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**OFFICE OF NUCLEAR MATERIAL  
SAFETY AND SAFEGUARDS**

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**DEMONSTRATION PROJECT  
WORKSHOP**

The International Atomic Energy Agency (IAEA), and U.S. Nuclear Regulatory Commission (NRC) offices of Nuclear Materials Safety and Safeguards (NMSS) and International Programs (OIP) sponsored the last Research Reactor Decommissioning Demonstration Project (R2D2P) Workshop on



“Release of Buildings and Sites/Final Surveys.” Loren Sharp, Director and Plant Manager, Pacific Gas and Electric (PG&E) at the Humboldt Bay Reactor Decommissioning Site hosted the meeting during the week of September 27–October 2, 2015. The R2D2P Workshop started in 2006 to educate developing country regulatory agency professionals and shutdown facility owners on the safe decommissioning of research reactors. The workshop, at the College of the Redwoods in Eureka, CA, included a tour of the Humboldt Bay Nuclear Power Plant Decommissioning Site. Vladan Ljubenov and Mika Shimba-Yamada of IAEA, and Bruce Watson, Certified Health Physicist (CHP), Chief, and John Hickman, Project Manager, both of the NRC’s Reactor Decommissioning Branch, organized the meeting with support from Brian Yip from OIP.

IAEA Technical Secretaries, Ljubenov and Shimba-Yamada, both of the Decommissioning and Remediation Unit, Division of Radiation, Transport and Waste Safety, provided the international perspective on releasing of sites and final surveys. NRC staff offered presentations on the NRC’s Decommissioning Program and survey requirements for release of facilities. The NRC was also represented by Dr. Gerald Schlapper, CHP, Region IV, Division of Nuclear Materials Safety, who did a presentation on the NRC’s Decommissioning Inspection Program. Timothy Vitkus, CHP from Oak Ridge Associated Universities, offered an overview of the Multi-Agency Radiological Site Survey and Investigation Manual (MARSSIM), and supervised survey activities in the field.

Eighteen nuclear regulators and operators from 11 countries from 4 continents participated in the R2D2P Workshop Technical Program. The countries were Argentina, Brazil, China, Indonesia, Iraq, Libya, Malaysia, Philippines, Romania, Serbia, and Vietnam.

Twelve technical presentations were provided at the workshop on regulatory requirements for release of buildings and sites. The host, PG&E, offered a



historical decommissioning perspective on the Humboldt Bay site, which covered the uniqueness and special radiological survey issues associated with the decommissioning, as well as the radiological survey plan in the License Termination Plan. IAEA Decommissioning staff made presentations on IAEA Safety Standards associated with decommissioning surveys and release criteria. NRC staff presented the U.S. research reactor regulatory requirements, decommissioning inspection program, and the MARSSIM process, for releasing sites from regulatory control, unrestricted release and termination of the licenses.

Participants observed health physicists performing surveys at the Humboldt Bay site. As part of the workshop, participants were assigned to perform final surveys in the field that included alpha, beta and gamma surveys, and soil sampling of an affected land area for release and an onsite building to be released. Participants gained hands-on experience with using typical survey instruments employed in decommissioning. They collected soil samples and reviewed sample chain of custody record keeping procedures for quality control. Participants conducted Workshop Survey Table-Top Exercises with survey results that required calculations to make informed decisions on the release of land areas and buildings.

This was a successful 4.5 day meeting with decommissioning technical exchanges, observation, and performance of field survey activities. Based on feedback, the workshop conducted at the Humboldt Bay was one of the most successful because of PG&E's support in planning the workshop, active participation, and access to the reactor facility to allow participants to observe and perform radiological surveys. The R2D2P meeting was concluded with feedback from participants and PG&E reporting on the program, content, and the learning experiences afforded from the workshop.

(Contact: Bruce Watson, NMSS, 301-415-6221 or [Bruce.Watson@nrc.gov](mailto:Bruce.Watson@nrc.gov))



## NUCLEAR MATERIAL REPORTING

In September 2015, staff from the NRC and the Department of Energy (DOE) met with the International Atomic Energy Agency (IAEA) in Vienna, Austria, to discuss the nuclear materials reporting performed by the United States to satisfy the requirements in the U.S. IAEA Safeguards Agreement.

The NRC and DOE jointly manage the Nuclear Materials Management and Safeguards System (NMMSS), which serves as the U.S. Government database for tracking movements and inventories of source materials and special nuclear materials within the United States. The NMMSS database generates monthly reports on inventory changes at the four NRC licensed facilities that have been selected by IAEA, as well as imports and exports of special nuclear materials and source materials. These reports are provided to IAEA monthly to meet the Nation's reporting requirements contained in the U.S. IAEA Safeguards Agreement.

IAEA receives similar monthly reports from other countries. IAEA compares the import and export information contained in the United States' reports to import and export information reports by other countries. The IAEA objective is to "match" all import and export activities reported worldwide. Because of variations in how countries report imports and exports, IAEA identifies some shipments as not-matched and seeks the involved countries' assistance.



The purpose of the September meeting was to continue face to face discussions to resolve IAEA import and export matching involving the United States as well as resolve recent comments made by IAEA regarding monthly inventory reporting by the four IAEA selected facilities. During the meeting, staff from the NRC and DOE highlighted actions taken this past year to improve U.S. reporting: direct electronic reporting by the United States to IAEA, with an emphasis on resolving legacy matching issues that IAEA recently identified. Because of U.S. efforts, we believe that essentially all of the IAEA legacy issues identified to us have been resolved. DOE staff also expressed desire for IAEA support for a workshop between the United States and some of its trading partners to address issues related to international transit matching. IAEA indicated that it would encourage a workshop on this topic.

IAEA expressed satisfaction with the efforts taken by the U.S. entities. The science attaché to the U.S. Mission in Vienna also shared that he had received numerous IAEA words of praise for the work performed by the United States during the past year.

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## WELCOME, FAREWELL AND RETIREMENTS

### WELCOME



The NMSS staff would like to welcome Daniel Collins as Director, Division of Material Safety, State, Tribal, and Rulemaking Programs, Office of Nuclear Material Safety and Safeguards.

Since joining the NRC in 1998, Mr. Collins has held positions of increasing responsibility including senior project manager in the Division of Licensing Project Management, NRR; Chief, Licensing Project Branch 3-2, NRR; Chief, Research Reactor Licensing Branch, NRR; and Deputy Director, Division of Nuclear Materials Safety, Region I. In 2014, he was appointed as the

Director, Division of Nuclear Materials Safety, Region I.

Before joining the NRC, Mr. Collins worked as an engineer and supervisor at the Calvert Cliffs Nuclear Power Plant, and as a nuclear-trained Navy officer. He earned a bachelor's degree in mechanical engineering from the University of Maryland and a master's degree in business administration from Johns Hopkins University.

The NMSS staff is looking forward to working with Mr. Collins.

### FAREWELL



The NMSS staff would like to congratulate Catherine Haney, the former NMSS Director, for her recent appointment as the new Regional Administrator for Region II, which is effective in January 2016.

Ms. Haney initially joined the NRC in 1981 as a health physicist intern in the former Office of Inspection and Enforcement. After a break in Federal service, she rejoined the NRC in 1989 and served in a number of positions in NMSS, including quality assurance specialist; senior health physicist; and section chief in the Medical, Academic and Commercial

Safety Branch; and in the Rulemaking and Guidance Branch. Ms. Haney has served in a number of senior management positions, including Chief, Safety and Safeguards Support Branch, NMSS;

Deputy Director, Division of Nuclear Security, Office of Nuclear Security and Incident Response; Program Director, Policy and Rulemaking, Office of Nuclear Reactor Regulation (NRR); Deputy Director, Division of Licensing Project Management, NRR; and Director, Division of Operating Reactor Licensing, NRR. She also completed an assignment as former Chairman Diaz's Executive Assistant for Materials and Security. Ms. Haney received a bachelor's degree in Radiological Technology from the University of Maryland and a master's degree in Radiological Science from Emory University.

## RETIREMENTS

On December 3, 2015, Josephine (Josie) Piccone, Director, Division of Material Safety, State, Tribal, and Rulemaking Programs (MSTR), NMSS, retired with more than 41 years of Federal service.

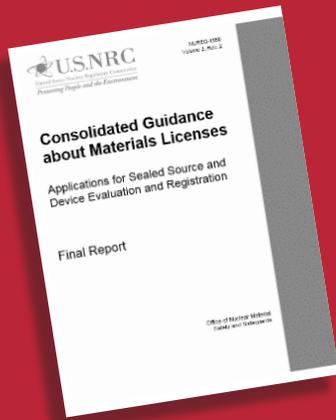
On September 20, 2015, Larry W. Camper, Director, Division of Decommissioning, Uranium Recovery and Waste Programs, NMSS, retired with more than 35 years of combined Federal service including length of service within the NRC and serving in the U.S. Air Force.

## NUREG-1556, VOLUME 3, REVISION 2

In September 2015, the final report for Revision 2 of NUREG-1556, Volume 3, "Consolidated Guidance About Materials Licenses: Applications for Sealed Source and Device Evaluation and Registration" was published as a NUREG volume and placed on the NRC Website. This revision provides updates to reflect a number of regulatory and procedural changes since the Revision 1 was published and corrected errors and inconsistencies noted in the last revision. This report provides updates to guidance for applicants submitting requests to the NRC for radiation safety evaluation and registration of sealed sources and devices containing byproduct material and provides the NRC with criteria for evaluating such applications. The report also provides reviewers of requests from applicants with the guidance, information, and materials necessary to make a determination that the product being evaluated is acceptable for licensing purposes. Additionally, the report provides information on applicable regulations and industry standards, general policies and procedures affecting evaluation and registration, how and where to file a request, the application review process, and how to draft and modify a registration certificate.

The Materials Safety Licensing Branch of NMSS plans to issue several additional NUREG-1556 final reports in 2016.

(Contact: Anthony McMurtray, NMSS, 301-415-2746 or [Anthony.McMurtray@nrc.gov](mailto:Anthony.McMurtray@nrc.gov))





## SIGNIFICANT ENFORCEMENT ACTIONS

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

### **MISTRAS Group, Inc. (EA-14-225)**

On June 30, 2015, the NRC issued a Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$7,000 to MISTRAS Group, Inc., for a Severity Level III problem for two related violations. The violations involved MISTRAS' failure to obtain an export license as required by Title 10 of the Code of Federal Regulations (10 CFR) 110.5, "License Requirements," and a failure to submit an advance notification of shipment to the NRC and the Canadian Government as required by paragraph (c) of 10 CFR 110.50, "Terms." Specifically on or about July 24, 2014, MISTRAS exported two iridium-192 sealed sources to Canada, without obtaining a required specific export license, and did not provide the required export notifications to the NRC and the Canadian government in advance exporting the sources to Canada.

### **Howard University (EA-15-078)**

On August 25, 2015, the NRC issued a Notice of Violation to Howard University (HU) for a Severity Level III violation. The violation involved HU's failure to notify the NRC within 24 hours after the discovery of an unplanned contamination event in accordance with paragraph (b) of 10 CFR 30.50, "Reporting Requirements." Specifically, in February and March 2008, HU discovered that a storage room had been contaminated with material from a vial containing cesium-137 and prohibited entry into the room for several months until decontamination was complete. However, from February/March 2008 until May 7, 2015, HU did not notify the NRC within 24 hours as required, after the discovery of the contamination event.



## **MEDICAL**

### **Howard University Hospital (EA-15-053)**

On August 25, 2015, the NRC issued a Notice of Violation to Howard University Hospital (HUH) for a Severity Level III problem for two related violations. The violations involved HUH's failure to: (1) control and maintain constant surveillance of licensed material that is in an unrestricted area and not in storage as required by 10 CFR 20.1802, "Control of Material Not in Storage," and (2) secure licensed materials that are stored in controlled or unrestricted areas from unauthorized removal or access as required by 10 CFR 20.1801, "Security of Stored Material." Specifically, on August 31, 2013, a package containing iridium-192 source was delivered to the hallway outside the HUH Central Supply Department room, a controlled or unrestricted area, and the licensee did not control or maintain constant surveillance of the source for approximately 4.5 hours. In addition, between August 31, 2013, and September 3, 2013, the package was stored in a locked room and unauthorized HUH staff had access to the room.



### **McLaren Medical Center Bay Region (EA-15-111)**

On August 27, 2015, the NRC issued a Notice of Violation to McLaren Medical Center Bay Region (MMCBR) for a Severity Level III violation. The violation involved MMCBR's failure to develop, implement, and maintain written procedures to provide high confidence that each administration is in accordance with the written directive as required by paragraph (a) of 10 CFR 35.41, "Procedures for Administrations Requiring a Written Directive." Specifically, as of February 6, 2015, MMCBR failed to include specific steps in its procedure for verifying the catheter position to ensure the administration was in accordance with the written directive. As a result, a medical event occurred as the patient received an unintended dose of approximately 2.6 gray (260 rad) to the skin of the right thigh.



## **Monongalia General Hospital (EA-15-062)**

On July 14, 2015, the NRC issued a Notice of Violation to Monongalia General Hospital (MGH) for a Severity Level III violation. The violation involved MGH's failure to have two written directives dated and signed by an authorized user before the administration of I-131 sodium iodide as required by paragraph (a) of 10 CFR 35.40, "Written Directives." Specifically, on February 8, 2013, and on February 26, 2013, MGH administered I-131 sodium iodide and the two individuals that signed and dated the written directives were not listed as authorized users on its NRC license.

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 Agencywide Documents Access and Management System (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))

## **SELECTED FEDERAL REGISTER NOTICES**

### **September 4, 2015**

*Federal Register (FR) notice 80 FR 53478, "Cyber Security at Fuel Cycle Facilities" (Draft Regulatory Basis; Request for Comment)*

Summary: The NRC is requesting comments on a draft regulatory basis to support a rulemaking that would amend its regulations by adopting new cyber security requirements for certain nuclear fuel cycle facility (FCF) licensees to address safety and security consequences of concern. Potentially affected licensees include certain FCFs authorized to possess Category I, II, or III quantities of special nuclear material and uranium hexafluoride conversion and deconversion facilities.

(Contact: Matthew Bartlett, NMSS, 301-415-7154 or [Matthew.Bartlett@nrc.gov](mailto:Matthew.Bartlett@nrc.gov))

### **October 7, 2015**

*FR notice 80 FR 60513, "Revisions to the Petition for Rulemaking Process" (Final Rule)*

Summary: The NRC is amending its regulations to clarify and streamline its process for addressing petitions for rulemaking (PRMs). These amendments are intended to improve transparency and to make the PRM process more efficient and effective. This final rule effective date was November 6, 2015.

(Contacts: Cindy Bladey, Office of Administration (ADM), 301-415-3280 or [CindyBladey@nrc.gov](mailto:CindyBladey@nrc.gov); or Anthony de Jesus, ADM, 301-415-1106 or [Anthony.deJesus@nrc.gov](mailto:Anthony.deJesus@nrc.gov); or Jennifer Borges, Regulations Specialist, ADM, 301-415-3647 or [Jennifer.Borges@nrc.gov](mailto:Jennifer.Borges@nrc.gov))



## October 20, 2015

### 80 FR 63409, "Hearings on Challenges to the Immediate Effectiveness of Orders" (Final Rule)

Summary: The NRC is amending its regulations regarding challenges to the immediate effectiveness of NRC enforcement orders to clarify the burden of proof and to clarify the authority of the presiding officer to order live testimony in resolving these challenges. This final rule effective date was November 19, 2015.

(Contact: Esther Houseman, OGC, 301-415-2267 or Esther.Houseman@nrc.gov; or Eric Michel, OGC, 301-415-1177 or Eric.Michel2@nrc.gov)



## ONGOING RULEMAKINGS

RULEMAKING	DESCRIPTION	STATUS
<b>PROPOSED RULES</b>		
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 <i>Federal Register</i> (80 FR 16082 and 80 FR 15930) on March 26, 2015. The comment period was extended until and closed on September 21, 2015. The comments received are under NRC review. The final rule package is due to the Commission in May 2016.
10 CFR Parts 30/32, 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 drafting the regulatory basis for the rulemaking and expects to release it for public comment in March 2016.

10 CFR Part 73, Enhanced Security of Special Nuclear Material

The proposed rule would update security regulations, including portions of 10 CFR Part 73, relating 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 (NSIR) 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 *Federal Register* (80 FR 22434). A working group was formed and has begun work 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 *Federal Register* (80 FR 53478). The working group is reviewing the comments.

## 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, make changes as requested in 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. The comment period closed on November 18, 2014. The NRC received 48 comment letters, resulting in several hundred 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 March 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. The final rule package is due to the Commission in November 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 & 12), accepted for consideration Request 11 as part of the ongoing independent spent fuel storage installation (ISFSI) security rulemaking effort (RIN 3150 AI78; Docket ID NRC 2009-558), and reserved two requests for future rulemaking determination (Requests 4 and 9).

Staff is working on resolving the final two requests in the petition. Staff is currently resolving comments from OGC. Once staff has a "no legal objection" from OGC, the package will be forwarded to NMSS office management for review.

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 reviewing comments.

### PRE-RULEMAKING

10 CFR Part 20, "Standards for Protection against Radiation," International Commission on Radiological Protection (ICRP) Recommendations

The rulemaking would incorporate recommendations from the ICRP to revise 10 CFR Part 20.

The NRC published an advance notice of proposed rulemaking in the *Federal Register* (79 FR 43284) on July 25, 2014, and the public comment period closed on June 22, 2015. Staff is 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.

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