

APR 28 1986

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Pathfinder Labs., Inc.
ATTN: Mr. Paul L. Spangler
President
11542 Fort Mims Drive
St. Louis, MO 63141

Dear Mr. Spangler:

We have reviewed your application received March 3, 1986 requesting that License Number 24-16273-01 be amended in its entirety and find that we will need additional information as follows:

1. It appears that you will be relocating to a new facility. Please be advised that we cannot authorize you to release your old facility for unrestricted use (even by other members of your staff) until we have received and reviewed a copy of the results of your close-out survey. The survey should consist of exposure rate measurements to show that all sources of radioactive material have been removed, and contamination checks of areas where radioactive materials were used or stored. Average radiation levels associated with surface contamination and removable contamination should not exceed those specified in the enclosed decontamination guide. Please submit the following information with your close-out survey:
 - a. A diagram of your old facility with survey and wipe test results keyed to specific locations.
 - b. The name of the person performing the survey.
 - c. The date the survey was performed.
 - d. The instrument(s) used for exposure rate measurements and for analysis of the wipes.
 - e. Background readings.
 - f. The date that the survey instrument was last calibrated.
2. Please provide a general description of your method of packaging byproduct material for distribution and include:
 - a. The physical form(s) of the byproduct material.
 - b. The maximum activity anticipated for each type of container.
 - c. The type and thickness of shielding used.
 - d. The typical maximum radiation levels at the surface of the final shielded source container when filled with the maximum activity.

It is not acceptable for you to state that you will comply with Department of Transportation (DOT) regulations. DOT regulations apply to shipping. The dose rate limits that DOT imposes apply to the surface of the shipping container, not the surface of the shielded vial.

The essential point is to demonstrate that shielding is adequate for repetitive handling and storage at various laboratories by persons (e.g., technologists) whose radiation safety knowledge may be minimal.

3. With regard to the labeling of the byproduct material you wish to distribute, please:
 - a. Submit color samples of the labels used on the vials and/or vial shields used to comply with 10 CFR 20.203(f).
 - b. Supply a copy of the radiation safety related instructions supplied to end users. These instructions may include, but not be limited to:
 - (1) Use of waterproof gloves.
 - (2) Use of additional shielding, if necessary.
 - (3) Use of extremity monitors, when applicable.
 - (4) Use of auxiliary shielding for storage .
 - (5) Use of tongs or other devices to minimize direct contact.
4. Please describe your procedures for assuring compliance with Section 30.41(c) and (d) of 10 CFR Part 30 (enclosed).

We will continue our review of your application upon receipt of this information. Please reply in duplicate, within 30 days, and refer to Control Number 80806.

Sincerely,

Original Signed By
William J. Adam, Ph.D.
Materials Licensing Section

Enclosures:

1. Decontamination Guidelines
2. 10 CFR Part 30

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WAC
Adam/cm
4/29/86