

## Rulemaking Comments

**From:** NYS Vincent [Vincent.NYS@FANC.FGOV.BE]  
**Sent:** Saturday, June 18, 2011 1:03 AM  
**To:** Rulemaking Comments  
**Subject:** FW: Availability of Part 61 preliminary proposed rule language and its associated regulatory basis documents, and solicitation for public comments.  
**Attachments:** 110618 comments.doc

**Importance:** High

DOCKETED  
USNRC

Dear

June 20, 2011 (11:15 am)

Please in attachment our comments on Part 61 the preliminary proposed rule

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

Vincent Nys  
Federal Agency of Nuclear Control (Belgium)  
Project leader of LLW Waste disposal facility



federaal agentschap voor nucleaire controle  
agence fédérale de contrôle nucléaire

Het FANC is ISO 9001:2000 gecertificeerd - L'AFCN est certifiée ISO 9001:2000.

Aub, denk aan het milieu voordat u deze mail uitprint.  
Svp, pensez à notre environnement avant d'imprimer ce mail.

Disclaimer (Fr) - Disclaimer (NI)

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**Sent:** Thu 6/2/2011 6:37 PM

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**Subject:** Availability of Part 61 preliminary proposed rule language and its associated regulatory basis documents, and solicitation for public comments.

Good afternoon,

My name is Andrew Carrera and I am a Rulemaking Project Manager for the Nuclear Regulatory Commission (NRC). The NRC is in the process of developing proposed revisions to 10 CFR Part 61 – Licensing Requirements for Land Disposal of Radioactive Waste, which will include a new requirement for licensees to prepare a performance assessment for their disposal sites. As a practitioner in the field of performance assessments, the NRC would appreciate your feedback on its draft proposed rule language.

The draft proposed rule text, along with the regulatory basis and a paper on the period of performance of waste disposal sites, are attached to this email.

In addition to commenting on the performance assessment requirements in the draft proposed rule, you may want to comment on the period of performance for low-level waste disposal, which was the subject of a May 18th, 2011 public meeting that you may not have been able to attend. More information on this topic and the meeting can be found at the NRC Site-Specific Analysis rulemaking Web site <http://www.nrc.gov/about-nrc/regulatory/rulemaking/potential-rulemaking/uw-streams.html> and in the attached period of performance paper.

The NRC staff plans to submit a draft proposed rule to the Commission later this calendar year; and, if the Commission approves publication of the proposed rule, you and other interested stakeholders will have an opportunity to comment as part of the rulemaking record. The NRC staff will respond to any comments received on the proposed rule as part of the final rule.

As noted in the attached Federal Register Notice, please provide any comments you might have on these preliminary materials by June 18, 2011. Comments may be submitted through the Federal Rulemaking website ([www.regulations.gov](http://www.regulations.gov); Docket ID NRC-2011-0012), mail (Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attn: Rulemakings and Adjudications Staff), E-mail ([Rulemaking.Comments@nrc.gov](mailto:Rulemaking.Comments@nrc.gov)), fax (Secretary, U.S. Nuclear Regulatory Commission at 301-415-1101), or hand-delivery (11555 Rockville Pike, Rockville, Maryland 20852, between 7:30 a.m. and 4:15 p.m. Federal workdays).

Comments received after this date will be considered if it is practical to do so, but the NRC is able to ensure consideration only for comments received on or before this date.

Your input is appreciated.

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**Comments NR**  
**On draft revision of 10 CFR 61 –**  
**Licensing requirements for land disposal of radioactive waste**

Experts involved: N. Reynal, C. de Lhoneux

**1. § 61.2 Definition:**

Although we consider useful to introduce a definition for long-lived waste, we suggest avoiding introducing requirements through the definition.

The limit of ten percent of the initial radioactivity should be stated as a requirement somewhere else. We also suggest completing the text by saying that the initial radioactivity should be considered short lived radionuclide greater than 5 year of half life.

**2. § 61.7 (c) on waste classification and near-surface disposal:**

- Classification of waste:  
The added sentence *“While stability is desirable; it isn't necessary from a health and safety standpoint for most low-level waste because the waste doesn't contain sufficient radionuclides to be of concern. This low-activity waste (e.g. ordinary trash-type waste) tends to be unstable, which can become a problem if it is mixed with higher activity waste”* only addresses the level of activity of the waste. It would also be necessary to take account of the lifetime of the waste: mixing unstable waste with long-lived waste can raise problems, whatever their activity level.
- Aims of limiting access of water to the waste:  
The last part of the sentence *“Limiting the access of water to the waste minimizes the migration of radionuclides, which avoids the need for long-term active maintenance and reduces the potential for inadvertent intruders to be exposed to the waste”* needs to be corrected, as the limitation of water ingress inside the repository does not prevent an inadvertent intrusion to occur, but only limits the exposure of inadvertent intruders in case of an intrusion.
- Specific requirements for class C waste:  
Instead of saying that the effective life of the intruder barriers for class C waste should be 500 years, it is suggested to indicate that this effective life shall be commensurate to the lifetime of the waste, and **at least** 500 years.
- Timeframes:  
Several timeframes are given in the document (e.g. 100 years / 300 years / 500 years / 20,000 years), related respectively to the lifetime of the waste, the performance of the barriers, evaluation of the site and the period of time during which controls may be maintained, and the assessment period.

So many time frames could introduce in some circumstances confusion. Would it be not more appropriate to combine some of them specially looking at the rationale behind 300 years and 500 years.

### 3. §61.13 Technical analysis:

- (a):

We propose to not limit the performance assessment to evaluate the uncertainties. The demonstration of the compliance with the performance objectives should be based on sound reliable uncertainties treatments.

We propose to add to the sentence “*The performance assessment must also identify the degradation, deterioration, or alteration processes of the engineered barriers and of the natural barriers...*”

- (b):

We propose to add to the sentence “*and that the exposure to any inadvertent intruder will not exceed the limits set forth in §61.42 as demonstrated in an intruder assessment at 500 years and beyond*”.

- (e) (2):

The basis on which the radiological impact would be assessed for the period of time beyond 20000 years should be more explicitly described, specially as we consider the link between the total radioactivity capacity that would be allowed for a given radionuclide and the approach that we be considered.

An approach based on an assessment of the reasonable maximal limit as proposed for the “performance period” of the uncertainty informed approach would help and provide some useful indications to the decision makers.