LLW notes

Volume 31 Number 4 July/August 2016

Government Accountability Office (GAO)

GAO Releases Report re Security of Sealed Sources

On July 15, 2016, the Government Accountability Office (GAO) released GAO-16-330 titled, "Nuclear Security: NRC Has Enhanced the Controls of Dangerous Radioactive Materials, but Vulnerabilities Remain." The report examines

- the steps that the U.S. Nuclear Regulatory Commission (NRC) and the 37 states it permits to grant licenses for radioactive materials—called Agreement States—have taken to ensure that radioactive materials licenses are granted only to legitimate organizations and licensees can obtain materials only in quantities allowed by their licenses; and,

- the results of covert vulnerability testing designed to test the effectiveness of these controls.

In the report, GAO concludes that NRC and Agreement States have taken several steps to help ensure that radioactive materials licenses are granted only to legitimate organizations and that licensees can only obtain such materials in quantities allowed by their licenses.

However, GAO also determined that NRC and Agreement States have not taken some measures for better controlling Category 3 quantities of radioactive material—such as tracking and agency license verification—that leave vulnerabilities.

GAO-16-330 was prepared in response to a request from the Committee on Homeland Security of the U.S. House of Representatives.

GAO-16-330 can be obtained online at www.gao.gov/assets/680/678170.pdf.

Background

In 2007, a GAO covert vulnerability testing effort revealed weaknesses in the NRC's licensing program when GAO investigators, after setting up fictitious companies, were able to obtain an NRC license and then alter it to obtain agreements to

(Continued on page 18)

In This Issue

Registration Deadline Approaching for Fall 2016 LLW Forum Meeting—page 4

Pennsylvania Releases Revised TENORM Study—page 7

Southeast Compact Commission Elects New Officers—page 12

New York Issues 30th Annual Low-Level Waste Status Report—page 17

Commissioner Proposes NRC Revisit Tracking of Category 3 Sources —page 32

LLW Forum, Inc. • 2657 Bayview Drive • Ft. Lauderdale, FL 33306
(754) 779-7551 • FAX (754) 223-7452 • EMAIL llwforuminc@aol.com WEBSITE www.llwforum.org

COPYRIGHT POLICY

The Low-Level Radioactive Waste Forum, Inc. is dedicated to the goals of educating policy makers and the public about the management and disposal of low-level radioactive wastes, and fostering information sharing and the exchange of views between state and compact policy makers and other interested parties.

As part of that mission, the LLW Forum publishes a newsletter, news flashes, and other publications on topics of interest and pertinent developments and activities in the states and compacts, federal agencies, the courts and waste management companies. These publications are available to members and to those who pay a subscription fee.

Current members are allowed to distribute these written materials to a limited number of persons within their particular organization (e.g., compact commissioners, state employees, staff within a federal agency, employees in a commercial enterprise.) It has become clear, however, that there will be instances where members and subscribers wish to share LLW Forum materials with a broader audience of non-members.

This Copyright Policy is designed to provide a framework that balances the benefits of a broad sharing of information with the need to maintain control of published material.

1. LLW Forum, Inc., publications will include a statement that the material is copyrighted and may not be used without advance permission in writing from the LLW Forum.

2. When LLW Forum material is used with permission it must carry an attribution that says that the quoted material is from an LLW Forum publication referenced by name and date or issue number.

3. Persons may briefly summarize information reported in LLW Forum publications with general attribution (e.g., the LLW Forum reports that . . .) for distribution to other members of their organization or the public.

4. Persons may use brief quotations (e.g., 50 words or less) from LLW Forum publications with complete attribution (e.g., *LLW Forum Notes,* May/June 2002, p. 3) for distribution to other members of their organization or the public.

5. Members and subscribers may with written approval from the LLW Forum's officers reproduce LLW Forum materials one time per year with complete attribution without incurring a fee.

6. If persons wish to reproduce LLW Forum materials, a fee will be assessed commensurate with the volume of material being reproduced and the number of recipients. The fee will be negotiated between the LLW Forum's Executive Director and the member and approved by the LLW Forum's officers.

Low-Level Radioactive Waste Forum, Inc.

LLW Notes
Volume 31, Number 4 July/August 2016
Editor and Writer: Todd D. Lovinger
Layout and Design: Rita Houskie, Central Interstate Low-Level Radioactive Waste Compact

LLW Notes is published several times a year and is distributed to the Board of Directors of the Low-Level Radioactive Waste Forum, Inc. — an independent, non-profit corporation. Anyone — including compacts, states, federal agencies, private associations, companies, and others — may support and participate in the LLW Forum, Inc. by purchasing memberships and/or by contributing grants or gifts. For information on becoming a member or supporter, please go to our website at www.llwforum.org or contact Todd D. Lovinger — the LLW Forum, Inc.'s Executive Director — at (754) 779-7551.

The *LLW Notes* is owned by the LLW Forum, Inc. and therefore may not be distributed or reproduced without the express written approval of the organization's Board of Directors.

Directors that serve on the Board of the Low-Level Radioactive Waste Forum, Inc. are appointed by governors and compact commissions. The LLW Forum, Inc. was established to facilitate state and compact implementation of the Low-Level Radioactive Waste Policy Amendments Act of 1985 and to promote the objectives of low-level radioactive waste regional compacts. The LLW Forum, Inc. provides an opportunity for state and compact officials to share information with each another and to exchange views with officials of federal agencies and other interested parties.

Table of Contents

Congress (Cover Story) 1
GAO Releases Report re Security of Sealed Sources 1

Low-Level Radioactive Waste Forum, Inc 4
Registration Deadline Approaching for Fall 2016 LLW Forum Meeting 4
Save the Date Notice for Spring 2017 LLW Forum Meeting 5
Organizational Liaisons Appointed to Work with DSWG 6

States and Compacts 7
Pennsylvania Releases Revised TENORM Study 7
Missing Portable Nuclear Gauge Recovered in Connecticut 9
Utah Waste Management and Radiation Control Board Meets 10
Utah Proposes Hazardous Waste Rule Changes 12
Southeast Compact Commission Elects New Officers 12
New Mailing Address for the Southeast Compact Commission 13
2017 Hodes Award Nominations Deadline Approaching 14
Texas Compact Commission Holds August 2016 Meeting 16
New York Issues 30th Annual Low-Level Waste Status Report 17

Congress (continued) 18
Annual Report to Congress Published re Nuclear Security Inspections 20

Industry 21
News Briefs for Nuclear Power Plants Across the Country 21
US Ecology to Acquire Los Angeles-Area Treatment Facility 26

Federal Agencies and Committees (continued) 27
Four New Members Named to Advisory Committee on Reactor Safeguards 27
NRC Makes Yucca Mountain Hearing Documents Publicly Available 29
EPA Publishes User Fees for Electronic Hazardous Waste Management System and Amendments to Manifest Regulations 29
Commissioner Proposes NRC Revisit Tracking of Category 3 Sources 32
NRC Hosts Public Meeting re Strategic Plan 32
Commission Meets With Wide Array of Stakeholders 33
NRC Revises Regulations to Increase Potential Maximum Fine 34
NRC Amends Licensing Inspection and Annual Fees for FY 2016 34
Dapas Assumes Duties as NMSS Director 35
Nelson Named as NRC's Chief Information Officer 36

Obtaining Publications 37

LLW FORUM, INC.

Low-Level Radioactive Waste Forum, Inc.
2657 Bayview Drive
Ft. Lauderdale, FL 33306
(754) 779-7551
FAX (754) 223-7452
EMAIL llwforuminc@aol.com
INTERNET www.llwforum.org

Key to Abbreviations

U.S. Department of Energy	DOE
U.S. Department of Transportation	DOT
U.S. Environmental Protection Agency	EPA
U.S. Government Accountability Office	GAO
U.S. Nuclear Regulatory Commission	NRC
Naturally-occurring and accelerator-produced radioactive material	NARM
Naturally-occurring radioactive material	NORM
Code of Federal Regulations	CFR

Low-Level Radioactive Waste Forum, Inc.(LLW Forum)

Registration Deadline Approaching for the Fall 2016 LLW Forum Meeting

Embassy Suites Hotel in Saratoga Springs, New York
November 7-8, 2016

As a reminder, the deadline is approaching to register for the fall 2016 Low-Level Radioactive Waste Forum (LLW Forum) meeting, which will be held at the Embassy Suites by Hilton Saratoga Springs Hotel on November 7-8, 2016.

Interested stakeholders are encouraged to register and make hotel reservations for the meeting at your earliest convenience, as there is limited space available in our discount room block. The New York State Energy and Research Development Authority (NYSERDA) is sponsoring the meeting.

The meeting documents—including a meeting bulletin and registration form—have been posted to the LLW Forum's web site at www.llwforum.org. As a new option for interested stakeholders, a registration form may be completed and submitted online by going to the bottom of the LLW Forum web site's home page at www.llwforum.org.

Attendance

Officials from states, compacts, federal agencies, nuclear utilities, disposal operators, brokers/ processors, industry, and other interested parties are invited and encouraged to attend.

The meeting is an excellent opportunity to stay up-to-date on the most recent and significant developments in the area of low-level radioactive waste management and disposal. It also offers an important opportunity to network with other government and industry officials and to participate in decision-making on future actions and endeavors affecting low-level radioactive waste management and disposal.

Location and Dates

The fall 2016 LLW Forum meeting will be held on Monday, November 7 (9:00 am – 5:00 pm) and Tuesday, November 8 (9:00 am – 1:00 pm) at:

Embassy Suites by Hilton Saratoga Springs
86 Congress Street
Saratoga Springs, New York 12866

Located in the heart of downtown Saratoga Springs, the Embassy Suites is walking distance to the Saratoga Heritage Area Visitor's Center, Congress Park, the Canfield Casino, and Broadway for its restaurants and shopping.

Registration

All persons must pre-register for the meeting and pay any associated registration fees in order to be allowed entry. Registration forms are needed in order to ensure that you receive a meeting packet and name badge. Accordingly, interested attendees are asked to please take a moment to complete the registration form at your earliest convenience and return it Cecilia Snyder of the LLW Forum at the address, e-mail or fax number listed at the bottom of the form.

The meeting is free for up to two individuals representing members of the LLW Forum. Additional and non-member registration is $500, payable by check only to the "LLW Forum, Inc." (Credit card payments are not accepted.)

Reservations

Persons who plan to attend the meeting are strongly encouraged to make their hotel reservations and send in their registration forms as soon as possible, as we have exceeded our block at the last few meetings.

A limited block of hotel rooms has been reserved for meeting attendees for Sunday (November 6) and Monday (November 7) at the prevailing federal per diem rate (which is currently $120 per night) plus tax/single or double. A limited number of rooms are available at this rate for one day prior to and one day following the meeting, subject to availability.

To make a reservation, please call 1-800-HILTONS and ask for a room in the "LLW Forum block" at the Embassy Suites Saratoga Springs or use the following dedicated link: http://embassysuites.hilton.com/en/es/groups/personalized/A/ALBESES-LLW-20161105/index.jhtml?WT.mc_id=POG.

In order to receive the discounted rate, please make your reservation by October 6, 2016.

Transportation and Directions

Saratoga Springs is a 30-minute drive from the Albany International Airport. A taxi from the airport to the hotel is a minimum estimated charge of $50/each way. Driving directions from both airports can be found at: http://embassysuites3.hilton.com/en/hotels/new-york/embassy-suites-by-hilton-saratoga-springs-ALBESES/maps-directions/index.html. Parking at the hotel is free.

For additional information, please contact Todd D. Lovinger, the LLW Forum's Executive Director, at (754) 779-7551 or go to www.llwforum.org.

Save the Date Notice for Spring 2017 LLW Forum Meeting

Embassy Suites Downtown Hotel in Denver, Colorado
April 24-25, 2017

Please mark your calendars for the spring 2017 meeting of the Low-Level Radioactive Waste Forum (LLW Forum), which will be held at the Embassy Suites Downtown/Convention Center Hotel in Denver, Colorado from April 24-25, 2017.

Meeting Logistics

This will be a one and one-half day meeting beginning at 9:00 a.m. on Monday and concluding at 1:00 p.m. on Tuesday.

The meeting is being co-sponsored by the Rocky Mountain Low-Level Radioactive Waste Board and the Midwest Interstate Low-Level Radioactive Waste Compact Commission.

Meeting registration and the hotel block information will be released in late 2016.

Attendance

Officials from states, compacts, federal agencies, nuclear utilities, disposal operators, brokers/processors, industry, and other interested parties are encouraged to attend the spring 2017 LLW Forum meeting.

LLW Forum meetings are an excellent opportunity to stay up-to-date on the most recent and significant developments in the area of low-level radioactive waste management and disposal. They also offer an important opportunity to network with other government and industry officials and to participate in decision-making on future actions and endeavors affecting low-level radioactive waste management and disposal.

Background

The LLW Forum is a non-profit organization of representatives appointed by Governors and compact commissions that seeks to facilitate state and compact implementation of the Low-Level Radioactive Waste Policy Act of 1980 and its 1985 amendments, as well as to promote the objectives of regional low-level radioactive waste disposal compacts.

The LLW Forum meets twice per year—once in the spring and once in the fall—at different locations throughout the country. LLW Forum members take turns sponsoring the meetings.

If you have questions or require additional information, please contact Todd D. Lovinger, Esq.—Executive Director of the LLW Forum and Project Director of the Disused Sources and Part 61 Working Groups (DSWG/P61WG)—at (754) 779-7551 or at LLWForumInc@aol.com.

LLW Forum/Disused Sources Working Group

Organizational Liaisons Appointed to Work with DSWG

The following is a brief update on activities of the Low-Level Radioactive Waste Forum's (LLW Forum's) Disused Sources Working Group (DSWG).

For additional information and ongoing updates, interested stakeholders are encouraged to go to the DSWG web site at www.disusedsources.org.

DSWG Holds Summer 2016 Meeting

The DSWG held its summer meeting in Chicago, Illinois from July 7-8, 2016. During the meeting, among other things, the DSWG

- provided an overview of the working group's activities to date and received input from organizational representatives of the Conference of Radiation Control Program Directors (CRCPD), the Organization of Agreement States (OAS) and the Health Physics Society (HPS) to identify areas of agreement and open a dialogue about the path forward;
- reviewed the development of educational materials for current and prospective licensees of radioactive sources and devices; and,
- outlined the agenda for the fall 2016 DSWG meeting that will be held in conjunction with the fall 2016 LLW Forum meeting in Saratoga Springs, New York on November 7-8, 2016.

The summer 2016 DSWG meeting was open to DSWG members and invited guests.

Appointment of Organizational Liaisons

Following the summer 2016 meeting, the organizational attendees appointed the following liaisons to work with the DSWG:

- Jennifer Opila on behalf of OAS;
- Denny Galloway on behalf of CRCPD; and,
- Craig Little on behalf of the HPS.

Development and Presentations re Educational Materials

The DSWG, in conjunction with CRCPD's E-34 Committee, is developing educational materials—including letters and brochures—for prospective and current licensees of radioactive sealed sources and devices. Once finalized, the DSWG will make these materials available to state and federal agencies, as well as other interested stakeholders.

The DSWG gave oral and/or poster presentations on the educational materials at

- the HPS annual meeting in Spokane, Washington from July 17-21, 2016; and,

- the OAS annual meeting in Denver, Colorado from August 21-25, 2016.

Background

The LLW Forum is a non-profit organization of representatives appointed by Governors and compact commissions that seeks to facilitate state and compact implementation of the Low-Level Radioactive Waste Policy Act of 1980 and its 1985 amendments, as well as to promote the objectives of regional low-level radioactive waste disposal compacts.

In September 2011, the LLW Forum formed the Disused Sources Working Group (DSWG) to develop recommendations from the states and compacts for improving the management and disposition of disused sources.

For additional information about the DSWG, please contact Project Director Todd D. Lovinger, Esq at (754) 779-7551 or at LLWForumInc@aol.com.

Appalachian Compact/Commonwealth of Pennsylvania

Pennsylvania Releases Revised TENORM Study

Earlier this summer, the Commonwealth of Pennsylvania's Department of Environmental Protection (DEP) released a revised version of its January 2015 study regarding Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM), which analyzed the naturally occurring levels of radioactivity associated with oil and natural gas development in Pennsylvania.

The Pennsylvania DEP issued the revised version to correct errors in the data tables, inconsistent use of significant figures, and some typos. In addition, DEP published a new Appendix M that contains the non-radiological data generated and collected that was not with the scope of the study.

Although the DEP report outlined recommendations for further study, it concluded that there is little potential for harm to workers or the public from radiation exposure due to oil and gas development.

The revised study report, as well as a second version of the revised report that shows the edits, is available at http://www.dep.pa.gov/Business/Energy/OilandGasPrograms/OilandGasMgmt/Oil-and-Gas-Related-Topics/Pages/Radiation-Protection.aspx.

Overview

During the expansion of the Marcellus Shale Gas industry, DEP staff observed a steady increase in the volume of waste containing TENORM, generated by the oil and gas industry, being disposed in Pennsylvania landfills. TENORM is naturally occurring radioactive material whose radionuclide concentrations or potential for

human exposure have been increased above levels encountered in the undisturbed natural environment by human activities.

In 2013, at the direction of Pennsylvania Governor Tom Corbett, DEP initiated a study to collect data relating to TENORM associated with oil and gas operations in Pennsylvania including radioactivity levels in flow-back waters, treatment solids and drill cuttings, as well as transportation, storage and disposal of drilling wastes. This included a study of radon levels in natural gas to ensure that public health and the environment continue to be protected.

The study included the assessment of potential worker and public radiation exposure, evaluation of potential impacts from TENORM waste disposal, and the investigation of possible radiological environmental effects.

It encompassed radiological surveys at well sites, wastewater treatment plants, landfills, gas distribution and end use, and oil and gas brine-treated roads. The media sampled included solids, liquids, natural gas, ambient air, and surface radioactivity.

The survey and sample data will be used to address potential radiological concerns from oil and gas operations, disposal of waste, and product use.

Conclusions

The following is a brief summary of the observations and recommendations contained in the peer-reviewed Pennsylvania TENORM study.

- There is little potential for additional radon exposure to the public due to the use of natural gas extracted from geologic formations located in Pennsylvania.

- There is little or limited potential for radiation exposure to the public and workers from the development, completion, production, transmission, processing, storage, and end use of natural gas. There are, however, potential radiological environmental impacts from fluids if spilled. Radium should be added to the Pennsylvania spill protocol to ensure cleanups are adequately characterized. There are also site-specific circumstances and situations where the use of personal protective equipment by workers or other controls should be evaluated.

- There is little potential for radiation exposure to workers and the public at facilities that treat oil and gas wastes. However, there are potential radiological environmental impacts that should be studied at all facilities in Pennsylvania that treat wastes to determine if any areas require remediation. If elevated radiological impacts are found, the development of radiological discharge limitations and spill policies should be considered.

- There is little potential for radiation exposure to the public and workers from landfills receiving waste from the oil and gas industry. However, filter cake from facilities treating wastes could have a radiological environmental impact if spilled, and there is also a potential long-term disposal issue. TENORM disposal protocols should be reviewed to ensure the safety of long-term disposal of waste containing TENORM.

- While limited potential was found for radiation exposure to recreationists using roads treated with brine from conventional natural gas wells, further study of radiological environmental impacts from the use of brine from the oil and gas industry for dust suppression and road stabilization should be conducted.

Persons interested in a complete list of the study's observations and recommendations are directed to the document itself.

Background

The Marcellus Shale formation underlies much of Pennsylvania, with the exception of southeastern Pennsylvania. The type of gas found in most areas of the Marcellus Shale throughout Pennsylvania is geologically mature and consists of mostly methane that requires little processing prior to use. This gas is commonly called "dry gas." Marcellus Shale gas found along the westernmost border of Pennsylvania is less geologically mature; therefore, in addition to methane, the gas contains additional hydrocarbons such as ethane, propane, and butane. This gas is commonly called "wet gas" and can be used to produce plastics and other high-value petroleum-based products.

The Pennsylvania Department of Conservation and Natural Resources (DCNR) has documented that Marcellus Shale can contain from 10 to 100 parts per million (ppm) uranium (U). Typical crustal U concentrations in the United States (U.S.) average 3 ppm.

Marcellus Shale and other geologic formations rich in oil and gas resources may contain naturally occurring radioactive material (NORM), specifically U, U-238 parent and thorium (Th), Th-232 parent, and their decay progeny, as well as Potassium-40 (K-40). These series occur naturally and are the most prevalent of the three natural decay series, the third being the actinium (Ac), U-235 parent. Surface soil typically contains approximately 1 to 2 picocuries per gram (pCi/g) of both the U and Th series radionuclides with all of the series members at approximately equal activity (i.e., secular equilibrium). The radioactive materials, including TENORM, are brought to the land surface by oil and gas activities.

Each of the natural decay series includes an Rn gas member. Radon and its progeny are the primary issue of concern associated with natural gas distribution and its end uses.

For additional information, please contact Dave Allard of the Pennsylvania Department of Environmental Protection at (717) 787-2480 or at djallard@pa.gov.

Atlantic Compact/State of Connecticut

Missing Portable Nuclear Gauge Recovered in Connecticut

On July 27, 2016, the U.S. Nuclear Regulatory Commission (NRC) announced that the agency has been notified by a Connecticut company that a portable moisture-density gauge containing sealed sources of radioactive material that was reported stolen a day earlier has been recovered.

The gauge—which was located by police on the afternoon of July 26, 2016 at a pawnshop in Bridgeport, Connecticut—was not damaged.

Background

On July 26, 2016, HAKS Material Testing Group—which is located in Bridgeport, Connecticut—reported that the device was stolen from a technician's vehicle while it was parked in Bridgeport. According to the NRC press release, the vehicle's trunk was broken into, chains securing the gauge in place were cut and the gauge was removed.

The device contains small amounts of Cesium-137 and Americium-241. The gauge is used to make measurements by projecting the radiation from the two radioactive sources into the ground and then displaying the reflected radiation on a dial on its top.

The gauge, which is stored in a robust transportation case, consists of a shielding container with a plunger-type handle protruding

from the top. The handle is used to extend and then retract the radioactive sources from the shielded position. When not in use, the handle is normally locked, with the sources in the retracted, safely shielded position. The rectangular base of the gauge is yellow.

According to NRC's original press release announcing the theft and search for recovery, as long as the sources are in the shielded position, the gauge would present no hazard to the public. However, NRC cautioned that any attempt to tamper with the radioactive sources in the device could subject the person to radiation exposure. In particular, handling of the unshielded sources outside their container would carry a risk of potentially dangerous radiation exposure.

Upon notification of the theft, an NRC inspector was sent to the company's offices to gather more information on the loss of the gauge. In addition, law-enforcement authorities opened an investigation into the theft.

Recovery

On July 27, 2016, an inspector from Connecticut's Department of Energy and Environmental Protection (DEEP) traveled to the shop to inspect the recovered gauge. Once the inspector confirmed the device was undamaged, it was returned to its owner.

According to NRC's press release announcing recovery of the gauge, the NRC is following up on the event. This includes an NRC inspection being conducted at the offices of HAKS Material Testing Group in Bridgeport.

For additional information, please contact Diane Screnci at (610) 337-5330 or Neil Sheehan at (610) 337-5331.

Northwest Compact/State of Utah

Utah Waste Management and Radiation Control Board Meets

In July and August 2016, the Utah Waste Management and Radiation Control Board (Board) held regularly scheduled meetings in Salt Lake City, Utah.

The meetings, which were open to the public, were held in Conference Room 1015 of the Department of Environmental Quality (DEQ) Board Room on the first floor of the Multi Agency State Office Building in Salt Lake City, Utah.

July 2016 Meeting

The following items, among others, were on the agenda for the July 14, 2016 Board meeting:

I. Call to Order

II. Approval of Meeting Minutes for the June 9, 2016 Board Meeting *(Board Action Item)*

III. Underground Storage Tanks Update

IV. Administrative Rules

- A. Approve Change in Proposed Rule (CPR) for R315-319, Management of Coal Combustion Residuals Requirements in Landfills and Surface Impoundments and to Set an Effective Date of September 1, 2016 *(Board Action Item)*
- B. Final Adoption of Proposed Changes to Solid Waste Rule R315-310, Permit Requirements for Solid Waste Facilities and to Set an Effective Date of July 15, 2016 *(Board Action Item)*

C. Approval to Proceed with Formal Rulemaking and 30-Day Public Comment Period for Repeal of Rule R313-27, "Medical Use of Advisory Committee" *(Board Action Item)*

V. Hazardous Waste Section

A. Proposed Stipulation and Consent Order Between the Board and Heckmann Woods Cross *(Board Action Item)*

VI. Other Business

A. Evaluation of Closure, Post-Closure and Perpetual Care for Hazardous and Radioactive Waste Treatment and Disposal Facilities; Report to Legislature *(Information Item Only)*

B. Miscellaneous Information Item

C. Scheduling of Next Board Meeting

VII. Adjourn

August 2016 Meeting

The following items, among others, were on the agenda for the August 15, 2016 Board meeting:

I. Call to Order

II. Approval of Meeting Minutes for the July 14, 2016 Board Meeting *(Board Action Item)*

III. Underground Storage Tanks Update

IV. Proposed Non-Substantive Change to Underground Storage Tank Rule R311-210 *(Information Item Only)*

V. X-Ray Program

B. Approval of Mammography Imaging Medical Physicist (MIMP) in Accordance with UCA 19-6-104(2)(b) *(Board Action Item)*

VI. Administrative Rules

D. Approval to Proceed with Formal Rulemaking and 30-Day Public Comment Period for Repeal of Rule R313-27, "Medical Use Advisory Committee" *(Board Action Item)*

VII. Report to Legislature

A. Review of Comments on the Evaluation of Closure, Post-Closure and Perpetual Care for Hazardous and Radioactive Waste Treatment and Disposal Facilities, Report to Legislature *(Board Action Item)*

VIII. Other Business

D. Miscellaneous Information Item

E. Scheduling of Next Board Meeting

IX. Adjourn

Background

The Board—which is appointed by the Utah Governor with the consent of the Utah Senate—guides development of Radiation Control policy and rules in the state.

The Board holds open meetings ten times per year at locations throughout the state. A public

comment session is held at the end of each meeting.

Copies of the Utah Waste Management and Radiation Control Board meeting agendas and packet information can be found at http://www.deq.utah.gov/boards/waste/meetings.htm.

For additional information, please contact Rusty Lundberg, Deputy Director of the Division of Waste Management and Radiation Control at the Utah Department of Environmental Quality, at (801) 536-4257 or at rlundberg@utah.gov.

Utah Proposes Hazardous Waste Rule Changes

On July 10, 2016, the Utah Waste Management and Radiation Control Board approved amendments to R315-261 to be published in the Utah Bulletin and commence a 30-day public comment period.

The proposed amendments, among other things, change the word "variance" to "excluded" in several sections of the rule.

The public comment period started on July 2, 2016 and ended on July 31, 2016.

The proposed modifications to the rule can be viewed at http://www.deq.utah.gov/Laws_Rules/dshw/ProposedHWRules.htm.

For additional information about the Hazardous Waste Rules, please contact Ralph Bohn of the State of Utah at rbohn@utah.gov or at (801) 536-0212 or at (801) 536-0259.

Southeast Compact Commission

Southeast Compact Commission Elects New Officers

On June 23, 2016, the Southeast Compact Commission for Low-level Radioactive Waste Management elected new officers at its 108th Business Meeting in Atlanta, Georgia.

Chair

The Commission elected Debra Shults as Chair, which duties will include presiding at all Commission meetings, appointing the membership of all committees of the Commission, officially representing the Commission, and performing all other duties that are normally performed by a presiding officer.

Shults has served as an Alternate Commissioner from the State of Tennessee since 1989 and as the Commission's Vice-Chair since 2004. She has over thirty years of professional experience in managing environmental programs in the state. In 2010, Shultz was appointed as the Director of the Division of Radiological Health (DRH) in the Tennessee Department of Environment and Conservation (TDEC). She serves as the Governor's appointed State Liaison Officer to the U.S. Nuclear Regulatory Commission (NRC); the designee to receive advance notifications regarding shipments of certain radioactive materials per 10 CFR 37; and, as Treasurer of the Organization of Agreement States (OAS).

Chair-Elect

The Commission elected Steve Harrison as Chair-Elect. His duties will include representing the Commission on behalf of the Chair when needed; preparing to assume the position of Chair to assure continuity in the leadership of the

Commission; and, assumption of the position of Chair if the current Chair is unable to perform her duties. As Chair-Elect, Harrison will serve as the Vice-Chair and will automatically become the Chair after serving a two-year term as Chair-Elect.

Harrison has served as one of the two Commissioners from the Commonwealth of Virginia since 2014. He has served as the Director of the Commonwealth's Office of Radiological Health in the Virginia Department of Health (VDH) since 2012. Harrison joined VDH in 2003 where he has served as Assistant State Planning Coordinator, State Hospital Coordinator, Strategic National Stockpile and Exercise Coordinator, and Emergency Preparedness & Response's Central Region Planner. Prior to joining VDH, Harrison worked for Dominion Resources for 23 years, where he performed nuclear emergency planning and conducted radiological surveillance and testing.

Secretary/Treasurer

The Commission elected Paul Burks as Secretary/ Treasurer, which duties will include supervising and controlling the funds of the Commission and ensuring that the minutes of all Commission meetings are recorded, prepared, and distributed to each member of the Commission.

Burks has represented the State of Georgia since 1984. He has served on various committees of the Commission and as Chair of the Administrative Committee. After serving nearly 31 years in Georgia state government, Burks retired in 2006 as the Executive Director of the Georgia Environmental Facilities Authority (GEFA). Since 2008, he has worked on a consulting and part-time basis for the Carl Vinson Institute of Government of the University of Georgia. He currently serves as State Services Liaison for the Institute.

Background

The Southeast Compact for Low-Level Radioactive Waste Management is an agreement among six states—Alabama, Florida, Georgia, Mississippi, Tennessee, and Virginia—to provide for the responsible management of the region's low-level radioactive waste.

The Southeast Compact Commission oversees administration of the Compact.

For additional information, please contact Ted Buckner, Executive Director of the Southeast Compact Commission for Low-Level Radioactive Waste Management, at (919) 380-7780 or at tedb@secompact.org or go to the Southeast Compact Commission's web site at www.secompact.org.

New Mailing Address for the Southeast Compact Commission

On July 31, 2016, the Southeast Low-Level Radioactive Waste Compact Commission closed its physical office in Cary, North Carolina. Starting on August 1, 2016, the compact commission's two employees will be working out of their homes.

The Southeast Compact Commission's telephone number and email addresses remain the same. However, its new mailing address is as follows:

P.O. Box 5427
Cary, NC 27512

For additional information, please contact the Southeast Compact Commission at (919) 380-7780 or at secc@secompact.org or go to the compact commission's website at secc@secompact.org.

2017 Hodes Award Nominations Deadline Approaching

The Southeast Compact Commission for Low-Level Radioactive Waste Management is accepting nominations for the 2017 Richard S. Hodes, M.D. Honor Lecture Award—a program that recognizes an individual, company, or organization that contributed in a significant way to improving the technology, policy, or practices of low-level radioactive waste management in the United States.

The award recipient will present the innovation being recognized at a lecture during the Waste Management '17 Symposium in Phoenix, Arizona. The award recipient will receive a $5,000 honorarium and all travel expenses will be paid.

Nominations must be received by August 31, 2016 .

Background

Dr. Richard S. Hodes was a distinguished statesman and a lifetime scholar. He was one of the negotiators of the Southeast Compact law, in itself an innovative approach to public policy in waste management. He then served as the Chair of the Southeast Compact Commission for Low-Level Radioactive Waste Management from its inception in 1983 until his death in 2002.

Throughout his career, Dr. Hodes developed and supported innovation in medicine, law, public policy, and technology. The Richard S. Hodes, M.D. Honor Lecture Award was established in 2003 to honor the memory of Dr. Hodes and his achievements in the field of low-level radioactive waste management.

Past Recipients

The following individuals and entities are past recipients of the Richard S. Hodes, M.D. Honor Lecture Award:

- W.H. "Bud" Arrowsmith (2004);
- Texas A & M University Student Chapter of Advocates for Responsible Disposal in Texas (2004 *honorable mention*);
- William Dornsife (2005);
- California Radioactive Materials Management Forum (2006);
- Larry McNamara (2007);
- Michael Ryan (2008);
- Susan Jablonski (2009);
- Larry Camper (2010);
- Christine Gelles (2011);
- Lawrence "Rick" Jacobi (2012);
- James Kennedy (2013);
- Energy*Solutions*, the Utah Department of Environmental Quality (DEQ), the Conference of Radiation Control Program Directors (CRCPD), and the U.S. Department of Energy's (DOE) Global Threat Reduction Initiative (2013 *honorable mention*);
- Electric Power Research Institute (2014) ;
- Division of Radiation Control of the Utah DEQ and Energy*Solutions* (2015); and,
- Louis Centofanti (2016).

The Award

The Richard S. Hodes Honor Lecture Award—established in March, 2003—is awarded to an individual, company, or organization that contributed in a significant way to improving the technology, policy, or practices of low-level radioactive waste management in the United States.

The award recipient will be recognized with a special plaque and an invitation to present a lecture about the innovation during the annual international Waste Management Symposium (WM '17). The 2017 symposium is sponsored by

the University of Arizona and will be held in Phoenix, Arizona in the spring of 2017.

A special time is reserved during the Symposium for the lecture and the award presentation. The Southeast Compact Commission will provide the award recipient a $5,000 honorarium and will pay travel expenses and per diem (in accordance with Commission Travel Policies) for an individual to present the lecture.

Criteria

The Richard S. Hodes Honor Lecture Award recognizes innovation industry-wide. The award is not limited to any specific endeavor—contributions may be from any type of work with radioactive materials (nuclear energy, biomedical, research, etc.), or in any facet of that work, such as planning, production, maintenance, administration, or research. The types of innovations to be considered include, but are not limited to:

- conception and development of new approaches or practices in the prevention, management, and regulation of radioactive waste;
- new technologies or practices in the art and science of waste management; and,
- new educational approaches in the field of waste management.

The criteria for selection include:

1. *Innovation*. Is the improvement unique? Is it a fresh approach to a standard problem? Is it a visionary approach to an anticipated problem?
2. *Safety*. Does the practice enhance radiation protection?
3. *Economic*s. Does the approach produce significant cost savings to government, industry or the public?
4. *Transferability*. Is this new practice applicable in other settings and can it be replicated? Does it increase the body of technical knowledge across the industry?

Eligibility

To be eligible for the award, the individual/group must consent to being nominated and must be willing to prepare and present a lecture about the innovation being recognized at the Waste Management Symposium. Individuals or organizations can nominate themselves or another individual, company, institution, or organization.

Nominations

To nominate yourself or another individual, company, or organization for this distinguished award, please contact:

Awards Committee
c/o Ted Buckner
Executive Director
Southeast Compact Commission
Post Office Box 5427
Cary, NC 27512-5427
(919) 380-7780
tedb@secompact.org

or visit the Southeast Compact Commission's website at http://www.secompact.org/.

Nominations must be received by August 31, 2016.

Texas Low-Level Radioactive Waste Disposal Compact Commission

Texas Compact Commission Holds August 2016 Meeting

On August 11, 2016, the Texas Low-Level Radioactive Waste Disposal Compact Commission (Texas Compact Commission) held a regularly scheduled meeting in Austin, Texas.

The meeting began at 9:00 a.m. CDT. It was held in Room E1.028 at the Texas State Capitol, which is located at 1100 Congress Avenue in Austin, Texas.

The formal meeting agenda is available on the Texas Compact Commission's web site at www.tllrwdcc.org.

Agenda

The following is an abbreviated overview of the agenda for the Texas Compact Commission meeting.

- call to order;
- roll call and determination of quorum;
- introduction of Commissioners, elected officials and press;
- public comment;
- consideration of and possible action on applications and proposed agreements for importation of low-level radioactive waste from Xcel - Prairie Island; PerkinElmer; Entergy – Palisades; Thermo Process Instruments; Bionomics; and, Entergy - Riverbend;
- consideration of and possible action on applications on petitions and proposed orders for exportation of low-level radioactive waste from Alcon; Texas Children's Hospital; and, Texas A&M;
- receive reports from Waste Control Specialists LLC (WCS) about recent site operations and any other matter WCS wishes to bring to the attention of the Texas Compact Commission;
- receive reports from Texas Compact Commission committees including the Rules Committee (as Chaired by Commissioner Morris) and the Capacity Committee (as Chaired by Commissioner Weber);
- reconsideration of and possible action to adopt the Texas Compact Commission's annual budget estimates for FY 2018 and FY 2019 pursuant to Article VI, Section Two of the Bylaws in light of the Legislative Appropriations Request to the State of Texas Legislative Budget Board for FY 2018 and FY 2019;
- consideration, evaluation and possible action with respect to contract employees Leigh Ing, Andrew Tachovsky, Diane Fulmer and Eric Woomer;
- consideration, evaluation and possible action with respect to the renewal, extension or dismissal of the contract with DigITech Web Design;
- consideration and possible action to authorize the Chair to execute a contract, not to exceed $25,000, with an attorney to assist in matters associated with the laws and operations of interstate compacts;
- Chairman's report on Texas Compact Commission activities including reporting on fiscal matters to be taken by the compact and addressing personnel matters;
- report from Leigh Ing, Executive Director of the Texas Compact Commission, on her activities and questions related to Texas Compact Commission operations;
- discussion and possible changes of dates and locations of future Texas Compact Commission meetings in 2016 and 2017; and,
- adjourn.

Background

The Texas Compact Commission may meet in closed session as authorized by the Texas Open Meetings Act, Chapter 551, Texas Government Code. Texas Compact Commission meetings are open to the public.

For additional information, please contact Texas Compact Commission Executive Director Leigh Ing at (512) 305-8941 or at leigh.ing@tllrwdcc.org.

State of New York

New York Issues 30th Annual Low-Level Waste Status Report

In July 2016, the New York State Energy and Research Development Authority (NYSERDA) released the thirtieth annual *New York State Low-Level Radioactive Waste Status Report.*

The report, which covers calendar year 2015, is available on NYSERDA's website at www.nyserda.ny.gov/llw-reporting.

Overview

The 2015 Status Report provides data on the volume and activity of low-level radioactive waste shipped to out-of-state disposal sites. It also includes data on low-level radioactive waste stored at the end of the year pending disposal.

Background

The New York State Low-Level Radioactive Waste Management Act (Chapter 673, Laws of 1986) requires facilities in the State of New York that produce low-level radioactive waste to file annual reports with NYSERDA detailing the types and quantities of waste generated. The Act further requires NYSERDA to prepare an annual status report summarizing this information and to submit the report to the Governor and the New York state legislature.

For additional information, please contact Alyse Peterson, NYSERDA's Senior Project Manager for Radioactive Waste Policy and Nuclear Coordination, at (518) 862-1090 ext. 3274 or at alp@nyserda.ny.gov.

(Continued from page 1)
purchase devices containing, in aggregate, a dangerous quantity of radioactive materials.

In 2008, however, GAO found that NRC had worked with the Agreement States and others to

- identify sealed sources of greatest concern;
- enhance requirements to secure radioactive sources; and,
- ensure that security requirements were implemented.

In addition, GAO found that NRC had made progress toward implementing recommendations to

- modify its process for issuing licenses to ensure that radioactive materials cannot be purchased by those with no legitimate need for them; and,
- examine whether certain radioactive sources should be subject to more stringent regulations.

Nonetheless, the 2008 GAO work also found that NRC could do more to ensure the security of radioactive materials. Specifically, GAO recommended that, among other things, NRC take steps to develop and implement the systems it was then planning to better track, secure and control radioactive materials

The Committee on Homeland Security then asked GAO to review and assess the steps NRC and the Agreement States have taken to strengthen their licensing processes since the 2007 covert vulnerability testing and subsequent 2008 GAO report.

Methodology

In preparing the new report, GAO reviewed relevant guidance documents, regulations, and analyses of orders. GAO also interviewed NRC and state officials.

In addition, GAO tested the effectiveness of the NRC and Agreement State controls through the use of covert investigative techniques. Specifically, GAO established fictitious businesses and applied for radioactive materials licenses in three states—two Agreement States and one NRC state—for a license to possess a Category 3 source only slightly below the threshold for Category 2.

In all three states, GAO leased vacant space in an industrial or office park. GAO made no attempt to outfit the sites to make it appear as if legitimate businesses were operating there. Instead, GAO used these spaces as the physical addresses of fictitious businesses and these locations were later the subject of pre-licensing site visits by Agreement State or NRC officials as part their pre-licensing reviews of GAO's applications.

GAO selected the three states based on a non-generalizable sampling strategy focusing on states with a history of issuing the largest numbers of radioactive materials licenses for the type of devices GAO sought for its fictitious businesses and, in one case, a state that GAO believes to have a history of weaknesses in its radioactive materials regulatory program.

Findings

GAO-16-330 finds that the NRC and Agreement States have taken several steps since 2007 to help ensure that licenses are granted only to legitimate organizations and that licensees can only obtain such materials in quantities allowed by their licenses.

However, GAO determined that NRC and Agreement States have not taken some measures to better control some dangerous quantities of radioactive materials that could be used in a "dirty bomb," which uses explosives to disperse radioactive material.

Screening Criteria, Site Visit Checklist and Guidance The International Atomic Energy Agency (IAEA) established a system ranking quantities of certain radioactive materials into five categories based on their potential to harm human health. In descending order of danger, Categories 1, 2, and 3 are all considered dangerous under the IAEA system.

NRC developed revised guidance, screening criteria, and a checklist, among other things, and now directs NRC regions and Agreement States to conduct pre-licensing site visits that focus on questions related to the applicant's business operations, facility, radiation safety operations, and personnel qualifications for all unknown applicants.

GAO-16-330 finds, however, that NRC has not strengthened controls for all categories of radioactive material considered dangerous. Specifically, unlike its process for applicants for Category 1 and 2 quantities of radioactive materials, NRC does not review specific security measures before a license is issued for Category 3 applicants.

Tracking, Licensing and Verification Systems NRC has also developed and deployed the National Source Tracking System (NSTS), the Web-based Licensing System (WBL), and the License Verification System (LVS) to better control some materials. However, GAO-16-330 notes that these systems focus on more dangerous Category 1 and 2 quantities, but not Category 3 quantities. Further, NRC does not specifically require that the validity of Category 3 licenses be verified by the seller with NRC or the Agreement States—creating risks that licenses could be counterfeited or that licensees could obtain radioactive materials in quantities greater than what is allowed by their licenses.

Covert Testing Results GAO's covert testing of NRC requirements showed them to be effective in two out of three cases. In the third case, however, GAO was able to obtain a license. GAO altered the license and secured commitments from two companies to purchase—by accumulating multiple Category 3 quantities of materials—a Category 2 quantity of a radioactive material considered attractive for use in a dirty bomb.

In the two cases where GAO was unable to obtain a license, the scrutiny provided by NRC or Agreement State (regulatory body) officials during the pre-licensing site visit led to the license not being granted. In the third case, the official from the regulatory body accepted GAO's assurances without scrutinizing key aspects of the fictitious business, which led to a license being obtained.

Corrective Actions Upon learning of the GAO actions, NRC immediately confirmed that the Agreement State knew that the license was obtained under false pretenses and revoked it, as well as notified manufacturers and distributors of the revocation. NRC also made sure that the 36 other Agreement States knew about the issue.

Working with the Agreement State that issued the license, NRC found that the licensing staff did not complete all the required steps of the pre-licensing procedures. NRC has taken corrective actions to provide training to NRC and Agreement State officials to emphasize greater scrutiny in conducting pre-licensing site visits. All licensing and inspection staff at the NRC and in the Agreement States completed this re-training in December 2015.

NRC and Agreement State officials also formed working groups to identify lessons learned from the GAO operation. The groups, which have been meeting since January 2016, are currently developing and evaluating enhancements to pre-licensing guidance overall, as well as to license verification and transfer requirements for Category 3 licenses. Once this work is completed, NRC staff will present to agency management and Commissioners any policy questions that emerge from the reviews, including

whether staff believes that changes are needed to the current security and tracking requirements for radioactive materials.

Recommendations

Because some quantities of radioactive materials are potentially dangerous to human health if not properly handled, GAO recommends that NRC take action to better track and secure these materials and verify the legitimacy of the licenses for those who seek to possess them.

Specifically, GAO recommends that NRC take the following three actions:

- take the steps needed to include Category 3 sources in the NSTS and add Agreement State Category 3 licenses to the WBL as quickly as reasonably possible;
- at least until such time that Category 3 licenses can be verified using the LVS, require that transferors of Category 3 quantities of radioactive materials confirm the validity of a would-be purchaser's radioactive materials license with the appropriate regulatory authority before transferring any Category 3 quantities of licensed materials; and,
- as part of the ongoing efforts of NRC working groups meeting to develop enhancements to the pre-licensing requirements for Category 3 licenses, consider requiring that an on-site security review be conducted for all unknown applicants of Category 3 licenses to verify that each applicant is prepared to implement the required security measures before taking possession of licensed radioactive materials.

GAO provided a draft of GAO-16-330 to NRC for comment. NRC neither agreed nor disagreed with GAO's recommendations, but noted that the agency has formal evaluations underway considering all three recommendations.

For additional information, please contact David Trimble at (202) 512-3841 or at trimbled@gao.gov.

U.S. Congress

Annual Report to Congress Published re Nuclear Security Inspections

On June 30, 2016, an unclassified version of the annual report to Congress from the U.S. Nuclear Regulatory Commission (NRC) was made available to the public. The report, which is required under the Energy Policy Act of 2005, details the previous year's security inspection program.

A copy of the report can be found at www.nrc.gov/docs/ML1608/ML16081A367.pdf.

Overview

The report covers the NRC's security inspection program, including force-on-force exercises, for commercial nuclear power reactors and Category I fuel cycle facilities for calendar year 2015.

In 2015, the NRC conducted 242 security inspections at commercial nuclear power plants and Category I fuel cycle facilities. Those included 22 force-on-force inspections, involving simulated attacks on the facilities to test the effectiveness of a licensee's security. The NRC's security program and publicly available results of the inspections are discussed in the report.

Background

Whenever NRC inspectors identify a security finding during an inspection, they ensure the licensee implements appropriate compensatory measures to correct the situation. Details of security findings are considered sensitive and not released to the public.

"The report provides information regarding the overall security and safeguards performance of

the commercial nuclear power industry and Category I fuel cycle facilities to keep Congress informed of the NRC's efforts to oversee the protection of the nation's civilian nuclear power infrastructure and strategic special nuclear material against terrorist attacks," said NRC Chair Stephen Burns.

For additional information, please contact Maureen Conley of the NRC at (301) 415-8200.

Nuclear Power Plants and Other NRC Licensees

News Briefs for Nuclear Power Plants Across the Country

The following news briefs provide updates on recent activities, enforcement actions and general events at nuclear power plants and other licensees around the country. The briefs are organized by compact and state.

For additional information, please contact the referenced facility or licensee.

Atlantic Compact/States of New Jersey and South Carolina

Tetra Tech EC, Inc. On July 29, 2016, the U.S. Nuclear Regulatory Commission (NRC) announced that the agency has cited New Jersey company Tetra Tech EC, Inc. for an apparent violation of NRC requirements that occurred at the U.S. Navy's Hunter's Point Naval Shipyard site in California. The agency proposed a $7,000 fine. Hunter's Point is being remediated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, with Environmental Protection Agency (EPA) oversight. The Department of the Navy contracted with Tetra Tech to assist with the regulatory free-release and closure of the radiologically impacted buildings and sites at the shipyard, under the Navy's Base Realignment and Closure mandate. The NRC has jurisdiction over the northeast portion of the shipyard. NRC oversight involves ensuring that contractors with NRC service provider licenses, such as Tetra Tech, are conducting remediation activities safely. NRC is not overseeing the decommissioning of the site. The Navy identified discrepancies in the soil sample survey data and Tetra Tech conducted an investigation to identify the inaccurate records. After the company reported the discrepancies to the NRC, an agency investigation was conducted. The investigation determined that two Tetra Tech employees, who worked within NRC jurisdiction, deliberately falsified soil samples on a number of occasions in late 2011 through the summer of 2012. When tasked with obtaining soil samples to ascertain the amount of residual radioactivity in certain locations within Parcel C, the workers instead obtained soil samples from other areas that were suspected to be less contaminated and then created documents indicating the work had been done as expected. The company has since taken actions to prevent recurrence. Tetra Tech has been issued a notice of violation for failing to make surveys within Parcel C that were reasonable to evaluate concentrations of residual radioactivity in the soil. "Although the NRC investigation did not find information to suggest buildings, land or materials were inappropriately released for unrestricted use, the failure to perform reasonable surveys is a significant concern because that potential did exist," said Region I Administrator Dan Dorman. Tetra Tech is not required to respond to the notice of violation because the company has already provided information on the reason for the violation and the actions taken to prevent recurrence. The company was given 30 days to pay the proposed civil penalty or to request in writing that all or part of it be withdrawn. *For additional information, please contact Diane Screnci at (610) 337-5330 or Neil Sheehan at (610) 337-5331.*

Westinghouse Nuclear Fuel Plant On August 12, 2016, NRC announced that the agency has

sent a Confirmatory Action Letter to the Westinghouse nuclear fuel fabrication facility in Columbia, South Carolina acknowledging corrective action commitments the company will complete before restarting some of its uranium processing operations. In May 2016, during an annual maintenance shutdown, plant employees discovered an accumulation of uranium-bearing material in a scrubber system, which is designed to remove unwanted material from a number of plant processes. There were no actual safety-related consequences as a result of the accumulation of the material, but the potential for such consequences may have existed. After an analysis showed the amount of uranium was much higher than anticipated, the NRC launched an inspection to review the issue. The still-ongoing inspection prompted the need for the Confirmatory Action Letter (CAL), which outlines a series of corrective actions Westinghouse has already taken or will perform before NRC-licensed operations involving the scrubber system can be resumed. Those actions include shutting down affected systems in the facility, performing a root cause analysis investigation of the event, conducting a review and revision of safety culture, updating maintenance and management procedures, installing physical modifications to the system, training personnel operating and maintaining the system, reviewing other potentially affected systems, and the retaining an external nuclear criticality safety expert to oversee such functions. "The commitments outlined in the CAL will greatly reduce the likelihood of such incidents in the future," said NRC Region II Administrator Cathy Haney. "Westinghouse management has cooperated fully and has assured us of their commitment to these corrective actions and continued safe operations." The issuance of the CAL does not preclude the NRC from taking other actions for any violations of NRC requirements that may be identified. The NRC inspection into the issue includes visits to the facility and in-office reviews of the findings. A report will be issued within 30 days of the completion of the inspection. *For additional information, please contact Roger Hannah at (404) 997-4417 or Joey Ledford at (404) 997-4416.*

William States Lee Site On August 3, 2016, NRC announced that staff has completed its Final Safety Evaluation Report for Combined Licenses for two proposed reactors at the William States Lee site. The report concludes there are no safety aspects that would preclude issuing the licenses for construction and operation of the proposed reactors at the site, which is located near Gaffney in Cherokee County, South Carolina. The staff will provide the report and Final Environmental Impact Statement on the application to the Commission for the mandatory hearing phase of the licensing process. In the mandatory hearing, expected to take place later this year, the Commission will examine whether the staff's review supports the findings necessary to issue the licenses. Following the mandatory hearing, the Commission will vote on whether to authorize the staff to issue the licenses. Duke Energy submitted its application for the William States Lee site on December 12, 2007, which seeks permission to build and operate two AP1000 nuclear reactors at the site. The NRC certified the amended 1,100-megawatt AP1000 design in 2012. The NRC's Advisory Committee on Reactor Safeguards (ACRS) independently reviewed those aspects of the application that concern safety. The committee provided the results of its review to the Commission on December 14, 2015. The NRC completed its environmental review and issued the final impact statement for the proposed William States Lee reactors in December 2013. *For additional information, please contact Scott Burnell of the NRC at (301) 415-8200.*

Midwest Compact/State of Indiana

Patriot Engineering and Environmental Inc. On July 13, 2016, NRC announced that the agency has proposed a $3,500 civil penalty against Patriot Engineering and Environmental

Inc. for the failure to control licensed radioactive material. The company is based in Indianapolis, Indiana. It uses portable nuclear gauges for measuring construction materials. The violation was identified during an NRC inspection of an incident where a portable density gauge was run over by a vehicle and damaged. The nuclear material inside the gauge was not damaged and remained intact. "Even though no one was harmed, it could have impacted the health and safety of the workers at the jobsite," said NRC Region III Administrator Cynthia Pederson. "We expect companies to ensure NRC regulations are being followed to protect workers and the environment. Our actions show the importance we place on controlling nuclear material." The event occurred at a job site in Indianapolis on March 8, 2016. Once the violation of NRC requirements was identified, the company took corrective actions. The NRC will conduct a follow-up inspection to verify the company's actions are effective and prevent recurrence. *A copy of the Notice of Violation will be posted on the NRC's ADAMS online database at www.adams.nrc.gov. For additional information, please contact Viktoria Mitlyng at (630) 829-9662 or Prema Chandrathil at (630) 829-9663.*

Northwest Compact/States of Alaska and Wyoming

Acuren USA On July 8, 2016, NRC announced that the agency has issued a $7,000 civil penalty to Acuren USA for violations of NRC regulations related to its industrial radiographic operations at a facility in Kenai, Alaska. The company is licensed to use radioactive materials in devices for making images of pipe welds. On April 10, 2014, inspectors walking around the outside of the facility during an unannounced inspection observed high readings on their radiation survey meters in an area without boundaries or physical controls to prevent entry by the public during radiography operations. An initial dose estimate performed by the inspectors indicated that, had a member of the public been standing next to the building during the time the radiography operations were conducted on that day, that person could have been exposed to radiation in excess of NRC annual limits (100 millirem). In addition, the inspectors were concerned that over the course of a year, members of the public employed in a nearby office had the potential to receive a dose in excess of NRC annual limits. The NRC determined that no members of the public had received radiation exposures as a result of the company's failure to establish required controls. The company has taken numerous corrective actions designed to ensure safe operations at the Kenai facility. In May, NRC staff met with company officials to discuss results of the NRC inspection before determining that seven violations of NRC regulations had occurred, including two that were willful. In March, NRC issued an inspection report that identified the violations. *For additional information, please contact Victor Dricks at (817) 200-1128.*

Reno Creek In Situ Recovery Project NRC is asking the public to comment on a draft report on the environmental impacts from a new uranium recovery facility proposed for Wright, Wyoming in Campbell County. The report contains the NRC's preliminary conclusion that the environmental impacts of the Reno Creek in situ uranium recovery facility would not preclude issuing a license to operate for 20 years. In October 2012, AUC LLC applied for the license necessary to build, operate and ultimately decommission the proposed facility. Reno Creek would use the in situ leach process to recover uranium from underground ore and convert the recovered uranium into yellowcake for use in the production of nuclear fuel. The NRC draft report analyzes environmental impacts specific to the Reno Creek site, and mitigation strategies to reduce or avoid adverse effects on the surrounding environment. The staff is conducting a separate technical review to analyze safety aspects of the application. The NRC expects to complete that review by September 30, 2016. The NRC published a notice asking for comments in the *Federal Register* dated July 7, 2016. The

notice includes details on how to submit comments. On July 21, 2016, the NRC extended the comment period until September 6, 2016. *Additional information on the application can be found on the NRC's website at www.nrc.gov. For additional information, please contact Maureen Conley of the NRC at (301) 415-8200.*

Southeast Compact/States of Georgia and Florida

Applied Technical Services, Inc. On July 28, 2016, NRC announced that the agency is proposing a $7,000 civil penalty for a Georgia-based company for failing to comply with agency requirements while performing industrial radiography work at a job site in Virginia. On October 20, 2015, a radiographer for Applied Technical Services (ATS) Inc., of Marietta, Georgia was using radiography equipment to check on a pipe weld at the National Aeronautics and Space Administration's (NASA) Langley Research Center when the NRC conducted an unannounced safety inspection and identified several concerns. Issues found during that inspection also triggered an investigation by the NRC's Office of Investigation. Based on the results of both the inspection and investigation, the NRC has identified three violations of NRC regulations: (1) a failure to post conspicuous radiation or high radiation signs to establish a clear boundary in an area where industrial radiography was being performed; (2) a failure to conduct a radiological survey of the camera guide tube after taking a pipe weld image; and, (3) a failure to comply with a condition of the company's nuclear materials license from the State of Georgia that requires continuous direct visual surveillance of the radiography work to guard against unauthorized entries into the radiation area. ATS is a consulting engineering firm that holds nuclear materials licenses from both the NRC and Georgia. As an NRC Agreement State, Georgia issued the company a license allowing it to perform radiography work within its borders and in other Agreement States. When the firm is working at federal facilities, such as the NASA site, it falls under the jurisdiction of the NRC. The NRC is also issuing a Severity Level III Notice of Violation to the radiographer for deliberately failing to post warnings in the area where the industrial radiography was being performed. "Contrary to NRC regulations, radiography work was being performed in this case without the proper precautions in places. These steps are required for the protection of both the public and those performing the activities," NRC Region I Administrator Dan Dorman said. "While no one was harmed by this breach of requirements, the lack of adherence to these important requirements is unacceptable." *For additional information, please contact Diane Screnci at (610) 337-5330 or Neil Sheehan at (610) 337-5331.*

Vogtle Nuclear Plant On August 3, 2016, an NRC Atomic Safety and Licensing Board (ASLB) held a teleconference to hear oral arguments on a hearing request regarding a license amendment request for two new reactors at the Vogtle site in Georgia. The board is the independent body within the NRC that conducts adjudicatory hearings and renders decisions on legal challenges to licensing actions. The Board heard arguments on contentions filed by the Blue Ridge Environmental Defense League and its chapter, Concerned Citizens of Shell Bluff. The contentions challenge Southern Nuclear's request to amend details of the Vogtle new reactor licenses regarding safety features called hydrogen igniters. Members of the public and media were allowed to observe the teleconference in person or listen via telephone, but participation was limited to the parties, lawyers and witnesses. Documents related to the hearing request are available on the NRC's Electronic Hearing Docket by clicking on the folder entitled "Vogtle 52-025 and 52-026-LA -2" on the left side of the page. *Additional information about the role of the ASLB in the licensing process is available on the NRC web site at www.nrc.gov. For additional information, please contact Scott Burnell of the NRC at (301) 415-8200.*

Levy County New Reactor Application On July 28, 2016, NRC conducted a mandatory hearing on an application for Combined Licenses (COL) to build and operate two new reactors at the Levy County site in Florida. This hearing marks the final step in the agency's Part 52 reactor licensing process. The Commission's hearing included testimony and exhibits from applicant Duke Energy Florida (DEF), as well as NRC staff, on the question of whether the staff's review adequately supports the findings necessary to issue the licenses. DEF is applying for permission to build and operate two AP1000 reactors at the site, which is located approximately 30 miles west of Ocala, Florida. On July 28, 2008, DEF (formerly Progress Energy Florida) submitted the COL application. The NRC certified the 1,100-megawatt AP1000 design in 2011. The NRC's Advisory Committee on Reactor Safeguards (ACRS) independently reviewed aspects of the application that concern safety, as well as the staff's final safety evaluation report (FSER). On December 7, 2011, the Committee provided the results of its review to the Commission. On April 18, 2016, the Committee provided the results of its review of several exemption requests. In April 2012, the NRC completed its environmental review and issued the final Environmental Impact Statement. On June 6, 2016, the NRC completed and issued the FSER. *For additional information, please contact Scott Burnell of the NRC at (301) 415-8200.*

Michigan

DC Cook Nuclear Plant On July 6, 2016, an incident at the DC Cook Nuclear Plant, Unit 2, resulted the declaration of an Unusual Event—the lowest level of alert on the NRC's emergency response scale. The NRC is reviewing the circumstances around the incident, which involved a steam line rupture and subsequent damage to a turbine-building wall on the non-nuclear side of Unit 2. According to NRC, the incident did not impact public health and safety. Unit 2 was manually shut down in a stable condition and the Unusual Event was terminated an hour and 15 minutes later. Unit 1 remains at full power. An NRC resident inspector immediately responded to the plant after being notified of the event to closely follow the company's actions. NRC inspectors at the site and in the NRC Region III office in Lisle, Illinois are independently evaluating the company's response to the situation and the plant's assessment of what caused the steam pipe rupture, and will review repairs as they occur. DC Cook, operated by Indiana Michigan Power Company, is located in Bridgman, Michigan—approximately 13 miles south of Benton Harbor. *For additional information, please contact Viktoria Mitlyng at (630) 829-9662 or Prema Chandrathil at (630) 829-9663.*

Nebraska

Omaha VA's Decommissioned Research Reactor On August 1, 2016, after reviewing the Department of Veterans Affairs' radiation survey following decommissioning of its Omaha research reactor, the NRC announced that it has terminated the facility's license and released the site for unrestricted use. The Alan J. Blotcky Reactor Facility operated from June 1959 through November 2001 for neutron activation of biological samples, as well as training operators at the Fort Calhoun nuclear power plant. In November 2015, the NRC approved the VA's plan for conducting a final status survey, which must show that the site meets the NRC's requirements before it can be released without restrictions on public access or use. The VA submitted that survey and requested license termination in February 2016. NRC staff evaluated the survey, conducted inspections and reviewed confirmatory analyses before concluding that decommissioning was completed in accordance with NRC-approved plans and that the site meets NRC criteria for license termination. *For additional information, please contact Maureen Conley at (301) 415-8200.*

US Ecology, Inc.

US Ecology to Acquire Los Angeles-Area Treatment Facility

By press release dated August 4, 2016, US Ecology, Inc. announced that it has entered into an agreement to acquire the assets of the Vernon, California-based Resource Conservation and Recovery Act (RCRA) Part B, liquids and solids waste treatment and storage facility of Evoqua Water Technologies LLC.

According to the press release, the Vernon facility will expand US Ecology's market and competitive position in Southern California; leverage the company's existing fixed facilities; and, allow US Ecology to better service its customers.

Terms of the transaction were not disclosed.

Overview

The Vernon facility, located approximately five miles southeast of downtown Los Angeles, is focused on the treatment, storage, recycling and offsite shipment of wastewaters, sludges and solids. Current capabilities include neutralization and precipitation of corrosive and metal bearing wastes, carbon adsorption of trace organic wastes, oil water separation, and hazardous waste storage and bulking for offsite shipment.

"The addition of the Vernon facility places us closer to our customers in the Southern California market with new capabilities," commented US Ecology Chairman and CEO Jeff Feeler. "It will also allow us to leverage our existing sales effort, streamline waste handling for our customers and internalize certain waste streams, while complementing our treatment and disposal assets in Nevada. This high quality permitted facility is strategically located in a key market and will provide opportunities for synergies and enhance growth across our Environmental Services and Field and Industrial Services businesses."

The transaction is expected to close in the fourth quarter of 2016 and will be reported as part of US Ecology's Environmental Services segment. Its financial contribution to the company is not expected to have a material impact on US Ecology's previously provided 2016 earnings guidance, which was reaffirmed on July 28, 2016 in conjunction with the Company's second quarter earnings release.

Background

US Ecology is a leading North American provider of environmental services to commercial and government entities. The company addresses the complex waste management needs of its customers, offering treatment, disposal and recycling of hazardous, non-hazardous and radioactive waste, as well as a wide range of complementary field and industrial services.

Headquartered in Boise, Idaho, with operations in the United States, Canada and Mexico, US Ecology has been operating since 1952.

For additional information, please go to www.usecology.com.

Advisory Committee on Reactor Safeguards (ACRS)

Four New Members Named to Advisory Committee on Reactor Safeguards

In late June 2016, the U.S. Nuclear Regulatory Commission (NRC) announced that the agency has appointed four new members to the Advisory Committee on Reactor Safeguards (ACRS) for four-year terms effective June 12, 2016.

The ACRS—which is comprised of a group of experienced technical experts—advises the Commission, independently from the NRC staff, on safety issues related to the licensing and operation of nuclear power plants, as well as issues of health physics and radiation protection.

New ACRS Members

The new ACRS members include:

- Margaret Sze-Tai Chu: Chu is a consultant to international and domestic clients on nuclear waste management, nuclear fuel cycle analysis, nonproliferation technologies and nuclear materials management. She has more than 30 years of experience working on issues related to the nuclear fuel cycle, with an emphasis on risk assessment and performance assessment as applied to nuclear waste management. Chu was Director of the U.S. Department of Energy's (DOE's) Office of Civilian Radioactive Waste Management from 2002 to 2005. Before that, she had a long career with Sandia National Laboratory that included directing the lab's Nuclear Waste Management Center and acting as Senior Manager of the Waste Isolation Pilot Plant (WIPP) program at Sandia. Chu holds a Bachelor of Science degree in Chemistry from Purdue University and a Doctorate in Physical Chemistry from the University of Minnesota. She serves on the DOE Nuclear Energy Advisory Committee and the National Academies' Nuclear and Radiation Studies Board. Chu is the second woman to serve on the ACRS, and this marks the first time two women have served on the committee simultaneously.

- Walter Kirchner: Kirchner retired in June 2015 from the Argonne National Laboratory. While at Argonne, he served as an Institutional Liaison Manager following, analyzing, and advising Argonne's leaders on science and technology policy and programmatic developments in the DOE, other federal agencies and Congress. He began his career as a Reactor Operator/ Engineering Officer on the N.S. Savannah before joining the staff at Los Alamos National Laboratory (LANL). During his 29 years at LANL, he held division and group leader line management positions in construction project management, defense programs, nuclear reactor design and safety projects, and applied energy research and development activities. Kirchner's technical expertise is in nuclear reactor design, thermal-hydraulics and nuclear reactor safety. He holds a Bachelor of Science degree in Marine Engineering from the U.S. Merchant Marine Academy, and an M.S. and Ph.D. in Nuclear Engineering from the Massachusetts Institute of Technology.

- Jose March-Leuba: March-Leuba is the Principal of MRU, which specializes on measurements, regulatory and uncertainty analysis, and an Associate Professor in the Nuclear Engineering Department of the University of Tennessee, Knoxville. He began his career at the Oak Ridge National Laboratory, where he did research into noise

analysis and dynamic modeling, as well as running tests to determine the stability of commercial boiling water reactors. He also developed and installed instrumentation in Russian facilities to monitor the down-blending of highly enriched uranium. During his 37-year career as a Nuclear Engineer, March-Leuba developed expertise in reactor thermal hydraulics and dynamics, reactor instrumentation and control and protection systems, software development and testing, and instrumentation development for international safeguards. March-Leuba has a Master of Science in Industrial Engineering from the Universidad Politécnica de Valencia in Spain, as well as an M.S. and Ph.D. in Nuclear Engineering from the University of Tennessee, Knoxville.

- Matthew Sunseri: Sunseri is an Independent Nuclear Industry Consultant with more than 35 years of experience in the safe operation of large commercial reactors. Prior to starting his own executive consulting practice, he was President and Chief Executive Officer of Wolf Creek Nuclear Operating Corporation. Sunseri has a wide range of experience in the operation, maintenance, engineering, oversight and security of the nation's commercial nuclear power fleet. He started his career as a Nuclear Engineer assigned to the construction, licensing, startup and operation of the Comanche Peak nuclear power plant. Sunseri earned his Bachelor of Science degree in Nuclear Engineering from Texas A&M University and is a graduate of the Advanced General Management Program at Northwestern University and the Directors Institute at Emory University.

Other ACRS Members

The other members of the ACRS include:

- Dennis Bley (Chair)—President of Buttonwood Consulting, Inc. in Oakton, Virginia;
- Michael Corradini (Vice Chair)—Professor in the Engineering Physics Department at the University of Wisconsin, Madison;
- Peter Riccardella (Member-at-Large)—Authority on the structural integrity of nuclear power plant components;
- Ronald Ballinger—Professor of Nuclear Science, Materials Science and Engineering and Head of the H.H. Uhlig Corrosion Laboratory at the Massachusetts Institute of Technology;
- Charles Brown, Jr.—Senior Advisor for electrical systems for BMT Syntek Technologies, Inc. in Arlington, Virginia;
- Dana Powers—Retired Senior Scientist for Sandia National Laboratories in Albuquerque, New Mexico;
- Harold Ray—Retired Chief Executive Vice President of Southern California Edison Company in Rosemead, California;
- Joy Rempe—Retired Laboratory Fellow and Group Leader at the Idaho National Laboratory in Idaho Falls, Idaho;
- Gordon Skillman—Independent Consultant in nuclear power plant design and registered Professional Engineer in Pennsylvania and Virginia; and,
- John Stetkar—Principal of Stetkar and Associates in Lake Forest, California.

All member biographies are available on the NRC web site at www.nrc.gov.

For additional information, please contact Maureen Conley of the NRC at (301) 415-8200.

U.S. Department of Energy (DOE) and U.S. Nuclear Regulatory Commission (NRC)

NRC Makes Yucca Mountain Hearing Documents Publicly Available

By press release dated August 19, 2016, the U.S. Nuclear Regulatory Commission (NRC) announced that the agency has made nearly 3.7 million documents from the adjudicatory hearing on the proposed nuclear waste repository at Nevada's Yucca Mountain publicly available in the agency's online documents database.

Background

The documents were formerly part of the Licensing Support Network (LSN) created to allow various parties and the public access to documents needed for the hearing on the U.S. Department of Energy's request for a construction authorization for the repository. The NRC's Atomic Safety and Licensing Boards had admitted nearly 300 contentions from various parties challenging aspects of DOE's application. The LSN was shut down when the hearing was suspended in September 2011 after Congress reduced funding.

In August 2013, the U.S. Court of Appeals for the District of Columbia Circuit ordered the NRC to resume its review of the application using the remaining previously appropriated funds. In response, NRC staff completed the Safety Evaluation Report (SER) in January 2015 and a supplement to DOE's Environmental Impact Statement (EIS) in May 2016.

Overview

The LSN documents were placed in the NRC's online documents database, known as ADAMS, to comply with federal records requirements and assist the staff in completing the safety review. At that time, only LSN documents submitted by the staff were publicly available. However, the Commission directed that all LSN documents be made publicly available in ADAMS once the staff completed its license review activities.

The new LSN Library in ADAMS includes enhanced search capabilities as well as an online user's guide. The NRC Public Document Room reference staff is also available to provide LSN Library assistance and can be reached at (301) 415-4737 or at (800) 397-4209 from 8:00 a.m. to 4:00 p.m. ET Monday through Friday, except federal holidays.

For additional information, please contact David McIntyre of the NRC at (301) 415-8200.

U.S. Environmental Protection Agency (EPA)

EPA Publishes User Fees for Electronic Hazardous Waste Management System and Amendments to Manifest Regulations

On July 26, 2016, the U.S. Environmental Protection Agency (EPA) published a notice in the *Federal Register* announcing user fees for its electronic hazardous waste management system and amendments to manifest regulations.

The EPA notice was published at 81 Federal Register 49,072 dated July 26, 2016.

Overview

The EPA is proposing its user fee methodology applicable to electronic and paper manifests submitted to the national electronic manifest system (or e-Manifest system) that is being established by EPA under the Hazardous Waste Electronic Manifest Establishment Act. After the implementation date for the e-Manifest system, certain users of the hazardous waste manifest would be required to pay a prescribed fee for each electronic and paper manifest they use and submit to the system in order for EPA to recover its costs of developing and operating the national e-Manifest system. The final rule that EPA develops in response to public comments on this action's proposed fee methodology will include the final fee methodology. In addition, EPA will include the initial fee schedule and the implementation date for the e- Manifest system in the preamble to the final rule.

EPA is also proposing several amendments to the regulations governing the use of electronic hazardous waste manifests and the completion of manifests. These amendments propose:

- to change EPA's longstanding regulations regarding transporter changes to shipment routing information on the manifest during transportation;
- to specify a process by which receiving facilities may submit manifest data corrections to the e- Manifest system; and,
- to modify a provision of the current electronic manifest use requirements that precludes the use of mixed electronic and paper manifests by those users desiring to make use of electronic manifests in settings where not all users are able to participate electronically.

EPA's action is expected to result in net cost savings amounting to $34 million per year when discounted at 7% and annualized over 6 years.

Comments

Comments must be received on or before September 26, 2016. Under the Paperwork Reduction Act (PRA), comments on the information collection provisions are best assured of consideration if the Office of Management and Budget (OMB) receives a copy of stakeholder comments on or before August 25, 2016.

For this rule, EPA is requesting comments be submitted electronically on a comment platform being piloted at *https://epa- notice.usa.gov.* Alternatively, stakeholders may choose to submit comments by postal mail or electronically through *Regulations.gov*. For comments submitted via postal mail or *Regulations.gov*, EPA is further requesting comments be submitted using comment headings.

Background

In 2012, Congress enacted Public Law 112–195, the Hazardous Waste Electronic Manifest Establishment Act. The goal of this legislation was to provide the users of the hazardous waste manifest with a much more efficient and modern option to the 6-copy paper manifest forms that have been used for more than 30 years to track hazardous waste shipments from ''cradle-to-grave.'' The e-Manifest Act directed EPA to establish a national electronic manifest system that would enable users, at their option, to obtain and submit electronic manifests to track waste shipments involving either Resource Conservation and Recovery Act (RCRA) hazardous wastes or certain state-only regulated wastes subject to manifesting requirements under federal or state law. It was the intent of the Act that a data repository would be established within the e-Manifest system and that this national data repository would collect and retain waste shipment data from the electronic manifests obtained from the system, as well as from processing the data from any paper manifests that continued in use after the deployment of the e-Manifest system.

Of particular significance to EPA's proposed rule are the funding provisions of the e-Manifest Act. While section 2(i) of the Act authorized Congress to appropriate funds to cover start-up activities and costs, Congress intended that the e-Manifest system would ultimately be self-sustaining once deployed. Under section 2(c) of the Act, EPA was authorized to impose and collect reasonable service fees (user fees) necessary to pay the costs of developing, operating, maintaining, and upgrading the e-Manifest system—including any costs incurred in collecting and processing paper manifests submitted to the system. Section 2(d) of the Act further authorized the establishment of a special System Fund in the U.S. Treasury for the deposit of collected service fees. By the terms of sections 2(d)(2) and 2(c)(4) of the Act, funds deposited in the System Fund could be transferred from Treasury to EPA at the Administrator's request and spent for system related costs to the extent of and in the amount provided in advance in appropriations Acts. The fees collected and deposited in the System Fund would be used to fund the system's operating costs and other system related costs, as well as to offset any appropriated funds authorized under section 2(i) of the Act to seed the start-up activities and system development costs.

In particular, section 2(c) of the Act confers broad discretion to EPA to determine the user fees to be imposed on users of the system. This provision states that EPA ''may impose on users such reasonable service fees as the Administrator determines to be necessary to pay costs in developing, operating, maintaining, and upgrading the system, including any costs incurred in collecting and processing data from any paper manifest submitted to the system after the date on which the system enters operation.''

On the issue of timing of fee collections, section 2(c)(2)(A) of the Act provides EPA discretion to collect fees from users either in advance of services being provided or as reimbursement for the provision of system-related services by EPA. The user fee provisions of the Act further speak to the matter of fee adjustments. Under section 2(c)(3)(B) of the Act, EPA shall (in consultation with the Board) increase or decrease the amounts of the fees so that the amounts collected and aggregated in the System Fund are sufficient (and not more than reasonably necessary) to cover current and projected system costs, including necessary upgrades. Moreover, the fees should be maintained at levels that minimize, to the maximum extent practicable, the accumulation of unused amounts in the Fund. Where the timing of fee adjustments is concerned, section 2(c)(3)(B)(iii) of the Act specifies that the fee schedule shall be adjusted initially when start-up costs have been recovered, and periodically thereafter, whenever an annual audit report on the system's finances discloses a significant disparity between fees collected in a fiscal year and expenditures made for system related services during that fiscal year.

For further information, please contact Richard LaShier of EPA's Office of Resource Conservation and Recovery via phone at (703) 308– 8796 or via email at lashier.rich@epa.gov, or Bryan Groce of EPA's Office of Resource Conservation and Recovery via phone at (703) 308–8750 or via email at groce.bryan@epa.gov.

U.S. Nuclear Regulatory Commission (NRC)

Commissioner Proposes NRC Revisit Tracking of Category 3 Sources

In a memo dated July 29, 2016, NRC Commissioner Baran proposes that U.S. Nuclear Regulatory Commission (NRC) staff revisit the question of whether and how to track Category 3 sources. In the memo, Commissioner Baran asserts that the "case for doing so is even stronger today than it was seven years ago."

The memo concludes with the following proposed staff direction:

> In light of [the Government Accountability Office's] GAO's findings and the years of operating experience with the [National Source Tracking System] NSTS, I propose that the NRC staff take a fresh look at the question of whether and how to track Category 3 sources. This re-evaluation can build on the efforts of the working groups established in response to the GAO investigation. I propose that, within six months of the Staff Requirements Memorandum resulting from this paper, the staff should submit a notation vote paper to the Commission that includes the following:
>
> 1) An evaluation of the pros and cons of different methods of requiring transferors of Category 3 sources to verify the validity of a transferee's license prior to the transfer;
> 2) An evaluation of the pros and cons of including Category 3 sources in the NSTS; and
> 3) Based on these evaluations, options for addressing the GAO recommendations.
>
> In conducting these evaluations, the staff should assess the risks posed by the aggregation of Category 3 sources into Category 2 quantities and consider the current views of our Agreement States partners.

The memo, which has been posted to the Resources Page of the Disused Sources Working Group (DSWG) web site, is also publicly available via the "Recently Released Commission Documents for 2016" area of the NRC Web site at www.nrc.gov under Accession No. ML16197A229.

For additional information, please see the Resources page of the DSWG web site at www.disusedsources.org.

NRC Hosts Public Meeting re Strategic Plan

On July 27, 2016, the U.S. Nuclear Regulatory Commission (NRC) held a public meeting to seek input to inform development of the agency's Strategic Plan for Fiscal Year 2018 through 2022.

Managers and staff from various NRC offices—including Office of Executive Director for Operations, Office of Nuclear Reactor Regulation, Office of New Reactors, Office of Material Safety and Safeguards, Office of Nuclear Security and Incident Response, Office of Nuclear Regulatory Research, Strategic Plan Working Group, and others—were in attendance.

Participants

The following individuals participated in the meeting on behalf of the NRC:

- Michael Johnson, Gary Holahan, and H. Rasouli from the Office of Executive Director for Operations:
- Michael Weber from the Office of Nuclear Regulatory Research;
- Vonna Ordaz from the Office of New Reactors;
- Tim McGinty and W. Burton from the Office of Nuclear Reactor Regulation; and,
- Daniel Collins from the Office of Nuclear Material Safety and Safeguards.

Related Documents

Interested stakeholders were encouraged to review the following documents, all of which are available on the NRC's web site at www.nrc.gov, in preparation for the public meeting:

- ML14301A249: Strategic Plan Fiscal Years 2014-2018 (At-A-Glance);
- ML16197A025: Public Meeting with Stakeholders to Discuss and Receive Input on the Development of NRC's Strategic Plan for Fiscal Years 2018 through 20122; and,
- ML14246A439: NUREG-1614, Volume 6, titled "U.S. NRC Strategic Plan Fiscal Years 2014-2018."

For reference, the NRC's current Strategic Plan for FY 2014-2018 can be found at http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1614/.

For additional information, please contact Nicholas DiFrancesco of the NRC at (301) 415-1115 or Dan Shapiro of the NRC at (301) 415-2922.

Commission Meets With Wide Array of Stakeholders

On July 26, 2016, the U.S. Nuclear Regulatory Commission met with numerous invited stakeholders to hear their views on the NRC's regulatory activities.

During the meeting, NRC Chair Stephen Burns and Commissioners Kristine Svinicki and Jeff Baran heard perspectives on any topic the participants raised.

Topics

Participants were specifically informed that they could present on any topic of interest to them. However, the NRC's meeting announcement stated that the Commission expected the discussion topics would likely include such matters as

- the efficiency and effectiveness of NRC regulatory programs;
- effectiveness of public engagement; and,
- the use of risk insights in regulations and decision-making.

Participants

Participants in the meeting included states, Native American tribes, public interest groups, nuclear power plant operators, new reactor vendors, and former NRC Commissioners.

For additional information, please contact Scott Burnell of the NRC at (301) 415-8200.

NRC Revises Regulations to Increase Potential Maximum Fine

By press release dated July 1, 2016, the U.S. Nuclear Regulatory Commission (NRC) announced that, following changes in federal law, the agency has revised its regulations to increase the potential maximum civil penalty for violations of the Atomic Energy Act (AEA) from $140,000 to $280,000.

Overview

The agency is increasing the maximum civil penalty to meet the requirements of the Federal Civil Penalties Inflation Adjustment Act of 2015. The law calls for an initial "catch-up" penalty adjustment to become effective no later than August 1, 2016. The NRC will also follow the law's requirement to annually adjust penalties for inflation, beginning in January 2017.

Background

The NRC may assess penalties up to the new maximum in all cases assessed after August 1, 2016—even if the violation occurred before that time. The NRC has published conforming changes to the agency's enforcement policy that includes the process for assessing civil penalties based on the violation's severity and the type of licensee.

For additional information, please contact Scott Burnell of the NRC at (301) 415-8200.

NRC Amends Licensing, Inspection and Annual Fees for FY 2016

On June 27, 2016, the U.S. Nuclear Regulatory Commission (NRC) announced that the agency has amended its regulations to reflect the licensing, inspection, special project, and annual fees it will charge applicants and licensees for fiscal year (FY) 2016. The amended regulations reduce annual fees for most licensees primarily due to a decrease in the NRC's budget.

The final fee rule—which was published in the *Federal Register* on June 24, 2016—includes fees required by law to recover approximately 90 percent of the agency's budget. A proposed rule was published for public comment on March 23, 2016.

A copy of the Federal Register notice can be found at https://www.gpo.gov/fdsys/pkg/FR-2016-06-24/pdf/2016-14490.pdf.

Overview

For FY 2016, the NRC's required fee recovery amount, after billing and collection adjustments, is $882.9 million. Approximately 38 percent, or $332.7 million, of the fees would recover the cost of specific services to applicants and licensees under 10 CFR Part 170. The remaining 62 percent, or $550.7 million, would be billed as annual fees to licensees under 10 CFR Part 171.

Annual fees for FY 2016 decrease by 3.1 percent over last year for operating reactors, 6 percent for fuel facilities, 2.4 percent for research and test reactors, and 11.7 percent for spent fuel storage/ reactor decommissioning licensees. Fees increase by 7.6 percent for most uranium recovery licensees and decrease by 18.2 percent for U.S. Department of Energy (DOE) activities

related to the Uranium Mill Tailings Radiation Control Act of 1978.

Changes

The final rule includes several changes from the FY 2015 rule. For instance, the NRC has lowered the hourly rate of staff review time from $268 to $265 for FY 2016. Fees charged under 10 CFR Part 170 have been updated accordingly.

Another change is that the NRC will now recover the agency's costs in responding to significant requests for information, records, or NRC employee testimony in lawsuits where the NRC is not a named party—commonly referred to as "Touhy requests." The final rule will assess hourly rate fees on all Touhy requests that require over 50 NRC staff hours.

Application

The NRC estimates the FY 2016 annual fees will be paid by licensees of 100 operating commercial power reactors, four research and test reactors, 122 spent nuclear fuel storage and decommissioning reactor facilities, nine fuel cycle facilities, 10 uranium recovery facilities and approximately 3,000 nuclear materials licensees.

For additional information, please contact David McIntyre of the NRC at (301) 415-8200.

Dapas Assumes Duties as NMSS Director

By press release dated July 25, 2016, the U.S. Nuclear Regulatory Commission announced that Marc Dapas had begun serving as the new Director of the Office of Nuclear Material Safety and Safeguards (NMSS) at NRC headquarters in Rockville, Maryland.

Dapas, a 27-year veteran of the NRC, succeeds Catherine Haney, who left in January to become Regional Administrator in the agency's Region II office in Atlanta, Georgia.

Overview

"Marc Dapas' experience in a variety of roles across the agency will serve him well as he takes the helm of our nuclear materials office," said Victor McCree, the NRC's Executive Director for Operations. "He has shown an unparalleled commitment to technical and managerial excellence in a wide variety of assignments in our regional offices as well as at NRC headquarters."

With Dapas' arrival, Scott Moore, who has been Acting Director since Haney's departure, will resume his position as Deputy Director for the office.

Background

Dapas began his career in 1989 as an Operations Specialist at agency headquarters and three years later began a series of increasingly responsible positions in the NRC's Region III office outside of Chicago, Illinois.

In 1998, Dapas joined the Senior Executive Service in Region III, leading a program assuring safety at 18 reactor facilities. In 2002, he took over leadership of the materials program in the region. Three years later he became Deputy Regional Administrator of the Region I office in

King of Prussia, Pennsylvania, where he helped lead that office's oversight of both reactors and materials licensees in the Northeast.

Dapas returned to NRC headquarters in 2011 as Deputy Director for the Office of Nuclear Security and Incident Response. In this position, he provided leadership of the NRC's oversight of security policy for both nuclear facilities and users of radioactive materials, as well as maintained the NRC emergency preparedness and incident response programs.

In 2013, Dapas became Regional Administrator in the NRC's Region IV office outside of Dallas, helping oversee the safety and security inspection of 19 reactors and 600 materials licensees.

Dapas received a Bachelor's Degree in Mechanical Engineering from the U.S. Naval Academy and served on active duty in the U.S. Navy's nuclear power submarine program. After leaving active duty to join the NRC, Dapas continued his military service as a member of the Navy Reserve, retiring in 2012 after 30 years of service.

For additional information, please contact Maureen Conley at (301) 415-8200.

Nelson Named as NRC's Chief Information Officer

By press release dated August 8, 2016, the U.S. Nuclear Regulatory Commission (NRC) announced that technology veteran David Nelson has been named as the agency's Chief Information Officer. Nelson's start date has yet to be finalized.

"David's lengthy experience with the government's use of information technology will help the NRC keep pace with today's interconnected world," said Victor McCree, Executive Director for Operations. "We're glad to have him on board."

Nelson comes to the NRC from his role as CIO and Director, Office of Enterprise Information at the Centers for Medicare and Medicaid Services (CMS), part of the Department of Health and Human Services (DHHS). He was selected to help lead the recovery of Healthcare.gov and oversaw the technology backbone for services such as Medicare claims processing. Nelson managed the Centers' $2.6 billion portfolio of applications, trusted data exchanges and other information technology.

Nelson joined CMS in 2004, filling senior positions such as Director, Office of Information Services; Director, Office of Enterprise Management; and Director, Data Analytics and Control Group for the Center for Program Integrity. Prior to joining CMS, Nelson's private sector experience includes co-founding two broadband development companies providing access to underserved U.S. markets. He served in the U.S. Air Force, and holds a Bachelor's Degree in Business Management from the University of Phoenix.

For additional information, please contact Scott Burnell at (301) 415-8200.

To Obtain Federal Government Information

by telephone

- DOE Public Affairs/Press Office ..... (202) 586-5806
- DOE Distribution Center ..... (202) 586-9642
- EPA Information Resources Center ..... (202) 260-5922
- GAO Document Room ..... (202) 512-6000
- Government Printing Office (to order entire *Federal Register* notices) ..... (202) 512-1800
- NRC Public Document Room ..... (202) 634-3273
- Legislative Resource Center (to order U.S. House of Representatives documents) ..... (202) 226-5200
- U.S. Senate Document Room ..... (202) 224-7860

by internet

- NRC Reference Library (NRC regulations, technical reports, information digests, and regulatory guides). ..... **www.nrc.gov**

- EPA Listserve Network • Contact Lockheed Martin EPA Technical Support at (800) 334-2405 or email (leave subject blank and type help in body of message). ..... **listserver@unixmail.rtpnc.epa.gov**

- EPA • (for program information, publications, laws and regulations) ..... **www.epa.gov**

- U.S. Government Printing Office (GPO) (for the Congressional Record, *Federal Register*, congressional bills and other documents, and access to more than 70 government databases). ..... **www.access.gpo.gov**

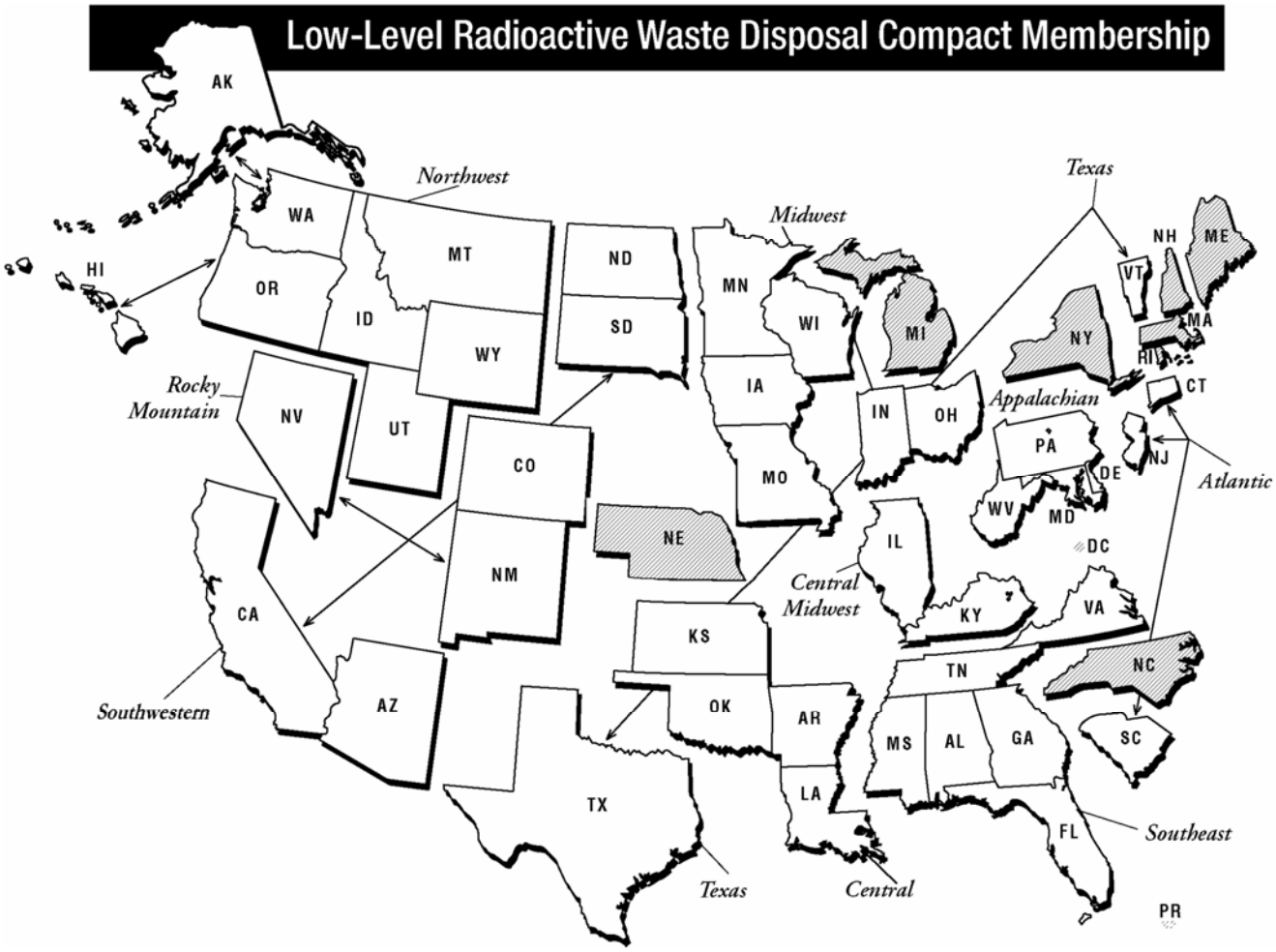
- GAO homepage (access to reports and testimony) ..... **www.gao.gov**

To access a variety of documents through numerous links, visit the website for the LLW Forum, Inc. at www.llwforum.org

Acknowledgement and Disclaimer

Acknowledgement: This material is based upon work supported in part by the U.S. Department of Energy under Award Numbers DE-EM0001364 and DE-em0003153.

Disclaimer: Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.



Appalachian Compact
Delaware
Maryland
Pennsylvania
West Virginia

Atlantic Compact
Connecticut
New Jersey
South Carolina

Central Compact
Arkansas
Kansas
Louisiana
Oklahoma

Central Midwest Compact
Illinois
Kentucky

Northwest Compact
Alaska
Hawaii
Idaho
Montana
Oregon
Utah
Washington
Wyoming

Midwest Compact
Indiana
Iowa
Minnesota
Missouri
Ohio
Wisconsin

Rocky Mountain Compact
Colorado
Nevada
New Mexico

Northwest accepts Rocky Mountain waste as agreed between compacts

Southeast Compact
Alabama
Florida
Georgia
Mississippi
Tennessee
Virginia

Southwestern Compact
Arizona
California
North Dakota
South Dakota

Texas Compact
Texas
Vermont

Unaffiliated States
District of Columbia
Maine
Massachusetts
Michigan
Nebraska
New Hampshire
New York
North Carolina
Puerto Rico
Rhode Island