

IONIZING RADIATION

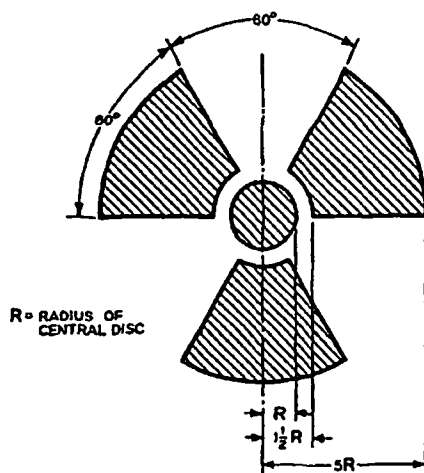


Fig. 42-11. The American Standards Association recommends this symbol for radiation warning signs. Symbol should be reddish-purple, displayed against a yellow background and should be accompanied by the word "RADIATION" in yellow letters on reddish-purple panel. Radiation signs should be proportioned the same as "danger" signs and sized according to the area to be marked. See American Standard N2 1 "Radiation Symbol"

include the Atomic Energy Commission for contractor work. Prime contractors and their subcontractors are controlled in accordance with the provisions of the AEC Manual chapters. Licensees are subject to Federal Regulations, Title 10^{*}

Other governmental regulations are issued by the Interstate Commerce Commission, the US Coast Guard, FAA, the US Post Office, and the US Public Health Service. Many state governments have also developed regulations in this field.

If the company is a multiplant operation, controls may be exercised through the company's headquarters group or central staff. Some policies may require insurance company services, consultants, and industrial associations. Health and safety advisory and inspection services may be obtained from the state or federal government, the insurance carrier, or commercial sources.

Preliminary planning of operating functions

The company's internal operations should be analyzed so that methods can be developed to cope with:

- 1 Requirements for preemployment and subsequent periodic medical examinations of personnel subject to radioactivity exposure
- 2 Transportation, storage, and handling of radioactive materials.
- 3 The air-borne spread of radioactive contaminants which may result in inhalation hazards for employees and in widespread contamination of areas, surfaces, and equipment
- 4 The spread of contaminants via clothing, shoes, hands, or bodies of personnel. Eating and drinking regulations should be reviewed from this standpoint
- 5 Discarded materials and wastes
- 6 Programs for conducting surveys and monitoring exposure areas and employees
7. The heightened requirement to prevent ordinary fire, explosion, temperature elevation, or other occurrence that could cause incidental spread of radioactive contaminants.
- 8 Any possibility of a radioactive material fire, such as a plutonium fire.
9. The spread of radioactive contaminants in the event of an ordinary fire, explosion, temperature rise, or similar causative occurrence—or in the event of a radioactive material fire, together with the need for development of special techniques to combat it, if any possibility of such a fire should exist
- 10 Wounded and contaminated persons who need medical care.
- 11 Contamination of medical facilities

^{*}Title 10—Atomic Energy, Chapter 1—Atomic Energy Commission, Part 20, "Standards for Protection against Radiation," *Federal Register*, Nov 17, 1960, or latest revision (National Archives, Washington, D C)