

June 26, 2002

Mr. Thomas E. Hill, Manager
Radioactive Materials Program
Department of Natural Resources
4244 International Parkway, Suite 114
Atlanta, GA 30354

Dear Mr. Hill:

We have reviewed the final Georgia regulations, Rules and Regulations for Radioactive Materials, Chapter 391-3-17, which were dated May 21, 2002. The final regulations covered Section .01, General Provisions; Section .02, Licensing of Radioactive Material; Section .03, Standards for Protection Against Radiation; Section .04, Special Radiation Safety Requirements for Industrial Radiographic Operations; Section .05, Use of Radionuclides in the Healing Arts; Section .06, Transportation of Radioactive Material; Section .07, Notices, Instructions, and Reports To Workers; Section .09, Licensing and Radiation Safety Requirements for Irradiators; and Section .11, Administration. The final regulations are in response to the 16 amendments identified in the enclosed State Regulation Status (SRS) Data Sheet, and proposed amendments to 10 CFR Part 35. Please note that we limited our review to regulations required for compatibility and/or health and safety.

In regard to your analysis of the Nuclear Regulatory Commission (NRC) comments transmitted to you by letter dated February 27, 2002, the following has been determined.

The NRC comment regarding the use of collimators has been withdrawn. Following discussions with the Office of the General Counsel and the Office of Nuclear Material Safety and Safeguards, a compatibility resolution (CR-02-01) has been issued and is enclosed.

The NRC comment regarding vehicle markings during radioactive material transport has also been withdrawn. After review of the Suggested State Regulation and 10 CFR Part 71, it has been determined that it is not a compatibility issue.

We have no new comments. There are six comments that you did not address from our letter dated February 27, 2002. We understand that you intend to address these comments in your next rulemaking, which will include a revision of your medical rules to be compatible with the new 10 CFR Part 35. Some of these comments, related to Georgia's medical rules, may not be applicable after you incorporate the new Part 35. We request that you submit your revised medical rules for our review.

The SRS Data Sheet summarizes our knowledge of the status of other Georgia regulations as indicated. This letter including the SRS Data Sheet is posted on the STP Web Site: <http://www.hsr.dornl.gov/nrc/rulemaking.htm>. If you have any questions regarding the comments, the compatibility and health and safety categories, or any of the NRC regulations used in the review, please contact me or Mr. John Zabko of my staff at (301) 415-2308 or JGZ@NRC.GOV.

Sincerely,

/RA/

Josephine M. Piccone, Deputy Director
Office of State and Tribal Programs

Enclosures:
As stated

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| DATE | 06/06/02 | | 06/20/02 | | 06/7/02; 06/26/02 | | |

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SSR/10 CFR 34.20 COMPATIBILITY RESOLUTION
REQUIREMENT TO USE COLLIMATORS IN INDUSTRIAL RADIOGRAPHY

ISSUE:

The Mississippi Regulations and Suggested State Regulations (SSR) for industrial radiography require, in part, that “except when physically impossible, collimators shall be used in industrial radiographic operations that use radiographic exposure devices that allow the source to be moved out of the device.” There is no comparable requirement in 10 CFR 34, “Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations.”

DISCUSSION:

The requirement to use collimators, whenever possible, in the SSR and State regulations dates back 15, or more, years. Many States, principally those who have large numbers of radiography licensees and significant regulatory experience with radiography operations, have adopted this requirement either by regulation or by license condition.

The rationale used by State regulatory authorities to require the use of collimators is based on, in part, the concept of decreasing worker exposure by limiting the projected beam’s direction and area. Although NRC has known of the State’s use of this ALARA requirement for many years, NRC has not adopted an equivalent requirement. During the major revision of 10 CFR Part 34 in the mid-1990’s, NRC considered, but decided not to include use of collimators in Part 34, and it appears no comments were received to include this requirement in Part 34. NRC understands that use of collimators is “good” practice and did not see a health and safety need to add such usage as a prescriptive requirement.

At issue is the difference between the State of Mississippi’s requirement to use collimators when performing radiography and NRC’s radiography regulations which do not. There is no NRC equivalent to the Mississippi requirement. Mississippi’s requirement is a use condition found in Section 801E15(c), “Conducting Industrial Radiographic Operations.” The NRC equivalent for Section 801E15(c) is 10 CFR 34.41 with a Compatibility Category “B,” indicating a program element with significant direct transboundary implications. The State’s program element should be essentially identical to that of NRC. Also, the Mississippi regulations are based on the SSR for radiography.

No undue burden is placed on licensees as a result of the SSR or Mississippi requirement. There is no undue “transboundary” impact on Mississippi licensees who operate under reciprocity in NRC or other jurisdictions, or for licensees from NRC or other jurisdictions operating in Mississippi. The low cost of collimators, about \$150, hardly presents an undue or un-necessary operating cost to a licensee.

OBSERVATIONS/CONCLUSION:

1. The use of collimators, either voluntary or required, is a good ALARA practice. The use of collimators reduces worker exposure.
2. The use of collimators permits radiography operations in smaller areas.
3. The use of collimators is not cost prohibitive. A small tungsten collimator costs between \$100 to \$200. It is not an undue burden to purchase one, or several, and use them.
4. Today, the use of collimators is generally accepted as “good” practice in radiography operations. The use of collimators is an integral part of safe operations and is routinely used in industry. As part of the license application process, NRC licensees address the use of collimators in training and operating procedures as part of the effort to maintain worker and public exposure ALARA.
5. The staff notes that the requirement for collimators does not result in a regulation which is less restrictive than NRC’s regulation and does not result in any significant transboundary impact.

Because of the above, especially the wide spread use of collimators in industry, we find that there is no compatibility issue associated with the difference between NRC’s regulations, the State of Mississippi’s requirement and the current version of the SSR on use of collimators.

4/4/02

Date

RA By Susan M. Frant for

Donald A. Cool, Director
Industrial & Medical Nuclear Safety/NMSS

3/27/02

Date

RA

Josephine M. Piccone, Deputy Director
Office of State and Tribal Programs

3/27/02

Date

RA

Stuart A. Treby, Assistant General
for Rulemaking and Fuel Cycle
Office of the General Counsel

COMMENTS ON PROPOSED GEORGIA REGULATIONS
AGAINST COMPATIBILITY AND HEALTH AND SAFETY CATEGORIES

| State Regulation | NRC Regulation | RATS ID | Category | Subject and Comments |
|-------------------|----------------|---------|----------|--|
| .03(8)(b)(1)(ii) | 20.1502(a)(2) | 1999-3 | D/H&S | <p><u>Conditions Requiring Individual Monitoring of External and Internal Occupational Dose</u></p> <p>The State regulation does not specify the deep dose equivalent above which minors must be monitored for occupational exposure.</p> <p>The State needs to include this limit.</p> |
| .03(5)(h)4 | 20.1208(d) | 1998-5 | A | <p><u>Dose Equivalent to an Embryo/Fetus</u></p> <p>The 0.45 rem dose equivalent is more restrictive than the 0.50 rem dose equivalent found in NRC regulations.</p> <p>To be considered compatible, the State limit may not be more restrictive than 20.1208 (d).</p> |
| .05(6)(k) | 35.32 | (none) | D/H&S | <p><u>Quality Management Program</u></p> <p>Georgia does not allow the use of an oral directive or revision in emergencies.</p> <p>The State needs to include the use of oral directives.</p> |
| .05(7)(g)(4), (7) | 35.59(d), (g) | (none) | D/H&S | <p><u>Requirement for Possession of Sealed Sources</u></p> <p>The State does not require that the name of the person conducting the leak test and the methodology used to be recorded.</p> <p>The objectives of this section include the safe maintenance of sources and the prevention of accidental exposures caused by leakage. To meet these objectives, sources must be periodically tested for leaking and the data from those tests must be recorded. The name of the person conducting the test and the methodology used must also be recorded to ensure the reliability and accountability. The State needs to include this requirement.</p> |

| State Regulation | NRC Regulation | RATS ID | Category | Subject and Comments |
|------------------|----------------|---------|----------|---|
| .05(15)(r) | 35.641 | (none) | D/H&S | <p data-bbox="849 279 1463 310"><u>Radiation Surveys for Teletherapy Facilities</u></p> <p data-bbox="849 352 1463 520">The State regulation does not indicate what methods must be used to conduct the survey. It also omits the requirement that a teletherapy source be locked in the off position and not used if excessive dosages are measured.</p> <p data-bbox="849 562 1446 594">The State needs to include these requirements.</p> |
| .05(15)(n) | 35.636 | (none) | D/H&S | <p data-bbox="849 621 1398 653"><u>Safety Checks for Teletherapy Facilities</u></p> <p data-bbox="849 695 1349 758">Georgia has deleted this section from its regulations.</p> <p data-bbox="849 800 1446 863">The State needs to place this section back into its rules.</p> |

STATE REGULATION STATUS

State: Georgia

[16 amendments reviewed are identified by a i at the beginning of each equivalent NRC regulation.]

Tracking Ticket Number: 2-106

Date: June 26, 2002

| NRC Chronology Identification | FR Notice (State Due Date) | RATS ID | Proposed (P) / Final (F) ¹ Rule / ML # ⁵ | NRC Review / Y, N ² / Date / ML # ⁵ | Final State Regulation ¹ (Effective Date) |
|--|---|---------|--|---|--|
| Safety Requirements for Radiographic Equipment-Part 34 | 55 FR 843; (1/10/94) | 1991-1 | F | | 5/22/91 |
| ASNT Certification of Radiographers-Part 34 | 56 FR 11504; (none) | 1991-2 | | | Not required ³ |
| Standards for Protection Against Radiation-Part 20 | 56 FR 23360; 56 FR 61352; 57 FR 38588; 57 FR 57877; 58 FR 67657; 59 FR 41641; 60 FR 20183; (1/1/94) | 1991-3 | F | N 10/7/97 | |
| Notification of Incidents-Parts 20, 30, 31, 34, 39, 40, 70 | 56 FR 64980; (10/15/94) | 1991-4 | | | 3/16/94 |
| Quality Management Program and Misadministrations-Part 35 | 56 FR 34104; (1/27/95) | 1992-1 | F | | 3/16/94 |
| Eliminating the Recordkeeping Requirements for Departures from Manufacturer's Instructions-Parts 30,35 | 57 FR 45566; (none) | 1992-2 | | | Not required ³ |
| Decommissioning Recordkeeping and License Termination: Documentation Additions [Restricted areas and spill sites]-Parts 30, 40 | 58 FR 39628; (10/25/96) | 1993-1 | | | 3/16/94 |
| Licensing and Radiation Safety Requirements for Irradiators-Part 36 | 58 FR 7715; (7/1/96) | 1993-2 | | | 3/16/94 |
| Definition of Land Disposal and Waste Site QA Program-Part 61 | 58 FR 33886; (7/22/96) | 1993-3 | | | Not applicable SECY-95-112 ⁴ |
| Self-Guarantee as an Additional Financial Mechanism-Parts 30, 40, 70 | 58 FR 68726; 59 FR 1618 (none) | 1994-1 | F | N 9/25/98 | Not required ³ 5/6/97 |
| Uranium Mill Tailings Regulations: Conforming NRC Requirements to EPA Standards-Part 40 | 59 FR 28220; (7/1/97) | 1994-2 | | | No Licenses |
| Timeliness in Decommissioning Material Facilities-Parts 30, 40, 70 | 59 FR 36026; (8/15/97) | 1994-3 | P | N 9/25/98 | 10/24/94 |
| Preparation, Transfer for Commercial Distribution, and Use of Byproduct Material for Medical Use-Parts 30, 32, 35 | 59 FR 61767; 59 FR 65243 60 FR 322; (1/1/98) | 1995-1 | F | N 9/25/98 | 10/24/94 |
| Frequency of Medical Examinations for Use of Respiratory Protection Equipment-Part 20 | 60 FR 7900; (3/13/98) | 1995-2 | F | N 9/25/98 | 10/24/94 |

| NRC Chronology Identification | FR Notice (State Due Date) | RATS ID | Proposed (P) / Final (F)¹ Rule / ML #⁵ | NRC Review / Y, N² / Date / ML #⁵ | Final State Regulation¹ (Effective Date) |
|---|---|----------------|---|--|--|
| Low-Level Waste Shipment Manifest Information and Reporting-Parts 20, 61 | 60 FR 15649; 60 FR 25983 (3/1/98) | 1995-3 | F | N 9/25/98 | 3/16/94 |
| Performance Requirements for Radiography Equipment-Part 34 | 60 FR 28323; (6/30/98) | 1995-4 | F | N 3/16/94 | 3/16/94 |
| Radiation Protection Requirements: Amended Definitions and Criteria-Parts 19, 20 | 60 FR 36038; (8/14/98) | 1995-5 | F | N 9/25/98 | 5/6/97 |
| Clarification of Decommissioning Funding Requirements-Parts 30, 40, 70 | 60 FR 38235; (11/24/98) | 1995-6 | F | N 9/25/98 | 5/6/97 |
| Medical Administration of Radiation and Radioactive Materials-Parts 20, 35 | 60 FR 48623; (10/20/98) | 1995-7 | F | N 9/25/98 | 5/6/97 |
| 10 CFR Part 71: Compatibility with the International Atomic Energy Agency-Part 71 | 60 FR 50248; 61 FR 28724 (4/1/99) | 1996-1 | F | N 9/25/98 | 5/6/97 |
| One Time Extension of Certain Byproduct, Source and Special Nuclear Materials Licenses-Parts 30, 40, 70 | 61 FR 1109; (none) | 1996-2 | | | Not required ³ |
| i Termination or Transfer of Licensed Activities: Recordkeeping Requirements-Parts 20, 30, 40, 61, 70 | 61 FR 24669; (6/17/99) | 1996-3 | F ML021540172 | N 6/26/02 ML021790295 | |
| i Resolution of Dual Regulation of Airborne Effluents of Radioactive Materials; Clean Air Act-Part 20 | 61 FR 65120; (1/9/00) | 1997-1 | F ML021540172 | N 6/26/02 ML021790295 | |
| i Recognition of Agreement State Licenses in Areas Under Exclusive Federal Jurisdiction Within an Agreement State-Part 150 | 62 FR 1662; (2/27/00) | 1997-2 | F ML021540172 | N 6/26/02 ML021790295 | |
| i Criteria for the Release of Individuals Administered Radioactive Material-Parts 20, 35 | 62 FR 4120; (5/29/00) | 1997-3 | F ML021540172 | N 6/26/02 ML021790295 | |
| Fissile Material Shipments and Exemptions-Part 71 | 62 FR 5907; (none) | 1997-4 | | | Not required ³ |
| i Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiography Operations-Parts 30, 34, 71, 150 | 62 FR 28947; (6/27/00) | 1997-5 | F ML021540172 | N 6/26/02 ML021790295 | |
| i Radiological Criteria for License Termination-Parts 20, 30, 40, 70 | 62 FR 39057; (8/20/00) | 1997-6 | F ML021540172 | N 6/26/02 ML021790295 | |
| i Exempt Distribution of a Radioactive Drug Containing One Microcurie of Carbon-14 Urea-Part 30 | 62 FR 63634; (1/02/01) | 1997-7 | F ML021540172 | N 6/26/02 ML021790295 | |
| i Deliberate Misconduct by Unlicensed Persons-Parts 30, 40, 61, 70, 150 | 63 FR 1890; 63 FR 13773 (2/12/01) | 1998-1 | F ML021540172 | N 6/26/02 ML021790295 | |

| NRC Chronology Identification | FR Notice (State Due Date) | RATS ID | Proposed (P) / Final (F)¹ Rule / ML #⁵ | NRC Review / Y, N² / Date / ML #⁵ | Final State Regulation¹ (Effective Date) |
|--|---|----------------|---|--|--|
| Self-Guarantee of Decommissioning Funding by Nonprofit and Non-Bond-Issuing Licensees- Parts 30, 40, 70 | 63 FR 29535; (none) | 1998-2 | | | Not required ³ |
| License Term for Medical Use Licenses-Part 35 | 63 FR 31604; (none) | 1998-3 | | | Not required ³ |
| i Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations-Part 34 | 63 FR 37059; (7/9/01) | 1998-4 | F ML021540172 | N 6/26/02 ML021790295 | |
| i Minor Corrections, Clarifying Changes, and a Minor Policy Change-Parts 20, 35, 36 | 63 FR 39477; 63 FR 45393 (10/26/01) | 1998-5 | F ML021540172 | Y 6/26/02 ML021790295 | |
| i Transfer for Disposal and Manifests: Minor Technical Conforming Amendment-Part 20 | 63 FR 50127; (11/20/01) | 1998-6 | F ML021540172 | N 6/26/02 ML021790295 | |
| i Radiological Criteria for License Termination of Uranium Recovery Facilities-Part 40 | 64 FR 17506; (6/11/02) | 1999-1 | F ML021540172 | N 6/26/02 ML021790295 | |
| Requirements for Those Who Possess Certain Industrial Devices Containing Byproduct Material to Provide Requested Information-Part 31 | 64 FR 42269; (none) | 1999-2 | | | Not required ³ |
| i Respiratory Protection and Controls to Restrict Internal Exposure-Part 20 | 64 FR 54543; 64 FR 55524 (2/2/03) | 1999-3 | F ML021540172 | Y 6/26/02 ML021790295 | |
| i Energy Compensation Sources for Well Logging and Other Regulatory Clarifications-Part 39 | 65 FR 20337; (5/17/03) | 2000-1 | F ML021540172 | N 6/26/02 ML021790295 | |
| i New Dosimetry Technology-Parts 34, 36, 39 | 65 FR 63750; (1/8/04) | 2000-2 | F ML021540172 | N 6/26/02 ML021790295 | |
| i Requirements for Certain Generally Licensed Industrial Devices Containing Byproduct Material-Parts 30, 31, 32 | 65 FR 79162; (2/16/04) | 2001-1 | F ML021540172 | N 6/26/02 ML021790295 | |
| Revision of the Skin Dose Limit-Part 20 | 67 FR 16298; (4/5/05) | 2002-1 | | | |

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|--|-------------------------------|---------|--|---|---|
| Medical Use of Byproduct Material- Parts 20, 32, and 35 | 67 FR 20249; (4/24/05) | 2002-2 | | | |

1. Or other generic Legally Binding Requirements.
2. (Y/N) Y means "Yes," there are comments in the review letter that the State needs to address. N means "No," there are no comments in the review letter.
3. Not required means these regulations are not required for purposes of compatibility.
4. A State need not adopt a specific regulation if the State has no licensees that would be subject to that regulation. See: "Final Policy Statement on Adequacy and Compatibility of Agreement State Programs," III.1. Time Frame for Adoption of Compatible State Regulations, p. 6, SECY-95-112, May 3, 1995.
5. ADAMS ML Number