

**VIRGINIA SUBMITS  
 AGREEMENT STATE  
 APPLICATION**

The Commonwealth of Virginia last week submitted its Agreement State application to the NRC.

The application was delivered to the Office of Federal and State Materials and Environmental Management Programs. NRC staff members from Headquarters and Region I will review the application and prepare an analysis for Commission review and public comment.

Section 274 of the Atomic Energy Act of 1954, as amended, allows States to assume NRC regulatory authority. Under the Act, NRC can relinquish to a State portions of its regulatory authority to license and regulate byproduct materials (radioisotopes), source materials (uranium and thorium), and certain quantities of special nuclear materials. The mechanism for the transfer is an Agreement signed by the Governor of the State and the Chairman of the Commission, in accordance with Section 274b of the Act.

Once a State takes on this authority and becomes an "Agreement State," NRC continues to provide assistance. This includes conducting training courses and workshops; evaluating technical licensing and inspection issues; evaluating State rule changes; participating in activities conducted by the Conference of Radiation Control

Program Directors, Inc., and the Organization of Agreement States; and allowing for early and substantive involvement of the States in NRC rulemaking and other regulatory efforts. The NRC also coordinates with Agreement States in reporting of event information and allegations involving Agreement States.

The Commonwealth of Kentucky became the first Agreement State in March 26, 1962. Close to 40 States now have either become Agreement States or have indicated an intention to do so.

**DIVISION OF WASTE  
 MANAGEMENT AND  
 ENVIRONMENTAL  
 PROTECTION HAS  
 DEVELOPED SEVERAL  
 KNOWLEDGE  
 MANAGEMENT TOOLS**

Shamica Walker, Allen Gross, Cynthia Barr and Christopher McKenney of the performance assessment branch in the Division of Waste Management and Environmental Protection have developed several knowledge management tools that will be useful to FSME staff. These tools include (i) a technical library, (ii) development of a performance assessment section within NRC's knowledge center, and (iii) further development of the decommissioning section within NRC's operational experience (OpE) web site. A summary of these tools and their use for FSME staff is provided below.

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The technical library, located in T8E12, provides staff with state-of-the-art tools and information needed to perform complex decommissioning and low-level radioactive waste disposal technical reviews more efficiently and effectively. Resources available for the staff in the library include information collected from internal and external training and workshops on a variety of topics related to performance assessment, a historical record of documents related to decommissioning and low-level radioactive waste disposal technical reviews, supporting decommissioning and low-level waste rulemaking documents (e.g., 10 CFR Part 61 regulatory documents), pertinent journal articles and other research documents of interest

to performance assessment staff, and high performance computer and software (e.g., sophisticated groundwater modeling and performance assessment codes). A catalog of information available in the library can be accessed through an internal network folder by interested staff. The performance assessment branch will be holding an open house for the library on June 24, 2008 from 10:00 am to 3:00 pm so that FSME staff can explore the resources in the library. Contact Cynthia Barr for more information.

The performance assessment staff has also provided substantial input to the NRC's knowledge center at <http://nrcknowledgecenter.nrc.gov> or internally at <http://papaya.nrc.gov/NRCKC/index.cfm>. The performance assessment information is under the "waste" folder under "non high level waste performance assessment". The purpose of the knowledge center website is to share "current" topics of interest to those with general interest in performance assessment and waste disposal topics. Under the waste folder, a performance assessment folder has been added with subfolders for the following topics: (1) research, (2) technical reviewer desk guides, (3) technical reviewer qualification cliff notes, and (4) training. Information on recent research efforts, presentations, and videos as well as external training opportunities is available on the site. The site also allows on-line discussions of documents on the site. To request access to the site, go to the internet page above and select "request an account". Enter your NRC lan ID as your user name and click submit. A temporary

password will be sent to you via email.

Lastly, links to decommissioning guidance documents and information on the process for submitting a Technical Assistance will soon be provided on the NRC's Operational Experience web site at <http://www.internal.nrc.gov/FSME/OpE/>. This information will provide FSME and other organizations a centralized portal at which to quickly find pertinent information on decommissioning and dose assessment that may be located at a wide variety of locations. In addition, the website has forum capabilities to allow for conversations to occur on any FSME-related topic to allow the sharing of experiences and information.

(Contact: Christopher McKenney, FSME/DWMEP, 301-415-6663, e-mail: [Christopher.McKenney@nrc.gov](mailto:Christopher.McKenney@nrc.gov))

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## **WORKSHOP ON THE CURRENT AND FUTURE USE OF CESIUM CHLORIDE SOURCES**

The NRC published a notice on July 31, 2008, in the Federal Register on the upcoming Workshop on the Security and Continued Use of Cesium-137 Chloride (CsCl) Sources. The Notice (1) solicits comments from stakeholders and (2) requests participation in the Workshop scheduled for September 29-30, 2008, at the Bethesda North Marriott Hotel (near the NRC). The Notice also contains an Issues Paper which delineates the topics of discussion grouped into five major areas: alternative CsCl sources, alternative technologies, phase-out of CsCl,

additional enhanced security, and potential future requirements.

The NRC encourages all interested parties to participate in the Workshop either in person or by writing to the NRC. We are also asking for interest to serve as panel member to lead the round-table discussions.

The full text of the Notice is available: - either in the traditional print of the Federal Register at <http://edocket.access.gpo.gov/2008/pdf/E8-17545.pdf>, - or in regular text format through the direct link to the Workshop announcement at

[http://federalregister.gov/OFRUpload/OFRData/2008-17545\\_PI.pdf](http://federalregister.gov/OFRUpload/OFRData/2008-17545_PI.pdf)

Documents relevant to the Workshop will also be continually posted on our designated web-site: <http://www.nrc.gov/materials/miau/licensing.html>.

For further information, please contact by e-mail or call at 301 415-7904: John P. Jankovich, Ph.D., Team Leader, Sealed Source and Device Registrations, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission.

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## **GENERIC COMMUNICATIONS ISSUED**

(March 31, 2008 – June 30, 2008)

The following are summaries of U.S. Nuclear Regulatory Commission (NRC) generic communications issued by the Office of Federal and State Materials and Environmental Management Programs. If one of these documents appears relevant

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## From the Desk of the FSME Director

The passage of time inevitably brings about change. NRC and FSME have not been exempt from such changes. In the past several months, we have added a new Commissioner, Kristine L. Svinicki, and a new Executive Director for Operations, R. William Borchardt.

In FSME, we have also experienced a few managerial changes in June and July. Joseph J. Holonich, Jr., the former Director of our Program Planning, Budgeting, and Program Analysis Staff has moved to a new position in the Office of Information Services, as their Director of the Information and Records Services Division. We will miss Joe who set up new administrative Office procedures when we came into being in 2006, led our budget formulation activities and our Office recruitment efforts, and made so many contributions to advance our information technology systems. He will be missed.

In June, we were fortunate to have Jennifer M. Golder join the FSME team in Joe's former position. Ms. Golder began her federal service in the U.S. Customs Service Office of Investigations in 1992, and joined NRC in 1999 as a Program Analyst in the Office of the Chief Financial Officer. In 2001, she worked in what is now NRC's Office of Information Services and was promoted to a Deputy Director position in OIS in 2006. Her budget and IT experience will be valuable assets in her new position in FSME.

In July, Scott C. Flanders, the former Deputy Director of FSME's Environmental Protection and Performance Assessment Directorate, in the Division of Waste Management and Environmental Protection (DWMEP) was promoted to Director, of the Division of Site and Environmental Reviews in NRC's Office of New Reactors. While in FSME, Scott made valuable contributions to the environmental review program, the NRC low-level waste management program, and helped resolve numerous policy and technical issues in the DWMEP. I know Scott will do a great job in NRO, but we will miss him in FSME.

To backfill his FSME position, we have asked Patrice M. Bubar to move from the Division of Intergovernmental Liaison and Rulemaking (DILR) to DWMEP. Patty is uniquely qualified for her new position since she has a degree in Environmental Engineering, extensive managerial experience at DOE, and staff experience at the U.S. Environmental Protection Agency in the Water, Superfund, and Radiation Programs. She will be a great addition to the DWMEP management team. By the time this Newsletter is published, we hope to have made a selection to backfill her position in DILR.

*Charles L. Miller*

Charles L. Miller, Director



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to your needs and you have not received it, please call one of the technical contacts listed below. The Internet address for the NRC library of generic communications is <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/index.html>. Please note that this address is case-sensitive and must be entered exactly as shown.

### **Bulletins (BLs)**

None.

### **Generic Letters (GLs)**

None.

### **Information Notices (INs)**

IN 2008-03, "Precautions to Take Before Sharing Sensitive Security-Related Information," was issued May 16, 2008. This IN was issued to U.S. Nuclear Regulatory Commission licensees who are implementing U.S. Nuclear Regulatory Commission's Order Imposing Increased Controls (IC Order) or implementing IC requirements by license condition; all Agreement State Radiation Control Program Directors and State Liaison Officers. (Technical contact: Christian Einberg, FSME, (301) 415-5422, e-mail [Christian.Einberg@nrc.gov](mailto:Christian.Einberg@nrc.gov); and Kathy Modes, Region I, (610)337-5251; e-mail [Kathy.Modes@nrc.gov](mailto:Kathy.Modes@nrc.gov))

### **Regulatory Issue Summaries (RIS)**

**RIS 2008-10, "Notice Regarding Forthcoming Federal Firearms Background Checks,"** was issued May 13, 2008. This RIS was issued to all U.S. Nuclear Regulatory Commission licensees, certificate holders, and applicants for a license or certificate of compliance who use armed security personnel as part of their physical

protection system and security organization; and to all Radiation Control Program Directors and State Liaison Officers. (Technical contacts: Philip Brochman, NSIR, (301) 415-6557; e-mail [Phil.Brochman@nrc.gov](mailto:Phil.Brochman@nrc.gov); Bob Beall, NRR, (301) 415-3874; e-mail [Robert.Beall@nrc.gov](mailto:Robert.Beall@nrc.gov); John Hickman, FSME, (301) 415-3017; e-mail [John.Hickman@nrc.gov](mailto:John.Hickman@nrc.gov); Peter Habighorst, NMSS, (301) 492-3136; e-mail [Peter.Habighorst@nrc.gov](mailto:Peter.Habighorst@nrc.gov); and Anne Marie Paskalis, ATF/GC, (202) 648-7012; e-mail [Annemarie.Paskalis@atf.gov](mailto:Annemarie.Paskalis@atf.gov)).

RIS 2008-11, "Precautions to Protect Children Who May Come in Contact with Patients Released After Therapeutic Administration of Iodine-131," was issued May 12, 2008. This RIS was issued to all U.S. Nuclear Regulatory Commission medical-use licensees, master material licensees, Agreement State Radiation Control Program Directors, and State Liaison Officers. (Technical contact: Duane White, FSME, (301) 415-6272, e-mail [Duane.White@nrc.gov](mailto:Duane.White@nrc.gov)).

RIS 2008-12, "Considerations for Extended Interim Storage of Low-level Radioactive Waste by Fuel Cycle and Materials Licensees," was issued May 9, 2008. This RIS was issued to all holders of U.S. Nuclear Regulatory Commission fuel cycle and materials licenses, all Radiation Control Program Directors, and State Liaison Officers. (Technical contact: James Shaffner, (301) 415-5496; e-mail [James.Shaffner@nrc.gov](mailto:James.Shaffner@nrc.gov)).

RIS 2008-13, "Status and Plans for Implementation of NRC Regulatory Authority for Certain Naturally Occurring and Accelerator-Produced Radioactive Material,"

was issued June 16, 2008. This RIS was issued to all U.S. Nuclear Regulatory Commission materials licensees, Radiation Control Program Directors, State Liaison Officers, and the NRC's Advisory Committee on the Medical Uses of Isotopes. (Technical contacts: Duane White, FSME, (301) 415-6272, e-mail [Duane.White@nrc.gov](mailto:Duane.White@nrc.gov); Kim K. Lukes, FSME, (301) 415-6701; e-mail [Kim.Lukes@nrc.gov](mailto:Kim.Lukes@nrc.gov); Donna M. Janda, Region I, (610) 337-5371; e-mail [Donna.Janda@nrc.gov](mailto:Donna.Janda@nrc.gov); Kevin G. Null, Region III, (630) 829-9854; e-mail [Kevin.Null@nrc.gov](mailto:Kevin.Null@nrc.gov); and Rachel S. Browder, Region IV, (817) 276-6552, e-mail [Rachel.Browder@nrc.gov](mailto:Rachel.Browder@nrc.gov)).

General Contact: Angela R. McIntosh, FSME, (301) 415-5030; [Angela.McIntosh@nrc.gov](mailto:Angela.McIntosh@nrc.gov)

Note: e-mail addresses of some of the NRC staff have changed since the time of issuance of the above generic communications. Please use the e-mail addresses shown above.

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## **SIGNIFICANT EVENTS**

### **Event #1: Administration of Dosage to Wrong Patient**

*Date and Place: April 28, 2008, Louisville, Kentucky*

Nature and Probable Causes: The licensee reported that a patient that was prescribed a dosimetric Bexxar Iodine-131 (I-131) dosage of 0.19 gigabecquerel (GBq) 5 millicuries (mCi) for a lymphatic cancer uptake study received an I-131 dosage of 1.65 GBq (44.5 mCi). The received dose was actually intended for another patient. The doctor has notified the patient. The patient had taken a thyroid blocking agent prior to

the medical event. The patient was subsequently administered a therapeutic dose of I-131, which was adjusted to account for the error.

## **Event #2: Treatment to Wrong Site**

*Date and Place: May 1, 2008, Midlothian, Virginia*

Nature and Probable Causes: The licensee reported that a patient received doses differing from prescribed during a breast cancer treatment using high dose rate (HDR) mammosite balloon brachytherapy on May 1, 2008. The patient was prescribed 10 fractions using an Iridium-192 (Ir-192) source with an activity of 165.4 GBq (4.47 Curies). During administration of the first fraction, the physicist received an alarm from the HDR computer. The alarm was overridden based on the judgment of the physicist and the treatment was completed. The other nine treatments were completed as intended. Subsequent review of the first treatment and cause of the alarm indicated that the source placement was dislodged by 2 cm. The physicist thought that the alarm was indicating the source was dislodged by only 2 mm. The dislodgment of the source by 2 cm put it at the skin entry point of the application catheter. That resulted in an underdose to the target site and an overdose to the skin. Preliminary calculations estimate that the skin in a 7 millimeter diameter around the catheter entry point may have received a dose of 3,700 centigray (rad). The patient will be notified of the incident and the doctor will monitor the skin for ill effects.

(CONTACT: Angela R. McIntosh, FSME, (301) 415-5030; e-mail: Angela.McIntosh@nrc.gov)

## **RECENT ENFORCEMENT ACTIONS**

The U.S. Nuclear Regulatory Commission's (NRC's) enforcement program can be accessed via NRC's homepage [<http://www.nrc.gov/>] under "What We Do." Documents related to cases can be accessed at [<http://www.nrc.gov/>], "Electronic Reading Room," "Documents in ADAMS." ADAMS is the Agency-wide Document Access and Management System. Help in using ADAMS is available from the NRC Public Document Room, telephone: 301-415-4737 or 1-800-397-4209.

### **Materials Actions**

**Global X-Ray & Testing Corporation** (EA-08-008; EA-08-009; EA-08-010; EA-08-011; EA-08-013)

On May 23, 2008, a Confirmatory Order (effective immediately) was issued to Global X-ray & Testing (Global) to confirm commitments made as a result of an Alternative Dispute Resolution (ADR) settlement agreement. NRC identified four violations during inspection and investigation involving: 1) a willful failure to provide the NRC with complete and accurate information; 2) the failure to prevent workers from resuming work after their pocket dosimeters were found to be off-scale; 3) the failure to ensure that a radiographer was providing personal supervision of the radiographer's assistant through direct observation of the assistant's performance of radiographic operations; and

4) allowing an individual who was not wearing a personal dosimeter to conduct radiographic operations. In response to these violations, the licensee requested ADR. As part of the agreement, licensee agreed to additional management review that will include developing procedures for additional oversight of offshore radiographic operations, obtaining an agreement with lay-barge operators that will address radiographic operations, incidents, and oversight; field audits of lay-barge radiographic operations by licensee management, making arrangements for NRC inspection of radiographic activities on U.S. owned lay-barges, implementation of training on potential consequences for violation of NRC regulations, and delivering a personal letter to each employee regarding the consequences of wrongdoing. Global also agreed to obtain an NRC license with special license conditions for radiographic operations in offshore waters. In exchange for Global's extensive corrective actions and most notably in consideration of costs associated with obtaining an NRC license, the NRC agreed to eliminate the civil monetary penalty.

**Westinghouse Electric Company** (EA-08-057)

On May 1, 2008, a Notice of Violation was issued for a Severity Level III violation. The violation involved the failure to assure safe and compliant activities involving nuclear material. Specifically, on November 17, 2006, a safety significant control interlock was willfully bypassed by an operator who disabled an alarm acknowledgement pushbutton

associated with Conversion Line 5 while hydrogen gas was flowing to the calciner in the licensee's wet conversion process. This activity is prohibited by licensee procedures and NRC license conditions.

## **Medical**

### **Oncology Institute of Greater Lafayette** (EA-07-313)

On March 31, 2008, a Notice of Violation was issued for a Severity Level III problem. The violations involved the failure to instruct an Authorized Medical Physicist, a supervised individual, in the licensee's written directive procedures with respect to the use of byproduct material and failure to develop, implement and maintain written directive procedures to provide high confidence that each administration was in accordance with the written directive. Specifically, the licensee did not verify before treatment that the treatment plan was properly input into the high dose rate remote afterloader unit and did not verify, after treatment, that the step size, a treatment parameter used for the treatments, was in agreement with the treatment plan. A medical event occurred during the licensee's administration of three treatment fractions to a patient. As a result, portions of the treatment site received a total dose that differed from the prescribed dose by more than 20 percent.

### **Karmanos Cancer Center** (EA-07-316)

On April 10, 2008, a Notice of Violation was issued for a Severity Level III violation. The violation involved the failure to develop,

implement and maintain written directive procedures to provide high confidence that each administration was in accordance with the written directive. Specifically, the licensee's written procedures for the implementation of treatment plans with its stereotactic radiosurgery unit did not require a check of the treatment plan parameters and magnetic resonance image orientation prior to administration of the treatment. As a result, the licensee administered a single gamma knife treatment to an unintended portion of the patient's brain.

### **Ball Memorial Hospital** (EA-08-026)

On May 12, 2008, a Notice of Violation was issued for a Severity Level III violation involving two written directives not dated and signed by an authorized user before the administration of I-131 sodium iodide greater than 30 microcuries. Specifically, on April 30, 2007, two nuclear medicine technologists administered I-131 sodium iodide to two patients, without a dated and signed written directive.

### **Dickinson County Memorial Hospital** (EA-08-048)

On May 7, 2008, a Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$3,250 was issued for a Severity Level III violation. The violation involved the failure to control and maintain constant surveillance of licensed material that was stored in a controlled area. Specifically, on January 25, 2008, the doors to a room which contained licensed material being packaged for

shipment were left unsecured and unattended, resulting in licensed radioactive material being accessible to unauthorized individuals via an adjacent, unrestricted hallway.

### **Saint Louis University** (EA-07-317)

On March 31, 2008, a Notice of Violation was issued for a Severity Level III violation involving the failure to control and maintain constant surveillance of licensed material that is in controlled or unrestricted area. Specifically, the licensee did not secure from unauthorized removal or limit access to materials containing a regulated amount of iodine-125 located in the Medical School building and a regulated amount of hydrogen-3 located in the Pediatric Research Institute, both of which were controlled areas.

## **Portable Gauges**

### **NTH Consultants, Ltd.** (EA-08-002)

On March 31, 2008, a Notice of Violation was issued for a Severity Level III violation involving the failure to use a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal, when portable gauge was not under the control and constant surveillance of the licensee. Specifically, licensee personnel secured the transport case containing a gauge to a vehicle with two independent cables and padlocks, but the gauge case lid was secured with only a padlock and the gauge was stolen from the vehicle.

**Hevly Technical Services, Inc.**  
(EA-08-129, EA-08-130)

On May 16, 2008, a Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$3,000 was issued to Hevly Technical Services, Inc. (HTS) for a deliberate Severity Level III violation of 10 CFR 150.20(b)(3) involving the transfer of a portable moisture density gauge containing radioactive material to a company in the State of Alaska that was not licensed to possess or use the gauge. Specifically, on May 17, 2003, HTS, a General Licensee under 10 CFR 150.20, transferred a portable gauging device containing radioactive material to Alaska Rim Engineering, a company that HTS knew was not specifically licensed by the NRC to receive the material. In addition, a second Severity Level III violation was issued for failure to file NRC Form 241- Report of Proposed Activities in Non-Agreement States, at least three days prior to engaging in licensed activities within NRC jurisdiction. Specifically on May 17, 2003, HTS, who held specific licenses from the

Agreement States of Washington and Oregon, used a portable device containing radioactive material in Palmer, Alaska, during training without filing a Form -241 with the NRC.

**Individual Actions**

**William M. Johnston** (IA-08-022)

On May 23, 2008, a Notice of Violation was issued for a Severity Level III violation involving a deliberate failure to provide the NRC with complete and accurate information, as required by 10 CFR 30.10(a)(2). Specifically, in a report submitted to the NRC on May 18, 2006, the individual, as the radiation safety officer (RSO) for Global X-Ray and Testing Corporation, described an event that took place during radiographic operations on board a lay-barge on April 20, 2006, but failed to include complete information regarding the radiation exposure to the radiographer involved in the event. He also failed to disclose the fact that the radiographer reported that his pocket dosimeter

had gone off-scale and he did not reconcile or explain the discrepancy between the reported dose and the off-scale dosimeter reading.

**SELECTED FEDERAL REGISTER NOTICES**

(April 1, 2008 – June 30, 2008)

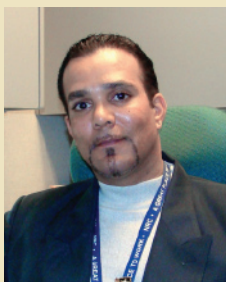
Licenses, Certifications, and Approvals for Nuclear Power Plants; Correction (AG24) (NRC-2001-0010)73 FR 31607, June 3, 2008.

(Contact: Michael T. Lesar, Office of Administrative Services, 301-415-7163, e-mail: Michael.Lesar@nrc.gov)

Yucca Mountain; Notice of Receipt and Availability of Application (NRC-2008-0343), 73 FR 34348, June 17, 2008.

(A copy of the application is available for public inspection via Public Electronic Reading Room on the Internet at the NRC Web site, <http://www.nrc.gov/reading-rm/adams.html>. The accession number for the application is ML081560408)

NOTE TO READERS: In an attempt to keep the FSME Licensee Newsletter relevant, useful and informative, feedback on the content of the newsletter is welcome. Readers desiring to contribute articles, self-explanatory diagrams, suggestions for future articles, bulletins, web-site postings, and other items of interest to the FSME Licensee Newsletter readership, should contact Michael Williamson or Gwendolyn Davis, from the Office of Federal and State Materials and Environmental Management Programs, Rulemaking Branch A. Mr. Williamson may be contacted at (301) 415-6234 or Michael.williamson@nrc.gov. Ms. Davis may be contacted at (301) 415-8165 or Gwendolyn.davis@nrc.gov. In addition, to ensure proper delivery of the FSME Licensee Newsletter, please report any address changes to Mr. Williamson to prevent any interruption of service.



Please send written correspondence and requests to:  
Michael K. Williamson, Editor  
FSME Licensee Newsletter  
Office of Federal and State Materials and Environmental Management Programs  
U.S. Nuclear Regulatory Commission  
Two White Flint North, Mail Stop: T-8-F42  
Washington, D.C. 20555-0001



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