

## APPENDIX C

### RADIATION SAFETY TRAINING PROGRAM

#### I. Introduction

Handling and use of portable nuclear gauges is restricted to trained personnel. A portable gauge operator will be an **Authorized User**--an individual that has completed an approved formal radiation safety class and is specifically listed on a Radioactive Material License.

There are three training components associated with portable gauges. Authorized User Training will be provided to workers who will be independently using the gauges. Hazardous Materials (Hazmat) Employee Training will be provided to any worker associated with the packaging and transportation of gauges. Ancillary Personnel Radiation Awareness Training will be provided to all personnel who may handle or work near the gauges (for example, vicinity of gauge permanent storage area) during their work. The training will be conducted at the frequency specified in the following table:

<u>Training Requirement</u>	<u>Frequency of Training</u>
Authorized User (Operator) Training	Initial; Annual Refresher
Hazardous Materials (Hazmat) Training	Initial; Refresher every 3 years
Ancillary Personnel Radiation Awareness Training	Initial; Annual Refresher

#### II. Authorized User Training

A. Portable gauges will be used by individuals that have completed at least 8 hours of formal radiation safety training. Authorized Users will complete a training course approved by the Arkansas Department of Health. Any third party course offered by a gauge manufacturer or independent consultant may be used, provided the Department approves the training.

If in-house radiation safety training is provided, it will be conducted in accordance with a training program that has been approved by the Department and incorporated into the company's radiation protection program.

B. Operating and Emergency (O&E) procedures are a required training topic. Unless training in our company's O&E procedures is addressed during third party training and documentation is provided by the trainer demonstrating its inclusion in the course, in-house training in O&E procedures will be provided. O&E procedures training will be conducted by the RSO or another experienced gauge operator, and separate documentation of O&E procedures training will be provided for each worker.

C. Prior to handling, transporting or operating portable nuclear gauges, all Authorized Users will receive the general radiation safety training as required by Paragraph RH-

2803, “Instructions to Workers”, of the Rules and Regulations for Control of Sources of Ionizing Radiation. The following instructions will be provided:

- ◆ Information on the storage, security, transfer, or use of portable gauges at permanent facilities and temporary job sites
- ◆ The health effects associated with exposure to radiation or radioactive material
- ◆ Precautions and procedures used to minimize exposures
- ◆ Applicable provisions of Arkansas’ radiation control regulations and the company’s Radioactive Materials License
- ◆ Workers’ responsibility to report any unsafe conditions in the workplace
- ◆ Appropriate responses to warnings made in the event of incidents having the potential to involve radiation exposure
- ◆ Reporting requirements for occupational radiation exposures described in Paragraph RH-2804, “Notifications and Reports to Individuals”.

This portion of the training will typically last 2 - 4 hours. The duration may vary based on attendees’ comprehension of the topics covered. A question and answer session will be held at the end of the training period, and attendees will be encouraged to request clarification as necessary during the presentation.

- D.** Documentation of portable gauge radiation safety training for each Authorized User will be maintained on file for inspection purposes.

### **III. Hazmat Employee/Driver Training**

- A.** Radioactive material contained in portable gauges is classified as hazardous material by the U.S. Department of Transportation (DOT). In accordance with DOT regulations (49 CFR Part 172, Subpart H) workers must complete hazmat training prior to performing work that directly affects hazardous material transportation safety. (Exception: New driver employees can transport for 90 days without the training, provided a hazmat-trained employee directly supervises them.) Refresher training must be provided at least once every 3 years.
- B.** Hazmat training will include the following: general awareness/familiarization, function specific, and safety training. It will be provided either in-house or by qualified third party trainers. **Completion of the Authorized User training can satisfy the hazmat training requirement; however, additional documentation is required (see below).**
- C.** Documentation of hazmat training will be maintained for the duration of each worker’s employment, plus 90 days, and will include the following information:
- The employee’s name and date of most recent training completed;
  - Description, copy or location of training materials used;
  - Name and address of the person providing the training; and
  - Certification that the employee has been trained and tested as required.

- D.** Driver training meeting the requirements of 49 CFR 177.816 must be provided to all personnel driving vehicles containing portable gauges, and may be provided concurrently with hazmat employee training.

**IV. Ancillary Personnel Radiation Awareness Training**

- A.** Ancillary personnel (office personnel, janitorial personnel, non-radiation workers, etc.) who may work in the general vicinity of the gauges (for example, the gauge permanent and temporary storage areas) will receive hazard awareness training to insure that these individuals understand the possible hazards, safety precautions, and emergency procedures related to the use and storage of radioactive material. This training is required by the U.S. Department of Labor, Occupational Safety and Health Administration.
- B.** The training will be conducted by the RSO for ancillary personnel at the time of employment. Refresher training for all ancillary personnel will be conducted at least annually thereafter.
- C.** The training will last about one hour and personnel will be encouraged to ask questions or request additional discussion of any topic covered in the training.
- D.** Documentation of radiation awareness training for ancillary personnel will be maintained on file for inspection purposes.