

## NOTICE OF INTENT

Department of Environmental Quality  
Office of Environmental Assessment  
Environmental Planning Division

Under the authority of the Environmental Quality Act, R.S. 30:2001 et seq., and in accordance with the provisions of the Administrative Procedure Act, R.S. 49:950 et seq., the secretary gives notice that rulemaking procedures have been initiated to amend the Radiation Protection regulations, LAC 33:XV.455, 573, 575, 577, 587, 588, 590, 605, 1329, and 2013 (Log #RP030).

This rule makes amendments to clarify the Radiation Protection regulations in LAC 33:XV.Chapters 4, 5, 6, 13, and 20. Amendments to Chapters 4 and 13 correct references. Amendments to Chapter 5 clarify the minimum number of qualified or approved crew present when performing industrial radiographic operations, require annual refresher safety training of all radiographers and radiographer assistants and trainees, require all crew members to wear personal monitoring devices and designate when personal monitoring devices must be replaced. require that a physical radiation survey be performed on radiation machines or sealed sources immediately upon exposure, and require maintenance of records of daily checks of equipment. Amendments to Chapter 6 correct an error concerning a unit of measure for exposure rates. Chapter 20 is amended to require that calibrated operable radiation survey equipment is maintained at a temporary job site. The basis and rationale for this rule are to clarify the Radiation Protection regulations.

This proposed rule meets an exception listed in R.S. 30:2019.D.(2) and R.S. 49:953.G.(3); therefore, no report regarding environmental/health benefits and social/economic costs is required. This proposed rule has no known impact on family formation, stability, and autonomy as described in R.S. 49:972.

A public hearing will be held on July 25, 2002, at 1:30 p.m. in the Maynard Ketcham Building, Room 326, 7290 Bluebonnet Boulevard, Baton Rouge, LA 70810. Interested persons are invited to attend and submit oral comments on the proposed amendments. Attendees should report directly to the hearing location for DEQ visitor registration, instead of to the security desk in the DEQ Headquarters building. Should individuals with a disability need an accommodation in order to participate, contact Patsy Deaville at the address given below or at (225) 765-0399.

All interested persons are invited to submit written comments on the proposed regulations. Persons commenting should reference this proposed regulation by RP030. Such comments must be received no later than August 1, 2002, at 4:30 p.m., and should be sent to Patsy Deaville, Regulation Development Section, Box 82178, Baton Rouge, LA 70884-2178 or to FAX (225) 765-0389 or by e-mail to patsyd@deq.state.la.us. Copies of this proposed regulation can be purchased at the above referenced address. Contact the Regulation Development Section at (225) 765-0399 for pricing information. Check or money order is required in advance for each copy of RP030.

This proposed regulation is available for inspection at the following DEQ office locations from 8 a.m. until 4:30 p.m.: 7290 Bluebonnet Boulevard, Fourth Floor, Baton Rouge, LA 70810; 804 Thirty-first Street, Monroe, LA 71203; State Office Building, 1525 Fairfield Avenue, Shreveport, LA 71101; 3519 Patrick Street, Lake Charles, LA 70605; 201 Evans Road, Building 4, Suite 420, New Orleans, LA 70123; 100 Asma Boulevard, Suite 151, Lafayette, LA 70508; 104 Lococo Drive, Raceland, LA 70394 or on the Internet at <http://www.deq.state.la.us/planning/regs/index.htm>.

James H. Brent, Ph.D.  
Assistant Secretary

**Title 33**  
**ENVIRONMENTAL QUALITY**  
**Part XV. Radiation Protection**  
**Chapter 4. Standards for Protection Against Radiation**  
**Subchapter G. Precautionary Procedures**

**§455. Procedures for Receiving and Opening Packages**

A. – D. ...

1. removable radioactive surface contamination exceeds the limits of LAC 33:XV.1512.H.B.9; or

2. external radiation levels exceed the limits of LAC 33:XV.1512.I and ~~JB.10.~~

E. – F. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 19:1421 (November 1993), LR 22:973 (October 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2577 (November 2000), LR 28.

**Chapter 5. Radiation Safety Requirements for Industrial Radiographic Operations**

**Subchapter B. Personal Radiation Safety Requirements for Radiographers**

**§573. Conducting Industrial Radiographic Operations**

A. Whenever radiography is performed at a location other than a permanent radiographic installation, the radiographer must be accompanied by at least one other qualified radiographer or ~~an individual~~ if the radiographer is a qualified instructor, a qualified radiographer trainee or assistant, as required by who has, at a minimum, met the requirements of Subsection E D of this Section. The additional qualified individual shall observe the operations and be capable of providing immediate assistance to prevent unauthorized entry. Radiography may not be performed if only one qualified individual is present.

B. – E.3. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 27:1234 (August 2001), amended LR 28.

**§575. Training and Testing**

A. – C. ...

D. The licensee or registrant shall provide annual refresher safety training to all radiographers, radiographer assistants, and radiographer trainees at intervals not to exceed 12 months.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 20:653 (June 1994), LR 20:999 (September 1994), LR 23:1138 (September 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2583 (November 2000), LR 27:1235 (August 2001), LR 28.

**§577. Personnel Monitoring Control**

A. No licensee or registrant shall permit an individual to act as a radiographer, instructor, radiographer assistant, or radiographer trainee unless, at all times during radiographic operations, each such individual wears a direct-reading pocket dosimeter, an alarm ratemeter, and either a film badge, an optically-stimulated luminescence dosimeter (OSL), or a thermoluminescent dosimeter (TLD), except that for permanent radiography facilities where other appropriate alarming or warning devices are in routine use, the wearing of an alarming ratemeter is not required.

B. ...

C. Each film badge, TLD, or OSL shall be assigned to and worn by only one individual. Film badges, TLDs, and OSLs must be replaced at periods not to exceed one month. After replacement, each film badge, OSL, or TLD must be processed as soon as possible.

D. – H.4. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 20:653 (June 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2583 (November 2000), LR 27:1235 (August 2001), LR 28.

**Subchapter C. Precautionary Procedures in Radiographic Operations****§587. Radiation Surveys and Survey Records**

A. ...

B. A physical radiation survey shall be made after each radiographic exposure utilizing radiation machines or sealed sources to determine that the machine is "off" or that the sealed source has been returned to its shielded position ~~before exchanging films, repositioning the exposure head, or dismantling equipment.~~ immediately upon completion of exposure. The entire circumference or perimeter of the radiographic exposure device shall be surveyed. If the radiographic exposure device has a source guide tube, the survey shall also include the entire length of the guide tube.

C. – E. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 20:653 (June 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2584 (November 2000), LR 27:1236 (August 2001), LR 28.

**§588. Documents and Records Required at Temporary Job Sites and Applicable Field Stations**

A. – A.7. ...

8. records of ~~equipment problems identified in~~ daily checks of equipment as required in LAC 33:XV.547;

A.9. – 11. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 20:653 (June 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2772 (December 2000), LR 27:1236 (August 2001), LR 28.

**§590. Specific Requirements for Radiographic Personnel Performing Industrial Radiography**

A. – D.2. ...

3. the radiographer's direct observation of the assistant's or trainee's performance of the operations referred to in this Section.

E. – F. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 20:653 (June 1994), amended LR 23:1139 (September 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2584 (November 2000), LR 27:1237 (August 2001), LR 28.

## **Chapter 6. X-rays in the Healing Arts**

### **§605. Fluoroscopic X-ray Systems**

A. - A.3.a.i.(a). ...

(b). when an optional high level control is provided. When so provided, the equipment shall not be operable at any combination of tube potential and current that will result in an exposure rate in excess of 5 roentgens (1.29  $\text{m}\mu\text{C}/\text{kg}$ ) per minute at the point where the center of the useful beam enters the patient, unless high level control is activated. Special means of activation of high level controls shall be required. The high level control shall be operable only when continuous manual activation is provided by the operator. A continuous signal audible to the fluoroscopist shall indicate that the high level control is being employed; or

(c). when optional high level control is provided on equipment manufactured after May 19, 1995. When so provided, the equipment shall not be operable at any combination of tube and current that will result in an exposure rate in excess of 10 roentgens (2.58  $\text{m}\mu\text{C}/\text{kg}$ ) per minute at the point where the center of the useful beam enters the patient, unless the high level control is activated. Special means of activation of high level control shall be required. The high level control shall only be operable when continuous manual activation is provided by the operator and the equipment shall not be operable at any combination of tube and current that will result in an exposure rate in excess of 20 roentgens (5.16  $\text{m}\mu\text{C}/\text{kg}$ ) per minute at the point where the useful beam enters the patient. A continuous signal audible to the fluoroscopist shall indicate that the high level control is being employed.

A.3.a.ii. - A.10.b. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 19:1421 (November 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2270 (October 2000), LR 26:2586 (November 2000), LR 28.

## **Chapter 13. Licensing Requirements for Land Disposal of Radioactive Waste**

### **Subchapter C. Technical Requirements for Land Disposal Facilities**

#### **§1329. Requirements for Waste Classification and Characteristics**

A. Refer to LAC 33:XV.438, ~~439~~ and ~~440~~ Chapter 4, Appendix E.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 28.

## **Chapter 20. Radiation Safety Requirements for Wireline Service Operations and Subsurface Tracer Studies**

### **§2013. Radiation Survey Instruments**

A. The licensee or registrant shall maintain sufficient calibrated operable radiation survey instruments at each field station and temporary job site to make physical radiation surveys as required by this Chapter and by LAC 33:XV.426 and 430. Instrumentation shall be capable of measuring 0.001 mSv (0.1 mrem) per hour through at least 0.5 mSv (50 mrem) per hour.

B. – C. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2604 (November 2000), LR 26:2771 (December 2000), LR 28.

**FISCAL AND ECONOMIC IMPACT STATEMENT  
FOR ADMINISTRATIVE RULES**

LOG #: RP030

Person

Preparing

Statement: Eddie Stelly Dept.: Environmental Quality

Phone: 225-765-0397 Office: Environmental Assessment

Return

Address: P.O. Box 82178 Rule Title: Radiation Protection Amendments  
Baton Rouge, LA 70884-2178 in Chapters 4, 5, 6, 13, and 20

Date Rule

Takes Effect: Upon Promulgation

**SUMMARY**

(Use complete sentences)

In accordance with Section 953 of Title 49 of the Louisiana Revised Statutes, there is hereby submitted a fiscal and economic impact statement on the rule proposed for adoption, repeal or amendment. THE FOLLOWING STATEMENTS SUMMARIZE ATTACHED WORKSHEETS, I THROUGH IV AND WILL BE PUBLISHED IN THE LOUISIANA REGISTER WITH THE PROPOSED AGENCY RULE.

**I. ESTIMATED IMPLEMENTATION COSTS (SAVINGS) TO STATE OR LOCAL GOVERNMENTAL UNITS (Summary)**

No implementation costs or savings to state or local governmental units are expected as a result of this rule.

**II. ESTIMATED EFFECT ON REVENUE COLLECTIONS OF STATE OR LOCAL GOVERNMENTAL UNITS (Summary)**

There should be no effect on revenue collections of state or local governmental units as a result of the implementation of this rule.

**III. ESTIMATED COSTS AND/OR ECONOMIC BENEFITS TO DIRECTLY AFFECTED PERSONS OR NON-GOVERNMENTAL GROUPS (Summary)**

This rule will have no economic impact on affected owners or nongovernmental groups.

**IV. ESTIMATED EFFECT ON COMPETITION AND EMPLOYMENT (Summary)**

Competition and employment are not expected to be affected as a result of the implementation of this rule.

\_\_\_\_\_  
Signature of Agency Head or Designee

\_\_\_\_\_  
LEGISLATIVE FISCAL OFFICER OR  
DESIGNEE

James H. Brent, Ph.D., Assistant Secretary  
Typed Name and Title of Agency Head or Designee

\_\_\_\_\_  
Date of Signature

\_\_\_\_\_  
Date of Signature

LFO 7/1/94

**FISCAL AND ECONOMIC IMPACT STATEMENT  
FOR ADMINISTRATIVE RULES**

The following information is requested in order to assist the Legislative Fiscal Office in its review of the fiscal and economic impact statement and to assist the appropriate legislative oversight subcommittee in its deliberation on the proposed rule.

- A. Provide a brief summary of the content of the rule (if proposed for adoption or repeal) or a brief summary of the change in the rule (if proposed for amendment). Attach a copy of the notice of intent and a copy of the rule proposed for initial adoption or repeal (or, in the case of a rule change, copies of both the current and proposed rules with amended portions indicated).

This rule will amend the Radiation Protection regulations in Chapters 4, 5, 6, 13 and 20. Amendments to Chapters 4 and 13 correct references. Amendments to Chapter 5 clarify the minimum number of qualified or approved crew present when performing industrial radiographic operations, require annual refresher safety training of all radiographers and radiographer assistants and trainees, require all the crew members to wear personal monitoring devices and designate when the personal monitoring devices must be replaced, require that a physical radiation survey be performed on radiation machines or sealed sources immediately upon exposure, and require maintenance of records of daily checks of equipment. The amendment to Chapter 6 corrects an error concerning a unit of measure for exposure rates. Chapter 20 is amended to require that calibrated operable radiation survey equipment is maintained at a temporary job site.

- B. Summarize the circumstances which require this action. If the Action is required by federal regulation, attach a copy of the applicable regulation.

These amendments were made to clarify the Radiation Protection regulations.

- C. Compliance with Act II of the 1986 First Extraordinary Session

(1) Will the proposed rule change result in any increase in the expenditure of funds? If so, specify amount and source of funding.

No, there will be no increase in the expenditure of funds.

2) If the answer to (1) above is yes, has the Legislature specifically appropriated the funds necessary for the associated expenditure increase?

(a)  Yes. If yes, attach documentation.

(b)  No. If no, provide justification as to why this rule change should be published at this time.

This is not applicable.

**FISCAL AND ECONOMIC IMPACT STATEMENT**

**WORKSHEET**

**I. A. COSTS OR SAVINGS TO STATE AGENCIES RESULTING FROM THE ACTION PROPOSED**

1. What is the anticipated increase (decrease) in costs to implement the proposed action?

COSTS	FY 02-03	FY 03-04	FY 04-05
PERSONAL SERVICES _____			
OPERATING EXPENSES _____			
PROFESSIONAL SERVICES _____			
OTHER CHARGES _____			
EQUIPMENT _____			
<b>TOTAL</b>	0	0	0
<b>MAJOR REPAIR &amp; CONSTR.</b>			
<b>POSITIONS (#)</b>	0	0	0

2. Provide a narrative explanation of the costs or savings shown in "A.1.", including the increase or reduction in workload or additional paperwork (number of new forms, additional documentation, etc.) anticipated as a result of the implementation of the proposed action. Describe all data, assumptions, and methods used in calculating these costs.

No additional costs or savings to state agencies will result from this rule.

3. Sources of funding for implementing the proposed rule or rule change.

SOURCE	FY 02-03	FY 03-04	FY 04-05
STATE GENERAL FUND _____			
AGENCY SELF-GENERATED _____			
DEDICATED _____			
FEDERAL FUNDS _____			
OTHER (Specify) _____			
<b>TOTAL</b>	0	0	0

4. Does your agency currently have sufficient funds to implement the proposed action? If not, how and when do you anticipate obtaining such funds?

The agency has sufficient funds to implement the proposed action.

**B. COST OR SAVINGS TO LOCAL GOVERNMENTAL UNITS RESULTING FROM THE ACTION PROPOSED.**

1. Provide an estimate of the anticipated impact of the proposed action on local governmental units, including adjustments in workload and paperwork requirements. Describe all data, assumptions and methods used in calculating this impact.

The rule will not result in any additional increase or any appreciable decrease in workload or paperwork for any governmental agency.

2. Indicate the sources of funding of the local governmental unit which will be affected by these costs or savings.

No additional funding will be necessary.

**FISCAL AND ECONOMIC IMPACT STATEMENT**

**WORKSHEET**

**II. EFFECT ON REVENUE COLLECTIONS OF STATE AND LOCAL GOVERNMENTAL UNITS**

A. What increase (decrease) in revenues can be anticipated from the proposed action?

REVENUE INCREASE/DECREASE	FY 02-03	FY 03-04	FY 04-05
STATE GENERAL FUND _____			
AGENCY SELF-GENERATED _____			
RESTRICTED FUNDS* _____			
FEDERAL FUNDS _____			
LOCAL FUNDS _____			
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>

\*Specify the particular fund being impacted.

B. Provide a narrative explanation of each increase or decrease in revenues shown in "A." Describe all data, assumptions, and methods used in calculating these increases or decreases.

No significant changes in revenue are expected as a result of this rule.

**III. COSTS AND/OR ECONOMIC BENEFITS TO DIRECTLY AFFECTED PERSONS OR NONGOVERNMENTAL GROUPS**

A. What persons or non-governmental groups would be directly affected by the proposed action? For each, provide an estimate and a narrative description of any effect on costs, including workload adjustments and additional paperwork (number of new forms, additional documentation, etc.), they may have to incur as a result of the proposed action.

This rule will have no economic impact on licensees or registrants of radiation devices.

B. Also provide an estimate and a narrative description of any impact on receipts and/or income resulting from this rule or rule change to these groups.

This section is not applicable.

**IV. EFFECTS ON COMPETITION AND EMPLOYMENT**

Identify and provide estimates of the impact of the proposed action on competition and employment in the public and private sectors. Include a summary of any data, assumptions and methods used in making these estimates.

The proposed rule will have no effect on competition and employment.