



Ohio Administrative Code

Rule 3701:1-38-21 Reports.

Effective: May 17, 2018

(A) The licensee or registrant shall report stolen, lost, or missing licensed or registered sources of radiation to the director in accordance with the following:

(1) Telephone reports shall be made as follows:

(a) To the bureau of environmental health and radiation protection point of contact (POC) in accordance with the form "Notice to Employees" issued by the director.

(b) In the case of a licensee, he or she shall make contact:

(i) Immediately after the licensee determines that licensed radioactive material is stolen, lost, or missing in an aggregate quantity equal to or greater than one hundred times the quantity specified in appendix A to rule 3701:1-38-18 of the Administrative Code under such circumstances that it appears to the licensee that an exposure could result to individuals in unrestricted areas;

(ii) Within thirty days after its occurrence becomes known to the licensee, lost, stolen, or missing licensed radioactive material in an aggregate quantity greater than ten times the quantity specified in appendix A to rule 3701:1-38-18 of the Administrative Code that is still missing.

(c) In the case of a registrant, he or she shall make contact immediately after it becomes known that radiation-generating equipment has been stolen, lost, or is missing.

(2) Written reports shall be made as follows:

(a) Each licensee or registrant required to make a report pursuant to paragraph (A)(1) of this rule shall, within thirty days after making the telephone report, make a written report to the director setting forth the following information, where applicable:



- (i) A description of the licensed or registered source of radiation involved, including, for radioactive material, the kind, quantity, and chemical and physical form, and in the case of radiation-generating equipment, the manufacturer, model and serial number, type and maximum energy of the radiation emitted;
 - (ii) A description of the circumstances under which the loss or theft occurred;
 - (iii) A statement of disposition, or probable disposition, of the licensed or registered source of radiation involved;
 - (iv) Exposures of individuals to radiation, circumstances under which the exposures occurred, and the possible total effective dose equivalent to persons in unrestricted areas;
 - (v) Actions that have been taken, or will be taken, to recover the source of radiation; and
 - (vi) Procedures or measures that have been, or will be, adopted to ensure against a recurrence of the loss or theft of licensed or registered sources of radiation.
- (b) Subsequent to filing the written report, the licensee or registrant shall also report additional substantive information on the loss or theft within thirty days after the licensee or registrant learns of such information.
- (c) The licensee or registrant shall prepare any report filed with the director pursuant to this rule so that names of individuals who may have received exposure to radiation are stated in a separate and detachable portion of the report.
- (B) Notification of incidents shall be made as follows:
- (1) Excluding prescribed medical doses to patients, each licensee or registrant shall immediately report each event involving a source of radiation possessed by the licensee or registrant that may have caused or threatens to cause any of the following conditions:
 - (a) An individual receiving:



- (i) A total effective dose equivalent of 0.25 sievert (twenty-five rem) or more;
 - (ii) A lens dose equivalent of 0.75 sievert (seventy-five rem) or more; or
 - (iii) A shallow dose equivalent to the skin or extremities or a total organ dose equivalent of 2.5 sievert (two hundred fifty rem) or more; or
- (b) The release of radioactive material, inside or outside of a restricted area that, had an individual been present for twenty-four hours, the individual could have received an intake five times the occupational ALI. This provision does not apply to locations where personnel are not normally stationed during routine operations, such as hot-cells or process enclosures.
- (2) Each licensee or registrant shall report to the director, within twenty-four hours of discovery, each event involving loss of control of a licensed or registered source of radiation possessed by the licensee or registrant that may have caused, or threatens to cause, any of the following:
- (a) An individual to receive, in a period of twenty-four hours:
 - (i) A total effective dose equivalent exceeding 0.05 sievert (five rem);
 - (ii) An lens dose equivalent exceeding 0.15 sievert (fifteen rem); or
 - (iii) A shallow dose equivalent to the skin or extremities or a total organ dose equivalent exceeding 0.5 sievert (fifty rem); or
 - (b) The release of radioactive material, inside or outside of a restricted area that, had an individual been present for twenty-four hours, the individual could have received an intake in excess of one occupational ALI. This provision does not apply to locations where personnel are not normally stationed during routine operations, such as hot-cells or process enclosures.
- (3) Licensees or registrants shall make the reports required by paragraphs (B)(1) and (B)(2) of this rule to the POC by telephone to the department and shall confirm the initial contact by telegram,



mailgram, electronic mail, or facsimile to the director.

(4) The licensee or registrant shall prepare each report filed with the director pursuant to this rule so that names of individuals who have received exposure to sources of radiation are stated in a separate and detachable portion of the report.

(5) The provisions of paragraph (B) of this rule do not apply to doses that result from planned special exposures, provided such doses are within the limits for planned special exposures and are reported in accordance with this paragraph.

(C) Reports of exposures, radiation levels, and concentrations of radioactive material exceeding the limits shall be made by the licensee or registrant as follows:

(1) Reportable events that are specified in this paragraph shall, in addition to the notification requirements in paragraph (B) of this rule, be reported to the director in writing within thirty days after learning of any of the following occurrences:

(a) Incidents for which notification is required by paragraph (B) of this rule and with doses in excess of any of the following:

(i) The occupational dose limits for adults in paragraphs (A)(1) and (A)(2) of rule 3701:1-38-12 of the Administrative Code;

(ii) The occupational dose limits for a minor in paragraph (G) of rule 3701:1-38-12 of the Administrative Code;

(iii) The limits for an embryo or fetus of a declared pregnant woman in paragraph (H) of rule 3701:1-38-12 of the Administrative Code;

(iv) The limits for an individual member of the public in paragraph (A) of rule 3701:1-38-13 of the Administrative Code;

(v) Any applicable limit in the license or registration; or



- (vi) The ALARA constraints for air emissions established under paragraph (D)(4) of rule 3701:1-38-11 of the Administrative Code; or
- (b) Levels of radiation or concentrations of radioactive material in:
- (i) A restricted area in excess of applicable limits in the license or registration; or
- (ii) An unrestricted area in excess of ten times the applicable limit set forth in this chapter or in the license or registration, whether or not involving exposure of any individual in excess of the limits in paragraph (A) of rule 3701:1-38-13 of the Administrative Code; or
- (c) For licensees subject to the provisions of the United States environmental protection agency generally applicable environmental radiation standards in 40 C.F.R. 190 (as published in the July 1, 2016 Code of Federal Regulations), levels of radiation or releases of radioactive material in excess of those standards, or of license conditions related to those standards.
- (2) Each report required by this rule shall describe the extent of exposure of individuals to radiation and radioactive material, including, as appropriate:
- (a) Estimates of each individual's dose, the level of radiation and concentration of radioactive material involved, and the cause of the elevated exposure, dose rate, or concentration; and
- (b) Corrective steps taken or planned to ensure against a recurrence, including the schedule for achieving conformance with applicable limits, ALARA constraints, generally applicable environmental standards, and associated license or registration conditions.
- (3) Each report filed pursuant to this rule shall include, for each occupationally overexposed individual, the name, social security account number, and date of birth of the individual. In the case of the limit for an embryo or fetus in paragraph (H) of rule 3701:1-38-12 of the Administrative Code, the identifiers should be those of the declared pregnant woman. The report shall be prepared so that information on each individual is stated in a separate and detachable portion of the report.



(4) All licensees or registrants who make reports pursuant to this rule shall submit the report in writing to the director.

(D) Reports of planned special exposures shall be submitted by the licensee in a written report to the director within thirty days following any planned special exposure conducted in accordance with paragraph (F) of rule 3701:1-38-12 of the Administrative Code, informing the director that a planned special exposure was conducted and indicating the date the planned special exposure occurred and the information required by paragraph (G) of rule 3701:1-38-20 of the Administrative Code.

(E) When a licensee or registrant is required pursuant to paragraph (C) or (D) of this rule to report to the director any exposure of an identified occupationally exposed individual, or an identified member of the public, to radiation or radioactive material, the licensee or registrant shall also provide the individual a report on his or her exposure data included in the report to the director. This report shall be transmitted no later than the transmittal to the director, and shall comply with the provisions of paragraph (C)(1) of rule 3701:1-38-10 of the Administrative Code.

(F) A report of a leaking or contaminated sealed source shall be filed by the licensee with the director within five days of the test results, if the test reveals the presence of one hundred eighty-five becquerels (0.005 microcurie) or more of removable contamination. The report shall include the equipment involved, the test results and the corrective action taken.