

NMSS:JEW  
Control No. 418656

SEP 11 1985

U.S. Department of Interior  
Bureau of Land Management  
Resource Evaluation  
ATTN: Donald Rhea  
Assistant District Manager  
Operations  
P.O. Box 2859  
Casper, Wyoming 82609

Gentlemen:

This is in reference to your request for a byproduct material license renewal in the name of U.S. Department of Interior, Bureau of Land Management, Resource Evaluation, Casper, Wyoming - District. In order for us to complete our review of your request, please supply the following:

1. It is not clear from your renewal request as to your training requirements for well-logging personnel. The following training should be completed by well-logging personnel:
  - a. Formal training should encompass a minimum of 24 hours duration covering the following topics:
    - (1) Fundamentals of Radiation Safety
    - (2) Radiation Detection Instrumentation to be Used
    - (3) Equipment to be Used
    - (4) The Requirements of Pertinent Federal Regulations (10 CFR 19, 20, 30, and 71 and DOT Title 49)
    - (5) The Licensee's Written Operating and Emergency (OE) Procedures
    - (6) The Licensee's Recordkeeping Procedures
    - (7) Case Histories and Potential Consequences of Accidents in Well-Logging Operations
  - b. The trainee should show evidence of satisfactory completion of this training by successfully passing an oral or written exam.

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- c. Formal on-the-job training should be, as a minimum, approximately 3 months duration working under the direct supervision of a user who has been specifically approved by the NRC, an Agreement State, or by a licensee in accordance with a specific license condition. Following the on-the-job training period, the preceptor should be able to attest to the fact that the trainee has demonstrated a clear and concise understanding of the duties and responsibilities of the job, NRC Regulations, OE procedures, and your byproduct material license.

Provide, for NRC review and approval, your training criteria for well-logging personnel. Donald Rhea should submit his training and experience to NRC for review.

2. Provide a sketch of the 111 S. Wolcott Street location where radioactive materials are stored or used identifying the physical layout of the building, locations of use, and storage facilities for sealed sources.
3. Provide a sketch of handling tools, if any, used for manipulating each type of sealed source you use in your well-logging operations.
4. Utilization records should show for each recorded event the following information for each source of radiation:
  - a. Make, model number, and a serial number or a description of each source of radiation used.
  - b. The identity of the well-logging supervisor or field unit to whom assigned.
  - c. Locations and dates of use.

Submit a copy of your utilization log for NRC evaluation or confirm that your utilization logs will contain all the information identified above.

5. Inspection and maintenance should be conducted, at intervals not to exceed 6 months, on source holders, logging tools, source handling tools, storage containers, and transport containers to assure proper labeling and the device's physical condition. Should any damage be revealed, the device should be removed from service until repairs have been made. Records of inspection and maintenance should be maintained for a period of 2 years for inspection by the NRC. Amend your OE procedures for conducting inspection and maintenance of source holders, logging tools, source handling tools, storage containers, and transport containers.

6. Each individual who will use or supervise the use of licensed material should be provided with a set of OE procedures. These procedures should include instructions in at least the following:
  - a. Safe handling and use of sources of radiation to be employed under this license.
  - b. Methods and occasions for conducting radiation surveys.
  - c. Methods and occasions of locking and securing source(s) of radiation.
  - d. Personnel monitoring and the use of personnel monitoring equipment.
  - e. Transportation of source(s) of radiation to temporary job sites and field stations, including packaging, placarding of vehicles, and securing sources of radiation during transportation.
  - f. Emergency procedures.
  - g. Maintenance of records.
  - h. Inspection and maintenance of source holders, logging tools, source handling tools, storage containers, and transport containers.
  - i. Procedures to be followed in the event a sealed source is lodged downhole.
  - j. Procedures to be used for picking up, receiving, and opening packages containing radioactive material.

Submit copies of your updated OE emergency procedures for NRC review and approval.

7. The following documents and records should be available at temporary job sites:
  - a. OE procedures.
  - b. Survey records for the period of operation at the temporary job site.
  - c. Evidence of current calibration for the radiation survey instruments in use at the temporary job sites.

- d. When operating in an Agreement State under reciprocity, a copy of your NRC license.

It is not necessary to submit copies of documents you will have available at all temporary job sites. You need only state that you plan to have these documents available for NRC/Agreement State inspection, just restate the documents you plan to have available at each temporary job site.

8. The following documents and records should be available at field stations where radioactive materials are used or stored:
  - a. Copy of the NRC license.
  - b. OE procedures.
  - c. Applicable NRC regulations.
  - d. Records of the latest survey instrument calibrations on each survey instrument.
  - e. Records of the latest leak test results on each sealed source.
  - f. Semiannual physical inventories.
  - g. Utilization records.
  - h. Records of inspection and maintenance.
  - i. Survey records that denote compliance with 10 CFR 20.201.

It is not necessary to submit copies of documents you will have available at all field stations where radioactive materials are used. You need only state that you plan to have these documents available for NRC/Agreement State inspection. Just restate the documents you plan to have available at each field site using radioactive material.

9. All personnel whose duties may require them to work in/around or visit a restricted area need to be informed about radiation hazards and appropriate precautions upon being hired and at least annually thereafter. Outline your method to assure that training prescribed in 10 CFR 19.12 will be conducted.
10. Provide a sketch of each type of gamma or neutron storage and/or transport containers you use in your well-logging operations.

11. Specify the types of wells that will be well logged under the auspices of License No. 49-19256-01 (oil, gas, mineral, etc.)
12. Labeling pursuant to 10 CFR 20.203(f) should be as follows:
  - a. Each source, source holder, or logging tool containing radioactive material shall bear a durable, legible and clearly visible marking or label, which has, as a minimum, the standard radiation caution symbol, without the conventional color requirement, and the following wording:

DANGER (OR CAUTION)  
RADIOACTIVE

This labeling should be on the smallest component transported as a separate piece of equipment.

- b. Each transport container should have permanently attached to it a durable, legible, and clearly visible label which has, as a minimum, the standard radiation caution symbol and the following wording:

DANGER (OR CAUTION)  
RADIOACTIVE  
NOTIFY CIVIL AUTHORITIES (OR NAME OF YOUR COMPANY)

Demonstrate from statements, drawings, sketches, etc., that the above labeling criteria have been satisfied on the transport containers you currently possess.

We will continue our review of your application upon receipt of this information. Please reply in duplicate and refer to Control No. 418656.

Sincerely,

Original signed by  
Jack E. Whitten

Jack E. Whitten  
Nuclear Materials Safety Section