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January 7, 2013 (11:37 PM)

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

**Don't Waste Michigan  
Coalition for a Nuclear Free Great Lakes**

Attention: Rulemakings and Adjudications Staff  
U.S. NUCLEAR REGULATORY COMMISSION  
Submitted via email: [Rulemaking.Comments@nrc.gov](mailto:Rulemaking.Comments@nrc.gov) and [regulations.gov](mailto:regulations.gov)

January 7, 2013

**Extension Request and Comments of Nuclear Information and Resource Service (NIRS) on:  
Docket NRC-2011-0012**

Low-Level Waste Disposal (Document ID NRC-2011-0012-0044)

10 CFR Part 61 [NRC-2011-0012] RIN 3150-AI92 Low-Level Waste Disposal  
ACTION: Regulatory basis and preliminary rule language; second request for comment  
Published: Federal Register Vol. 77, No. 236 Friday, December 7, 2012 pages 72997 and 72998

NIRS hereby offers Comments on: Docket ID NRC-2011-0012.

These comments may be supplemented in the near future due to the congestion of deadlines for public participation on radioactive waste policy and regulation at NRC and related agencies and departments.

**We ask that the comment period be extended until the end of February to enable more in depth review by potentially affected public interest organizations that have not had the opportunity for regular contact with NRC throughout the development of this proposed rule change.** We appreciate inclusion in some of the public meetings but contend the breadth of potential changes is potentially very large, affecting communities where radioactive waste is generated, processed, disposed and through which it is transported. We ask that NRC consider all comments we made at public meetings on this matter.

**We call on NRC to carry out a full Environmental Impact Statement for changes to 10 CFR 61.**

For decades the public has had and expressed concerns with 10 CFR 61 for not being protective enough. Unfortunately the proposed changes do not appear to address these concerns, but weaken the regulations and giving more leeway to operators of disposal sites to take more kinds and greater inventory of nuclear waste by doing their own calculations to claim it will give no more than the allowable NRC dose limit from the waste site.

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1) We oppose the change of the dose units for the allowable leak rate from a license facility: from the old rems and organ doses, 25 millirems per year to rems effective dose equivalent and total effective dose. These incorporate internal and external radiation into one dose number and effectively allow increases in concentration released. 10 CFR 61.41 will allow release of higher concentrations of many of the radionuclides (to deliver the same dose number).

2) We oppose the proposed language that allows disposal sites to do performance assessments to show compliance with applicable regulations which opens the door to taking more, potentially unlimited amounts and different kinds of waste based on the operator's own calculations.

3) We are concerned and oppose that the alternative method of compliance 10 CFR 61.6 could allow release of nuclear waste to unlicensed disposal or other destinations. We oppose disposal in other than facilities licensed for radioactive disposal. Public opposition to clearance and release of manmade nuclear fuel chain radioactive waste should be well known to the NRC but it bears repeating. Keep all manmade radioactive waste under licensed nuclear controls.

Some of the concerns with 10 CFR 61 in the past that continue and are made worse in the current draft include the claim the regulations are sufficient to manage concentrations of long-lasting radioactive materials. NRC claims in 10 CFR 61.7 e that Class A and B decay to levels that NRC considers "not hazardous" in 100 years, that they do "not pose an unacceptable hazard to inadvertent intruders or public health and safety," or that the inventory of waste "doesn't contain sufficient radionuclides to be of concern," that Class C does not pose an unacceptable threat to an intruder even though under 61.42 they may be dosed at 500 millirems per year!

The major reason it took so long for the only nuclear waste site to open since the 1980 Low Level Radioactive Waste Policy Act is the reality that the waste will remain hazardous for much longer than the 100 year institutional control period. Granted NRC "analyzes" performance for much longer but not for as long as some of the radionuclides remain radioactively dangerous and will not be maintaining institutional control for the length of hazard and cannot guarantee—in fact does not even promise to try to prevent releases... allows increasing legal releases.

Thus there is a distinction between what NRC considers dangerous and what the public who will be exposed considers dangerous. This issue merits greater review during this rulemaking.

The publication of independent scientific studies overwhelmingly support the assertion that radioactivity is more dangerous to everyone than current regulations assume; not less. In addition, the scientific literature contains basis for asserting that radioactivity is very much more harmful to some people, particularly women and children than to others (See: <http://www.nirs.org/radiation/radhealth/radhealthhome.htm> and also: <http://ieer.org/projects/healthy-from-the-start>). Therefore, NIRS categorically rejects ANY proposal which will lessen protection of public health, safety and environmental impacts. NIRS finds several bases upon which to here assert that the proposed changes to 10CFR61 will result in lessening of protection.

These include, but may not be limited to:

1. Adoption of Total Effective Dose Equivalent and concurrently dropping organ dose limits, increases allowable concentrations for many of the radionuclides from the 10 CFR 61 sites while purporting to be an "update;"
2. Allowing performance assessments by the licensee and modeling risk assessment as an alternative to measurable fixed limits, potentially allowing for more types and hazards of wastes. [[Specifically, a couple concerns regarding 10 CFR 61.13e Technical Analysis: Why is it unnecessary to analyze for Class A transuranics? Their concentrations (less than or equal to 10 nanocuries per gram will be largely unchanged for hundreds of years yet even a small amount can have significant effects to an intruder or if leaked into drinking water and food chain.

If Class C waste is buried deeper, isn't it closer to aquifers thus potentially released via that pathway? (This pertains to existing and proposed 10 CFR 61 assumptions.)

3. Implying or Asserting that 10,000 years is a meaningful timeframe for consideration of all materials that may come into this regulatory frame -- for instance Depleted Uranium, Greater-Than Class C and other radioactive from reprocessing and waste processing; Actually since the length of hazard of the wastes already in Class, A, B and C waste streams is that long or longer, there is merit to looking into the long term future but there is no technical basis to rely on shallow land burial for such timeframes.
4. Use of NRC legal release levels as regulations to justify releases and exposures rather than having a goal of isolation and zero release and minimal actual IMPACT, different than compliance with regulations that do impact health (NRC does not offer zero impact to the public from regulatory compliance--we have a right to have the agency evaluate with public review the full impact).

In order to determine more clearly the impacts of this proposal, the US Nuclear Regulatory Commission must, at the very least, conduct an environmental impact statement (EIS) under NEPA and provide the specific limits to the performance assessments if any as this appears to be a mechanism to provide disposal operators leeway to take more radioactivity than originally licensed to take.

In addition, NIRS suggests that NRC offer the public real-world data: NRC staff should, as part of this regulatory action study and report on successes and failures of the existing commercial so-called "low-level" radioactive waste sites, including those that formerly operated in the USA (Sheffield, Maxey Flats, West Valley, Beatty, Richland, and Barnwell). Since the former Envirocare/EnergySolutions in Clive, and now the Andrews, Texas site have opened, what mechanisms for reporting real data are available to the public on conditions, compliance, challenges at those sites?

Even if real data would be refreshing, any analysis must include the termination of the production of long-lasting so-called "low-level" radioactive waste and the termination of the use of "land disposal" in favor of more robust containment.

## RulemakingComments Resource

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**From:** Diane D'Arrigo [dianed@nirs.org]  
**Sent:** Monday, January 07, 2013 11:37 PM  
**To:** RulemakingComments Resource  
**Subject:** 10 CFR 61 Comments Low-Level Waste Disposal (Document ID NRC-2011-0012-0044)  
**Attachments:** NIRS, DWM, CNFGL LLRW part 61 drft comments NRC 1-7-13.pdf

Attached are the comments and extension request of NIRS, Don't Waste Michigan and Coalition for a Nuclear Free Great Lakes on draft language changes to 10 CFR 61.

Thanks for your consideration of these comments.

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