

105 CMR: DEPARTMENT OF PUBLIC HEALTH

120.142: continued

(2) Written Report. Each licensee who makes a report required by 105 CMR 120.142(A) or (B) shall submit a written follow-up report within 30 days of the initial report. Written reports prepared pursuant to other regulations may be submitted to fulfill this requirement if the reports contain all of the necessary information and the appropriate distribution is made. These written reports must be sent to the Massachusetts Department of Public Health, Radiation Control Program. The report must include the following:

- (a) A description of the event, including the probable cause and the manufacturer and model number (if applicable) of any equipment that failed or malfunctioned;
- (b) The exact location of the event;
- (c) The isotopes, quantities, and chemical and physical form of the licensed material involved;
- (d) Date and time of the event;
- (e) Corrective actions taken or planned and the results of any evaluations or assessments; and,
- (f) The extent of exposure of individuals to radiation or to radioactive materials without identification of individuals by name.

120.146: Emergency Plan for Responding to a Release

(A) Each application to possess radioactive materials in unsealed form, on foils or plated sources, or sealed in glass in excess of the quantities in 105 CMR 120.196: *Appendix B*, Table III must contain either:

- (1) An evaluation showing that the maximum dose to a person offsite due to a release of radioactive materials would not exceed 1 rem effective dose equivalent or 5 rems to the thyroid; or
- (2) An emergency plan for responding to a release of radioactive material.

(B) One or more of the following factors may be used to support an evaluation submitted pursuant to 105 CMR 120.146 and 120.760:

- (1) The radioactive material is physically separated so that only a portion could be involved in an accident;
- (2) All or part of the radioactive material is not subject to release during an accident because of the way it is stored or packaged;
- (3) The release fraction in the respirable size range would be lower than the release fraction shown in 105 CMR 120.196: *Appendix B*, Table III due to the chemical or physical form of the material;
- (4) The solubility of the radioactive material would reduce the dose received;
- (5) Facility design or engineered safety features in the facility would cause the release fraction to be lower than shown in 105 CMR 120.196: *Appendix B*, Table III;
- (6) Operating restrictions or procedures would prevent a release fraction as large as that shown in 105 CMR 120.196: *Appendix B*, Table III; or
- (7) Other factors appropriate for the specific facility.

(C) An emergency plan for responding to a release of radioactive material submitted pursuant to 105 CMR 120.146 and 120.760 must include the following information:

- (1) Facility Description. A brief description of the licensee's facility and area near the site.
- (2) Types of Accidents. An identification of each type of radioactive materials accident for which protective actions may be needed.
- (3) Classification of Accidents. A classification system for classifying accidents as alerts or site area emergencies.
- (4) Detection of Accidents. Identification of the means of detecting each type of accident in a timely manner.
- (5) Mitigation of Consequences. A brief description of the means and equipment for mitigating the consequences of each type of accident, including those provided to protect workers onsite, and a description of the program for maintaining the equipment.
- (6) Assessment of Releases. A brief description of the methods and equipment to assess releases of radioactive materials.