

**Information Notice Number 25
(April 2002)**

For Florida Radiation Machine Registrants

Department of Health, Bureau of Radiation Control

INDUSTRIAL RADIOGRAPHY REQUIREMENTS

Part IV of Rule 64E-5, Florida Administrative Code, has been revised effective September 2001. Sections .401 to .422 have been repealed and replaced with .423 to .441. A copy of the rules may be found on our web site at www.doh.state.fl.us/environment/radiation/index.html. The new regulations are outlined below.

I. Control of radiation from x-ray machines

Each radiation machine must be locked and the key removed when the machine is not under direct surveillance by the radiographer. Radiation machines require records are kept of quarterly inventories, use logs, daily or each job site survey logs, and individual dosimeter logs. In addition, radiation machines require a documented daily visual check, an operability check and a quarterly maintenance check.

II. Radiation Protection Program

Each registrant of industrial radiation machines is required to have a Radiation Protection Program (RPP). Industrial use RPP's must include at a minimum the:

- A. Organizational structure,
- B. Designation of Radiation Safety Officer (RSO),
- C. Training program for radiographers,
- D. Commitment to ALARA,
- E. Audit program by management,
- F. Operating and Safety procedures,
- G. Survey instrument calibration procedures, and
- H. Dosimetry calibration procedures.

III. Radiation Safety Officer (RSO)

The registrant shall appoint a Radiation Safety Officer who has a minimum of one year of industrial radiography experience and 16 hours of formal instruction in maintaining a RPP, performing internal audits, and mitigating incidents. RSOs designated prior to the effective date of the rule do not have to meet these requirements. The duties of the RSO include:

- A. Ensuring compliance with the RPP and regulations,
- B. Investigating incidents and taking corrective actions,
- C. Halting operations for safety reasons, and
- D. Serving as contact with the department for radiation issues.

IV. Radiographer Qualifications

Individuals who operate industrial radiography machines as Radiographers, Radiographer Assistants, or Industrial Cabinet Users must comply with the training, testing and auditing requirements of the regulations. Documentation of meeting these requirements must be maintained for inspection as specified in the rule.

- A. Radiographer Assistant

1. Receives copy of Operating and Emergency (O&E) procedures
2. Completes eight hours of training on procedures, use of equipment, and personnel monitoring
3. Passes a closed-book exam on procedures
4. Passes a practical exam on use of equipment, survey instruments, and monitoring

B. Radiographer

1. Receives copy of rules, O&E procedures, and transportation regulations
2. Completes 200 hours of on-the-job training using radiation machines
3. Completes 40 hours of formal training as outlined in .434(6)
4. Completes training on procedures, use of equipment, and personnel monitoring
5. Passes a closed-book exam on procedures
6. Passes a practical exam on use of equipment, survey instruments, and monitoring
7. Certified by a certifying entity after September 2002

C. Industrial Radiography Cabinet User

1. Completes ten hours of formal training as outlined in .434(6)
2. Completes two hours of training on O&E procedures
3. Completes two hours of training on use of industrial cabinet system(s)
4. Passes a closed-book exam on procedures
5. Passes a practical exam on use of equipment, and survey instruments

D. All Users

1. Receives 8 hours of annual radiation safety training (can be in multiple sessions)
2. Receives RSO audit at least every six months to ensure management policies are followed

V. Personnel Monitoring

Each Radiographer or Radiographer Assistant shall wear at all times during radiographic operations the following dosimetric devices.

A. A NVLAP-approved monitoring badge

1. Worn by only one individual
2. Exchanged each month
3. If lost, must cease work until replaced

B. A direct reading dosimeter

1. RSO investigation if found off scale
2. Recharged and recorded each shift

C. An alarming rate meter

1. Alarm tested each shift
2. Preset alarm rate no more than 500 mR/hr
3. Special means to change preset alarm rate
4. Not required for industrial cabinet or shielded rooms

VI. Baggage and Cabinet Systems

Baggage and cabinet x-ray systems not used for industrial radiography are exempt from Part IV of these regulations. Contact the Radiation Machine Program to determine the correct registration of an industrial cabinet system. Examples of cabinet x-ray systems of this kind are:

- A. Baggage systems,
- B. Mail or package systems,
- C. Biopsy cabinets,
- D. Briefcase or purse cabinets,
- E. QA radiography of small parts such as circuit boards, and
- F. Analytic systems such as fluorescence or diffraction units.

VII. Special Use Systems

Some industrial radiographic machines do not fall under Part IV of the regulations and are regulated through comprehensive RPPs. Examples of these special use systems are:

- A. Bomb squad radiographic or fluoroscopic machines
- B. Coroner radiographic machines, and
- C. Open beam analytic systems.

If you have questions or need guidance, please contact this office at:

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