

December 15, 2017

CD17-0281

Ms. May Ma
Office of Administration
Mail Stop: OWFN-2- A13
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Reference: Docket ID NRC-2017-0198

Subject: Comments on the revised draft, “Guidance for the Reviews of Proposed Disposal Procedures and Transfers of Radioactive Material Under 10 CFR 20.2002 and 10 CFR 40.13(a),” 82 FR 48727

Dear Ms. Ma:

EnergySolutions appreciates the opportunity to provide comments in response to the *Federal Register* notice regarding the U.S. Nuclear Regulatory Commission’s (NRC) revised draft *Guidance for the Reviews of Proposed Disposal Procedures and Transfers of Radioactive Material Under 10 CFR 20.2002 and 10 CFR 40.13(a)*.

EnergySolutions has been and continues to be in favor of a rulemaking to address the proper disposal of waste containing very low levels of radioactivity (VLLW). While we agree that finalizing the current guidance is important, this guidance lacks supporting technical basis and does not adequately address all the regulatory gaps associated with VLLW disposal.

As we have commented previously, the 20.2002 process has evolved into a *de facto* licensing scheme for VLLW disposal. This was not the original intent of the regulations regarding alternative disposals, yet VLLW is continually accepted at sites not licensed for the disposal of radioactive waste using this alternative, exemption-based approach to VLLW disposal. The NRC should not support a culture of licensing by exemption. VLLW disposal should be addressed through sound regulation and a well-conceived licensing process.

The reliance on 10 CFR 20.2002 in the absence of VLLW disposal regulations is problematic because it has resulted in *de facto* VLLW disposal sites and inconsistent standards for the analysis of repeat disposals at the same site. The guidance criteria for measuring the performance of sites with repeat VLLW disposals is incomplete, which introduces uncertainty as to what the standard is for measuring the performance at these sites. While the updated guidance is an improvement, it still is not a suitable substitute for a rulemaking for VLLW disposal.



EnergySolutions continues to believe that the appropriate solution is a rulemaking that provides for disposal of VLLW at sites regulated under the *Atomic Energy Act*. This rulemaking can be modeled after 10 CFR Part 61 with appropriate changes made to reflect the lower hazard of VLLW. Such a rulemaking would provide for more efficient disposal practices, and its promulgation should be a high priority to the NRC.

Our detailed comments on the draft guidance are contained in the attachment.

Thank you again for this opportunity to comment. Questions regarding these comments may be directed to me at (801) 649-2109 or dshrums@energysolutions.com.

Sincerely,

Daniel B. Shrum
Senior Vice President, Regulatory Affairs

Att.

COMMENTS – GUIDANCE DOCUMENT FOR ALTERNATIVE DISPOSAL REQUESTS

Background, p.7, final ¶ – This section contains the following statement:

Although these materials could be disposed of in a LLW disposal facility licensed under 10 CFR Part 61, use of alternative disposal methods under § 20.2002 may reduce overall risk (e.g., risk associated with increased transportation distances and associated radiological and non-radiological impacts).

The guidance contains no technical basis for this assertion, and we are not aware of any analysis by the NRC that provides such a justification. The guidance requires that doses from activities other than disposal, e.g., transportation, be evaluated, which is appropriate. It is not appropriate, nor necessary, to assert a lower risk when no technical basis has been provided. *EnergySolutions* proposes that this comment be deleted.

§ 5.1 Project Manager (Responsibilities), p.10, final ¶ – This section contains the following statement: “The PM also ensures that the guidelines in the regulation, this document, and the NRC’s Principles of Good Regulation are adhered to throughout the process...”

This wording confuses regulations and guidance. Revise to say “...the regulations, the guidelines in this document...”

§ 6.1.2 Tracking Requests, p. 14, footnote 16 – This footnote states:

SECY-07-0180, “Strategic Assessment of Low-Level Radioactive Waste Regulatory Program,” listed Task 10, “Develop and implement national waste tracking system,” as one of the low priority tasks that may be completed as resources allow. VLLW associated with ADRs will be considered for inclusion in this tracking system.

The implication here is that the tracking system is a future activity. *EnergySolutions* does not believe that it is acceptable to merely track ADRs by their inclusion in ADAMS. If the waste tracking system has not yet been established, ADRs should be tracked by staff in a system that makes the information publicly available in a single location.

§ 7.1.2 Off-Site Burial Disposals, p. 16 – This section contains the following statement: “...timeframes specified in NUREG-2175 for performance assessment should be used for evaluation of a 10 CFR 20.2002 request, unless other timeframes have been appropriately justified in a licensees’ submittal.”

NUREG-2175 is not an appropriate reference as cited here relative to timeframes. That document does not identify appropriate timeframes; rather, it “...describes the information that a licensee

should provide and a reviewer should evaluate with respect to the timeframe...”¹ For identification of the appropriate evaluation timeframe, NUREG-2175 refers to the regulations: “Analyses timeframes are specified in 10 CFR Part 61.”² Since there is not in this case any regulation that specifically address the appropriate timeframe for analysis, the guidance should specify the timeframe(s).

EnergySolutions proposes that the appropriate timeframe for analysis be the same as that identified in SRM-SECY-16-0106, which provides Commission direction to staff regarding the ongoing Part 61 rulemaking. In accordance with that direction, the appropriate timeframe should be 1,000 years, which NRC has identified as the appropriate time period for assessing the risk from the disposal of low-level radioactive waste.

§ 7.1.3 Reuse or Recycle of Licensed Materials – This section states that: “Licensees or applicants may request approval to reuse or recycle licensed materials as a means of alternative disposal.” This concept has not appeared in previous drafts of the guidance document and it is not clear what the regulatory basis is for its inclusion.

EnergySolutions does not believe that the NRC has provided adequate justification for authorizing recycle under 20.2002, and as such we do not believe that it should be addressed in this guidance document. 10 CFR 20.2002 makes no reference to recycle. It refers only to disposal. 10 CFR 20.1003 does not contain a definition for disposal, never mind ones that refers to recycle. 10 CFR 20.2001(a) clearly specifies means by which a licensee may dispose of licensed material (“A licensee shall dispose of licensed material *only*...”), none of which include recycle. [Emphasis added.]

EnergySolutions proposes that NRC either provide an analysis by the Office of General Counsel that authorizes this interpretation or delete this section in its entirety.

§ 7.2.1 § 20.2002 Requests (Dose Guidelines), p. 20, ¶ 1 – This section states that: “For the dose assessment, licensees or applicants proposing disposals that result in doses not exceeding a 0.01 mSv (1 mrem/year) dose criterion generally do not have to consider cumulative doses from multiple sources.”

NRC has provided no technical justification for ignoring cumulative impacts from multiple sources simply because each, individually is projected to cause only a very small dose (<0.01 mSv). The clarifying examples provided suggest that the intent is to apply this guidance to multiple sources of exposure from differing 20.2002 authorizations at contiguous locations.

¹ NUREG-2175, **Guidance for Conducting Technical Analyses for 10 CFR Part 61**, Draft Final Report, October 2016, D. Esh, C. Grossman, H. Arlt, C. Barr, P. Yadav, p. 2-2.1.

² NUREG-2175, p. 2-22.

While that would seem to be a reasonable approach, the same is not true for multiple sources of disposal to a single location, e.g., a common burial site.

EnergySolutions believes that there should be no exceptions for the preparation of a cumulative dose assessment for offsite disposal. There is no limit to the number of applications for disposal at an unlicensed waste disposal site, so cumulative dose is always a consideration. Please clarify that this guidance does *not* apply to offsite disposal actions in a common burial site.

§ 7.2.2 § 40.13(a) Requests, p. 20 – This section states:

The regulations do not require NRC’s prior written approval for transfers of unimportant quantities of source material to exempt persons. Therefore, licensees and applicants should request NRC review *and approval* of such transfers, which provides the NRC staff an opportunity to develop or evaluate dose assessments prior to transfer of these unimportant quantities. [Emphasis added.]

The section goes on to state that: “Requests for transfers would *normally be approved* if the estimated dose to a member of the public is unlikely to exceed a dose limit of 0.25 mSv (25 mrem/year).” [Emphasis added.]

So although the regulations do not require NRC review, NRC is providing guidance stating that licensees should request NRC review and approval, and furthermore, providing a quantitative standard for *approval*.

In addition, we note that the NRC letter to Agreement States³ regarding 20.2002 disposals states:

For example, a source material licensee may transfer unimportant quantities of source material (10 CFR 40.13(a)) to persons exempt (10 CFR 40.51(b)(3) & (4)).

This can be done without any specific licensing action by the NRC (or Agreement State). [Emphasis added.]

This seems to be an attempt by the staff to impose a regulatory standard via guidance, which is not appropriate. What is the basis for this standard? More importantly, what is the basis for approving – or *not approving* – an application for something that the regulations say does not require approval? If staff believes that transfers of unimportant quantities of source material merit regulatory approval, then it should revise its regulations to accomplish that objective.

³ NRC letter to all Agreement States, “Clarification of the Authorization for Alternate Disposal of Material Issued Under 10 CFR 20.2002 and Exemption Provisions In 10 CFR (FSME-12- 025).” March 13, 2012.

EnergySolutions proposes that all reference to approval of the transfer of unimportant quantities of source material should be deleted from the document.

§7.5 Requests for Additional Information, Footnote 24 – “A draft SER and EA (see Sections 7 and 8) should be prepared prior to transmittal of the draft RAI. Although RAIs may be developed during the acceptance review, they should be limited to obvious information insufficiencies.” Direct, specific guidance for the reviewer does not seem to be appropriate content for a footnote. EnergySolutions proposes that this guidance be included in the main body of the document.

p. 23, final ¶ of § 7.5 – “...it may be warranted to perform a regulatory audit in order to identify additional information that a licensee should formally submit.”

NRC should define the bounds of such an audit, as well as describing the internal approvals required prior to conducting such an audit. To the extent such audits are defined by existing office instructions or procedures, e.g., NRO Office Instruction NRO-REG-108, Regulatory Audits, then the appropriate reference should be provided.

§ 10.2 Determination of the Need for Enhanced Communications, p. 30, – Regarding the need for enhanced communications, staff has concluded that if a “...proposed § 20.2002 disposal will be in a facility that routinely disposes of large quantities of similar radioactive materials, in accordance with its permit” it is not significant and no special measures would be necessary. [Emphasis in original.]

EnergySolutions does not agree that simply doing something routinely is a reasonable standard for something having or not having significance. We propose that the bullet containing this direction be deleted.

Topics not Adequately Addressed

Cumulative Impacts – The concept of cumulative impacts is not adequately addressed in the guidance. While references to cumulative impacts appear fleetingly in the guidance document, nowhere does the document specify the need for or provide guidance for the preparation of a cumulative analysis. Footnote 17 in § 7.1.1 provides a reference to NUREG-1757 as a source for “guidance on consideration of cumulative dose impacts,” but that is in reference to onsite disposals. While consideration of cumulative dose for onsite disposals certainly merits consideration, it is even more important in the context of offsite disposals. Offsite disposal sites already have been used for the disposal of millions of cubic feet of VLLW from decommissioning projects, and these volumes are expected only to increase in the future.

§ 7.1.2 should be revised to include specific guidance regarding the assessment of cumulative impacts of multiple ADRs for burial at any individual disposal site.

Inadvertent Intruder – Although the guidance document makes reference to intrusion (for

example, the p. 17 reference for dose assessments to consider a basement excavation or well drilled into the waste), it does not specify the need for an inadvertent intruder analysis. *EnergySolutions* proposes that the guidance document be revised to clarify the need for such an evaluation.