

TITLE 32: ENERGY
CHAPTER II: ILLINOIS EMERGENCY MANAGEMENT AGENCY
SUBCHAPTER b: RADIATION PROTECTION

PART 320
REGISTRATION AND OPERATOR REQUIREMENTS
FOR RADIATION INSTALLATIONS

Section	
320.10	Registration
320.15	Incorporations by Reference (Repealed)
320.20	Amendments and Changes in Status
320.30	Discontinued Use (Repealed)
320.40	Exemptions
320.50	Noncompliance (Repealed)
320.60	Requirements for All Operators of Radiation Installations
320.70	Additional Requirements for Operators of Class D Radiation Installations

AUTHORITY: Implementing and authorized by Sections 24.7, 25 and 25.1 of the Radiation Protection Act of 1990 [420 ILCS 40/24.7, 25 and 25.1].

SOURCE: Filed April 20, 1974 by the Department of Public Health; transferred to the Department of Nuclear Safety by P.A. 81-1516, effective December 3, 1980; codified at 7 Ill. Reg. 11278; amended at 10 Ill. Reg. 17529, effective September 25, 1986; amended at 14 Ill. Reg. 13644, effective August 13, 1990; amended at 18 Ill. Reg. 3363, effective February 22, 1994; amended at 20 Ill. Reg. 6912, effective May 1, 1996; amended at 23 Ill. Reg. 14488, effective January 1, 2000; amended at 27 Ill. Reg. 3465, effective February 17, 2003; recodified from the Department of Nuclear Safety to the Illinois Emergency Management Agency at 27 Ill. Reg. 13641.

Section 320.10 Registration

- a) For purposes of registration pursuant to this Part, the phrase "radiation installation" shall mean any location or facility where radiation machines are located.
- b) Installation Registration
 - 1) Any operator of a radiation installation shall register such radiation installation with the Department of Nuclear Safety (Department). The operator shall register the installation, before the installation is placed in operation, on a form prescribed by the Department which shall include:
 - A) The operator's name;
 - B) The location and confines of the radiation installation; and

C) The type, manufacturer, model, serial number and room location of radiation machines possessed.

2) Radiation machines that are located in a single building or in a group of buildings that are contiguous to one another, and used by the same operator, shall be treated as a single radiation installation unless requested otherwise in writing by the operator and approved by the Department.

c) Installation Classifications

Radiation installations shall be divided into the following 4 classes:

- 1) *Class A – Class A shall include dental offices and veterinary offices with radiation machines used solely for diagnosis and all installations using commercially manufactured cabinet radiographic/fluoroscopic radiation machines. [420 ILCS 40/25(f)] Class A installations shall be inspected at intervals not exceeding 5 years.*
- 2) *Class B – Class B shall include offices or clinics of persons licensed under the Medical Practice Act of 1987 or the Podiatric Medical Practice Act of 1987 with radiation machines used solely for diagnosis and all installations using spectroscopy radiation machines, noncommercially manufactured cabinet radiographic/fluoroscopic radiation machines, portable radiographic/fluoroscopic units, non-cabinet baggage/package fluoroscopic radiation machines and electronic beam welders. [420 ILCS 40/25(f)] Class B installations shall be inspected at intervals not exceeding 2 years.*
- 3) *Class C – Class C shall include installations using diffraction radiation machines, open radiography radiation machines, closed radiographic/fluoroscopic radiation machines and radiation machines used as gauges. Test booths, bays, or rooms used by manufacturing, assembly or repair facilities for testing radiation machines shall be categorized as Class C radiation installations. [420 ILCS 40/25(f)] Class C installations shall be inspected at intervals not exceeding 1 year.*
- 4) *Class D – Class D shall include all hospitals and other facilities using mammography, computed tomography (CT), or therapeutic radiation machines. [420 ILCS 40/25(f)] Class D installations shall be inspected at intervals not exceeding 1 year.*

d) Machine Registration

- 1) Every operator of a radiation installation shall register radiation machines annually on a form prescribed by the Department.

- 2) An annual registration fee for each machine possessed on January 1 of each year shall be submitted with the registration form. This fee, based on the type of facility and radiation machines possessed, is listed in this subsection (d)(2) as follows:

Facility Type	Fee Per Radiation Machine
Class A – Dental and veterinary offices.	\$35
Class A – Installations only using commercially manufactured cabinet radiation machines.	\$50
Class B – Offices or clinics of persons licensed under the Medical Practice Act, and all installations using portable radiographic/fluoroscopic units.	\$110
Class B – Podiatric offices.	\$70
Class B – All installations using spectroscopy, non-commercially manufactured cabinet units, non-cabinet baggage/package units, and/or electron beam welders.	\$110
Class C – Installations using diffraction, open or closed radiography machines, x-ray gauges, and installations with test booths, bays or rooms used by manufacturing, assembly or repair facilities for testing radiation machines.	\$170
Class D – All hospitals and other facilities using mammography, computed tomography (CT), or therapeutic radiation machines.	\$70

- 3) *Radiation installations for which more than one class is applicable shall be assigned the classification requiring the most frequent inspection [420*

ILCS 40/25(f-1)] and resultant fee.

- 4) Radiation installation not specified as Class A, B, C or D shall be assigned an inspection interval, classification and resultant fee by the Department, based on the radiation machines' use and associated radiation hazard.
- 5) *The Department shall bill the operator for the registration fee as soon as practical after January 1. The registration fee shall be due and payable within 60 days after the date of billing. If after 60 days the registration fee is not paid, the Department may issue an order directing the operator of the installation to cease use of all radiation machines or take other appropriate enforcement action as provided in Section 36 of the Act. Fees collected under this Section are not refundable. [420 ILCS 40/24.7]*

(Source: Amended at 27 Ill. Reg. 3465, effective February 17, 2003)

Section 320.15 Incorporations by Reference (Repealed)

(Source: Repealed at 23 Ill. Reg. 14488, effective January 1, 2000)

Section 320.20 Amendments and Changes in Status

- a) Operators of radiation installations which have been registered pursuant to Section 320.10 of this Part shall notify the Department within 30 days after the installation of any new, used or relocated radiation machines, or the reactivation of any radiation machines.
- b) If any operator discontinues using radiation machines, the operator shall notify the Department within 30 days after such discontinuance. The notification shall include the date of discontinuance and the disposition of the radiation machines.
- c) Within 30 days after changing the operator of a radiation installation, the new operator shall notify the Department.

(Source: Amended at 23 Ill. Reg. 14488, effective January 1, 2000)

Section 320.30 Discontinued Use (Repealed)

(Source: Repealed at 23 Ill. Reg. 14488, effective January 1, 2000)

Section 320.40 Exemptions

An operator shall be exempt from the installation and machine registration requirements of this Part for the following:

- a) Electrical equipment that is manufactured for purposes other than generation of

radiation, where the generation of radiation is incidental to operation (such as a television or electron microscope).

- b) Radiation machines while in transit or storage incident to transit.

(Source: Amended at 23 Ill. Reg. 14488, effective January 1, 2000)

Section 320.50 Noncompliance (Repealed)

(Source: Repealed at 23 Ill. Reg. 14488, effective January 1, 2000)

Section 320.60 Requirements for All Operators of Radiation Installations

Operators of radiation installations shall:

- a) Assure that all radiation machines are maintained and operated in accordance with standards established by the Department to protect the public health and safety as set forth in this Part and in 32 Ill. Adm. Code 310, 340, 350, 360, 370, 380, 390, 400, 401, 405 and 410.
- b) Assure that all persons who use a radiation machine to administer ionizing radiation to human beings are licensed in accordance with the requirements of 32 Ill. Adm. Code 360.10, accredited by the Department or exempt from such requirements in accordance with 32 Ill. Adm. Code 401.30.

(Source: Added at 23 Ill. Reg. 14488, effective January 1, 2000)

Section 320.70 Additional Requirements for Operators of Class D Radiation Installations

- a) Each operator of a Class D radiation installation shall utilize the services of an individual, registered with the Department pursuant to 32 Ill. Adm. Code 410, to implement and maintain a comprehensive radiation protection program. Activities related to diagnostic radiation producing machines shall be performed by a registered diagnostic imaging specialist. Activities related to therapeutic radiation machines shall be performed by a registered therapeutic radiological physicist. Each operator shall ensure that registered individuals:
 - 1) Conduct an annual performance evaluation of all radiation machines.
 - 2) Determine and document in a report to the facility that the radiation machines evaluated are being maintained and operated in accordance with standards established by the Department to protect the public health as set forth in 32 Ill. Adm. Code: Chapter II, Subchapters b and d. Noncompliance items shall be readily identified in the report.
 - 3) Establish and oversee the equipment-related quality assurance practices.

Specifically, these quality assurance practices shall include as a minimum:

- A) For therapeutic radiation machines, compliance with the quality assurance requirements specified in 32 Ill. Adm. Code 360.110(d) or 360.120(e).
 - B) For computed tomography machines, compliance with the quality assurance requirements specified in 32 Ill. Adm. Code 360.75.
 - C) For mammography machines, compliance with the quality assurance requirements specified in 32 Ill. Adm. Code 370.100.
- 4) Establish and oversee a quality assurance program for the film processors. The program shall include specifications for processor cleaning and maintenance and procedures to ensure the processor is optimized and properly maintained.

AGENCY NOTE: The Department recommends daily sensitometry and densitometry evaluation for processors used in facilities with heavy workloads. However, the diagnostic imaging specialist or therapeutic radiological physicist is the individual best qualified to determine the appropriate quality assurance program for each processor, based on its workload and conditions of use.

- b) Each operator of a Class D radiation installation shall maintain and have available for review by the Department:
 - 1) Accurate and thorough radiation machine evaluation reports.
 - 2) Records of quality assurance testing performed.
 - 3) Records of calibrations, maintenance or repair.
 - 4) Records of corrective action taken for items of non-compliance.
 - 5) Records of film processor cleaning and maintenance.
- c) The records and reports required by this Section shall be maintained for a period of at least 1 inspection cycle.

(Source: Added at 23 Ill. Reg. 14488, effective January 1, 2000)