

(i) Immediately following the description of the hazardous material required by Subpart C of this part; or

(ii) Entered once on the shipping paper in a clearly visible location. This provision may be used only if the telephone number applies to each hazardous material entered on the shipping paper, and if it is indicated that the telephone number is for emergency response information (for example: "EMERGENCY CONTACT: ***").

(b) The telephone number required by paragraph (a) of this section must be the number of the person offering the hazardous material for transportation or the number of an agency or organization capable of, and accepting responsibility for, providing the detailed information concerning the hazardous material. A person offering a hazardous material for transportation who lists the telephone number of an agency or organization shall ensure that agency or organization has received current information on the material as required by paragraph (a)(2) of this Section before it is offered for transportation.

(c) The requirements of this section do not apply to —

(1) Hazardous materials that are offered for transportation under the provisions applicable to limited quantities; and

(2) Materials properly described under the shipping names "Engines, internal combustion", "Battery powered equipment", "Battery powered vehicle", "Wheelchair, electric", "Carbon dioxide, solid", "Dry ice", "Fish meal, stabilized", "Fish scrap, stabilized", "Castor bean", "Castor meal", "Castor flake", "Castor pomace", or "Refrigerating machine".

§172.606 Carrier information contact.

(a) Each carrier who transports or accepts for transportation a hazardous material for which a shipping paper is required shall instruct the operator of a motor vehicle, train, aircraft, or vessel to contact the carrier (e.g., by telephone or mobile radio) in the event of an incident involving the hazardous material.

(b) For transportation by highway, if a transport vehicle, (e.g., a semi-trailer or freight container-on-chassis) contains hazardous material for which a shipping paper is required and the vehicle is separated from its motive power and parked at a location other than a facility operated by the consignor or consignee or a facility (e.g., a carrier's terminal or a marine terminal) subject to the provisions of §172.602(c)(2), the carrier shall—

(1) Mark the transport vehicle with the telephone number of the motor carrier on the front exterior near the brake hose and electrical connections or on a label, tag, or sign attached to the vehicle at the brake hose or electrical connection; or

(2) Have the shipping paper and emergency response information readily available on the transport vehicle.

(c) The requirements specified in paragraph (b) of this section do not apply to an unattended motor vehicle separated from its motive power when the motor vehicle is marked on an orange panel, a placard, or a plain white square-on-point configuration with the identification number of each hazardous material loaded therein, and the marking or placard is visible on the outside of the motor vehicle.

Subpart H — Training

§172.700 Purpose and scope.

(a) *Purpose.* This subpart prescribes requirements for training hazmat employees.

(b) *Scope.* Training as used in this subpart means a systematic program that ensures a hazmat employee has familiarity with the general provisions of this subchapter, is able to recognize and identify hazardous materials, has knowledge of specific requirements of this subchapter applicable to functions performed by the employee, and has knowledge of emergency response information, self-protection measures and accident prevention methods and procedures (see §172.704).

(c) *Modal-specific training requirements.* Additional training requirements for the individual modes of transportation are prescribed in Parts 174, 175, 176 and 177 of this subchapter.

§172.701 Federal/State relationship.

This subpart and the parts referenced in §172.700(c) prescribed minimum training requirements for the transportation of hazardous materials. For motor vehicle drivers, however, a State may impose more stringent training requirements only if those requirements —

(a) Do not conflict with the training requirements in this subpart and in Part 177 of this subchapter; and

(b) Apply only to drivers domiciled in that State.

§172.702 Applicability and responsibility for training and testing.

(a) A hazmat employer shall ensure that each of its hazmat employees is trained in accordance with the requirements prescribed in this subpart.

(b) Except as provided in §172.704(c)(1), a hazmat employee who performs any function subject to the requirements of this subchapter may not perform that function unless instructed in the requirements of this subchapter that apply to that function. It is the duty of each hazmat employer to comply with the applicable requirements of this subchapter and to thoroughly instruct each hazmat employee in relation thereto.

(c) Training may be provided by the hazmat employer or other public or private sources.

(d) A hazmat employer shall ensure that each of its hazmat employees is tested by appropriate means on the training subjects covered in §172.704.

§172.704 Training requirements.

(a) Hazmat employee training shall include the following:

(1) *General awareness/familiarization training.* Each hazmat employee shall be provided general awareness/familiarization training designed to provide familiarity with the requirements of this subchapter, and to enable the employee to recognize and identify hazardous materials consistent with the hazard communications standards of this subchapter.

(2) *Function-specific training.*

(i) Each hazmat employee shall be provided function-specific training concerning requirements of this subchapter, or exemptions issued under subchapter A of this chapter, which are specifically applicable to the functions the employee performs.

(ii) As an alternative to function-specific training on the requirements of this subchapter, training related to the requirements of the ICAO Technical Instructions and the IMDG Code may be provided to the extent such training addresses functions authorized by §§171.11 and 171.12 of this subchapter.

(3) *Safety training.* Each hazmat employee shall receive safety training concerning —

(i) Emergency response information required by subpart G of Part 172;

(ii) Measures to protect the employee from the hazards associated with hazardous materials to which they may be exposed in the work place, including specific measures the hazmat employer has implemented to protect employees from exposure; and

(iii) Methods and procedures for avoiding accidents, such as the proper procedures for handling packages containing hazardous materials.

(b) *OSHA or EPA Training.* Training conducted by employers to comply with the hazard communication programs required by the Occupational Safety and Health Administration (OSHA) of the Department of Labor (29 CFR 1910.120) or the Environmental Protection Agency (EPA) (40 CFR 311.1), to the extent that training addresses the training specified in paragraph (a) of this section, may be used to satisfy the training requirements in paragraph (a) of this section, in order to avoid unnecessary duplication of training.

(c) *Initial and recurrent training.*—

(1) *Initial training.* A new hazmat employee, or a hazmat employee who changes job functions may perform those functions prior to the completion of training provided —

(i) The employee performs those functions under the direct supervision of a properly trained and knowledgeable hazmat employee; and

(ii) The training is completed within 90 days after employment or a change in job function.

(2) *Recurrent training.* A hazmat employee shall receive the training required by this subpart at least once every three years.

(3) *Relevant Training.* Relevant training received from a previous employer or other source may be used to satisfy the requirements of this subpart provided a current record of training is obtained from the hazmat employees' previous employer.

(4) *Compliance.* Each hazmat employer is responsible for compliance with the requirements of this subchapter regardless of whether the training required by this subpart has been completed.

(d) *Recordkeeping.* A record of current training, inclusive of the preceding three years, in accordance with this section shall be created and retained by each hazmat employer for as long as that employee is employed by that employer as a hazmat employee and for 90 days thereafter. The record shall include:

(1) The hazmat employee's name;

(2) The most recent training completion date of the hazmat employee's training;

(3) A description, copy or the location of the training materials used to meet the requirements in paragraph (a) of this section;

(4) The name and address of the person providing the training; and

(5) Certification that the hazmat employee has been trained and tested, as required by this subpart.

(e) *Limitation.* A hazmat employee who repairs, modifies, reconditions, or tests packagings as qualified for used in the transportation of hazardous materials, and who does not perform any other function subject to the requirements of this subchapter, is not subject to the safety training requirement of paragraph (a)(3) of this section.

Subpart I — Radiation Protection Program

§172.801 Applicability of the radiation protection program.

(a) *Scope.* This subpart prescribes requirements for developing and maintaining a radiation protection program.

(b) *Applicability.* This subpart applies to persons who offer for transportation, accept for transportation, or transports Class 7 (radioactive) materials.

§172.803 Radiation protection program.

Each person who offers for transportation, accepts for transportation, or transports Class 7 (radioactive) materials must develop, implement and maintain a written radiation protection program in accordance with the following:

(a) Radiation exposures must be kept as low as reasonably achievable (ALARA), with economic and social factors being taken into account.

(b) Radiation exposures must be controlled such that:

(1) An occupationally exposed hazmat employee's annual effective dose equivalent for occupational radiation exposure will not exceed 12.5 mSv (1.25 rem) in any 3 month period or 50 mSv (5 rem) in any 12 month period. For workers under the age of eighteen, the radiation dose will not exceed 1.250 mSv (0.125 rem) in any 3 month period or 5.0 mSv (0.5 rem) in any 12 month period;

(2) Radiation exposures to members of the general public must be less than 0.02 mSv (2 mrem) per hour. This level will be measured as if an individual were present for an hour in any area where the general public could be exposed to radiation during the course of transportation, except that, if there is an occurrence where the dose to a member of the general public equals or exceeds 0.02 mSv (2 mrem) in one hour, the program must provide limits that will prevent an individual from receiving cumulative doses totaling 1.0 mSv (100 mrem) in any week or 5.0 mSv (500 mrem) in any twelve-month period;

(3) The radiation dose to an embryo-fetus in a pregnant female occupationally exposed hazmat employee, who has declared her pregnancy to her employer, must not exceed 5.0 mSv (500 mrem) during the pregnancy. This limit is to be achieved by limiting the radiation dose of the declared pregnant worker to not more than 5.0 mSv (500 mrem) during the nine months and not greater than 0.5 mSv (50 mrem) in any one month; and

(4) The radiation doses received by occupationally exposed hazmat employees must be monitored by radiation dosimetry devices.

(c) The Environmental Protection Agency report entitled "Radiation Protection Guidance to Federal Agencies for Occupational Exposure (January 1987)". This document is available from the US Environmental Protection Agency, Washington, DC 20460.

(d) *Exceptions.*

(1) The requirements of this subpart do not apply to:

(i) Persons who offer for transportation or transport less than 200 TI, not including TI calculated for criticality control purposes, of packages in a 12-month period; or

(ii) Those persons whose operations will not result in a hazmat employee receiving an exposure of 5 mSv (500 mrem) or more per year. This evaluation must consider the hazmat employers Class 7 (radioactive) materials transportation activities for a period of at least 12 months. An evaluation must be conducted by a person experienced with radiation protection programs and transportation regulations and programs. The evaluator's competency may be evidenced by being certified by the American Board of Health Physics, or by a letter of recommendation from a State Radiation Official listed in the most current issue of the "Directory of Personnel Responsible For Radiological Health Programs" published annually by the Conference of Radiation Control Program Directors, Frankfort, KY.

(2) The requirements of this subpart may be satisfied by any radiation protection program that has been approved by an appropriate federal or state agency.

(e) *Guidance.*

(1) Each hazmat employer should review and follow the guidance provided in the following documents when establishing and maintaining their radiation protection program:

(i) National Council on Radiation Protection and Measurements (NCRP) Report No. 59, "Operational Radiation Safety Program (1978)". The guidance in this report should be tailored to the practical needs and operations of the hazmat employer and their occupationally exposed hazmat employees.

(ii) NCRP Report No. 116, "Limitation of Exposure to Ionizing Radiation (1993)".

(2) The reports referenced in paragraph (e)(1) of this section are available from NCRP Publications, 7910 Woodmont Avenue, Bethesda, MD 20814.

§172.805 Recordkeeping and notifications.

(a) A hazmat employer must document their radiation protection program and maintain written records of the radiation protection program activities, including dosimetry records, described in this subpart. These records must be made available to the Associate Administrator for Hazardous Materials Safety or other authorized officials in written form within seven days of a written request.

(b) A hazmat employer must keep a record of the radiation dose that each hazmat employee has received and provide it to the employee in reasonable time following a request during employment and no more than three months after end of employment.

(c) Each hazmat employer must notify the Associate Administrator for Hazardous Materials Safety, in writing, if a hazmat employee receives a dose exceeding 12.5 mSv (1250 mrem) in any calendar quarter or 50 mSv (5,000 mrem) in one year, or if a member of the general public is likely to receive a dose exceeding 5 mSv (500 mrem) in one year as a result of the hazmat employer's transportation activities. Such a notification must be made as soon as practicable following awareness of the occurrence.

(d) If an offeror or carrier of Class 7 (radioactive) materials is not required to establish a radiation protection program, they must develop and keep records which demonstrate why a program is not required (i.e., either the total TI of packages transported in any 12 month period is less than 200, or that the current Class 7 (radioactive) materials transport activities are the same as the activities that were reviewed by a competent radiation protection specialist whose evaluation demonstrated that no worker will receive a dose exceeding 5 mSv (500 mrem) in one year).

§172.807 Transitional provisions.

Compliance with the requirements of this subpart is required after October 1, 1999.

Appendix A — Office of Hazardous Materials Transportation Color Tolerance Charts and Tables

The following are Munsell notations and Commission Internationale de L'Eclairage (CIE) coordinates which describe the Office of Hazardous Materials Transportation Label and Placard Color Tolerance Charts in Tables 1 and 2, and the CIE coordinates for the color tolerances specified in Table 3. Central colors and tolerances described in Table 2 approximate those described in Table 1 while allowing for differences in production methods and materials used to manufacture labels and placards surfaced with printing inks. Primarily, the color charts based on Table 1 are for label or placard colors applied as opaque coatings such as paint, enamel or plastic, whereas color charts based on Table 2 are intended for use with labels and placards surfaced only with inks.

For labels printed directly on packaging surfaces, Table 3 may be used, although compliance with either Table 1 or Table 2 is sufficient. However, if visual reference indicates that the colors of labels printed directly on package surfaces are outside the Table 1 or 2 tolerances, a spectrophotometer or other instrumentation may be required to insure compliance with Table 3.

(see next page for tables)