

# NMSS News

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SAFETY AND SAFEGUARDS

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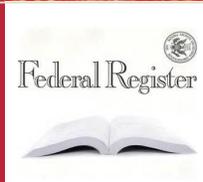
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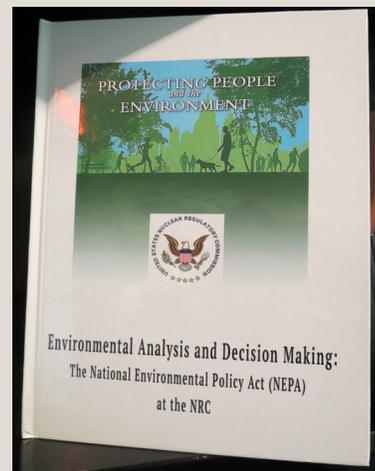
## LIBRARY DONATION

Thanks to a partnership between the U.S. Nuclear Regulatory Commission (NRC) and Duke University, the agency's technical library has a new lasting knowledge management tool that will help future generations of employees in understanding of the National Environmental Policy Act (NEPA).

As part of its mission, the NRC performs environmental reviews to satisfy NEPA requirements across a spectrum of regulatory activities. Co sponsored by the Council on Environmental Quality, the 2008 environmental leadership program offered the NRC first rate training with access to outstanding talent in the environmental field. Through the Duke Environmental Leadership Program, NRC staff across the agency (not just those in environmental positions) took part in graduate-level courses and were provided the opportunity to pursue graduate-level professional certification in the implementation of NEPA.

The agency developed a compendium containing capstone papers written by those NRC staff members who succeeded in completing the entire program and obtaining a professional certificate in the implementation of NEPA. On April 6th, NRC staff donated the compendium titled "Environmental Analysis and Decision Making: The National Environmental Policy Act (NEPA) at the NRC," to the technical library, located in TWFN-2B09. The record information is KF3775.29E59 2015, and the book can also be accessed electronically through the Agencywide Documents Access and Management System (ADAMS) at Accession No. MLI6103A342.

Thank you and congratulations to all of the agency's staff members who took the time to attend classes over a the 5 year time period and contributed to this effort.



(Contact: Zahira Cruz, NMSS, 301-415-3808 or [Zahira.Cruz@nrc.gov](mailto:Zahira.Cruz@nrc.gov))

## ANNUAL MEETING



On April 25–28, 2016, the Office of Nuclear Material Safety and Safeguards (NMSS) hosted the 12th annual Application of Safeguards to Geological Repositories (ASTOR) meeting on behalf of the International Atomic Energy Agency (IAEA) in Rockville, MD. The 3-day meeting focused on the contents of a 10 year report, which technical experts will use at IAEA's Department of Safeguards. The report will assist in implementing a repository safeguards approach at a specific site. It will include verification technologies, containment and surveillance options, geophysical techniques, design information verifications, methods of data management, and legal framework.

The ASTOR meeting attendees represented 14 Member States (countries), as well as IAEA and the European Commission. Each Member State presented information on its national nuclear waste policy and status of current nuclear waste disposal plans. Finland is leading the way in this area, with plans to begin construction on the first underground geological repository before November 2017. Sweden follows, with an active project underway, estimated to begin construction in 2020. Other Member States are still in the process of site selection and engaging the public.

Presenters representing the United States included those from the NRC's Yucca Mountain Directorate and the U.S. Department of Energy's (DOE's) Office of Nuclear Energy. The topic was a discussion of the "consent-based siting approach," a methodology that includes input from local communities, State and local governments, and Tribes. DOE representatives are currently engaging members of the public across the country through several public meetings on long term spent fuel management.

ASTOR attendees concluded by deciding to meet annually for each of the next 5 years. The annual meetings will continue to address new developments in geological repositories as they arise.

(Contact: Soly Soto, NMSS, 301-415-7528 or [Soly.Soto@nrc.gov](mailto:Soly.Soto@nrc.gov))

## PHYSICAL PROTECTION RETROSPECTIVE REVIEW

On March 19, 2013, the NRC published a final rule that provided reasonable assurance of preventing the theft or diversion of Category 1 and Category 2 quantities of radioactive material, and included security requirements for the transportation of irradiated reactor fuel that weighs 100 grams or less in net weight of irradiated fuel. In December 2014, the Committees on Appropriations of the U.S. House of Representatives and the Senate directed the NRC to evaluate the effectiveness of the new regulations and determine if the requirements were adequate to protect "high-risk radiological material." In response to this mandate, the NRC is working to complete a retrospective program review of the new requirements and associated implementation. As part of this review, the staff is considering more than 200 observations and recommendations that were identified by the NRC staff's assessment activities; results from an independent assessment of separate aspects of 10 CFR Part 37 by three consultants appointed by the NMSS Director; and stakeholder feedback received in response to a *Federal Register* Notice (81 FR 13263), four webinars, and a public meeting. The results of the retrospective program review will be used to develop a report to Congress on the effectiveness of the rule to protect Category 1 and Category 2 radioactive material.

(Contact: George Smith, NMSS, 301-415-7201 or [George.Smith@nrc.gov](mailto:George.Smith@nrc.gov))





## SIGNIFICANT ENFORCEMENT ACTIONS

The NRC issued significant actions for failure to comply with a regulation.

### Materials Testing Consultants, Inc. (EA-15-221)

On February 19, 2016, the NRC issued a Notice of Violation to Materials Testing Consultants, Inc., for a Severity Level III violation. The violation involved the failure to use a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal when the portable gauges were not under the control and constant surveillance of the licensee, as required by Title 10 of the *Code of Federal Regulations* (10 CFR) 30.34(i), "Terms and Conditions of Licenses." Specifically, on August 5, 2015, the licensee stored portable gauges with only a single physical barrier during business hours, and the gauges were not under the control and constant surveillance of the licensee.

### Whitworth–Muench, Inc. (EA-15-190)

On February 2, 2016, the NRC issued a Notice of Violation to Whitworth–Muench, Inc., for a Severity Level III violation. The violation involved the failure to use a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal when the portable gauges were not under the control and constant surveillance of the licensee, as required by 10 CFR 30.34(i). Specifically, from approximately July 18 to August 18, 2015, a locked pantry door provided the single physical barrier against unauthorized removal of the licensee's portable gauges.

### Ferrovia Agroman, S.A. (EA-15-205)

On February 1, 2016, the NRC issued a Notice of Violation to Ferrovia Agroman, S.A. for a Severity Level III violation. The violation involved a failure to control and maintain constant surveillance or failure to use two independent physical controls that form tangible barriers to secure a portable gauge from unauthorized removal, as required by 10 CFR 20.1802, "Control of Material Not in Storage," and 10 CFR 30.34(i). Specifically, on April 28, 2015, a gauge containing licensed material was left unattended and uncontrolled in the back of a pickup truck at a temporary jobsite and was secured to the truck with two independent controls. However, the keys to both the vehicle and the gauge locks were left in the unlocked truck, which was stolen from the jobsite.

### Megan, LLC (EA-15-184)

On January 25, 2016, the NRC issued a Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$3,500 to Megan, LLC, for a Severity Level III violation. The violation involved a failure to use two independent controls to secure portable gauges from unauthorized removal whenever the gauges were not under licensee control or constant surveillance, as required by 10 CFR 30.34(i). Specifically, on August 12, 2015, Megan, LLC, kept the gauge in a locked trunk of the car with the locked transportation case secured to the vehicle and the vehicle was unlocked, allowing access to a mechanism that could be used to open the trunk of the vehicle. The gauge user was in a trailer at the temporary jobsite and was not keeping the gauge under control and constant surveillance.

Information about the NRC's enforcement program can be accessed at <http://www.nrc.gov/about-nrc/regulatory/enforcement/current.html>. Documents related to cases can be accessed through ADAMS at <http://www.nrc.gov/reading-rm/adams.html>. Help in using ADAMS is available by contacting the NRC Public Document Room staff at 301-415-4737 or 1-800-397-4209 or by sending an e mail to [PDR.Resource@nrc.gov](mailto:PDR.Resource@nrc.gov).

(Contact: Michele Burgess, NMSS, 301-415-5868 or [Michele.Burgess@nrc.gov](mailto:Michele.Burgess@nrc.gov))





**NIST**  
National Institute of  
Standards and Technology  
U.S. Department of Commerce



## GENERIC COMMUNICATIONS ISSUED

The following summarize NRC generic communications issued by NMSS. If any of these documents appear relevant to your needs and you have not received a copy, please call one of the technical contacts listed below. The Web address for the NRC library of generic communications is <http://www.nrc.gov/reading-rm/doc-collections/gen-comm>.

### INFORMATION NOTICE

The NRC information notice (IN) provides significant, recently identified information about safety, safeguards, and environmental issues. Addressees are expected to review the information for applicability to their facilities and consider actions, as appropriate, to avoid similar problems.

#### **IN-16-03: Revision to the National Institute of Standards and Technology Standard for Radium-223 and Impact on Dose Calibration for the Medical Use of Radium-223 Dichloride**

On January 12, 2016, the NRC issued IN-16-03 to all NRC medical licensees, NRC Master Materials Licensees, Agreement State Radiation Control Program Directors, and State Liaison Officers. The IN alerts addressees that the National Institute of Standards and Technology revised its primary standard for radium-223 (Ra-223), and the IN conveys the impact this revision will have on the calibration of patient doses of Ra-223 dichloride (trade name Xofigo®). Recipients should review the information contained in this notice for applicability to their facilities and consider taking appropriate action, if necessary.

(Contact: Michael Fuller, NMSS, 301-415-0520 or [Michael.Fuller@nrc.gov](mailto:Michael.Fuller@nrc.gov)).

### REGULATORY ISSUE SUMMARIES

The NRC regulatory issue summary (RIS) is an informational document used to communicate with the nuclear industry on a broad spectrum of matters.

On April 29, 2016, the NRC issued **RIS-16-05**, "Embedded Digital Devices in Safety Related Systems" (ADAMS Accession No. MLI5118A015). The agency issued the RIS to clarify the NRC's technical position on existing regulatory requirements for the quality and reliability of safety-related equipment with embedded digital devices (EDDs). This RIS requires no specific action or written response on the part of an addressee. The NRC's intent in issuing this RIS is to heighten awareness that EDDs might exist in procured equipment used in safety related systems without the devices having been explicitly identified in procurement documentation. Inadequate consideration of these devices in digital technology system upgrades, component replacements, and new equipment applications could lead to an adverse safety consequence. Therefore, addressees should implement early efforts to identify these devices. The scope of this RIS is limited to equipment, including instrumentation and controls, in safety related systems.

On May 9, 2016, the NRC issued **RIS-16-06**, "NRC Regulation of Radium-226 under Military Control and for Coordination on Cercla Response Actions at DoD Sites with Radioactive Materials" (ADAMS Accession No. MLI5167A323). The agency issued the RIS for three purposes. First, this RIS clarifies which discrete sources of radium-226 (Ra-226) under military control are subject to NRC regulation as byproduct material under the Atomic Energy Act of 1954, as amended (AEA). This RIS clarifies the discussion of the NRC's jurisdiction over Ra-226 under military control in the NRC final rule "Requirements for Expanded Definition

of Byproduct Material" (published in the *Federal Register* (FR), 72 FR 55864 (October 1, 2007)) ("Naturally Occurring and Accelerator-Produced Radioactive Material (NARM) Rule"). Secondly, this RIS describes regulatory approaches to implement the NRC's authority over contamination and items and equipment containing naturally occurring and accelerator produced radioactive material (e.g., Ra-226) at military sites. Thirdly, this RIS describes the NRC and U.S. Department of Defense's coordination and agreement on Comprehensive Environmental Response, Compensation and Liability Act, response actions at military sites with unlicensed AEA byproduct, source, or special nuclear materials, under a memorandum of understanding (MOU) dated April 28, 2016.

**Correction:** In the last edition, the ADAMS Accession Number for **RIS-15-19**, "Decommissioning Timeliness Rule Implementation and Associated Regulatory Relief", was incorrect. The correct ADAMS Accession Number is MLI 5226A397.

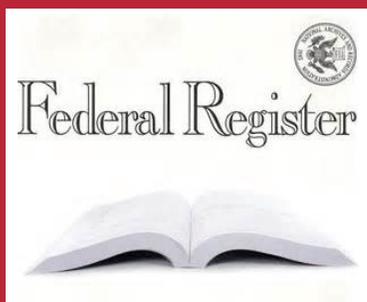
## SELECTED FEDERAL REGISTER NOTICE

**March 21, 2016**

*Federal Register* (FR) notice 81 FR 15133, "License Amendment Application for Source Materials License Jefferson Proving Ground" (License Amendment Application; Withdrawal by Applicant)

Summary: The NRC is announcing the withdrawal of a license amendment application from the U.S. Department of the Army for its Jefferson Proving Ground site located in Madison, IN, to decommission the site under restricted release conditions, as defined in the NRC's regulations.

(Contact: James Smith, NMSS, 301-415-6103 or [James.Smith@nrc.gov](mailto:James.Smith@nrc.gov))





## ONGOING RULEMAKINGS

RULEMAKING	DESCRIPTION	STATUS
<b>PROPOSED RULES</b>		
10 CFR Parts 30 and 32, "Items Containing Byproduct Material Incidental to Production (formerly Polymer (Polycarbonate or Polyester) Track Etched (PCTE) Membranes)"	The proposed rulemaking would amend requirements for track etched membranes that have been irradiated with mixed fission products as part of the membrane production process. The proposed rulemaking would also accommodate the licensing and distribution of other irradiated products (e.g., gemstones) without the need for a specific exemption for each distributor.	The NRC is currently drafting the regulatory basis for the rulemaking and expects to release it for public comment in December 2016.
10 CFR Part 73, "Enhanced Security for Special Nuclear Material"	The proposed rule would update security regulations, including portions of 10 CFR Part 73, related to physical protection of special nuclear material at NRC licensed facilities and in transit.	On February 3, 2015, the Office of Nuclear Security and Incident Response submitted a user need request (ADAMS Accession No. MLI4317A037) to NMSS to initiate a rulemaking to update the security regulations within 10 CFR Part 73. NMSS accepted the regulatory basis (ADAMS Accession No. MLI4321A007) on February 25, 2015. On April 22, 2015, the NRC published the final regulatory basis in the <i>Federal Register</i> (80 FR 22434). A working group was formed and is working on the proposed rule.
10 CFR Part 73, "Cyber Security at Fuel Cycle Facilities"	The proposed rulemaking would revise 10 CFR Part 73 to add new cyber security requirements for fuel cycle facilities.	On September 4, 2015, the NRC published the draft regulatory basis and asked for comments in the <i>Federal Register</i> (80 FR 53478). The working group revised the document. The final regulatory basis was completed on March 22, 2016, and was noticed in the <i>Federal Register</i> on April 12, 2016 (81 FR 21449). The NRC has held eight public meetings on the rulemaking so far, and plans two additional meetings for July and August 2016. Draft proposed rule language was provided for public review in May 2016 and was discussed at a May 19, 2016, public meeting.

## FINAL RULE

10 CFR Part 35," Medical Use of Byproduct Material—Medical Event Definitions, Training and Experience and Clarifying Amendments"

The rule would amend the reporting and notification requirements for medical events for permanent brachytherapy, amend training and experience requirements to remove attestation requirements for certain individuals, make changes, as requested, in petition for rulemaking (PRM)-35-20, petition for rulemaking, and clarifying amendments.

The NRC published the proposed rule and draft guidance in the *Federal Register* (79 FR 42224) for public comments on July 21, 2014. The comment period closed November 18, 2014. The NRC received 69 comment letters, each containing numerous individual comments. The comments are posted at <http://www.regulations.gov> under Docket ID NRC-2008-0175. On October 8, 2014, the NRC held a public meeting to promote better understanding of the proposed amendments. The comments received are under NRC review. The final rule package is due to the Commission in June 2016.

10 CFR Part 61, "Low-Level Radioactive Waste (LLRW) Disposal"

The proposed rule would revise 10 CFR Part 61 to require LLRW disposal licensees and license applicants to conduct updated site specific analyses and to permit the development of criteria for future LLRW acceptance based on the results of these analyses.

The NRC published the proposed rule and notice of availability of the draft guidance in the *Federal Register* (80 FR 16082 and 80 FR 15930) on March 26, 2015. The comment period was extended and closed on September 21, 2015. The staff is reviewing the comments received. The final rule package is due to the Commission in September 2016.

10 CFR Part 74, "Material Control and Accounting of Special Nuclear Material"

This rule would revise and consolidate the current Material Control and Accounting (MC&A) requirements into 10 CFR Part 74, and would clarify and strengthen the MC&A requirements, in part, by removing existing exemptions in the item control provisions.

Staff is resolving the public comments and preparing the final package for the rulemaking.

10 CFR Parts 40, 70, and 75, "Small Quantities Protocol"

This rulemaking implements the requirements of the agreement between the United States and IAEA for the application of safeguards in connection with the Treaty for the Prohibition of Nuclear Weapons in Latin America. In addition, this rulemaking implements the modifications to this agreement's small quantities protocol under the U.S. and IAEA Caribbean Territories safeguards agreement.

The staff has not received approval from the Commission to start this rulemaking. The staff submitted the rulemaking plan to the Commission on May 31, 2016.

## PETITIONS

PRM-72-6, "Petition for Rulemaking (PRM-72-6), C-10 Research and Education Foundation, Inc."

The petitioner submitted 12 requests for the NRC to amend its regulations concerning dry cask safety, security, transferability, and longevity. In a *Federal Register* notice dated October 16, 2012, the NRC denied nine of the petitioner's 12 requests (Requests 1, 2, 3, 5-8, 10, and 12), accepted for consideration Request 11 as part of the ongoing independent spent fuel storage installation security rulemaking effort (RIN 3150-A178; Docket ID NRC-2009-558), and reserved two requests for future rulemaking determination (Requests 4 and 9).

Staff submitted the Petition Docket Closure Package to the Office of Administration and obtained concurrence from the Office of the Secretary. The petition for rulemaking; denial submitted by C-10 Research and Education Foundation, Inc. on Part 72 was published in the *Federal Register* on June 27, 2016.

PRM-28, PRM-29 and PRM-30, "Linear No-Threshold Model and Standards for Projection Against Radiation"

The NRC received three petitions for rulemaking (PRM) requesting that the NRC amend its "Standards for Protection against Radiation" regulations and change the basis of those regulations from the Linear No-Threshold (LNT) model of radiation protection to the radiation hormesis model.

On June 23, 2015, the NRC published in the *Federal Register*, 80 FR 35870, the receipt of the Petition For Rulemaking; Notice of Docketing and requested public comment on three PRMs, PRM-20-28, PRM-20-29, and PRM-20-30. The public comment period was September 8, 2015. But on August 21, 2015, the NRC published in the *Federal Register*, 80 FR 50804, the receipt of the Petition for rulemaking; notice of docketing and extension of comment period. The NRC extended the public comment period until November 19, 2015, to allow more time for members of the public to develop and submit their comments. Staff is examining the issues raised in the PRMs to determine whether they should be considered in rulemaking.

## POLICY STATEMENT

Tribal Policy Statement

The Tribal Policy Statement development will describe the Commission's policy for consulting and coordination with Native American tribes.

The proposed Tribal Policy Statement was published in the *Federal Register* (79 FR 71136) on December 1, 2014, and the public comment period closed on May 31, 2015. Staff is in the process of reviewing comments.



## TO OUR READERS

Thank you for your interest in our newsletter. In our attempt to keep the NMSS licensee newsletter—The *NMSS News Link*—relevant, we welcome feedback on its contents. If you would like to suggest topics for the newsletter, please contact Vanessa Cox, NMSS Rulemaking and Project Management Branch, by telephone at 301-415-8342 or by e-mail at [Vanessa.Cox@nrc.gov](mailto:Vanessa.Cox@nrc.gov). In addition, to ensure proper delivery of The *NMSS News Link* and to prevent any interruption of service, please report e-mail address changes to Ms. Cox.

Please send written correspondence to the following address:

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