

## Department of Energy

## § 835.1003

(3) Physical design features, administrative controls, limits, policies, procedures, alarms, and other measures implemented at the facility to manage doses and maintain doses ALARA, including both routine and emergency actions;

(4) Individual rights and responsibilities as related to implementation of the facility radiation protection program;

(5) Individual responsibilities for implementing ALARA measures required by § 835.101; and

(6) Individual exposure reports that may be requested in accordance with § 835.801.

(d) When an escort is used in lieu of training in accordance with paragraph (a) or (b) of this section, the escort shall:

(1) Have completed radiation safety training, examinations, and performance demonstrations required for entry to the area and performance of the work; and

(2) Ensure that all escorted individuals comply with the documented radiation protection program.

(e) Radiation safety training shall be provided to individuals when there is a significant change to radiation protection policies and procedures that may affect the individual and at intervals not to exceed 24 months. Such training provided for individuals subject to the requirements of § 835.901(b)(1) and (b)(2) shall include successful completion of an examination.

[63 FR 59685, Nov. 4, 1998]

### §§ 835.902–835.903 [Reserved]

## Subpart K—Design and Control

### § 835.1001 Design and control.

(a) Measures shall be taken to maintain radiation exposure in controlled areas ALARA through engineered and administrative controls. The primary methods used shall be physical design features (e.g., confinement, ventilation, remote handling, and shielding). Administrative controls shall be employed only as supplemental methods to control radiation exposure.

(b) For specific activities where use of engineered controls is demonstrated to be impractical, administrative con-

trols shall be used to maintain radiation exposures ALARA.

[63 FR 59686, Nov. 4, 1998, as amended at 72 FR 31927, June 8, 2007]

### § 835.1002 Facility design and modifications.

During the design of new facilities or modification of existing facilities, the following objectives shall be adopted:

(a) Optimization methods shall be used to assure that occupational exposure is maintained ALARA in developing and justifying facility design and physical controls.

(b) The design objective for controlling personnel exposure from external sources of radiation in areas of continuous occupational occupancy (2000 hours per year) shall be to maintain exposure levels below an average of 0.5 millirem (5  $\mu$ Sv) per hour and as far below this average as is reasonably achievable. The design objectives for exposure rates for potential exposure to a radiological worker where occupancy differs from the above shall be ALARA and shall not exceed 20 percent of the applicable standards in § 835.202.

(c) Regarding the control of airborne radioactive material, the design objective shall be, under normal conditions, to avoid releases to the workplace atmosphere and in any situation, to control the inhalation of such material by workers to levels that are ALARA; confinement and ventilation shall normally be used.

(d) The design or modification of a facility and the selection of materials shall include features that facilitate operations, maintenance, decontamination, and decommissioning.

[58 FR 65485, Dec. 14, 1993, as amended at 63 FR 59686, Nov. 4, 1998; 72 FR 31927, June 8, 2007]

### § 835.1003 Workplace controls.

During routine operations, the combination of engineered and administrative controls shall provide that:

(a) The anticipated occupational dose to general employees shall not exceed the limits established at § 835.202; and