

January 20, 2004

Gary N. Wright, Assistant Director  
Illinois Emergency Management Agency  
1035 Outer Park Drive  
Springfield, IL 62704

Dear Mr. Wright:

We have reviewed the proposed changes to the Illinois regulations, 32 Ill. Adm. Code 350, "*Radiation Safety Requirements for Industrial Radiographic Operations*," and 32 Ill. Adm. Code 351, "*Radiation Safety Requirements for Wireline Service Operations and Subsurface Tracer Studies*," received by our office on November 25, 2003. Our review and comments are in response to the State's request for Nuclear Regulatory Commission (NRC) evaluation of the changes to Illinois radiation control rules that incorporated the amendments identified on the States Regulation Status Data Sheet (SRS). These regulations were reviewed by comparison to the equivalent NRC rules in 10 CFR 20, 30, 31, 34, 39, 71, 150 and the requirements of the eight amendments identified in the enclosed SRS. We discussed our review of the regulations with Joe Klinger on January 20, 2004.

As a result of our review, we have 20 comments. Under our current procedure, a finding that a State regulation meets the compatibility and health and safety categories of the equivalent NRC regulation may only be made based on a review of the final State regulation. Please provide a final amended version of your rules showing the location of any changes made in response to our comments. If there are any comments which you believe are in error, you should identify the section of your regulations that meet the designated compatibility category. Please note that we have limited our review to regulations required for compatibility and/or health and safety.

The State requested review of their rules related to amendment RATS ID # 1991-4 "Notification of Incidents". This review could not be conducted with the text submitted. The CFR changes associated with this amendment occur in 10 CFR 20.2202, 30.50, 40.60 and 70.50. We have attached the summary of change document for this amendment to this letter for your review. If the State has language in its rules compatible with these sections, please provide a copy for review.

In addition, for future regulation submissions, it may be to the State's advantage to use the summary of change documents for the desired CFR amendments the State is attempting to incorporate. These documents are used by this office to conduct the review of the submitted State regulations against the required text. They show exactly what changed in the CFR and the compatibility levels for each amendment. These documents are available from this office electronically or in hard copy. We have attached a copy of the summary of change document for amendment RATS ID # 2002-2 "New Dosimetry Technology" which was one of the amendments the State tried to incorporate. Our review found omissions in the State rules for this submission. These summary of change documents will show what text you must have in your rules.

Gary N. Wright

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January 20, 2004

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 Jim Lynch at (630) 829-9661 or JLL2@NRC.GOV.

Sincerely,

***/RA By K.X. Schneider for J.M. Piccone/***

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

Enclosure:  
As stated

The SRS Data Sheet summarizes our knowledge of the status of other Illinois regulations, as indicated. Please let us know if you note any inaccuracies, or have any comments on the information contained in the SRS Data Sheet. This letter, including the SRS Data Sheet, is posted on the STP website: <http://www.hrsd.ornl.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 Jim Lynch at (630) 829-9661 or JLL2@NRC.GOV.

Sincerely,

***/RA By K.X. Schneider for J.M. Piccone/***

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

Enclosure:  
As stated

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OFFICE	RSOA:RIII	STP	OGC	STP:DD
NAME	JLynch	JZabko	STreby	KXSchneider for JMPiccone
DATE	01/05/04*	01/07/04*	01/15/04*	01/16/04*

**ML040200621**

**Official Record**

**COMPATIBILITY COMMENTS ON ILLINOIS PROPOSED REGULATIONS**

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
1	350.20	34.3	1997-5	B	<p><b>Definition: Associated Equipment</b></p> <p>The definition refers to an undefined term “crank” rather than a control (drive) cable. The definition is also missing “and collimator when it is used as an exposure head.”</p> <p>These terms should be added to the definition to meet Category B compatibility which requires essentially identical language.</p>
2	Not found	34.3	1997-5	B	<p><b>Definition: Certifying Entity</b></p> <p>This term is not included in the proposed rules and therefore does not meet Category B compatibility.</p> <p>The State needs to add this definition.</p>
3	350.20	34.3	1997-5	B	<p><b>Definition: Control Drive Mechanism</b></p> <p>Refers to definition of “Crank-out Device”</p> <p>The State definition is different than 34.3 and the SSR. Although the meaning is the same, the definition does not meet Category B compatibility.</p> <p>This definition should be essentially identical to 34.3.</p>

**COMPATIBILITY COMMENTS ON ILLINOIS PROPOSED REGULATIONS**

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
4	350.20	34.3	1997-5	B	<p><b>Definition: Control Tube</b></p> <p>Refers to "Guide Tube" definition</p> <p>The control tube is not the same as the guide tube as indicated. The control tube runs from the crank to the exposure device. The guide tube runs from the exposure device to the exposure head. This definition does not meet Category B compatibility.</p> <p>This definition should be essentially identical to 34.3.</p>
5	Not found	34.3	1997-5	C	<p><b>Definition: Field Station</b></p> <p>This term is not included in the proposed rules and therefore does not meet Category C compatibility.</p> <p>The State needs to add this definition.</p>
6	350.20	34.3	1997-5	B	<p><b>Definition: Guide Tube</b></p> <p>The proposed rule includes "control tube" as an equivalent term. This reference should be removed to meet Category B compatibility.</p>
7	Not found	34.3	1997-5	B	<p><b>Definition: Independent Certifying Organization</b></p> <p>This definition needs to be included in the rule to meet Category B compatibility.</p> <p>The State needs to add this definition.</p>

**COMPATIBILITY COMMENTS ON ILLINOIS PROPOSED REGULATIONS**

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
8	350.20	34.3	1997-5	B	<p><b>Definition: Industrial Radiography</b></p> <p>This definition, although having the same meaning as 34.3 and the SSR, is not essentially identical. It should be modified to meet Category B compatibility.</p> <p>The State needs to add this definition.</p>
9	Not found	34.3	1997-5	C	<p><b>Definition: Practical Examination</b></p> <p>This term is not included in the proposed rule and therefore does not meet Category C compatibility.</p> <p>The State needs to add this definition.</p>
10	Not found	34.3	1997-5	B	<p><b>Definition: Radiographer Certification</b></p> <p>This definition needs to be included in the rule to meet Category B compatibility.</p> <p>The State needs to add this definition.</p>
11	Not found	34.3	1997-5	C	<p><b>Definition: Radiographic Operations</b></p> <p>This term is not included in the proposed rules and therefore does not meet Category C compatibility.</p> <p>The State needs to add this definition.</p>
12	350.20	34.3	1997-5	B	<p><b>Definition: Source Assembly</b></p> <p>The Illinois rule differs from the NRC definition.</p> <p>The definition should be essentially identical to meet category B requirements.</p>

**COMPATIBILITY COMMENTS ON ILLINOIS PROPOSED REGULATIONS**

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
13	350.1000	34.20	1997-5	B	<p><b>Requirements for Radiography Equipment Using Radiographic Exposure Devices</b></p> <p>The Illinois rule differs from 34.20 throughout.</p> <p>Examples include: 350.1000(a)(4) and 350.1000(b) refer to radiographic exposure devices and associated equipment but do not reference source changers or source assemblies as written in 34.20(b)(3) and 34.20(c).</p> <p>The rule should be modified to be essentially identical to meet Category B compatibility.</p>
14	350.1020	34.23	1997-5	B	<p><b>Locking of Sources of Radiation</b></p> <p>Many of the components of 34.23 are in the proposed rule, however, some like the "outer locked container" are not.</p> <p>The rule should be modified to be essentially identical to meet Category B compatibility.</p>
15	350.2030	34.47	2002-2	C	<p><b>Personnel Monitoring</b></p> <p>The State has omitted the requirements of section 34.47 (a)(1), (a)(4), the requirements contained in the last 2/3 of paragraph (d), and all of paragraph (e).</p> <p>The State needs to add these sections to meet compatibility.</p>

**COMPATIBILITY COMMENTS ON ILLINOIS PROPOSED REGULATIONS**

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
16	350.1070	34.71	1997-5	B	<p><b>Utilization Logs</b></p> <p>Several pieces of information are not required in the logs, including the make and model of exposure devices and the radiographer's signature. Because of the differences from 34.71, the rule does not meet Category B compatibility.</p> <p>The rule should be modified to be essentially identical to 34.71.</p>
17	351.2030	39.65	2002-2	C	<p><b>Personnel monitoring</b></p> <p>The State has omitted the replacement criteria for personal dosimeters contained in 39.65 (a).</p> <p>The State needs to add the replacement criteria to meet compatibility.</p>
18	350.2010	34.43	1997-5	B	<p><b>Training and Testing</b></p> <p>The revision chart submitted with the proposed rule package states that Illinois allows reciprocal recognition of certification cards issued by other regulatory agencies. This rule, however, states that radiographers must be certified by Illinois and does not address reciprocal recognition.</p> <p>Observation of radiographers and trainees job performance during actual radiographic operations is required annually instead of semiannually as required by 34.43.</p> <p>The rule should be modified to be essentially identical to 34.43 for Category B compatibility.</p>



STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
19	350.3045	34.41	1997-5	B	<p><b>Operating Requirements</b></p> <p>The rule differs from 34.41 throughout.</p> <p>The rule is missing “The additional qualified individual shall observe the operations and be capable of providing immediate assistance to prevent unauthorized entry.” This omission allows the second individual to be in a darkroom or other area from which the radiographic operations are not visible.</p> <p>The rule should be modified to be essentially identical to meet Category B compatibility.</p>
20	340.410 and 351.1050	39.35	2000-1	C	<p><b>Leak testing of sealed sources</b></p> <p>The State has omitted the requirements of 39.35 (b) pertaining to the need for wipe test kits or methods approved by the Commission or an Agreement State to conduct wipe tests of sources.</p> <p>The State needs to add these requirements to meet compatibility.</p>

## STATE REGULATION STATUS

State: Illinois

[Eight amendments reviewed and are identified by a ★ at the beginning of each equivalent NRC regulation.]

Tracking Ticket Number: 3-271

Date: January 16, 2004

NRC Chronology Identification	FR Notice (Date Due For State Implementation)	RATS ID	Proposed (P) / Final (F) <sup>1</sup> / Rule <sup>1</sup> / ML # <sup>5</sup>	NRC Review / Y, N <sup>2</sup> / Date / ML # <sup>5</sup>	Final State Regulation <sup>1</sup> (Effective Date)
★Safety Requirements for Radiographic Equipment-Part 34	55 FR 843; (1/10/94)	1991-1	P	N 1/16/04 ML040200621	
★ASNT Certification of Radiographers-Part 34	56 FR 11504; (none)	1991-2	P	N 1/16/04 ML040200621	
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-Y	7/23/97	1/1/94
★Notification of Incidents-Parts 20, 30, 31, 34, 39, 40, 70	56 FR 64980; (10/15/94)	1991-4	P	Y 1/16/04 ML040200621	
Quality Management Program and Misadministrations-Part 35	56 FR 34104; (1/27/95)	1992-1			
Eliminating the Recordkeeping Requirements for Departures from Manufacturer's Instructions-Parts 30,35	57 FR 45566; (none)	1992-2			
Decommissioning Recordkeeping and License Termination: Documentation Additions [Restricted areas and spill sites]-Parts 30, 40	58 FR 39628; (10/25/96)	1993-1	F-N	8/21/00	6/1/00
Licensing and Radiation Safety Requirements for Irradiators-Part 36	58 FR 7715; (7/1/96)	1993-2			Not applicable SECY-95-112 <sup>3</sup>
Definition of Land Disposal and Waste Site QA Program-Part 61	58 FR 33886; (7/22/96)	1993-3			Not applicable SECY-95-112 <sup>4</sup>
Self-Guarantee as an Additional Financial Mechanism-Parts 30, 40, 70	58 FR 68726; 59 FR 1618 (none)	1994-1	F-N	8/21/00	6/1/00
Uranium Mill Tailings Regulations: Conforming NRC Requirements to EPA Standards-Part 40	59 FR 28220; (7/1/97)	1994-2			
Timeliness in Decommissioning Material Facilities-Parts 30, 40, 70	59 FR 36026; (8/15/97)	1994-3	F-N	8/21/00	6/1/00

NRC Chronology Identification	FR Notice (Date Due For State Implementation)	RATS ID	Proposed (P) / Final (F) <sup>1</sup> / Rule <sup>1</sup> / ML # <sup>5</sup>	NRC Review / Y, N <sup>2</sup> / Date / ML # <sup>5</sup>	Final State Regulation <sup>1</sup> (Effective Date)
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			
Frequency of Medical Examinations for Use of Respiratory Protection Equipment-Part 20	60 FR 7900; (3/13/98)	1995-2			
Low-Level Waste Shipment Manifest Information and Reporting-Parts 20, 61	60 FR 15649; 60 FR 25983 (3/1/98)	1995-3	P-Y	11/24/99	
★Performance Requirements for Radiography Equipment-Part 34	60 FR 28323; (6/30/98)	1995-4	P	N 1/16/04 ML040200621	
Radiation Protection Requirements: Amended Definitions and Criteria-Parts 19, 20	60 FR 36038; (8/14/98)	1995-5			
Clarification of Decommissioning Funding Requirements-Parts 30, 40, 70	60 FR 38235; (11/24/98)	1995-6			
Medical Administration of Radiation and Radioactive Materials-Parts 20, 35	60 FR 48623; (10/20/98)	1995-7			
10 CFR Part 71: Compatibility with the International Atomic Energy Agency-Part 71	60 FR 50248; 61 FR 28723 (4/1/99)	1996-1			
One Time Extension of Certain Byproduct, Source and Special Nuclear Materials Licenses-Parts 30, 40, 70	61 FR 1109; (none)	1996-2			
Termination or Transfer of Licensed Activities: Recordkeeping Requirements-Parts 20, 30, 40, 61, 70	61 FR 24669; (6/17/99)	1996-3	F-N	8/21/00	6/1/00
Resolution of Dual Regulation of Airborne Effluents of Radioactive Materials; Clean Air Act-Part 20	61 FR 65120; (1/9/00)	1997-1			
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-N	8/21/00	6/1/00

NRC Chronology Identification	FR Notice (Date Due For State Implementation)	RATS ID	Proposed (P) / Final (F) <sup>1</sup> / Rule <sup>1</sup> / ML # <sup>5</sup>	NRC Review / Y, N <sup>2</sup> / Date / ML # <sup>5</sup>	Final State Regulation <sup>1</sup> (Effective Date)
Criteria for the Release of Individuals Administered Radioactive Material-Parts 20, 35	62 FR 4120; (5/29/00)	1997-3			
Fissile Material Shipments and Exemptions-Part 71	62 FR 5907; (none)	1997-4			
★Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiography Operations-Parts 30, 34, 71, 150	62 FR 28948; (6/27/00)	1997-5	P	Y 1/16/04 ML040200621	
Radiological Criteria for License Termination-Parts 20, 30, 40, 70	62 FR 39058; (8/20/00)	1997-6			
Exempt Distribution of a Radioactive Drug Containing One Microcurie of Carbon-14 Urea-Part 30	62 FR 63634; (1/02/01)	1997-7	F-N	5/26/00	7/27/98
Deliberate Misconduct by Unlicensed Persons-Parts 30, 40, 61, 70, 71, 150	63 FR 1890; 63 FR 13773 (2/12/01)	1998-1			
Self-Guarantee of Decommissioning Funding by Nonprofit and Non-Bond-Issuing Licensees- Parts 30, 40, 70	63 FR 29535; (none)	1998-2	F-N	8/21/00	6/1/00 Not required <sup>3</sup>
License Term for Medical Use Licenses-Part 35	63 FR 31604; (none)	1998-3			Not required <sup>3</sup>
★Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations-Part 34	63 FR 37059; (7/9/01)	1998-4	P	N 1/16/04 ML040200621	
Minor Corrections, Clarifying Changes, and a Minor Policy Change-Parts 20, 35, 36	63 FR 39477; 63 FR 45393 (10/26/01)	1998-5			
Transfer for Disposal and Manifests: Minor Technical Conforming Amendment-Part 20	63 FR 50127; (11/20/01)	1998-6			
Radiological Criteria for License Termination of Uranium Recovery Facilities-Part 40	64 FR 17506; (6/11/02)	1999-1			

<b>NRC Chronology Identification</b>	<b>FR Notice (Date Due For State Implementation)</b>	<b>RATS ID</b>	<b>Proposed (P) / Final (F)<sup>1</sup> / Rule<sup>1</sup> / ML #<sup>5</sup></b>	<b>NRC Review / Y, N<sup>2</sup> / Date / ML #<sup>5</sup></b>	<b>Final State Regulation<sup>1</sup> (Effective Date)</b>
Requirements for Those Who Possess Certain Industrial Devices Containing Byproduct Material to Provide Requested Information-Part 31	64 FR 42269; (none)	1999-2			
Respiratory Protection and Controls to Restrict Internal Exposure-Part 20	64 FR 54543; 64 FR 55525 (2/2/03)	1999-3			
★Energy Compensation Sources for Well Logging and Other Regulatory Clarifications-Part 39	65 FR 20337; (5/17/03)	2000-1	P	Y 1/16/04 ML040200621	
★New Dosimetry Technology-Parts 34, 36, 39	65 FR 63749; (1/8/04)	2000-2	P	Y 1/16/04 ML040200621	
Requirements for Certain Generally Licensed Industrial Devices Containing Byproduct Material-Parts 30, 31, 32	65 FR 79162; (2/16/04)	2001-1			
Revision of the Skin Dose Limit-Part 20	67 FR 1629; (4/5/05)	2002-1			
Medical Use of Byproduct Material-Parts 20, 32, 35	67 FR 20249; (4/24/05)	2002-2	F	ML031060038	
Financial Assurance for Materials Licensees – Parts 30, 40, 70	68 FR 57327 12/3/06	2003-1			

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