§ 39.61  Training.

(a) The licensee may not permit an individual to act as a logging supervisor until that person—

(1) Has completed training in the subjects outlined in paragraph (e) of this section;
(2) Has received copies of, and instruction in—
(i) The NRC regulations contained in the applicable sections of parts 19, 20, and 39 of this chapter;
(ii) The NRC license under which the logging supervisor will perform well logging; and
(iii) The licensee’s operating and emergency procedures required by §39.63;
(3) Has completed on-the-job training and demonstrated competence in the use of licensed materials, remote handling tools, and radiation survey instruments by a field evaluation; and
(4) Has demonstrated understanding of the requirements in paragraphs (a) (1) and (2) of this section by successfully completing a written test.

(b) The licensee may not permit an individual to act as a logging assistant until that person—

(1) Has received instruction in applicable sections of parts 19 and 20 of this chapter;
(2) Has received copies of, and instruction in, the licensee’s operating and emergency procedures required by §39.63;
(3) Has demonstrated understanding of the materials listed in paragraphs (b) (1) and (2) of this section by successfully completing a written or oral test; and
(4) Has received instruction in the use of licensed materials, remote handling tools, and radiation survey instruments, as appropriate for the logging assistant’s intended job responsibilities.

(c) The licensee shall provide safety reviews for logging supervisors and logging assistants at least once during each calendar year.

(d) The licensee shall maintain a record on each logging supervisor’s and logging assistant’s training and annual safety review. The training records must include copies of written tests and dates of oral tests given after July 14, 1987. The training records must be retained until 3 years following the termination of employment. Records of annual safety reviews must list the topics discussed and be retained for 3 years.

(e) The licensee shall include the following subjects in the training required in paragraph (a)(1) of this section:

(1) Fundamentals of radiation safety including—
(i) Characteristics of radiation;
(ii) Units of radiation dose and quantity of radioactivity;
(iii) Hazards of exposure to radiation;
(iv) Levels of radiation from licensed material;
(v) Methods of controlling radiation dose (time, distance, and shielding); and
(vi) Radiation safety practices, including prevention of contamination, and methods of decontamination.

(2) Radiation detection instruments including—
(i) Use, operation, calibration, and limitations of radiation survey instruments;
(ii) Survey techniques; and
(iii) Use of personnel monitoring equipment;
(3) Equipment to be used including—
(i) Operation of equipment, including source handling equipment and remote handling tools;
(ii) Storage, control, and disposal of licensed material; and
(iii) Maintenance of equipment.
(4) The requirements of pertinent Federal regulations. And
(5) Case histories of accidents in well logging.

§ 39.63  Operating and emergency procedures.

Each licensee shall develop and follow written operating and emergency procedures that cover—

(a) The handling and use of licensed materials including the use of sealed sources in wells without surface casing for protecting fresh water aquifers, if appropriate;
§ 39.65 Personnel monitoring.

(a) The licensee may not permit an individual to act as a logging supervisor or logging assistant unless that person wears, at all times during the handling of licensed radioactive materials, a personnel dosimeter that is processed and evaluated by an accredited National Voluntary Laboratory Accreditation Program (NVLAP) processor. Each personnel dosimeter must be assigned to and worn by only one individual. Film badges must be replaced at least monthly and other personnel dosimeters replaced at least quarterly. After replacement, each personnel dosimeter must be promptly processed.

(b) The licensee shall provide bioassay services to individuals using licensed materials in subsurface tracer studies if required by the license.

(c) The licensee shall retain records of personnel dosimeters required by paragraph (a) of this section and bioassay results for inspection until the Commission authorizes disposition of the records.

§ 39.67 Radiation surveys.

(a) The licensee shall make radiation surveys, including but not limited to the surveys required under paragraphs (b) through (e) of this section, of each area where licensed materials are used and stored.

(b) Before transporting licensed materials, the licensee shall make a radiation survey of the position occupied by each individual in the vehicle and of the exterior of each vehicle used to transport the licensed materials.

(c) If the sealed source assembly is removed from the logging tool before departure from the temporary jobsite, the licensee shall confirm that the logging tool is free of contamination by energizing the logging tool detector or by using a survey meter.

(d) If the licensee has reason to believe that, as a result of any operation involving a sealed source, the encapsulation of the sealed source could be damaged by the operation, the licensee shall conduct a radiation survey, including a contamination survey, during and after the operation.