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JUN 20 1985

Bemidji State University  
ATTN: Gary W. Evans, Ph.D.  
Associate Professor of Chemistry  
Bemidji, MN 56601

License No. 22-07944-01

Gentlemen:

We have reviewed your letter and application dated January 16, 1985 requesting renewal of License No. 22-07944-01 and find that existing supporting documents do not contain a complete description of your program. Therefore, we need the following additional information:

1. Please clarify the name of your current radiation safety officer (RSO). Previous documents indicate Dr. Alice Lindgren as RSO, however, the renewal request dated January 16, 1985 was submitted and signed by Dr. Evans.
2. Please have an administrative representative concur with the request to have Dr. Evans added to the license and state his authority to make commitments to the NRC concerning your program.
3. Previously submitted applications and letters which are listed in License Condition No. 18 do not contain a description of your facilities and procedures for the Pu-Be neutron source. Therefore, please supplement these procedures by submitting the following:
  - a. Describe the howitzer and its location and security. Include how unauthorized use is prevented.
  - b. Describe the use of the Pu-Be source.
  - c. Describe your safe handling procedures. State whether or not the source is removed from its shielding.
  - d. Describe procedures for collecting leak test samples. Describe your procedure for analyzing the sample and include a sample calculation showing how you use the Bendix electroscope to demonstrate the levels are less than 0.005 microcuries. Include calibration techniques to determine the instrument's efficiency.
  - e. Describe the gamma and neutron radiation levels in nearby restricted and unrestricted areas.
  - f. Refer to the enclosed Pu-Be Source Checklist and use it as a guide for submitting information pertaining to the howitzer.
4. Please describe the animal housing facilities used for the animals treated with radioactive material. Describe instructions given to the caretakers for handling animals, carcasses, and cleaning and decontaminating cages.

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5. Describe the emergency procedures provided to users in case of spills, etc. Include in your procedures the immediate steps to be taken, the RSO's name and telephone number, and any cleanup instructions. Refer to Regulatory Guide 10.8, Appendix H for example procedures.
6. Please clarify how and where radioactive materials packages will be received at your facility. Clarify who will order the radioactive material. Submit procedures equivalent to those in Appendix E of Regulatory Guide 10.8.
7. In addition to G-M surveys, expand your laboratory survey procedures to include weekly wipe testings of areas where all unsealed radionuclides are used and/or stored. Also, include a statement that all sealed and unsealed source storage areas will be surveyed for exposure rates monthly.
8. The thin window G-M tube and the RCL scaler that you use for laboratory surveys and monitoring packing material must be calibrated at least annually. Therefore, describe your calibration frequency and the calibration method you will use. You may choose to follow the procedures in Appendix D, Section 1 of Regulatory Guide 10.8 or submit alternate procedures.
9. Describe how the civil defense sealed sources will be used. Will they be loaned out or taken to temporary job sites?

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 78201.

Sincerely,

Original Signed By  
Evelyn R. Matson  
Materials Licensing Section

Enclosures:

1. Regulatory Guide 10.8
2. Pu-Be Source Checklist

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Matson/jl  
6/19/85