

Appendix 4.2-2

NRC comment and State response letters.



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

February 27, 2023

Jeffrey Semancik, Director
Radiation Division
Bureau of Air Management
Connecticut Department of Energy
and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

Dear Jeffrey Semancik:

We have reviewed the proposed revisions to the Connecticut regulations Sections 22a-153-1 through 22a-153-199, received by our office on November 22, 2022. These regulations were reviewed by comparison to the equivalent U.S. Nuclear Regulatory Commission (NRC) rules in 10 CFR 19, 20, 30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 70, 71, and 150 as identified in the enclosed State Regulation Status (SRS) Data Sheet. We discussed our review of the regulations with members of your staff on February 23, 2023.

As a result of our review, we have 14 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 Connecticut 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 Connecticut 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 Materials Safety, Security, State, and Tribal Programs, NMSS.

The SRS Data Sheet summarizes our knowledge of the status of other Connecticut 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 301-415-0275 (Michelle.Beardsley@nrc.gov) or Sherrie Flaherty at 301-415-7288 (Sherrie.Flaherty@nrc.gov).

Sincerely,



Signed by Cecere, Bethany
on 02/27/23

Bethany K. Cecere, Acting Chief
State Agreement and Liaison Programs Branch
Division of Materials Safety, Security, State,
and Tribal Programs
Office of Nuclear Material Safety
and Safeguards

Enclosures:

1. Compatibility Comments
2. Connecticut SRS Data Sheet

SUBJECT: CONNECTICUT PROPOSED REGULATIONS TO 10 CFR PARTS 19, 20, 30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 70, 71, AND 150 DATE February 27, 2023

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OFFICE	NMSS/MSST	NMSS/MSST	OGC	NMSS/MSST
NAME	SFlaherty	MBeardsley	JScro NLO via email	BCecere
DATE	01/09/2023	01/09/2023	02/24/2023	02/27/2023

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COMPATIBILITY COMMENTS ON CONNECTICUT PROPOSED REGULATIONS

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
1	Various	NA	NA	NA	<p>General Comments</p> <p>a) The proposed regulations state, “With the exception of 10 CFR 30.4, and in the definition of Special Nuclear Material in 10 CFR 20.1003, a reference to “NRC” or “Commission” means the Connecticut Department of Energy and Environmental Protection;”. This provision omits applicable references to 10 CFR parts 70.10, 70.19(a)(1), 70.19(c)(3) and 40.4.</p> <p>b) The proposed regulations state, “In 10 CFR 30.18(d), 30.32(g), 31.5(b)(1)(ii), 31.5(c)(3)(ii), 31.5(c)(8)(i), 31.6, 31.7(a), 31.10(a), 31.10(b)(1), 31.12(c)(4), 40.13(c)(10), 40.22(e), 40.25(b), 40.25(d)(3), 40.54, 40.55(c), (c)(1), (d)(1)(ii), (d)(2) and (d)(3), where a reference is made to “an Agreement State”, it means “an Agreement State or the NRC”. This provision omits applicable references to 10 CFR sections 32.13, 32.51(c), 32.56, 32.59, 32.72(b)(5)(ii).</p> <p>c) The Applicability provisions in multiple subsections are overly broad and do not account for areas of exclusive NRC jurisdiction. Connecticut should either delete these subsections or revise to be more specific.</p>
2	Sec 22a-153-2(b)	10 CFR 20, 30, 40, and 71	NA	A, B	<p>Definitions:</p> <p>In Section 22a-153-2(b):</p> <p>a) certain definitions refer back to</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					<p>NRC regulations, e.g., ALARA, Agreement State, Background radiation. These are duplicative and could cause future conflicts and confusion. Connecticut should delete duplicative provisions.</p> <p>b) Connecticut uses the term "registrant" in several definitions , but does not define that term. Connecticut needs to either change all instances of "registrant," "registered," and "unregistered" to "licensee," "licensed" and "unlicensed" or clarify and define what, if any, differences there are between the two terms.</p> <p>c) Connecticut should delete the definition of "unrestricted use" since it incorporates by reference the definition of "unrestricted area." This creates duplication and confusion. Also the first part of the definition that states, "may be used by individual for any purpose without limits or controls" is too broad in scope.</p>
3	22a-153-4	NA	NA	NA	<p>Exemptions</p> <p>Section 22a-153-4(f)(B) states, "The production, transportation, storage, use and disposal of naturally occurring radioactive materials of equivalent specific radioactivity not exceeding that of natural potassium (857 picocurie/gram or 31.72 becquerel /gram; NCRP Report No. 160, 2009)". This exemption does not appear in NRC regulations.</p> <p>Connecticut should either delete this exemption or submit a justification and analysis for a compatibility</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					review.
4	22a-153-30	10 CFR 30	NA	Various	<p>Rules of general applicability to domestic licensing of byproduct material</p> <p>In the table incorporating 10 CFR part 30 by reference, it states, "In 10 CFR 30.10(b), the reference to 10 CFR 2 relating to deliberate misconduct is replaced with Section 22a-158c of the Connecticut General Statutes...". Connecticut omits a reference to 22a-6b.</p> <p>Please either clarify why this section is omitted or add it to the statement in the table as indicated above.</p>
5	22a-153-35 (c)(1)	35.65 (a)(4)	NA	D	<p>Authorization for calibration, transmission, and reference sources</p> <p>Connecticut's regulations for the maximum possession limit of radium 226 is 100 µCi. 10 CFR 35.65(a)(4) states that materials with a half-life greater than 120 days has a maximum amount allowed of 1000 times quantity in appendix B of part 30. For radium the maximum quantity allowed would be 10 µCi (.01 x 1000). Connecticut's proposed maximum allowable quantity possessed of radium 226 conflicts with the allowable quantity in 10 CFR Appendix B.</p> <p>Connecticut needs to change the maximum allowable possession limit for radium 226 to 10 µCi in order to not conflict with 10 CFR 35.65 (a)(4).</p>
6	22a-153-37	37.5	NA	C	Definition: Access Control

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					<p>Connecticut omits a definition for access control.</p> <p>Connecticut needs to submit a definition for access control to meet the Compatibility Category C designation assigned to 10 CFR 37.5 Definition of Access Control.</p>
7	22a-153-70	70.60	NA	NRC	<p>Applicability</p> <p>Connecticut incorporates 10 CFR 70.60 by reference This provision is designated as Compatibility Category NRC and should not be adopted by the state.</p> <p>Connecticut needs to add 70.60 to the list of excluded parts to meet the Compatibility Category NRC designation assigned to 10 CFR 70.60.</p>
8	22a-153-70	10 CFR 70	NA	NA	<p>Domestic licensing of special nuclear material</p> <p>Connecticut lists 10 CFR parts 70.53 and 70.54 in the regulations that are excepted from incorporation by reference, however those parts do not exist.</p> <p>Connecticut needs to delete those provisions from their list of excepted regulations.</p>
9	22a-153-71	71.101 (a), (b) & (c) (1)	NA	C	<p>Quality assurance requirements</p> <p>Connecticut incorporates 10 CFR 71.101 by reference, however, the licensees' quality assurance programs (QAP) should be submitted to, and reviewed by the state agency</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					<p>and not the NRC.</p> <p>Connecticut needs to add a provision stating that the licensees' QAPs in 10 CFR 71.101 need to be submitted to their state agency.</p> <p>Connecticut needs to make the change indicated above to meet the Compatibility Category C designation assigned to 10 CFR 71.101.</p>
10	22a-153-150	10 CFR 150	NA	Various	<p>Exemptions and continued regulatory authority in Agreement States and in offshore waters under Section 274</p> <p>In the Table of regulations incorporated by reference for 10 CFR 150, Connecticut lists 150.1, 150.2, 150.3, 150.11, and 150.20. Please confirm that these are the only parts being incorporated by reference, or list those parts that are excepted from incorporation by reference as is done for the other parts.</p>
11	22a-153-150(c)(1)(E)(i)	10 CFR 150	NA	Various	<p>Licenses of Byproduct, Source, and Special Nuclear Material in Quantities Not Sufficient to Form a Critical Mass</p> <p>Section 22a-153-150(c)(1)(E)(i) states, "Specifically licensed by the commissioner or by the NRC to receive such material; or".</p> <p>Connecticut needs to add, "or another Agreement State" to this provision.</p>
12	22a-153-7(c)(1)	Various	NA	Various	<p>Exempt quantities and items containing radioactive material</p> <p>Sec 22a-153-7(c)(1) states, "The</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS
					<p>following quantities and items containing radioactive material are exempt from the requirements of section 22a-153-7 of the Regulations of Connecticut State Agencies." The reference to section 22a-153-7 in its entirety is broad.</p> <p>Connecticut needs to specify which subsection in 22a-153-7 the quantities and items of radioactive materials are being exempted from.</p>
13	Section 22a-153-150(d)(1)	10 CFR 150	NA	Various	<p>Licenses of Naturally Occurring and Accelerator-Produced Radioactive Material.</p> <p>Since Connecticut defines byproduct material to include NORM and NARM this section is duplicative and could create confusion. In addition, this section uses the term "Licensing State," without defining it. It is not clear what this term means or whether it is equivalent to Agreement State.</p> <p>Connecticut should delete this section.</p>
14	--	61.55 61.56 61.57	NA	B H&S H&S	<p>Waste classification Waste characteristics Labeling</p> <p>Connecticut did not submit equivalent regulations for 10 CFR 61.55, 61.56, and 61.57.</p> <p>Connecticut needs to submit the above to meet the Compatibility Category B designation assigned to 10 CFR 61.55, and the Compatibility Category H&S designation assigned to 10 CFR 61.56, and 61.57.</p>

STATE REGULATION STATUS

State: Connecticut

Tracking Ticket Number: 23-07

Date: February 27, 2023

(Amendments reviewed marked by asterisk)

RATS ID	NRC Chronology Identification	Date Due for State Adoption	Incoming Letter	Outgoing Package	Notes
*NA	10 CFR Parts 19, 20, 30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 70, 71, and 150	NA	ML22335A504	Comments 02/27/2023 ML22335A398	Connecticut submitted regulations that incorporate NRC regulations by reference.



December 5, 2023

Adelaide Giantelli, Chief
State Agreement and Liaison Programs Branch
Division of Materials Safety, Security, State and Tribal Programs
Office of Nuclear Material Safety and Safeguards

Dear Ms. Giantelli:

Thank you for your sufficiency review of Connecticut's draft radioactive material regulations necessary to enter into an agreement with the US Nuclear Regulatory Commission (NRC) to regulate certain radioactive materials¹ as documented in your review letter dated February 27, 2023. We have reviewed your comments and have provided resolution to each as identified in the enclosure.

I also want to inform you that Connecticut's proposed radioactive materials regulations (Tracking Number PR2021-040) have been posted and are open for public comment. Information on the proposed regulations including how to make comments can be found at <https://portal.ct.gov/DEEP/Public-Notices/Public-Notices-Proposed-Actions---Opportunity-for-Comment/Miscellaneous-Proposed-Actions>.

If you have any questions regarding the comments, or the Connecticut General Statutes, in our response, please contact me at 860-424-4190 (jeffrey.semancik@ct.gov) or Brandon Graber, at 860-424-3921 (brandon.graber@ct.gov).

Sincerely,

Jeffrey D. Semancik
Director, Radiation Division
Dept of Energy and Environmental Protection

Enclosure: NRC comment table resolution

Cc: Duncan White, US NRC

¹ In accordance with section 274 of the Atomic Energy Act of 1954, as amended.

Enclosure: Compatibility Comments n Connecticut Proposed Regulations – CT DEEP Response

STATE SECTION	NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS	CT DEEP Response
1	Various	NA	NA	<p>General Comments</p> <p>a) The proposed regulations state, “With the exception of 10 CFR 30.4, and in the definition of Special Nuclear Material in 10 CFR 20.1003, a reference to “NRC” or “Commission” means the Connecticut Department of Energy and Environmental Protection;”. This provision omits applicable references to 10 CFR parts 70.10, 70.19(a)(1), 70.19(c)(3) and 40.4.</p> <p>b) The proposed regulations state, “In 10 CFR 30.18(d), 30.32(g), 31.5(b)(1)(ii), 31.5(c)(3)(ii), 31.5(c)(8)(i), 31.6, 31.7(a), 31.10(a), 31.10(b)(1), 31.12(c)(4), 40.13(c)(10), 40.22(e), 40.25(b), 40.25(d)(3), 40.54, 40.55(c), (c)(1), (d)(1)(ii), (d)(2) and (d)(3), where a reference is made to “an Agreement State”, it means “an Agreement State or the NRC”. This provision omits applicable references to 10 CFR sections 32.13, 32.51(c), 32.56, 32.59, 32.72(b)(5)(ii).</p> <p>c) The Applicability provisions in multiple subsections are overly broad and do not account for areas of exclusive NRC jurisdiction. Connecticut should either delete these subsections or revise to be more specific.</p>	<p>Sections 10 CFR 70.10, 70.19(a)(1), 70.19(c)(3) and 40.4 have been added.</p> <p>Sections 10 CFR 32.13, 32.15(c), 32.56, 32.59, 32.72(b)(5)(ii) have been added.</p> <p>Per discussion with NRC OGC, applicability was modified to add: (2) This section shall not apply to any person to the extent such person is subject to regulation by the U.S. Nuclear Regulatory Commission (NRC).</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS	CT DEEP Response
2	Sec 22a-153-2(b)	10 CFR 20, 30, 40, and 71	NA	A, B	<p>Definitions:</p> <p>In Section 22a-153-2(b):</p> <p>a) certain definitions refer back to NRC regulations, e.g., ALARA, Agreement State, Background radiation. These are duplicative and could cause future conflicts and confusion. Connecticut should delete duplicative provisions.</p> <p>b) Connecticut uses the term "registrant" in several definitions but does not define that term. Connecticut needs to either change all instances of "registrant," "registered," and "unregistered" to "licensee," "licensed" and "unlicensed" or clarify and define what, if any, differences there are between the two terms.</p> <p>c) Connecticut should delete the definition of "unrestricted use" since it incorporates by reference the definition of "unrestricted area." This creates duplication and confusion. Also, the first part of the definition that states, "may be used by individual for any purpose without limits or controls" is too broad in scope.</p>	<p>Duplicative provisions have been removed.</p> <p>Word 'Licensee' and 'Unlicensed' has replaced other references to CT governed entities.</p> <p>Definition of "unrestricted use" has been deleted.</p>

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS	CT DEEP Response
3	22a-153-4	NA	NA	NA	<p>Exemptions</p> <p>Section 22a-153-4(f)(B) states, “The production, transportation, storage, use and disposal of naturally occurring radioactive materials of equivalent specific radioactivity not exceeding that of natural potassium (857 picocurie/gram or 31.72 becquerel /gram; NCRP Report No. 160, 2009)”. This exemption does not appear in NRC regulations.</p> <p>Connecticut should either delete this exemption or submit a justification and analysis for a compatibility review.</p>	Exemption for NORM has been removed.
4	22a-153-30	10 CFR 30	NA	Various	<p>Rules of general applicability to domestic licensing of byproduct material</p> <p>In the table incorporating 10 CFR part 30 by reference, it states, “In 10 CFR 30.10(b), the reference to 10 CFR 2 relating to deliberate misconduct is replaced with Section 22a-158c of the Connecticut General Statutes...”. Connecticut omits a reference to 22a-6b.</p> <p>Please either clarify why this section is omitted or add it to the statement in the table as indicated above.</p>	Reference to 22a-6b has been added to table.

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS	CT DEEP Response
5	22a-153-35 (c)(1)	35.65 (a)(4)	NA	D	<p>Authorization for calibration, transmission, and reference sources</p> <p>Connecticut's regulations for the maximum possession limit of radium 226 is 100 µCi. 10 CFR 35.65(a)(4) states that materials with a half-life greater than 120 days has a maximum amount allowed of 1000 times quantity in appendix B of part 30. For radium the maximum quantity allowed would be 10 µCi (.01 x 1000). Connecticut's proposed maximum allowable quantity possessed of radium 226 conflicts with the allowable quantity in 10 CFR Appendix B.</p> <p>Connecticut needs to change the maximum allowable possession limit for radium 226 to 10 µCi in order to not conflict with 10 CFR 35.65 (a)(4).</p>	Changed the maximum allowable possession limit for radium 226 to 10 µCi.
6	22a-153-37	37.5	NA	C	<p>Definition: Access Control</p> <p>Connecticut omits a definition for access control.</p> <p>Connecticut needs to submit a definition for access control to meet the Compatibility Category C designation assigned to 10 CFR 37.5 Definition of Access Control.</p>	Corrections have been made. Part 37.5 will be adopted by reference, thus no exception.

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS	CT DEEP Response
7	22a-153-70	70.60	NA	NRC	<p>Applicability</p> <p>Connecticut incorporates 10 CFR 70.60 by reference This provision is designated as Compatibility Category NRC and should not be adopted by the state.</p> <p>Connecticut needs to add 70.60 to the list of excluded parts to meet the Compatibility Category NRC designation assigned to 10 CFR 70.60.</p>	70.60 has been added to exceptions.
8	22a-153-70	10 CFR 70	NA	NA	<p>Domestic licensing of special nuclear material</p> <p>Connecticut lists 10 CFR parts 70.53 and 70.54 in the regulations that are excepted from incorporation by reference, however those parts do not exist.</p> <p>Connecticut needs to delete those provisions from their list of excepted regulations.</p>	Reference to 70.53 and 70.54 have been deleted.

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS	CT DEEP'Response
9	22a-153-71	71.101 (a), (b) & (c) (1)	NA	C	<p>Quality assurance requirements</p> <p>Connecticut incorporates 10 CFR 71.101 by reference, however, the licensees' quality assurance programs (QAP) should be submitted to, and reviewed by the state agency and not the NRC.</p> <p>Connecticut needs to add a provision stating that the licensees' QAPs in 10 CFR 71.101 need to be submitted to their state agency.</p> <p>Connecticut needs to make the change indicated above to meet the Compatibility Category C designation assigned to 10 CFR 71.101.</p>	Added a provision stating that the licensees' QAPs in 10 CFR 71.101 need to be submitted to their state agency in 22a-153-1(b)(3)(U). Deleted section 22a-153-71
10	22a-153-150	10 CFR 150	NA	Various	<p>Exemptions and continued regulatory authority in Agreement States and in offshore waters under Section 274</p> <p>In the Table of regulations incorporated by reference for 10 CFR 150, Connecticut lists 150.1, 150.2, 150.3, 150.11, and 150.20. Please confirm that these are the only parts being incorporated by reference, or list those parts that are excepted from incorporation by reference as is done for the other parts.</p>	Connecticut confirms that 10 CFR parts 150.1, 150.2 150.3, 150.11 and 150.20 are the only parts being incorporated by reference. In reviewing the sections to be excluded, some of the sections do not exist sequentially. Thus, the string of excluded sections may look incomplete. However, the sections referenced in your response are those that CT will be adopting.

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS	CT DEEP Response
11	22a-153-150(c)(1)(E)(i)	10 CFR 150	NA	Various	<p>Licenses of Byproduct, Source, and Special Nuclear Material in Quantities Not Sufficient to Form a Critical Mass</p> <p>Section 22a-153-150(c)(1)(E)(i) states, "Specifically licensed by the commissioner or by the NRC to receive such material; or".</p> <p>Connecticut needs to add, "or another Agreement State" to this provision.</p>	Added "or another Agreement State"
12	22a-153-7(c)(1)	Various	NA	Various	<p>Exempt quantities and items containing radioactive material</p> <p>Sec 22a-153-7(c)(1) states, "The following quantities and items containing radioactive material are exempt from the requirements of section 22a-153-7 of the Regulations of Connecticut State Agencies." The reference to section 22a-153-7 in its entirety is broad.</p> <p>Connecticut needs to specify which subsection in 22a-153-7 the quantities and items of radioactive materials are being exempted from.</p>	Corrections have been handled by adding NRC or Agreement State references to 'exempt quantity or item' in 10 CFR 30.11 & 30.22

STATE SECTION		NRC SECTION	RATS ID	CATEGORY	SUBJECT and COMMENTS	CT DEEP Response
13	Section 22a-153-150(d)(1)	10 CFR 150	NA	Various	<p>Licenses of Naturally Occurring and Accelerator-Produced Radioactive Material.</p> <p>Since Connecticut defines byproduct material to include NORM and NARM this section is duplicative and could create confusion. In addition, this section uses the term "Licensing State," without defining it. It is not clear what this term means or whether it is equivalent to 'Agreement State'.</p> <p>Connecticut should delete this section.</p>	The reference to NARM has been removed. 'Licensing State' has been replaced with 'Agreement State'.
14	--	61.55 61.56 61.57	NA	B H&S H&S	<p>Waste classification Waste characteristics Labeling</p> <p>Connecticut did not submit equivalent regulations for 10 CFR 61.55, 61.56, and 61.57.</p> <p>Connecticut needs to submit the above to meet the Compatibility Category B designation assigned to 10 CFR 61.55, and the Compatibility Category H&S designation assigned to 10 CFR 61.56, and 61.57.</p>	Per table in 22a-153-1, 10 CFR 61.55, 61.56, and 61.57 are being incorporated by reference. Other sections of 10 CFR 61 are not. Thus, the only exceptions are the sections listed. No additional section in CT regulation is needed.