

<b>SYNOPSIS of the Proposed Amendments to the Rules of the Department of Natural Resources, Environmental Protection Division Relating to Radioactive Materials, Chapter 391-3-17</b>	
Subject Area:	Security Requirements for Portable Gauges Containing Radioactive Material
Rules Section:	Chapter 391-3-17-.02 (Licensing of Radioactive Material)
Purpose	To improve security of portable gauges containing radioactive materials through additional physical controls (e.g., interlocks) to prevent unauthorized use.
Main Features:	<ul style="list-style-type: none"> <li>Added each portable gauge licensee shall use a minimum of two independent physical controls that form tangible barriers to secure the portable gauges from unauthorized removal, whenever the portable gauges are not under the control and constant surveillance of the licensee.</li> </ul>
Subject Area:	Financial Assurance for Materials Licensees
Rules Section:	Chapter 391-3-17-.02 (Licensing of Radioactive Material)
Purpose	To assure adequate funds are available for decommissioning facilities that used radioactive materials.
Main Features:	<ul style="list-style-type: none"> <li>Added specific license holders with sealed sources or plated foils of greater than 120-day half-life and exceeding <math>10^{12}</math> times applicable quantities shall submit a decommissioning plan.</li> <li>Added radioactive waste collectors and processors provide financial assurance based on a decommissioning funding plan, including the cost of disposal and remediation of the site.</li> <li>Increased the required amounts of financial assurance for decommissioning.</li> <li>Added cost estimates adjusted at intervals not to exceed three years.</li> </ul>
Subject Area:	Revision of Skin Dose Limit
Rules Section:	Chapter 391-3-17-.03 (Standards for Protection Against Radiation)
Purpose	To reword the definitions to clarify that doses to the skin are calculated for the whole body.
Main Features:	<ul style="list-style-type: none"> <li>Changed definition of shallow-dose equivalent.</li> <li>The annual limits to the skin and to the extremities changed to a shallow dose equivalent of 50 rem (0.50 Sievert).</li> <li>The assigned deep dose equivalent and shallow dose equivalent changed to be for the portion of the body receiving the highest dose.</li> </ul>
Subject Area:	National Source Tracking System
Rules Section:	Chapter 391-3-17-.03 (Standards for Protection Against Radiation)

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Purpose	To improve the security of sealed sources of radioactive materials by instituting a federally mandated tracking system that tracks these sources from manufacture to its ultimate disposal.
Main Features:	<ul style="list-style-type: none"> <li>• Added definition of a "nationally tracked source" to mean radioactive material sealed in a capsule or is bonded that exceeds certain federal limits.</li> <li>• Added national source tracking reporting requirements for licensees that manufacture, transfer, receive, disassemble, and dispose of nationally tracked sealed sources.</li> <li>• Added the national source transaction reports are to be sent to the U.S. Nuclear Regulatory Commission in a variety of methods, including electronically (online or e-mailed), facsimile, mail, or by telephone.</li> <li>• Added errors should be corrected within five business days; inventory reconciliations are to be done annually in January.</li> <li>• Added there are two category thresholds (Category 1 and Category 2) based on the radionuclide and its activity, and licensees are to report their initial inventories to the U.S. Nuclear Regulatory Commission.</li> </ul>
Subject Area:	Medical Use of Radioactive Material – Recognition of Specialty Boards
Rules Section:	Chapter 391-3-17-.05 (Use of Radionuclides in the Healing Arts)
Purpose	To allow for two pathways of training – a certification from a nationally recognized specialty board or through documentation of training and experience.
Main Features:	<ul style="list-style-type: none"> <li>• Changed the training requirements for a Radiation Safety Officer to allow certification from a specialty board to certify Radiation Safety Officers.</li> <li>• Changed the training requirements for an Authorized Medical Physicist to allow certification from a specialty board to certify medical physicists.</li> <li>• Changed the training requirements for an authorized nuclear pharmacist to allow certification from a specialty board to certify pharmacists.</li> <li>• Changed the training requirements for an experienced Radiation Safety Officer, teletherapy or medical physicist, authorized medical physicist, authorized user, nuclear pharmacist, and authorized nuclear pharmacist exempted if the individuals subject to a radioactive materials broad scope or master materials license before April 2005.</li> <li>• Changed the training for uptake, dilution, and excretion studies (no written directive needed) to allow certification from a specialty board to certify physicians.</li> <li>• Changed the training for imaging and localization studies (no written directive needed) to allow certification from a specialty board to certify physicians.</li> </ul>

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	<ul style="list-style-type: none"> <li>• Changed the training for the use of unsealed radioactive materials (a written directive is needed) to allow certification from a specialty board to certify physicians.</li> <li>• Added the training for the parenteral (that is, taken into the body or administered in a manner other than through the digestive tract, as by intravenous or intramuscular injection) administration of unsealed radioactive materials (a written directive is needed) to allow certification from a specialty board to certify physicians.</li> <li>• Changed the training for use of manual brachytherapy sources to allow certification from a specialty board to certify physicians.</li> <li>• Changed the training for use of remote after-loader units, teletherapy units and gamma stereotactic radiosurgery units to allow certification from a specialty board to certify physicians.</li> </ul>
Subject Area:	Compatibility with International Atomic Energy Agency Transportation Safety Standards and Other Transportation Safety Amendments
Rules Section:	Chapter 391-3-17-.06 (Transportation of Radioactive Material)
Purpose	To obtain consistency with national (US Department of Transportation) and international (International Atomic Energy Agency) regulations regarding the transportation of radioactive materials.
Main Features:	<ul style="list-style-type: none"> <li>• Added definitions for A<sub>1</sub> and A<sub>2</sub>, Certificate Holder, Certificate of Compliance, Consignment, Criticality Safety Index, Deuterium, DOT, Graphite, Licensed Material, Optimum interspersed hydrogenous moderation, Spent Nuclear Fuel, Unirradiated Uranium.</li> <li>• Added physicians licensed in Georgia to dispense drugs in the practice of medicine exempted from transportation of radioactive material regulations, as long the physician is licensed to use radioactive materials.</li> <li>• Added licensees exempted from transportation of radioactive material regulations if shipping low-level radioactive materials with certain conditions.</li> <li>• Added fissile material is exempted from transportation of radioactive material regulations if meeting certain conditions.</li> <li>• Added a general license may be issued to transport fissile material, provided the material is shipped in accordance with U.S. DOT regulations, shipped in a Type A container, contains less than 500 grams of certain materials, licensee has a quality assurance program, the shipment has a Criticality Safety Index of 10 or less.</li> <li>• Added a general license may be issued to transport plutonium-beryllium fissile material, provided the material is shipped in accordance with U.S. DOT regulations, shipped in a Type A container, contains less than 1,000 grams plutonium, licensee has a quality assurance program, the shipment</li> </ul>

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	<p>has a Criticality Safety Index of 100 or less.</p> <ul style="list-style-type: none"> <li>• Added external radiation levels for packages cannot exceed 200 millirem per hour at the surface and cannot have a transport index exceeding 10. For packages exceeding the 200 mrem/hr level, those packages must be an exclusive-use shipment not to exceed 1,000 mrem/hr on the surface in a closed transport vehicle with the package secured and there are no loading or unloading operations between origination and destination. The vehicle cannot have an external radiation level of 200 mrem/hr on the outer surface. The shipper must provide specific written instructions for maintenance and shipment control and be sufficient to cause the carrier no unnecessary delay or increased radiation exposures to the transport workers or general public.</li> <li>• Added advanced notification is required for shipments of irradiated reactor fuel in quantities less than that subject to advance notification under 10 CFR 73.37.</li> <li>• The tables for determining the values for <math>A_1</math> and <math>A_2</math> have been changed. There are new equations for determining exempt activity concentrations for a mixture of radionuclides and exempt consignment activity limits for a mixture.</li> </ul>

**STATEMENT OF RATIONALE**

**Proposed Amendments to the Georgia Rules for Radioactive Materials, Chapter 391-3-17**

The purpose of the proposed amendments to these rules is to conform to U.S. Nuclear Regulatory Commission regulations. Georgia must maintain conformity with federal regulations to remain an Agreement State with delegated authority to enforce radiological regulations for health and safety.

These revisions are administrative in nature, are not more restrictive than Federal regulations, and do not incur any additional costs to any regulated entities in Georgia beyond what would be required by Federal agencies. No costs are directly imposed on local governments or the general public. These rules will have no cost impacts on EPD since we will not hire new staff or ask for an increased budget to implement these rules.