Safety Officer and that all users wear personnel monitoring equipment when utilizing the equipment.
 - d. To maintain the records as required by the license and the regulations. These records shall include personnel exposure records, leak test records and training certificates for all users.
 - e. To ensure that the equipment is properly secured against unauthorized removal at all times when it is not in use.
 - f. To serve as a point of contact and give assistance in case of emergency such as equipment damaged in the field or theft and to notify the proper authorities in case of emergency.
 - g. To ensure that all users have read and understand the radiation safety operating and emergency procedures.
 - h. To post NRC Notice to Employees in a highly visible area.

- i. To post "Warning Radioactive Material" on the storage location.

B. Operating Procedures

1). Transportation of Equipment

- a. All possible means shall be provided to ensure that the equipment is fully secured in the transporting vehicle and the equipment is away from the passenger compartment. When transporting in an enclosed vehicle (car or van), the vehicle will be locked. When transporting in an open bed vehicle, the gauge should be securely fastened and locked to the truck bed.
- b. The gauge will be transported in the Troxler transportation case. The United States Department of Transportation requires that the gauge be transported in a properly labeled carrying case.
- c. At all times during transport, the operator will have a properly completed Bill of Lading for each gauge.

2). Utilization Procedures

- a. When the gauge is in the field, we as the authorized user will maintain control over the gauge at all times. The gauge will never be left unattended.
- b. When not making measurements, the gauge should be placed in the transportation case and returned to its permanent storage area as soon as possible. The gauge is to be used for its intended purpose only. By doing so, we will maintain any radiation exposure to as low as reasonably attainable.
- c. When using the equipment, we will wear the personnel monitoring device that has been assigned to us. When we are not using the equipment, our monitoring device is to be stored in the radiation free area that has been designated in the office.

- d. A utilization log book will be kept at all times to control the gauge(s) whereabouts. The equipment will be signed out and in with the date and operator's name posted. A six month inventory will be done.
- 3). Maintenance and Leak Test Procedures
- a. Periodic maintenance will include cleaning the gauge. During any maintenance, you must wear your personnel monitoring device.
 - b. No maintenance will be performed in which the radioactive source is removed from the gauge. For this type of maintenance, the gauge will be returned to the manufacturer.
 - c. The leak test will be performed using the Troxler Model 3880 Leak Test Kit. The leak test will be performed using the manufacturer's instructions. Again, the personnel monitoring device will be employed. Gauges will be leak tested at intervals not to exceed six (6) months.

C. Emergency Procedures

- 1). In the event of physical damage to a gauge, the following will be performed. The operator will have a copy of these procedures with him.
 - a. Immediately cordon off an area around the gauge. An area radius of 15 feet will be sufficient.
 - b. If a vehicle is involved, it must be stopped until the extent of contamination, if any, can be established.
 - c. A visual inspection of the gauge is to be made to determine if the source housing and/or shielding has been damaged.
 - d. At the earliest possible time, when the situation is under control, you must contact Mr. John K. Schneider at (717) 622-4055. Describe the present conditions and follow the instructions of the Radiation Safety Officer.

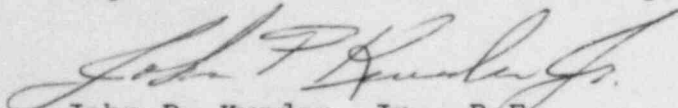
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- 2). In the event the gauge is lost or stolen, immediately notify the Radiation Safety Officer as listed above in Item C.1.d. He in turn will contact the Nuclear Regulatory Commission Regional Office.

Thank you for your time and consideration in this matter. If you have any questions or comments concerning the above, please contact our office at your convenience.

Very truly yours,

CHARLES H. QUANDEL ASSOCIATES, INC.
Engineers . Architects . Surveyors



John P. Kweder, Jr., P.E.

JPK/sc

cc: Mr. Charles H. Quandel
Mr. Jack K. Schneider