

File

FEB 25 1986

Illinois State University
ATTN: William Blomgren
University Safety Officer
Normal, IL 61761

Gentlemen:

This is in reference to your application received May 28, 1985, signed by William Blomgren, requesting an amendment to renew your Byproduct Material License Number 12-01372-02. In order to continue our review, we need the following additional information:

1. Submit your procedures for leak testing sealed sources. Your procedures should include the following:
 - a. The title and qualifications of the individual who will analyze leak test samples.
 - b. The type, manufacturer's name, model number, and radiation detection and measurement characteristics of the instrument to be used for assay of test samples.
 - c. Your procedures for calibrating the instrumentation used for analysis of leak test samples.
 - d. The method, including a sample calculation, used to convert instrument readings to units of activity, e.g., microcuries.
2. Please note that ancillary personnel (housekeeping, security, etc.) whose duties may require them to work in the vicinity of radioactive material (whether escorted or not) need to be informed about radiation hazards and appropriate precautions. Outline your program to insure that these employees receive the necessary instructions. Confirm that these instructions will be given both initially and annually thereafter on a refresher basis.
3. Your renewal application states that decontamination will be performed on laboratory areas where the wipe tests reveal an activity level greater than 15 times background. Please note that NRC recommends an action level of "any activity above background" for decontamination. Please modify your survey procedures to include an action level for decontaminating that is in accordance with NRC recommendations.
4. a. Please confirm that before disposal as normal waste, all radioactive waste will be surveyed with an appropriate instrument to determine that its radioactivity cannot be distinguished from background.

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- b. Please submit a more detailed description of the waste your transfer to the University of Illinois (U of I) at Urbana-Champaign for disposal. If you transfer waste that meets the requirements specified in 10 CFR Part 20, Section 20.306 (enclosed) there is no conflict. Be advised that if the waste transferred to U of I at Urbana-Champaign does not meet the above requirements, then you are prohibited from transferring it to them. You can only transfer waste for disposal to persons that possess a waste disposal license.
5. Please submit a copy of general instructions to be followed by laboratory personnel or students while working with radioactive materials. These instructions should:
 - a. Outline control procedures for obtaining permission to use radioactive materials at your institution; give limitations on quantity to be handled per student or allowed per experiment.
 - b. Explain what laboratory apparel to wear and what safety equipment to use (e.g., use of laboratory coats, gloves, and remote pipetting devices).
 - c. Prescribe limitations and conditions on handling liquid or loose (unencapsulated or dispersible) radioactive materials and what laboratory equipment to use in working with them. For example, explain when materials and operations should be confined to radiochemical fume hoods or gloveboxes and explain what shielding or remote handling equipment is to be used when hard beta- or gamma-emitting materials are handled.
 - d. Instruct the user about routine survey and monitoring procedures for each contamination control zone.
 - e. Instruct the user about movement of materials between rooms, halls, or in corridors, if applicable.
 - f. Explain requirements for storage of materials and labeling of containers and how areas will be identified where radioactive materials are used. Explain where and how contaminated articles and glassware are to be handled and stored.
 - g. Specify personnel monitoring devices to be used, where to obtain them, and instructions given on recording exposure results or properly turning in personnel monitoring devices for processing at appropriate intervals.

- h. Instruct the user in waste disposal procedures to follow in the laboratory, including limitations for disposal of liquid or solid wastes by the user and procedures to use for waste storage within each laboratory.
- i. Explain what records are to be kept for the use and disposal of materials.
- j. Describe contamination control procedures, including restrictions against smoking and consumption of food and beverages.


If you have any questions or require clarification on any of the information stated above, you may contact us at (312) 790-5625.

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 79044.

Sincerely,

Original Signed By
Cassandra F. McDonald
Materials Licensing Section

RIII


McDonald/cm
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