



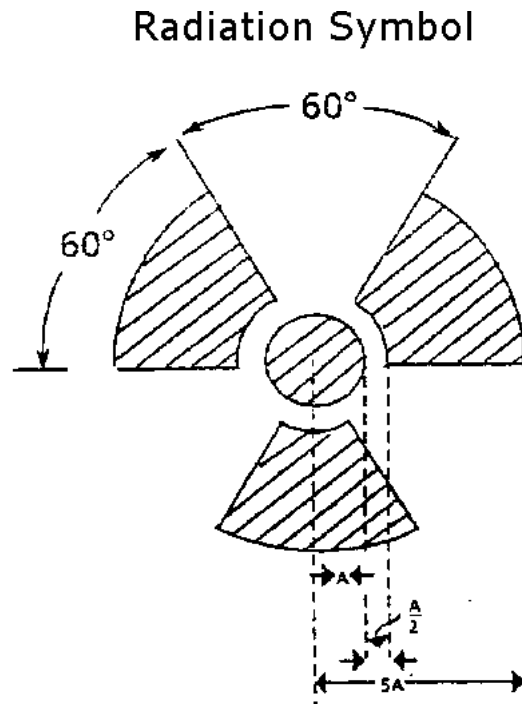
## Ohio Administrative Code

### Rule 3701:1-38-18 Posting, labeling, and receipt of packages.

Effective: September 1, 2011

(A) Except as provided in paragraph (B) of this rule, caution signs and posting requirements for licensees and registrants are as follows:

(1) The standard radiation symbol, unless otherwise authorized by the department or as provided in paragraph (A)(2) of this rule, shall use the colors magenta, purple, or black on yellow background. The symbol prescribed is the three-bladed design as follows:



1. Cross-hatched area is to be magenta, purple, or black, and
2. The background is to be yellow.

(2) Notwithstanding paragraph (A)(1) of this rule, licensees and registrants are authorized to label sources, source holders, or device components containing sources of radiation that are subjected to high temperatures, with conspicuously cast, etched or stamped radiation caution symbols and without a color requirement.

(3) In addition to the contents of signs and labels prescribed in this chapter, the licensee or registrant



may provide, on or near the required signs and labels, additional information, as appropriate, to make individuals aware of potential radiation exposures and to minimize the exposures.

(4) Posting of radiation areas shall be accomplished as follows:

(a) The licensee or registrant shall post each radiation area with a conspicuous sign or signs bearing the radiation symbol and the words "Caution, Radiation Area".

(b) The licensee or registrant shall post each high radiation area with a conspicuous sign or signs bearing the radiation symbol and the words "Caution, High Radiation Area" or "Danger, High Radiation Area".

(c) The licensee or registrant shall post each very high radiation area with conspicuous sign or signs bearing the radiation symbol and words "Grave Danger, Very High Radiation Area".

(d) The licensee shall post each airborne radioactivity area with a conspicuous sign or signs bearing the radiation symbol and the words "Caution, Airborne Radioactivity Area" or "Danger, Airborne Radioactivity Area".

(e) The licensee shall post each area or room in which there is an amount of licensed material used or stored which exceeds ten times the quantity of such material specified in appendix A of this rule with a conspicuous sign or signs bearing the radiation symbol and the words "Caution, Radioactive Material(s)" or "Danger, Radioactive Material(s)".

(f) The licensee shall post access openings to manufacturing or process equipment (such as tanks and vessels) on or in which radiation sources are mounted, if a person could gain access to the radiation beam and receive an annual dose to any part of their body which is greater than the applicable, permissible limits for individuals in rules 3701:1-38-12 and 3701:1-38-13 of the Administrative Code. The posting must include a conspicuous sign or signs bearing the radiation symbol and warning of the hazard.

(B) The following are exceptions to posting requirements set forth in paragraph (A) of this rule:



(1) A licensee or registrant is not required to post caution signs in an area or room that contains a source of radiation provided that the source is located in the area or room for a period of less than eight hours, and the source of radiation is continuously attended to during these periods by an individual who takes the precautions necessary to prevent the exposure of individuals to sources of radiation in excess of the limits established in rule 3701:1-38-13 of the Administrative Code, and the area or room is subject to licensee or registrant control.

(2) Rooms or other areas in hospitals that are occupied by patients are not required to be posted with caution signs pursuant to paragraph (A) of this rule provided that the patient could be released from licensee control in accordance with rule 3701:1-58-30 of the Administrative Code.

(3) A room or area is not required to be posted with a caution sign because of the presence of a sealed source provided the radiation level at thirty centimeters from the surface of the sealed source container or housing does not exceed 0.05 millisievert (0.005 rem) per hour.

(4) A room or area is not required to be posted with a caution sign because of the presence of radiation-generating equipment used solely for diagnosis in the healing arts.

(5) Rooms in hospitals or clinics that are used for teletherapy are exempt from the requirement to post caution signs if access to the room is controlled pursuant to rule 3701:1-58-59 of the Administrative Code and personnel in attendance take necessary precautions to prevent the inadvertent exposure of workers, other patients, and members of the public to radiation in excess of the limits established in this chapter.

(C) Except as provided in paragraph (E) of this rule, containers shall be labeled as follows:

(1) The licensee shall ensure that each container of licensed material bears a durable, clearly visible label bearing the radiation symbol and the words "Caution, Radioactive Material" or "Danger, Radioactive Material". The label shall also provide information, such as the radionuclides present, an estimate of the quantity of radioactivity, the date for which the activity is estimated, radiation levels, kinds of materials, and mass enrichment, to permit individuals handling or using the containers, or working in the vicinity of the containers, to take precautions to avoid or minimize exposures.



(2) Prior to removal or disposal of empty uncontaminated containers to unrestricted areas, each licensee shall, remove or deface the radioactive material label or otherwise clearly indicate that the container no longer contains radioactive materials.

(D) Each registrant shall ensure that each radiation-generating equipment is labeled in a conspicuous manner which cautions individuals that radiation is produced when it is energized.

(E) A licensee is not required to label the following:

(1) Containers holding licensed material in quantities less than the quantities listed in appendix A to this rule;

(2) Containers holding licensed material in concentrations less than those specified in table III of appendix C to rule 3701:1-38-12 of the Administrative Code;

(3) Containers attended by an individual who takes the precautions necessary to prevent the exposure of individuals in excess of the limits established by rule 3701:1-38-13 of the Administrative Code;

(4) Containers when they are in transport and packaged and labeled in accordance with the regulations of the United States department of transportation;

(5) Containers that are accessible only to individuals authorized to handle or use them, or to work in the vicinity of the containers, if the contents are identified to these individuals by a readily available written record. Examples of containers of this type are containers in locations such as water-filled canals, storage vaults, or hot cells. The record shall be retained as long as the containers are in use for the purpose indicated on the record; or

(6) Manufacturing or processing equipment such as contaminated piping and tanks, and vessels on or in which radiation sources are installed.

(F) Each licensee shall:



- (1) Monitor the external surfaces of a labeled package for radioactive contamination unless the package contains only radioactive material in the form of gas or in special form as defined in rule 3701:1-38-01 of the Administrative Code;
- (2) Monitor the external surfaces of a labeled package for radiation levels unless the package contains quantities of radioactive material that are less than or equal to the type A quantity; and
- (3) Monitor all packages known to contain radioactive material for radioactive contamination and radiation levels if there is evidence of degradation of package integrity, such as a package that is crushed, wet, or damaged.
- (4) Perform the monitoring required by this paragraph as soon as practicable after receipt of the package, but not later than three hours after the package is received at the licensee's facility, if it is received during the licensee's normal working hours. If a package is received after working hours, the package shall be monitored no later than three hours from the beginning of the next working day.
- (G) Each licensee who expects to receive a package containing quantities of radioactive material in excess of a type A quantity as defined in rule 3701:1-38-01 of the Administrative Code and as provided in rule 3701:1-50-25 of the Administrative Code, shall make arrangements to receive the package when the carrier offers it for delivery or expeditiously upon receiving notification that the package is available for pick-up.
- (H) The licensee shall immediately notify the final delivery carrier and the department by telephone and either telegram, mailgram, or facsimile, when:
  - (1) Removable radioactive surface contamination exceeds the limits as provided in 49 C.F.R. 173.443 (as published in the October 1, 2009 Code of Federal Regulations); or
  - (2) External radiation levels exceed the limits as provided in 49 C.F.R. 172.403 (as published in the October 1, 2009 Code of Federal Regulations).
- (I) Each licensee shall:



(1) Establish, maintain, and retain written procedures for safely opening packages in which radioactive material is received; and

(2) Ensure that the procedures are followed and that due consideration is given to special instructions for the type of package being opened.

(J) A licensee that transfers a special form source to and from a work site in a vehicle owned or operated by the licensee is exempt from the contamination monitoring requirements of this rule, but is not exempt from the monitoring requirement in this rule for measuring radiation levels that ensures that the source is still properly lodged in its shield.