NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: Chairman Gregory B. Jaczko

SUBJECT: SECY-12-0003 – DRAFT FINAL POLICY STATEMENT ON VOLUME REDUCTION AND LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT

Approved __X__ **Disapproved** _____ **Abstain** _____

Not Participating _____

COMMENTS: **Below** __X__ **Attached** __X__ **None** ___

Approved, subject to the attached edits.

_____
SIGNATURE

2/29/12
_____
DATE

Entered on "STARS" Yes __x__ **No** ___

[7590-01-P]

NUCLEAR REGULATORY COMMISSION

[NRC-20XX-XXXX]

Low-Level Radioactive Waste Volume Reduction and ~~Low-Level Radioactive Waste~~ Management

AGENCY: Nuclear Regulatory Commission.

ACTION: Policy statement; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC or the Commission) is revising its 1981 Policy Statement on Low-Level Radioactive Waste (LLRW) Volume Reduction (Policy Statement). This statement encouraged licensees to take steps to reduce the amount of waste generated and to reduce the volume of waste once generated. The purpose of ~~the~~ this revised statement is to recognize that progress in reducing waste volume has been achieved since the 1981 Policy Statement was published, and to acknowledge that factors other than volume reduction may be used by licensees to determine how best to manage their LLRW.

DATES: This Policy Statement is effective on **[Insert date of publication in the *Federal Register*]**.

ADDRESSES: You can access publicly available documents related to this Policy Statement using the following methods:

- **NRC's Public Document Room (PDR):** The public may examine and have copied, for a fee, publicly available documents at the NRC's PDR, O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

- **NRC's Agencywide Documents Access and Management System (ADAMS):** Publicly available documents created or received at the NRC are available online in the NRC Library at http://www.nrc.gov/reading-rm/adams.html. From this page, the public can gain entry into ADAMS, which provides text and image files of the NRC's public documents. If you do not have access to ADAMS or if you have problems accessing the documents located in ADAMS, contact the NRC's PDR reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. The Policy Statement is available in ADAMS under Accession No. ML113400177.

- **Federal Rulemaking Web Site:** Supporting materials related to this Policy Statement can be found at http://www.regulations.gov by searching on Docket ID NRC-2011-0183-~~20XX-XXXX~~. Address questions about NRC dockets to Carol Gallagher, telephone: 301-492-3668; e-mail: Carol.Gallagher@nrc.gov.

FOR FURTHER INFORMATION CONTACT: Donald Lowman, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555; telephone: 301-415-5452, e-mail: Donald.Lowman@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Background

In 1981, the NRC published a Policy Statement regarding the volume reduction of LLRW. The Policy Statement addressed:

1. the need for a volume reduction policy; and
2. the need for waste generators to minimize the quantity of waste produced.

For 30 years, this Policy Statement has ~~effectively~~ conveyed the Commission's expectations that generators of LLRW should reduce the volume of waste shipped for disposal at ~~licensed~~ commercial waste disposal facilities. The Commission uses policy statements to communicate expectations about matters relating to activities that are within NRC jurisdiction and that are of particular interest and importance to the Commission. Policy statements help to guide the activities of the NRC staff and licensees. However, they are not regulations and are not accorded the status of a regulation within the meaning of the Administrative Procedure Act. The Agreement States, which are responsible for overseeing their material licensees, cannot be required to implement the elements of a policy statement because such statements, unlike NRC regulations, are not a matter of compatibility. Additionally, policy statements cannot be considered binding upon, or enforceable against, NRC or Agreement State licensees ~~and~~ or certificate holders.

On April 7, 2010, the NRC staff issued SECY-10-0043, "Blending of Low-Level Radioactive Waste," and referenced the Policy Statement in response to stakeholder comments that large-scale blending might not be consistent with the Policy Statement because it would enable licensees to ~~avoid the~~ choose not to use ~~of~~ an available volume reduction technology. Subsequently, the Commission directed the staff to update the Policy Statement to recognize the progress that has been achieved in waste reduction since 1981, and to acknowledge that volume reduction continues to be important, and that other risk-informed, performance-based approaches to managing waste are also appropriate for managing LLRW safely.

A revised draft of the Policy Statement, "Volume Reduction and Low-Level Radioactive Waste Management," was published in the *Federal Register* for comment on August 15, 2011 (76 FR 50500), with the comment period ending on September 14, 2011, which the NRC later extended to October 14, 2011.

The NRC received written comments on the draft Policy Statement and considered these comments when finalizing the Policy Statement. None of the comments resulted in changes to the basic principles of the Policy Statement and the changes made to the draft Policy Statement were limited. Responses to these comments can be found in ADAMS under Accession No. ML120090117.

II. Congressional Review Act

In accordance with the Congressional Review Act of 1996, the NRC has determined that this action is not a major rule and has verified this determination with the Office of Information and Regulatory Affairs of the Office of Management and Budget (OMB).

III. Policy Statement of the U.S. Nuclear Regulatory Commission on Low-Level Radioactive Waste Volume Reduction and ~~Low-Level Radioactive Waste~~ Management

Summary

In 1981, the Commission published a Policy Statement (46 FR 51100; October 16, 1981) regarding the volume reduction of LLRW. In October 2010, the Commission ~~approved revisions to~~ directed the staff to revise the Policy Statement, including updating to acknowledge that volume reduction continues to be important and adding that risk-informed, performance-based approaches to managing waste are also needed to safely manage LLRW.

Policy Statement

The primary focus of any LLRW management program should be public health and safety. Such programs often include waste minimization efforts and the Commission recognizes the substantial progress made by licensees in reducing volumes of LLRW shipped for disposal

since the publication of the 1981 Policy Statement. The Congress, States, LLRW Compacts and nuclear industry groups have also played a central part in this effort by encouraging waste minimization and volume reduction practices. Widespread use of these practices has resulted in a significant reduction in the amount of LLRW generated by licensees and the volume shipped for disposal. The Commission recognizes that the high cost of LLRW disposal has also been a factor, along with limitations on LLRW disposal access, ~~incentivizing~~ which has resulted in increased use of volume reduction and waste minimization techniques.

The Commission continues to believe that volume reduction is important to the management of LLRW—a continued focus on volume reduction will extend the operational lifetime of the existing commercial LLRW disposal sites and will reduce the number of waste shipments. ~~Safety, administrative controls, and operational enhancements are the foundation of a successful radioactive waste management program.~~ Therefore, the Commission encourages licensees to continue to adopt procedures that will minimize the volume of waste being transferred to disposal facilities. Additionally, as currently required by Title 10 of the *Code of Federal Regulations* (10 CFR), Part 20 Section 1406, "Minimization of contamination," license applicants, with limited exceptions, shall describe in their applications how facility design and procedures for operation will minimize, to the extent practicable, the generation of radioactive waste.

The Commission also recognizes that volume reduction is only one aspect of an effective LLRW management program. Although the Commission continues to favor the disposal of LLRW over storage, it recognizes that licensees may safely manage waste in a variety of ways, consistent with NRC regulations and guidance. ~~In addition to~~ As part of ensuring public health and safety, licensees ~~may~~ should consider ~~operational efficiency,~~ reductions in occupational exposures, as well as security~~, and cost~~ in determining how best to manage LLRW. Licensees may also consider operational efficiency and cost, as long as they

do not unfavorably impact public health and safety. As part of their LLRW management strategies, although the Commission continues to favor disposal in a licensed disposal facility, licensees should consider all means available to manage waste in a manner that is secure and protects public health and safety, such as (in no particular order and thus not indicating any NRC preference):

- Waste minimization;
- Short-term storage and decay;
- Long-term storage;
- Use of the alternate disposal provision in 10 CFR 20.2002, "Method for obtaining approval of proposed disposal procedures;" and
- Use of waste processing technologies.

The Commission understands that limited LLRW disposal access means that many licensees will ~~be forced~~ need to store at least some of their LLRW. Agreement State and NRC licensees must continue to ensure that stored waste is safely and securely managed. However, waste ~~minimization and~~ disposal ~~are~~ is still considered the safest and most secure long-term LLRW management approach.

Dated at Rockville, Maryland, this day of , 2012.

FOR THE NUCLEAR REGULATORY COMMISSION

Annette L. Vietti-Cook
Secretary of the Commission

Public Comments on the Draft Policy Statement on Low-Level Radioactive Waste Volume Reduction and ~~Low-Level Radioactive Waste~~ Management

January 2012

The U.S. Nuclear Regulatory Commission (NRC) staff solicited stakeholder input in developing the Policy Statement. The draft Policy Statement on Volume Reduction and Low-Level Radioactive Waste Management (VRPS) was published in the *Federal Register* on August 15, 2011, with a 30-day comment period ending on September 14, 2011. A 60-day extension to the comment period was requested, and a 30-day extension was granted extending the end of the comment period to October 14, 2011. Enclosure 4 lists the entities that commented on the draft VRPS published in the *Federal Register*, as well as the Agencywide Documents Access and Management System (ADAMS) accession numbers for their comment letters.

Listed below are the public comments and the NRC's response to each of the comments. The public comments have been grouped into eight categories based the content of the comments (10 CFR 20.2002 Authorizations, Volume Reduction Technologies, Safety, Cost, Public Outreach, Storage, Blending, and Miscellaneous). Many of the public comments were outside the scope of the VRPS because these comments addressed issues that were not related to the VRPS or the NRC's limited revision of the VRPS—such as general statements about the safety of radiation protection. The NRC revised the VRPS to acknowledge that volume reduction continues to be important to the effective management of low-level radioactive waste (LLRW), and that other risk-informed, performance-based approaches to managing LLRW should also be considered by licensees. The NRC has indicated in the comment responses below which comments are outside the scope of the VRPS.

1. 10 CFR 20.2002 AUTHORIZATIONS

a) Disposal of licensed radioactive material in unlicensed sites via 10 CFR 20.2002 exemptions is regulation by exemption.

Title 10 of the Code of Federal Regulations (10 CFR) Section 20.2002 specifically allows licensees and applicants to apply to the Commission for approval of alternate disposal (i.e., disposal not otherwise authorized in the regulations). Section 20.2002 is thus an existing regulatory process that provides a method for obtaining authorization for alternate disposal procedures. Approval under § 20.2002 does not constitute an exemption, but rather is expressly permitted by the regulations. The NRC issues an exemption (from the requirements to possess an NRC license) to the facility receiving waste approved for disposal under § 20.2002, not to the licensee or license applicant applying for authorization under § 20.2002.

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b) The connection to the NRC Volume reduction policy change (and 10 CFR 20.2002 exemptions) is that NRC is giving a green light to additional steps in the nuclear fuel chain, whether necessary or not, some of which allow nuclear waste out of regulatory control.

b) The public needs to have input into whether processing is done at all and the kinds of processing done at both offsite and at the site of generation. Exposures and risks from emissions into air and water are cumulative and ongoing especially when the radionuclides are long lasting.

The NRC provides many opportunities for the public to provide input into its licensing activities, including adjudicatory hearings, staff-initiated public meetings, and Federal Register notices that seek public comment on NRC actions. The NRC establishes its regulations in a public forum, whereby a Federal Register notice is published advising the public of the intent to establish regulations, and inviting public participation in the rulemaking process. The NRC also seeks public comments on many guidance documents—both formally requesting written comments and informally soliciting stakeholder feedback at public meetings.

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c) Funding should be provided to the public for technical support to participate in each of the NRC's ongoing and expanding bureaucratic processes if these are the legal avenues for public comment. Providing such funding for public participation should also be a matter of Agreement State adequacy and compatibility.

This comment is outside the scope of the VRPS because it raises issues concerning generic funding of public participation in NRC activities that is not addressed or affected by this policy statement. In any event, the NRC does not have specific legislative authority to currently provide such funding as is suggested in the comment and the NRC has specific limitations on funding participation in some NRC proceedings, ~~and Federal budget constraints make it unlikely that Congress would approve such funding in any event~~.

Despite these limitations, the NRC has worked to provide stakeholders with more cost-effective ways to participate in NRC proceedings. For example, rulemaking comments can now be submitted online, which provides a cost- and time-saving option to commenters. The NRC has also expanded the use of teleconferences, video conferences, and webinars, which allows stakeholders to participate in NRC meetings without the significant cost of traveling to a meeting location.

Members of the public are provided with many opportunities to comment on the NRC's activities. For example, the NRC frequently holds ~~early~~ public meetings and solicits public comment on draft proposed rules and guidance documents before starting the formal notice-and-comment process (which includes another opportunity for public comment). Further, all documents that are produced by the NRC should be clear and comprehensible. When a commenter believes that a document is unclear or incomprehensible, such concerns can be brought to the NRC's attention, which will allow the NRC to provide clarification in the future draft of the document.

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enforceable against, Compacts or NRC or Agreement State licensees and certificate holders.

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e) There is no comprehensive national policy for dealing with LLRW, and yet NRC continues to license new facilities and relicense old ones that generate LLRW with no regard for the fact that there is nowhere to isolate them. The system is broken and totally ignores policies adopted to prohibit one state from become the destination for the nation's radioactive waste.

This comment is outside the scope of the VRPS because the comment discusses issues associated with national waste policy and LLRW disposal access and capacity, and the revised VRPS does not address these issues.

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f) The NRC should pursue avenues for disposal of long-lived sources that are currently stored by licensees because they have no reasonable method for disposal.

This comment is outside the scope of the VRPS because this comment raises issues concerning the disposal of long-lived sealed sources. The VRPS identifies general LLRW management techniques that licensees should consider using to effectively manage LLRW. The NRC's limited revision of the VRPS was intended to acknowledge in the VRPS that volume reduction continues to be important to the effective management of LLRW, and that other risk-informed, performance-based approaches to managing LLRW should also be considered by licensees. Challenges related to the disposal of long-lived sources are beyond the scope of the VRPS.

However, the NRC agrees that disposal of long-lived sources is the preferred method for managing these types of waste. The NRC is addressing this issue in its regulatory framework by revising the Branch Technical Position on Concentration Averaging and Encapsulation to allow larger activity limits of sealed sources that can be safely disposed of, and through participation on the Radiation Source Protection and Security Task Force.

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g) Public interest groups contend that their views are being ignored.

h) What is needed is for NRC to truly understand and value (not "consider" and dismiss) these concerns so that licensing decisions are made that prevent making more radioactive waste and prevent radioactive and hazardous releases.

The NRC disagrees with these comments. In addition to the legal requirements, which require extensive public involvement in rulemaking, licensing hearings, and NEPA document development, the NRC has a longstanding policy of encouraging voluntary public involvement. For example, the NRC has consistently invited the public's comments, and the staff makes every effort to understand the public's comments~~, and to evaluate those comments against NRC's mission to enable the nation to safely use radioactive materials for beneficial civilian purposes while ensuring that people and the environment are protected.~~ Whenever the NRC solicits public comments, whether a formal response~~s~~ is prepared or not, the NRC considers the public comments as part of the development of its rulemakings, NEPA documents, Policy Statements, and guidance documents. Consideration of public comments does not mean that the NRC will adopt the proposals and positions in these

comments; it means that the NRC will evaluate the comments that it receives, and will, as appropriate, modify its documents in response.

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i) Under the current system Tennessee has become the nation's default destination for so called "low-level" radioactive waste and the NRC has relied on an inadequate Tennessee regulatory regime to protect the public health. With NRC's approval of the import of 1000 tons of German radioactive waste to be burned in Oak Ridge, Tennessee is becoming the world's destination for "low" and intermediate radioactive waste processing.

This comment is outside the scope of the VRPS because it raises concerns regarding the Tennessee Agreement State program and the approval of the importation of waste into Tennessee—neither of which are addressed in the VRPS. The VRPS identifies general LLRW management techniques that licensees should consider using to effectively manage LLRW. The NRC's limited revision of the VRPS was intended to acknowledge in the VRPS that volume reduction continues to be important to the effective management of LLRW, and that other risk-informed, performance-based approaches to managing LLRW should also be considered by licensees. Questions about specific regulatory actions taken by an Agreement State, such as Tennessee, should be addressed to the applicable Agreement State.

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j) NRC protocols for handling "low-level" radioactive waste are being driven by the scarcity/absence of proper disposal options. This has resulted in a convoluted system which is far from science based with results that are far from optimal in terms of isolation of these radionuclides from the atmosphere.

To the extent that this comment is challenging the regulatory regime for handling LLRW that appears in the NRC's regulations, this comment is outside the scope of this policy statement. Additionally, the comment incorrectly asserts that the lack of disposal options for LLRW is determining the NRC's protocols for managing waste and resulting in decisions not based on science. The NRC's existing LLRW regulatory framework is ~~science-based~~ risk-informed and performance-based and is adequate to protect public health and safety. This policy statement provides guidance for activities within this existing regulatory framework.

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k) The VRPS revisions are one of many related "low-level" projects NRC has underway. The segmentation of these efforts facilitates secrecy and deception. NRC is increasing staff hours and divisions dedicated to making it look like there is a way to manage "low level" radioactive waste with each division claiming its contribution to the radiation burden is insignificant. The whole underpinning of the waste management scheme is changing but without the reality that ionizing radiation is actually more harmful than previously thought, thus failing to incorporate the publicly known reality that greater protection and a goal of no release/exposure is needed. NRC is simultaneously changing its 10 CFR Part 61 burial regulations, changing its guidance on LLRW including onsite storage at operating and proposed new reactors, changing its Branch Technical Position on Concentration averaging, holding meetings with industry (not public), and planning for site specific analyses of disposal sites. The local communities and national and regional public interest groups need to be invited to or notified of these specific planning discussions.

the VRPS that volume reduction continues to be important to the effective management of LLRW, and that other risk-informed, performance-based approaches to managing LLRW should also be considered by licensees. Further, as a policy statement, the VRPS does not have the effect of an order or regulation, but rather it provides guidance to stakeholders; it cannot impose binding requirements.

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o) **We are extremely concerned about transporting waste back and forth across the country for potentially unnecessary processing and some amount of "clearance" or release to regular landfills and into commercial recycling streams.**

This comment is outside the scope of the VRPS because this comment addresses the transportation impacts associated with waste processing and disposal—a topic that is not addressed in the VRPS. The VRPS identifies general LLRW management techniques that licensees should consider using to effectively manage LLRW. Transportation was not evaluated in the VRPS; however, transportation issues, along with other environmental factors, are currently being examined by the NRC in an environmental analysis of the impacts of blending and its alternatives. Upon its completion, the environmental analysis will be issued for public comment; this analysis is scheduled to be completed in early 2012 (staff should check whether this timeframe is still accurate).

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p) **NRC continues with the folly of considering depleted uranium and its extremely long-lasting progeny to be Class A "low-level" radioactive waste without increasing the protections and disposal requirements for Class A. The public has long called for institutional control periods that last as long as the waste. We also contend that liability must remain with the generators for the length of the hazard of the waste. Since uranium's decay products far exceed the institutional control period in 10 CFR Part 61, depleted uranium should not be permitted in this class. For the record, many of our groups have opposed the inclusion of plutonium and other long-lasting radionuclides in "low-level" waste at any amount with its 100 year institutional control period, and especially in Class A with the least control.**

This comment is outside the scope of the VRPS because it raises issues that are not addressed in the VRPS. The comment raises opposition to the classification of depleted uranium (DU) as Class A and the disposal of DU and other long-lived radionuclides in a LLRW facility. The classification of waste is governed by NRC regulations and not by this policy statement. The VRPS identifies general LLRW management techniques that licensees should consider using to effectively manage LLRW. The NRC's limited revision of the VRPS was intended to acknowledge in the VRPS that volume reduction continues to be important to the effective management of LLRW, and that other risk-informed, performance-based approaches to managing LLRW should also be considered by licensees. Specific comments, such as this comment, regarding the disposal of long-lived radionuclides are beyond the scope of the VRPS.

Notwithstanding, it should be noted that the Part 61 site-specific analysis rulemaking, which is addressing depleted uranium, is being conducted in an open, transparent manner. The NRC received public comments on the preliminary proposed rule language and an associated regulatory basis document for the Part 61 site-specific analysis rulemaking. The NRC considered these public comments during the development of the proposed rule and