

## RulemakingComments Resource

---

**From:** Janie Roman <Janie.Roman@tceq.texas.gov>  
**Sent:** Monday, July 20, 2015 1:02 PM  
**To:** RulemakingComments Resource  
**Cc:** Gallagher, Carol  
**Subject:** [External\_Sender] Docket ID NRC-2011-0012  
**Attachments:** letterNRC.pdf; NRC Part 61 comments\_TCEQ 7-24-15.docx

On behalf of TCEQ here is our letter and comments regarding the Proposed Revisions to 10 CFR Part 20 and 10 CFR Part 61 for Docket ID NRC-2011-0012.

If you have any questions please contact Mr. Brad Broussard (512) 239-6380 or by email at [brad.broussard@tceq.texas.gov](mailto:brad.broussard@tceq.texas.gov) .

Thank you,  
Janie Roman  
TCEQ  
512-239-0604

Janie Roman  
Texas Commission on Environmental Quality  
Intergovernmental Relations  
Legislative Coordinator/EA  
239-0604  
[Janie.roman@tceq.texas.gov](mailto:Janie.roman@tceq.texas.gov)

Bryan W. Shaw, Ph.D., P.E., *Chairman*  
Toby Baker, *Commissioner*  
Richard A. Hyde, P.E., *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

July 20, 2015

Secretary, U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Attention: Rulemakings and Adjudications Staff

Re: Docket ID NRC-2011-0012

Dear Sir or Madam:

The Texas Commission on Environmental Quality (TCEQ) appreciates the opportunity to comment on the United States Nuclear Regulatory Commission's (NRC) proposed revisions to 10 CFR Part 61 provided in Request For Comments on The Draft Proposed Rule: Low-Level Radioactive Waste Disposal (10 CFR PART 61)(RIN 3150-A192). TCEQ previously advised NRC staff that comments would be submitted.

Enclosed please find the TCEQ's detailed comments relating to the NRC's proposed revisions referenced above. If you have any questions concerning the enclosed comments, please contact Mr. Brad Broussard of the Radioactive Materials Division, at (512) 239-6380, or at [brad.broussard@tceq.texas.gov](mailto:brad.broussard@tceq.texas.gov).

Sincerely,

A handwritten signature in black ink that reads "Richard A. Hyde". The signature is written in a cursive style with a large initial "R" and "H".

Richard A. Hyde, P.E.  
Executive Director

**Comments on Proposed Revisions to 10 CFR Part 20 and  
10 CFR Part 61  
Docket ID NRC-2011-0012**

**Overview:**

The Texas Commission on Environmental Quality (TCEQ) values the opportunity to provide comments on the Nuclear Regulatory Commission's (NRC) proposed revisions to 10 CFR Part 20 and 10 CFR Part 61. The TCEQ supports the proposed changes to 10 CFR Part 20 and has no comments on those revisions at this time.

The TCEQ supports the proposed revisions to 10 CFR Part 61 requiring technical analyses and the associated compliance period, protective assurance period, and performance period. The TCEQ also supports the proposed requirement for development of waste acceptance criteria based on site-specific analysis. There is further support for conducting an intruder analysis and the related dose/dose target for protection of human health. Further, the TCEQ supports identification and evaluation of features, events, and processes (FEPs) and a demonstration of defense-in-depth through engineering design and site characteristics.

The TCEQ has the following comments as noted below in both a general and specific context.

**General Comments**

The TCEQ suggests adding definitions in the regulations for defense-in-depth and the safety case, which were always present in the performance objectives and facility design and location requirements. This will explain more clearly to the public the methodology used to ensure that a LLRW disposal facility will protect public health and safety while providing a means for taking care of the need to dispose of LLRW waste. The proposed requirements for the licensee to submit a safety case analysis of the LLRW disposal facility that includes a defense-in-depth analysis will clarify and make more transparent to the public the decision-making and analysis necessary in determining that the waste acceptance criteria and the facility design and location will result in the safe disposal of the LLRW.

The proposed changes will allow the use of a performance assessment to determine waste acceptance criteria for waste that was not considered in the original analysis that lead to the current LLRW classification. This will give the states and licensees additional flexibility while maintaining public health and safety. Texas has already employed the use of a performance assessment to determine what concentrations, total activity, and additional restraints are required for the disposal of depleted uranium since the original

waste classification analysis did not include large amounts of depleted uranium and agrees that this methodology should be standard throughout the country.

The proposed three-tiered approach, with staggered dose limits over three time periods of a disposal site, provides a reasonable balance between the need to assess site performance and the inherent uncertainty in predicting dose to the public and intruders very far into the future. The three-tier approach will still allow Texas to analyze the performance of the LLRW disposal facility up to peak dose as is currently required in Texas rules. However, those rules require the compliance period to be 1,000 years or peak dose, whichever is longer. Adopting the proposed compliance period with a compatibility category B may be perceived as a lowering of the standards for radioactive waste disposal. The TCEQ requests that NRC assign those requirements as compatibility category C, as further detailed below.

### **Specific Comments**

#### **1.) Amended Section 61.13(e), Technical Analyses.**

**61.13(e)** states “Analyses that assess how the disposal site limits the potential long-term radiological impacts, consistent with available data and current scientific understanding. The analyses shall be required for disposal sites with waste that contains radionuclides with average concentrations exceeding the values listed in table A of this paragraph, or if necessitated by site-specific conditions. For wastes containing mixtures of radionuclides found in table A, the total concentration shall be determined by the sum of fractions rule described in paragraph 61.55(a)(7). The analyses must identify and describe the features of the design and site characteristics that will demonstrate that the performance objectives set forth in §§ 61.41(c) and 61.42(c) will be met.”

**Comment:** The TCEQ suggests that the NRC consider removing Table A and references from the proposed rule and move the table to the draft guidance document, NUREG-2175. The TCEQ supports the remaining proposed revisions in 61.13 for conducting technical analyses and the compatibility categories.

#### **2.) Amended Section § 61.41(a), Protection of the General Population From Releases of Radioactivity.**

**61.41(a)** states “Concentrations of radioactive material that may be released to the general environment in ground water, surface water, air, soil, plants, or animals must not result in an annual dose exceeding an equivalent of 0.25 milliSievert (25 millirems) to any member of the public within the compliance period. Reasonable effort should be made to maintain releases of radioactivity in effluents to the general environment as low as is reasonably achievable during the compliance period. Compliance with this paragraph must be demonstrated through analyses that meet the requirements specified in § 61.13(a).”

**Comment:** The compatibility category for this amended section is proposed to remain unchanged as category A. The TCEQ suggests the NRC consider a compatibility category of C so that Texas can keep the requirement of peak dose or it may be perceived as a lowering of the standards for radioactive waste disposal. This will allow Texas to retain the flexibility in regulations more stringent than the NRC.

3.) **New Section § 61.41(b), Protection of the General Population From Releases of Radioactivity.**

**61.41(b)** states “Concentrations of radioactive material that may be released to the general environment in ground water, surface water, air, soil, plants, or animals shall be minimized during the protective assurance period. The annual dose, established on the license, shall be below 5 milliSieverts (500 millirems) or a level that is supported as reasonably achievable based on technological and economic considerations in the information submitted for review and approval by the Commission. Compliance with this paragraph must be demonstrated through analyses that meet the requirements specified in § 61.13(a).”

**Comment:** The TCEQ suggests removing “established on the license.” Since this will already be stated in the rule there is no need to state it in the site’s license as well. Also, this new section is being proposed with a compatibility category B. The TCEQ suggests that the NRC consider changing the compatibility to category C. This will allow the sited states greater flexibility in meeting the requirements proposed in 61.41(b) and will be consistent with the compatibility category in 61.13.

4.) **Amended Section § 61.42(a), Protection of Inadvertent Intruders.**

**61.42(a)** states “Design, operation, and closure of the land disposal facility must ensure protection of any inadvertent intruder into the disposal site who occupies the site or contacts the waste at any time after active institutional controls over the disposal site are removed. The annual dose must not exceed 5 milliSieverts (500 millirems) to any inadvertent intruder within the compliance period. Compliance with this paragraph must be demonstrated through analyses that meet the requirements specified in § 61.13(b).”

**Comment:** The compatibility category for this amended section is proposed to be changed from compatibility H&S to compatibility category A. The TCEQ suggests that the NRC consider changing the compatibility to category C. This will allow the sited states greater flexibility in meeting the requirements proposed in 61.42(a) and will be consistent with the compatibility category in 61.13.

5.) **New Section § 61.42(b), Protection of Inadvertent Intruders.**

**61.42(b)** states “Design, operation, and closure of the land disposal facility shall minimize exposures to any inadvertent intruder into the disposal site at any time during the protective assurance period. The annual dose, established on the license, shall be below 5 milliSieverts (500 millirems) or a level that is supported as reasonably achievable based on technological and economic considerations in the information submitted for review and approval by the Commission. Compliance with this paragraph must be demonstrated through analyses that meet the requirements specified in § 61.13(b).”

**Comment:** The compatibility category for this new section is proposed to be compatibility category B. The TCEQ suggests that the NRC consider changing the compatibility to category C. This will allow the sited states greater flexibility in meeting the requirements proposed in 61.42(b) and will be consistent with the compatibility category in 61.13.

6.) **Revised Section § 61.58 Waste acceptance.**

**61.58** states “*Waste acceptance criteria.* Each applicant shall provide, for approval by the Commission, criteria for the acceptance of waste for disposal that provide reasonable assurance of compliance with the performance objectives of subpart C of this part. Waste acceptance criteria shall specify, at a minimum, the following:....”

**Comment:** The compatibility category for this amended section is proposed to be changed from compatibility D to compatibility category B. The TCEQ suggests that the NRC consider changing the compatibility to category C. This will allow the sited states greater flexibility in meeting the requirements proposed in 61.58.