



UNITED STATES  
**NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

November 28, 2017

Mr. Michael Snee  
Bureau of Radiation Protection  
Ohio Department of Health  
246 North High Street  
Columbus, OH 43215

Dear Mr. Snee:

We have reviewed the proposed revisions to the Ohio regulations in the Ohio Administrative Code Chapter 3701, received by our office on October 16, 2017. These regulations were reviewed by comparison to the equivalent U.S. Nuclear Regulatory Commission (NRC) rules and Regulation Amendment Tracking System Identification Numbers (RATS IDs) 2015-3 and 2015-5 as identified in the enclosed State Regulation Status (SRS) Data Sheet. We discussed our review of the regulations with you on November 27, 2017.

As a result of our review, we have eight comments that have been identified in the enclosure. Please note that we have limited our review to regulations required for compatibility and/or health and safety. Under our current procedure, a finding that the Ohio regulations meet the compatibility and health and safety categories of the equivalent NRC regulation may only be made based on a review of the final Ohio regulations. However, we have determined that if your proposed regulations were adopted, incorporating our comments and without other significant change, they would meet the compatibility and health and safety categories established in the Office of Nuclear Material Safety and Safeguards (NMSS) Procedure SA-200, "Compatibility Categories and Health and Safety Identification for NRC Regulations and Other Program Elements."

We request that when the proposed regulations are adopted and published as final regulations, a copy of the "as published" regulations be provided to us for review. As requested in NMSS Procedure SA-201, "Review of State Regulatory Requirements," please highlight the final changes, and provide a copy to Division of Material Safety, State, Tribal, and Rulemaking Programs, NMSS.

The SRS Data Sheet summarizes our knowledge of the status of other Ohio 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 NMSS State Communication Portal: <https://scp.nrc.gov/rulemaking.html>.

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 Michelle Beardsley, State Regulation Review Coordinator, at (267) 884-2305 ([Michelle.Beardsley@nrc.gov](mailto:Michelle.Beardsley@nrc.gov)) or Jim Lynch at (630) 829-9661 ([James.Lynch@nrc.gov](mailto:James.Lynch@nrc.gov)).

Sincerely,

*/RA/  
LRakovan for KWilliams*

Kevin Williams, Deputy Director  
Division of Material Safety, State, Tribal  
and Rulemaking Programs  
Office of Nuclear Material Safety  
and Safeguards

Enclosures:

1. Compatibility Comments
2. Ohio SRS Data Sheet

M. Snee

-2-

SUBJECT: OHIO PROPOSED REGULATIONS TO RATS IDS 2015-3 AND 2015-5.  
DATE: NOVEMBER 28, 2017

DISTRIBUTION: SP07  
DIR RF (18-03)  
JLynch, RSAO  
Ohio File

OFFICE	RIII	ASPB	OGC	ASPB:BC	MSTR:DD
NAME	JLynch via email	MBeardsley	TSmith NLO via email	LRakovan for PMichalak	LRakovan for KWilliams
DATE	10/31/17	10/31/17	11/27 /17	11/28/17	11/28/17

**ML17304A706**

**OFFICIAL RECORD COPY**

**Package ML17290A051**

## COMPATIBILITY COMMENTS ON OHIO PROPOSED REGULATIONS

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
1	3701: 1-50-07 (C)	71.17	2015-3	B	<p><b>General license: NRC approved package</b></p> <p>The Ohio rule references the “Division of Spent Fuel Project” instead of the “Division of Spent Fuel <b>Storage and Transportation</b>”</p> <p>Ohio needs to correct the NRC division name to “Division of Spent Fuel <b>Storage and Transportation</b>” to meet the Compatibility Category B designation assigned to 10 CFR 71.17.</p>
2	3701: 1-50-10 (A)	71.21	2015-3	B	<p><b>General license: Use of foreign approved package</b></p> <p>Ohio regulation section 3701: 1-50-01(A) is missing a specific Ohio reference. Ohio needs to modify paragraph (A) to read “any Ohio licensee to transport, or....”.</p> <p>Ohio needs to make the change indicated above to meet the Compatibility Category B designation assigned to 10 CFR 71.21.</p>
3	3701: 1-50-20 (B-C)	71.91	2015-3	C	<p><b>Records</b></p> <p>Ohio should delete the phrase “certificate holder, and applicant for a CoC” from the Ohio rule 3701: 1-50-20 as these terms apply to the NRC only.</p> <p>Ohio needs to delete the phrase “certificate holder, and applicant for a CoC” from 3701: 1-50-20 to meet the Compatibility Category C designation assigned to 10 CFR 71.91.</p>

4	3701: 1-50-24	71.101	2015-3	C	<p><b>Quality assurance requirements</b></p> <p>Ohio should delete the phrase “certificate holder, and applicant for a CoC” from the Ohio rule as these terms apply to the NRC only.</p> <p>Additionally, Ohio cites references to 10 CFR Part 71 throughout 3701: 1-50-24. As Ohio’s rule contains their equivalent regulations to these requirements, Ohio needs to cite their specific regulations, and not the NRC’s, in order to avoid a duplication of requirements.</p> <p>Ohio needs to make the changes as indicated above to meet the Compatibility Category C designation assigned to 10 CFR 71.101.</p>
5	3701: 1-50-24 (E)	71.103	2015-3	C	<p><b>Quality assurance organization</b></p> <p>Ohio should delete the phrase “certificate holder, and applicant for a CoC” from the Ohio rule 3701: 1-50-24 as these terms apply to the NRC only.</p> <p>Ohio needs to delete the phrase “certificate holder, and applicant for a Certificate of Compliance” from 3701: 1-50-24 to meet the Compatibility Category C designation assigned to 10 CFR 71.103.</p>
6	3701: 1-50-24 (O-Q)	71.106	2015-3	C	<p><b>Changes to quality assurance program</b></p> <p>Ohio needs to replace “NRC” with the State Agency throughout 3701: 1-50-24.</p> <p>Ohio needs to make the changes indicated above to meet the Compatibility Category C designation</p>

					assigned to 10 CFR 71.106.
7	3701: 1-50-24 (R)	71.135	2015-3	C	<p><b>Quality assurance records</b></p> <p>Ohio should delete the phrase “certificate holder, and applicant for a CoC” from the Ohio rule 3701: 1-50-24 as these terms apply to the NRC only.</p> <p>Ohio needs to delete the phrase “certificate holder, and applicant for a Certificate of Compliance” from 3701: 1-50-24 to meet the Compatibility Category C designation assigned to 10 CFR 71.135.</p>
8	3701: 1-50-25 (D)	Part 71, Appendix A	2015-3	B	<p><b>Determination of A1 and A2</b></p> <p>The formula in 3701: 1-50-25 (D)(6) is missing a fraction bar.</p> <p>Ohio needs to add a fraction bar in the 3701: 1-50-25 (D)(6) formula to meet the Compatibility Category B designation assigned to 10 CFR Part 71, Appendix A.</p>

**STATE REGULATION STATUS**

State: Ohio

Tracking Ticket Number: 18-03

Date: 11/28/2017

[ # 2 amendment(s) reviewed identified by a \* at the beginning of the equivalent NRC requirement.]

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Letter	Outgoing Package	Notes
1991-1	Safety Requirements for Radiographic Equipment Part 34 55 FR 843 <b>(Superceded by 1997-5)</b>	01/10/1994	Final ML023250117	No Comments 01/09/2003 ML030060349	Ohio has adopted Final Regulations equivalent to RATS ID: 1997-5.
1991-2	ASNT Certification of Radiographers Part 34 56 FR 11504 <b>(Superceded by 1997-5)</b>	none	Final ML023250117	No Comments 01/09/2003 ML030060349	Ohio has adopted Final Regulations equivalent to RATS ID: 1997-5.
1991-3	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	01/01/1994	Final ML040920160	No Comments 04/14/2004 ML041060011	
1991-4	Notification of Incidents Parts 20, 30, 31, 34, 39, 40, and 70 56 FR 64980	10/15/1994	Final ML083200007	No Comments 12/10/2008 ML083220971	
1992-1	Quality Management Program and Misadministrations Part 35 56 FR 34104 <b>(Superceded by 2002-2)</b>	01/27/1995	Final ML061440106	No Comments 06/08/2006 ML061590424	Ohio has adopted Final Regulations equivalent to RATS ID: 2002-2.
1992-2	Eliminating the Recordkeeping Requirements for Departures from Manufacturer's Instructions Parts 30 and 35 57 FR 45566	none	Final ML061440106	No Comments 06/08/2006 ML061590424	These regulation changes are not required to be adopted for purposes of Compatibility.

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Letter	Outgoing Package	Notes
1993-1	Decommissioning Recordkeeping and License Termination: Documentation Additions [Restricted areas and spill sites] Parts 30 and 40 58 FR 39628	10/25/1996	Final ML083200007	No Comments 12/10/2008 ML083220971	
1993-2	Licensing and Radiation Safety Requirements for Irradiators Part 36 58 FR 7715	07/01/1996	Final ML023250117	No Comments 01/09/2003 ML030060349	
1993-3	Definition of Land Disposal and Waste Site QA Program Part 61 58 FR 33886	07/22/1996	Final	No Comments 10/09/1998	
1994-1	Self-Guarantee as an Additional Financial Mechanism Parts 30, 40, and 70 58 FR 68726; 59 FR 1618	none	Final	No Comments 10/09/1998	
1994-2	Uranium Mill Tailings Regulations: Conforming NRC Requirements to EPA Standards Part 40 59 FR 28220	07/01/1997	Final	No Comments 10/09/1998	
1994-3	Timeliness in Decommissioning Material Facilities Parts 30, 40, and 70 59 FR 36026	08/15/1997	R <sup>1</sup>	No Comments 7/26/00	
1995-1	Preparation, Transfer for Commercial Distribution, and Use of Byproduct Material for Medical Use Parts 30, 32, and 35 59 FR 61767; 59 FR 65243; 60 FR 322	01/01/1998	Final ML061440106	No Comments 06/08/2006 ML061590424	



RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Letter	Outgoing Package	Notes
1995-2	Frequency of Medical Examinations for Use of Respiratory Protection Equipment Part 20 60 FR 7900	03/13/1998	Final ML041240504	No Comments 06/14/2004 ML041670402	
1995-3	Low-Level Waste Shipment Manifest Information and Reporting Parts 20 and 61 60 FR 15649; 60 FR 25983	03/01/1998	Final ML040920160	No Comments 04/14/2004 ML041060011	
1995-4	Performance Requirements for Radiography Equipment Part 34 60 FR 28323 <b>(Superceded by 1997-5)</b>	06/30/1998	Final ML023250117	No Comments 01/09/2003 ML030060349	Ohio has adopted Final Regulations equivalent to RATS ID: 1997-5.
1995-5	Radiation Protection Requirements: Amended Definitions and Criteria Parts 19 and 20 60 FR 36038	08/14/1998	Final ML040920160	No Comments 04/14/2004 ML041060011	
1995-6	Clarification of Decommissioning Funding Requirements Parts 30, 40, and 70 60 FR 38235	11/24/1998	R <sup>1</sup>	No Comments 07/26/2000	
1995-7	Medical Administration of Radiation and Radioactive Materials Parts 20 and 35 60 FR 48623 <b>(Superceded by 2002-2 and 2005-2)</b>	10/20/1998	Proposed ML042230062	No Comments 10/14/2004 ML042890002	
1996-1	Compatibility with the International Atomic Energy Agency Part 71 60 FR 50248; 61 FR 28724 <b>(Superceded by 2004-1)</b>	04/01/1999	Not Required	Not Required	Ohio has adopted Final Regulations equivalent to RATS ID: 2004-1.

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Letter	Outgoing Package	Notes
1996-2	One Time Extension of Certain Byproduct, Source and Special Nuclear Materials Licenses Parts 30, 40, and 70 61 FR 1109	02/15/1999	R <sup>1</sup>	No Comments 07/26/2000	
1996-3	Termination or Transfer of Licensed Activities: Recordkeeping Requirements Parts 20, 30, 40, 61, and 70 61 FR 24669	06/17/1999	R <sup>1</sup>	No Comments 07/26/2000	
1997-1	Resolution of Dual Regulation of Airborne Effluents of Radioactive Materials; Clean Air Act Part 20 61 FR 65120	01/9/2000	Final ML041900134	No Comments 08/09/2004 ML042220269	
1997-2	Recognition of Agreement State Licenses in Areas Under Exclusive Federal Jurisdiction Within an Agreement State Part 150 62 FR 1662	02/27/2000	Final ML041240504	No Comments 06/14/2004 ML041670402	
1997-3	Criteria for the Release of Individuals Administered Radioactive Material Parts 20 and 35 62 FR 4120	05/29/2000	R <sup>1</sup>	No Comments 07/26/2000	
1997-4	Fissile Material Shipments and Exemptions Part 71 62 FR 5907 <b>(Superceded by 2004-1)</b>	02/10/2000	Not Required	Not Required	These regulation changes are not required to be adopted for purposes of Compatibility. (See STP-97-078)
1997-5	Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiography Operations Parts 30, 34, 71, and 150 62 FR 28947	06/27/2000	Final ML083020271	No Comments 12/05/2008 ML083150069	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Letter	Outgoing Package	Notes
1997-6	Radiological Criteria for License Termination Parts 20, 30, 40, and 70 62 FR 39057	08/20/2000	Final	No Comments 10/09/1998	
1997-7	Exempt Distribution of a Radioactive Drug Containing One Microcurie of Carbon-14 Urea Part 30 62 FR 63634	01/02/2001	Final ML041240504	No Comments 06/14/2004 ML041670402	
1998-1	Deliberate Misconduct by Unlicensed Persons Parts 30, 40, 61, 70, 71, and 150 63 FR 1890; 63 FR 13773	02/12/2001	R <sup>1</sup> ML010380259 ML010870344	No Comments 12/12/01 ML013530072	
1998-2	Self-Guarantee of Decommissioning Funding by Nonprofit and Non-Bond-Issuing Licensees Parts 30, 40, and 70 63 FR 29535	07/01/2001	Final	No Comments 10/09/1998	These regulation changes are not required to be adopted for purposes of Compatibility.
1998-3	License Term for Medical Use Licenses Part 35 63 FR 31604 <b>(Superceded by 2002-2)</b>	07/10/2001	Not Required	Not Required	These regulation changes are not required to be adopted for purposes of Compatibility. (See STP-98-074) Ohio has adopted Final Regulations equivalent to RATS ID: 2002-2.
1998-4	Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations Part 34 63 FR 37059	07/09/2001	Final ML041240504	No Comments 06/14/2004 ML041670402	
1998-5	Minor Corrections, Clarifying Changes, and a Minor Policy Change Parts 20, 32, 35, 36, and 39 63 FR 39477; 63 FR 45393	10/26/2001	Final	No Comments 10/09/1998	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Letter	Outgoing Package	Notes
1998-6	Transfer for Disposal and Manifests: Minor Technical Conforming Amendment Part 20 63 FR 50127	11/20/2001	Final ML041900134	No Comments 08/09/2004 ML042220269	
1999-1	Radiological Criteria for License Termination of Uranium Recovery Facilities Part 40 64 FR 17506	06/11/2002	Final ML060580024	No Comments 04/13/2006 ML061030457	
1999-2	Requirements for Those Who Possess Certain Industrial Devices Containing Byproduct Material to Provide Requested Information Part 31 64 FR 42269	10/04/2002	Not Required	Not Required	These regulation changes are not required to be adopted for purposes of Compatibility.
1999-3	Respiratory Protection and Controls to Restrict Internal Exposure Part 20 64 FR 54543; 64 FR 55524	02/02/2003	Final ML040920160	No Comments 04/14/2004 ML041060011	
2000-1	Energy Compensation Sources for Well Logging and Other Regulatory Clarifications Part 39 65 FR 20337	05/17/2003	Final ML023250117	No Comments 01/09/2003 ML030060349	
2000-2	New Dosimetry Technology Parts 34, 36, and 39 65 FR 63750	01/08/2004	Final ML023250117	No Comments 01/09/2003 ML030060349	
2001-1	Requirements for Certain Generally Licensed Industrial Devices Containing Byproduct Material Parts 30, 31, and 32 65 FR 79162	02/16/2004	Final ML12361A139	No Comments 02/06/2013 ML13011A272	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Letter	Outgoing Package	Notes
2002-1	Revision of the Skin Dose Limit Part 20 67 FR 16298	04/05/2005	Final ML061440106	No Comments 06/08/2006 ML061590424	
2002-2	Medical Use of Byproduct Material Parts 20, 32, and 35 67 FR 20249	10/24/2005	Final ML061440106	No Comments 06/08/2006 ML061590424	
2003-1	Financial Assurance for Materials Licensees Parts 30, 40, and 70 68 FR 57327	12/03/2006	Final ML090120129	No Comments 02/06/2009 ML090150553	
2004-1	Compatibility With IAEA Transportation Safety Standards and Other Transportation Safety Amendments Part 71 69 FR 3697	10/01/2007	Final ML063170453	No Comments 12/15/2006 ML063490049	
2005-1	Security Requirements for Portable Gauges Containing Byproduct Material Part 30 70 FR 2001	07/11/2008	Final ML071010099	No Comments 04/25/2007 ML071150005	
2005-2	Medical Use of Byproduct Material - Recognition of Specialty Boards Part 35 70 FR 16336; 71 FR 1926	04/29/2008	Final ML090120129	No Comments 02/06/2009 ML090150553	
2005-3	Increased Controls for Risk-Significant Radioactive Sources (NRC Order EA-05-090) 70 FR 72128	12/01/2005	License Condition ML053120143	No Comments 11/10/2005 ML053180026	
2006-1	Minor Amendments Parts 20, 30, 32, 35, 40, and 70 71 FR 15005	03/27/2009	Final ML103120326	No Comments 01/12/2011 ML103360248	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Letter	Outgoing Package	Notes
2006-2	National Source Tracking System - Serialization Requirements Part 32 with reference to Part 20 Appendix E 71 FR 65685	02/06/2007	Final ML083050030	No Comments 12/18/2008 ML083400038	
2006-3	National Source Tracking System Part 20 71 FR 65685, 72 FR 59162	01/31/2009	Final ML083050030	No Comments 12/18/2008 ML083400038	
2007-1	Medical Use of Byproduct Material - Minor Corrections and Clarifications Parts 32 and 35 72 FR 45147, 54207	10/29/2010	Final ML103120326	No Comments 01/12/2011 ML103360248	
2007-2	Exemptions From Licensing, General Licenses, and Distribution of Byproduct Material: Licensing and Reporting Requirements Parts 30, 31, 32, and 150 72 FR 58473	12/17/2010	Final ML091380031	No Comments 07/02/2009 ML091600466	
2007-3	Requirements for Expanded Definition of Byproduct Material Parts 20, 30, 31, 32, 33, 35, 61, and 150 72 FR 55864	11/30/2010	R <sup>1</sup> ML120100267	No Comments 02/21/2012 ML120370416	
2007-4	Order Imposing Fingerprinting Requirements and Criminal History Records Check Requirements for Unescorted Access to Certain Radioactive Material NRC Order EA-07-305 72 FR 70901	06/05/2008	License Condition ML080460449	No Comments 03/12/2008 ML080720077	
2008-1	Occupational Dose Records, Labeling Containers, and Total Effective Dose Equivalent Parts 19 and 20 72 FR 68043	02/15/2011	Final ML091380048	No Comments 07/07/2009 ML091600652	

<b>RATS ID</b>	<b>NRC Chronology Identification</b>	<b>Date Due for State Adoption</b>	<b>Incoming Letter</b>	<b>Outgoing Package</b>	<b>Notes</b>
2009-1	Medical Use of Byproduct Material – Authorized User Clarification Part 35 74 FR 33901	09/28/2012	Final ML120100267	No Comments 02/21/2012 ML120370416	
2011-1	Decommissioning Planning Parts 20, 30, 40, and 70 76 FR 35512	12/17/2015	Final ML13330A553	No Comments 12/23/2013 ML13330A097	
2011-2	Licenses, Certifications, and Approvals for Materials Licensees Parts 30, 36, 39, 40, 70, and 150 76 FR 56951	11/14/2014	Final ML13228A018	No Comments 09/18/2013 ML13228A016	
2012-1	Change of Compatibility Parts 31.5 and 31.6 (See RATS ID: 2001-1 for Rule text) 77 FR 3640	01/25/2015	Final ML12361A139	No Comments 02/06/2013 ML13011A272	
2012-2	Advance Notification to Native American Tribes of Transportation of Certain Types of Nuclear Waste Part 71 77 FR 34194	08/10/2015	Final ML12361A139	No Comments 02/06/2013 ML13011A272	
2012-3	Technical Corrections Parts 30, 34, 40, and 71 77 FR 39899	08/06/2015	Proposed ML14352A073  Final ML15176A551	No Comments 01/16/2015 ML14352A062  No Comments 07/23/2015 ML15176A515	

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Letter	Outgoing Package	Notes
2012-4	Requirements for Distribution of Byproduct Material Parts 30, 31, 32, 40, and 70 77 FR 43666	10/23/2015	Proposed ML15097A046  Final ML15314A591  Revised Final ML17173A405	No Comments 05/04/2015 ML15097A044  Comment 12/9/2015 ML15314A562  No Comments 06/27/2017 ML17173A404	
2013-1	Physical Protection of Byproduct Material Parts 20, 30, 32, 33, 34, 35, 36, 37, 39, and 71 78 FR 16922	03/19/2016	Final ML14161A337	No Comments 07/30/2014 ML14157A0700	
2013-2	Distribution of Source Material to Exempt Persons and to General Licensees and Revision of General License and Exemptions Parts 30, 40, and 70 78 FR 32310	08/27/2016	Proposed ML15091A243  Final ML15355A134  Final ML16015A278	No Comments 04/28/2015 ML15091A235  Comment 01/13/2016 ML15355A129  Comment 02/04/2016 ML16015A270	Request to rescind comment
2015-1	Domestic Licensing of Special Nuclear Material – Written Reports and Clarifying Amendments Part 70 79 FR 57721, 80 FR 143	01/26/2018	Proposed ML15336A030  Final ML16137A688	No Comments 12/15/2015 ML15336A029  No Comments 08/26/2016 ML16137A662	



RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Letter	Outgoing Package	Notes
2015-2	Safeguards Information - Modified Handling Categorization, Change for Materials Facilities Parts 30, 37, 73, and 150 79 FR 58664, 80 FR 3865	01/28/2018	Proposed ML15181A443  Final ML15327A068	No Comments 07/21/2015 ML15181A434  No Comments 12/10/2015 ML15327A060	
*2015-3	Revisions to Transportation Safety Requirements and Harmonization with International Atomic Energy Agency Transportation Requirements Part 71 80 FR 33987	07/13/2018 *extended to 08/15/2020 See STC 17-060	Proposed ML17290A052	Comments 11/28/2017 ML17290A051	
2015-4	Miscellaneous Corrections Parts 37 and 40 80 FR 45841	09/02/2018	Proposed ML15308A488  Final ML16137A688	No Comments 11/25/2015 ML15308A487  No Comments 06/13/16 ML16145A404	
*2015-5	Miscellaneous Corrections Parts 19, 20, 30, 32, 37, 40, 61, 70, 71, and 150 80 FR 74974	12/31/2018	Proposed ML17290A052	No Comments 11/28/2017 ML17290A051	

\*R stands for proposed changes to a final rule.