# LLW notes

Volume 39 Number 1 January - February 2024

A Message from Dan Shrum, Executive Director

Hope everyone has made their reservations for our upcoming meeting Orlando – make sure you are registered for the meeting. For those attending Waste Management in March, the Forum has two sessions, Session 59 and Session 60, both on Tuesday, March 12, 2024, in room 226BC from 8:00 to 11:35.

Daniel B. Shrum, Executive Director

See <u>page 6</u> for Waste Management Session information.

Please submit comments, suggestions or articles for the LLW *notes* to margaretllwf@gmail.

In this Issue...Find the Forum Board's focus, news about the Forum's Spring Meeting, news about WM and NRC RIC meetings, information on grant opportunities from DOE and NRC, and reports about advanced reactors and nuclear fuel, along with compact and regional news.

#### **About LLW Forum**

LLW Forum, established to facilitate state and compact implementation of the Low-Level Radioactive Waste Policy Amendments Act of 1985, promotes the objectives of the low-level radioactive waste regional compacts. LLW Forum provides opportunity for state and compact officials to share information with each other and to exchange views with officials of federal agencies and other interested parties.

LLW notes, a copyrighted publication of the LLW Forum, is distributed bimonthly to the Board of Directors of the Low-Level Radioactive Waste Forum, an independent non-profit corporation. Anyone--including compacts, states, federal agencies, private associations, companies and others--may support and participate in the LLW Forum by purchasing memberships and/or by contribution grants or gifts. For information on LLWF memberships and/or subscriptions to the LLW notes, visit www.llwforum.org or contact Daniel Shrum, Executive Director, telephone (801) 580-3201, dshrum@llwforum.org. For permission to reproduce or share information from LLW notes, see the Copyright Policy at the conclusion of this publication.

#### Acronyms Used in LLW notes **CFR** Code of Federal Regulations CRCPD Conference of Radiation Control Program **Directors** DOE U.S. Department of Energy DOT U.S. Department of Transportation U.S. Environmental Protection Agency EPA International Atomic Energy Agency **IAEA ICRP** International Commission on Radiation Protection **LLWF** Low-Level Waste Forum NARM Naturally occurring and accelerator produced radioactive material **NCRP** National Council on Radiation Protection and Measurements NORM Naturally occurring radioactive material **NRC** U.S. Nuclear Regulatory Commission OAS Organization of Agreement States TENORM Technologically enhanced naturally occurring radioactive material

#### **Contents**

A Message from Dan Shrum, Executive Director	
About LLW Forum	
Waste Managment Symposia: WM 2024 Conference	
Advanced Reactors: Fuelling the Future: Building Fuel	Ö
Supply Chains for SMRs and Advanced Reactors	7
Waste Isolation Pilot Plant Achieves Best Shipment Seaso	
in 10 Years	
Nuclear Fuel, Decommissioning and Waste Transportation	
and Storage	8
Regulating Nuclear Fuel	8
Foreign Nuclear Waste: Changing Conditions May Affect	
Future Management of Contamination Deposited	
Abroad During U.S. Cold War Activities, Report to the	
Chairman of the Committee on Environment and Publ	
Works, U.S. Senate	
Community Issues & Consent-Based Siting	
NRC Anticipates Awarding \$8.2 Million in Education Grant	is.
Supporting Nuclear Science and	1
Engineering Fields	_
in 2023	2
NRC's 36th Annual Regulatory Information Conference to	J
Focus on Adapting to a Changing Landscape 14	
Source Security	
Texas - Vermont Compact Proposes Rule Revision 10	
Appalachian Compact1	
Atlantic Compact1	7
Southeast Compact 1	
Southwestern Compact	
Texas Compact	
Low-Level Radioactive Waste Compact Membership 1	
Acknowledgment & Disclaimer	
Information Resources	
Copyright Policy	U

Officers
Tom Hansen, Chair
Doug Hansen, Chair-Elect
Joe Klinger, Past-Chair
Alyse Peterson, Treasurer



## Forum Corner

### **Board Focus**

January 10, 2024 Board Meeting

#### **OAS**

Past-Chair Joe Klinger mentioned the Forum needs OAS representation and he will be following up on getting a representative.

#### **DSWG**

Brian Goretzki from Arizona is looking forward to joining the DSWG discussion.

Regarding the GAO report on sealed sources, the work done by DSWG was featured and many of the recommendations were mentioned. There will be an update from GAO at the next LLW meeting. There appears to be more awareness of liability with having disused sources.

#### Import/export Between Compacts

Issues related to import/export between compacts – Stephen Raines – Management Rule. The new rule will be published and a NewsFlash will be sent out. The compact had to fix some deadlines and change some requirements for NRC filings and filings for holding of foreign waste. There are still some outstanding issues with reporting disposal and TDTSF.

#### Part 61

On January 23, 2024 the NRC will host a virtual public meeting.

#### Reconvening Part 61 Working Group

Addition of GTCC will have more of an impact on states and compacts. So far we have Joe, Dan, Tom, Stephen, and Kelly on the group. Reach out to Dan if you would like to join.

### LLW Forum Meeting Dates

Spring 2024 LLW Forum Meeting
Host: Southeast Compact
April 3-4, 2024
Board of Directors Meeting
DSWG Meeting
April 5, 2024
Orlando, FL

Fall 2024 LLW Forum Meeting October 9-10, 2024 Reno, NV

Spring 2025 LLW Forum Meeting
April 9-10, 2025
Odessa, TX
Tour of Urenco and WCS
April 8, 2025

#### Board Focus - continued

#### Forum Officers

Upcoming Treasurer Vacancy - volunteers are welcomed.

Chair-Elect

#### On-going issues of Concern

Forum – initiatives, potential collaborative efforts, upcoming policy or rulemaking activities.

#### **NORM**

This topic is of interest and the Forum may look further into this. North Dakota does regulate NORM but the Southwestern compact does not. The Central Midwest does. Rich commented PA regulates TENORM but not as waste. The question is, is NORM low-level waste?



## Forum Corner



#### Focus on Financials

- The Forum ended the year in the BLACK (by almost \$30,000) and the Forum appreciates Dan's success in managing the funds to achieve this financial position.
- Membership: Thanks to the members who have renewed. There are no new members at this time. Texas will no longer be a member due to budget constraints, cost of membership fee and cost to attend meetings. The Forum will continue to stay in contact with them.
- Year-end tax paperwork has been initiated.
- Agreed-Upon procedures review (yearly audit) will be done.

The Treasurer position will be open and Joe asked if any members have volunteered. (None yet.)

#### **Executive Director News**

- The Forum will need to stand up Part 61
  working group regarding the integrated
  rulemaking process. Integrated rulemaking
  is not only focused on the compacts, but
  the Forum will have state members, too.
- Dan will attend the Waste Management Conference in March, on two panels and chairing two panels. (See <u>page</u>
   6 for further information.)
- Dan will follow up on mailing issues.
- Lori Beagles is back to assist with accounting and invoicing.

### Mission & Operations Committee

#### **Survey Results**

• Ed reported that the Committee distributed a large survey but did not get a lot of responses, so it is difficult to compare with the old surveys. The Committee might want to consider a new method. Hopefully people are satisfied with the Forum and thus the low response.

#### October 2023 Meeting Survey

- Kristen reported that 40 responses were received. The Committee can review these and distribute a summary to the Board. It looks like about 90% were satisfied or very satisfied.
- Tom mentioned that he'd heard from about 10 people and was hearing that it was a great meeting.

# Executive Director News - continued

- An agenda committee will be set up.
  Joe, Dan, Tom, Stephen, and Ron
  will be on the committee. The agenda
  is more of a challenge because there
  are a lot of new people in DOE and
  NRC. Dan is working on getting the
  correct speakers. Dan has invited Jane
  Marshall and at this time is is not sure
  who will replace Stephen Koenick.
- Cecilia is trying to get a list of contacts that goes lower down the chain and will include them for members. Also, an organizational chart is being requested.

## **Safety Moment**

Read the medicine labels and follow-up if further action is needed.



# Forum Corner

# LLW FORUM MEETING SPRING 2024 MEETING

We invite you to join us for our Spring Meeting.

The Spring 2024 meeting will be held April 3-4 in Orlando, Florida, at:

Drury Plaza Hotel Orlando – Disney Springs® Area 2000 Hotel Plaza Boulevard Orlando, FL 32830

The DSWG meeting will be held April 5, 2024.

### SIGN UP NOW!

CLICK <u>HERE</u> TO SEE THE AGENDA.

CLICK <u>HERE</u> TO REGISTER NOW!

CLICK <u>HERE</u>TO RESERVE YOUR ROOM!

If you have any questions or concerns, please contact Cecilia Snyder at csnyder@llwforum.org.

Waste Managment Symposia: WM 2024 Conference

#### Session 59: The History of the Low-Level Radioactive Waste Compact System and Is It Still Needed

This session focuses on emerging issues in commercial LLW management in the U.S. from the perspective of active members of the Low-Level Radioactive Waste Forum, Inc. State, compact, federal and industry officials will share their views on a variety of timely and significant topics related to low-level radioactive waste management, disposal and related issues.

# Session 60: Selected Key Topics in U.S. Commercial LLW Management

The Richard S. Hodes, M.D. Honor Award will be presented by Donna Hodges, sitting Chair for the Southeast Compact Commission for Low Level Radioactive Waste Management, to the 2024 Richard S. Hodes Award Recipient in this session. The 10-minute awards ceremony is followed by the 2024 Hodes Honor Award Lecture. After the award ceremony and lecture two additional selected key presentations will immediately follow on LLW management.

The WM Symposia is hosting the Waste Management Conference (WM2024 Conference), organized in cooperation with the International Atomic Energy Agency. https://www.iaea.org/events/evt2306667

"An open forum for discussing and seeking safe, environmentally responsible, technically sound and cost effective solutions to the management and disposition of radioactive wastes and the decommissioning of nuclear facilities to enhance the transparency and credibility of the global radioactive waste industry."

March 10 - 14, 2024

Marking 50 Years: Proud of Our Past, Poised for the Future

Phoenix Convention Center Phoenix, AZ

For Forum presentations and hosting, search for "Dan Shrum" at https://www.xcdsystem.com/wmsym/program/hCWEC2i/index.cfm

# 023 Panel: U.S. NRC - Current and Emerging U.S. NRC Regulatory Topics

This session focuses on several current and emerging NRC regulatory issues impacting the radioactive waste arena. The panelists will provide different perspectives on several key issues including the revision to 10 CFR Part 61 and regulatory aspects of decommissioning and uranium recovery. Dan Shrum will be participating.

#### Advanced Reactors



#### Fuelling the Future: Building Fuel Supply Chains for SMRs and Advanced Reactors

Engineers are preparing for the next generation of nuclear power reactors, aimed at improving energy security and mitigating climate change. Many advanced reactor designs, including small modular reactors (SMRs), will require high assay low enriched uranium (HALEU) fuel, which ranges from 5 to 20 per cent of uranium-235 — beyond the 5 per cent level that powers most nuclear power plants in operation.

**HALEU advantages:** smaller designs, longer operating cycles and increased efficiencies.

**Production:** HALEU is produced in the Russian Federation and the United States of America, mostly for use in research reactors and for possible use in operating light water reactors. The facility in Russia is currently the only one that manufactures HALEU on a commercial scale.

Delay of SMRs: The U.S. nuclear industry is warning that the deployment of some SMR designs may be delayed by years due to the lack of HALEU. Currently, nine out of ten advanced reactor designs funded by the U.S. Government will need HALEU fuel in the next decade.

**Projections:** Projections by the U.S. Department of Energy (DOE) suggest that more than 40,000 kilograms of HALEU will be needed by 2030, with that amount set to grow year after year as the new fleet of advanced reactors is put into operation.

U.S. DOE actions: Working to address this need, the U.S. DOE is investing in the domestic HALEU production line. It has set up a HALEU Consortium and has co-funded a demonstration production plant in Piketon, Ohio. In June 2023, the U.S. regulator cleared the Piketon facility to begin enrichment operations.

Piketon's HALEU centrifuge cascade is expected to produce 20 kilograms of HALEU by the end of 2023 and 900 kilograms in 2024. A full-scale HALEU cascade of 120 individual centrifuge machines has a combined capacity of approximately 6000 kilograms of HALEU per year.

To complement this, another type of HALEU fuel is beginning to be produced for use by downblending government stockpiles of high enriched uranium. Tristructural isotropic (TRISO) particle fuel is made of uranium, carbon and oxygen covered in three layers of carbon- and ceramic-based materials that prevent the release of radioactive fission products. These particles can then be shaped into either billiard ball sized spheres called pebbles or cylindrical pellets. TRISO-HALEU fuel is used in high temperature gas cooled reactors, and some vendors are planning to use TRISO-HALEU fuel for their SMR and microreactor designs.

Source acknowledgement: IAEA's endorsement of users' views, products or services is not stated or implied in any way.

Citation: Excerpted from "Fuelling the Future: Building Fuel Supply Chains for SMRs and Advanced Reactors" © IAEA, 2024, at https://www.iaea.org/bulletin/fuelling-the-future-building-fuel-supply-chains-for-smrs-and-advanced-reactors

by Lucy Ashton, IAEA Department of Nuclear Energy

> NCRP Annual Meeting Bethesda, MD March 25-26, 2024

Advanced & Small Modular Nuclear Power Reactors Meeting - https://ncrponline.org/ wp-content/themes/ncrp/PDFs/2024/Annual\_ Meeting\_Flyer\_2024.pdf

NCRP - See https://ncrponline.org/

#### Nuclear Fuel, Decommissioning and Waste Transportation and Storage



#### Regulating Nuclear Fuel

NUREG/BR-0280, R2 ML24031A358 January 2024 at https://www.nrc.gov/docs/ML2403/ ML24031A358.pdf

#### Introduction

The nuclear fuel cycle covers the entire process of mining uranium, to turning it into fuel, to using it in a nuclear power plant to produce electricity, and finally, to disposing of "spent," or used nuclear fuel, in a special repository.

This booklet focuses on the responsibilities of the U.S. Nuclear Regulatory Commission (NRC) in the first part of the fuel cycle—the mining of uranium and its conversion and enrichment into a form that is used in a nuclear power plant to produce electricity.

#### Developments in Nuclear Fuel

The industry is also developing new reactor designs that will use different fuels than current light-water reactors.

These fuels will be able to use higher enrichment levels than the 5 percent typical in today's

reactors. The NRC is working with the industry in anticipation of licensing high-assay low-enriched uranium, or HALEU, with enrichment levels up to 20 percent U-235. HALEU fuel is expected to allow for smaller reactor designs, longer reactor core operation, and more efficient fuel use. Today's reactor fleet may also use fuels with higher enrichment to extract more power from fuel and reduce radioactive waste.

The NRC currently licenses three three fuel fabrication plants processing low-enriched uranium:

- (1) Global Nuclear Fuel-Americas in Wilmington, North Carolina
- (2) Westinghouse Columbia Fuel Fabrication Facility in Columbia, South Carolina
- (3) Framatome, Inc., in Richland, Washington These facilities are called Category 3 fuel facilities. (The Centrus Energy Corp. American Centrifuge Plant in Piketon, Ohio, is currently licensed to process uranium up to 19.75 percent enrichment. It is the only Category 2 fuel facility.)

For more information on regulating nuclear fuel, see https://www.nrc.gov/materials/fuel-cycle-fac.html

#### Waste Isolation Pilot Plant Achieves Best Shipment Season in 10 Years

In 2023, WIPP received 489 waste shipments from generator sites throughout the country, compared to 272 shipments in 2022. It's the best shipment total since the facility received 724 shipments in 2013. Several factors enabled the increase in shipments, including:

- Increased coordination with generator sites, which make the waste available for packaging and certification through the DOE-established Central Characterization Program;
- More transportation support with mobile loading unit teams at generator sites and shipment drivers;
- WIPP operational efficiencies gained by opening a new, uncontaminated set of underground storage rooms, known as a panel. Waste is disposed of in a set of panels located nearly one-half mile below the surface.

WIPP's highest shipment total was 1,142 in 2006, with the lowest being 44 shipments in 1999 when the underground waste repository opened.

Source: EM Vol. 16, Issue 4 | Jan. 30, 2024

#### Foreign Nuclear Waste



GAO-24-104082 Published: Jan 31, 2024. Publicly Released: Jan 31, 2024.

#### Why GAO Did This Study

The United States conducted defense activities in many countries during the Cold War. These activities resulted in radioactive contamination in three countries: Greenland, Spain, and RMI. During the 1960s, the United States buried radioactive liquid in Greenland's ice while operating the experimental Camp Century base to study the feasibility of installing nuclear missiles there. In 1966, in Spain, two U.S. defense aircraft collided, dispersing radioactive debris over the town of Palomares. From 1946 to 1958, the United States conducted 67 nuclear weapons tests in RMI, and the resulting radioactive fallout contaminated several atolls. This report examines (1) the amount and type of radioactive contamination

in Greenland, Spain, and RMI; and (2) how conditions have changed at these sites, and the extent to which the environment and inhabitants have been affected by these changed conditions. GAO reviewed key literature on the contamination and interviewed U.S. and foreign government officials.

#### What GAO Recommends

The Secretary of Energy, as a part of the agency's ongoing efforts to address the legacy of U.S. nuclear testing in RMI, should develop and document a strategy for communications on radioactive contamination that is sustained, understandable, transparent, engages the RMI government, and builds on lessons learned. DOE concurred with GAO's recommendation.

See the report at at https://www.gao.gov/ products/gao-24-104082?utm\_campaign=usgao\_ email&utm\_content=daybook&utm\_ medium=email&utm\_source=govdelivery

Strategic Programmatic Overview of the Decommissioning and Low-Level Waste and Nuclear Materials Users Business Lines (Public Meeting) (Contact: Candace Spore: 301-415-8537) held Thursday, January 18, 2024

#### Community Issues & Consent-Based Siting



### Yet at Community Engagement on Consent-Based Siting

The Office of Nuclear Energy (NE) is working to advance nuclear power to meet the nation's energy, environmental, and national security needs. The following funding opportunities assist NE by resolving barriers to technical, cost, safety, security, and proliferation resistance through early-stage research, development, and demonstration in the following areas:

- Enhancing the long-term viability and competitiveness of the existing U.S. reactor fleet.
- Developing an advanced reactor pipeline.
- Implementing and maintaining national strategic fuel cycle and supply chain infrastructure.

\$16 million funding is available to provide resources for communities interested in learning more about consent-based siting, management of spent nuclear fuel, and interim storage facility siting considerations.

Award recipients will promote dialogue that helps foster the development of innovative community ideas, incorporates principles of equity and environmental justice into community engagement strategies, and captures feedback related to the interim storage of spent nuclear fuel and high-level radioactive waste.

https://www.energy.gov/ne/funding-opportunity-announcement-community-engagement-consent-based-siting

#### Oak Ridge Transfers Largest Land Parcel Yet at East Tennessee Technology Park

OAK RIDGE, Tenn. — The biggest land parcel transfer at East Tennessee Technology Park (ETTP) has just been completed.

DOE's Oak Ridge Office of Environmental Management (OREM) has transferred a 365acre tract where a powerhouse complex was once located to the Community Reuse Organization of East Tennessee (CROET).

CROET is a local nonprofit that receives building and property transfers from federal ownership at ETTP, and then reuses those assets to attract new industry to the site that will benefit the community economically.

This transfer is part of OREM's ongoing efforts to transform ETTP, the former Oak Ridge Gaseous Diffusion Plant, into a multi-use industrial center, national park and conservation area.

Source: EM Vol. 16, Issue 5 | Feb. 6, 2024

### Research Grants



# NRC Anticipates Awarding \$8.2 Million in Education Grants Supporting Nuclear Science and Engineering Fields

The Nuclear Regulatory Commission anticipates awarding 22 education grants to 16 academic institutions, including two minority-serving institutions, totaling \$8.2 million. The University Nuclear Leadership Program provides federal funding opportunities to qualified academic institutions to bolster nuclear engineering and related programs.

"A competent and well-educated workforce is a necessary prerequisite for nuclear safety and continued U.S. leadership," said John Tappert, acting director of the NRC's Office of Nuclear Regulatory Research. "We are very excited to sponsor these grants to support the education and development of tomorrow's nuclear leaders."

The selected grants include eight undergraduate scholarships, six graduate fellowships, one trade school and community college scholarship and seven distinguished faculty advancement awards. Each undergraduate scholarship provides up to \$20,000 in financial support to students over the course of the three-year program; each trade school scholarship provides up to \$5,000 to students over the course of the two-year period; and each graduate fellowship provides up to \$50,000 per year to students over the course of the four-year program. The NRC's distinguished faculty advancement awards provide up to \$600,000 over a four-year period.

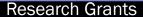
Since the program's inception in 2009, the NRC has awarded more than 600 educational grants totaling more than \$186 million, of which 110 were awarded to minority-serving institutions. This funding has benefited more than 176 individual faculty members and 4,200 students located in 39 states and Puerto Rico.

The public can find and apply for NRC educational grant opportunities on the NRC's website and grants.gov and view the list of final awards.

Institutions recommended for awards are listed on the following page.

Source: NRC News Release No: 24-011 February 5, 2024

Contact: Ivonne Couret, 301-415-8200





NRC Anticipates Awarding \$8.2 Million in Education Grants Supporting Nuclear Science and Engineering Fields - continued

#### Institutions in 15 States Have Been Recommended for Awards

Institution	State	Fellowship	Scholarship	Trade School	Distinguished Faculty Advancement	Total
Florence Darlington	State	reliowship	Scholarship	Scholarship	Advancement	TOTAL
Technical College	SC			\$149,200.00		\$149,200.00
University of Michigan	MI	\$400,000.00	\$200,000.00			\$600,000.00
University of Illinois at Urbana Champaign	IL	,	\$200,000.00		\$600,000.00	\$800,000.00
Purdue University	IN		\$200,000.00		\$500,000.00	\$700,000.00
University of Missouri (Rolla)	МО		\$199,070.00		,	\$199,070.00
University of Florida	FL		\$200,000.00			\$200,000.00
Idaho State University	ID		\$196,987.00			\$196,987.00
Virginia Commonwealth University	VA	\$400,000.00	\$199,743.00			\$599,743.00
Rensselaer Polytechnic Institute	NY	\$400,000.00	\$200,000.00			\$600,000.00
North Carolina State University	NC	\$400,000.00			\$600,000.00	\$1,000,000.00
Colorado School of Mines	СО	\$400,000.00				\$400,000.00
Florida International University	FL	\$400,000.00				\$400,000.00
Clemson University	SC				\$600,000.00	\$600,000.00
Utah State University	UT				\$600,000.00	\$600,000.00
University of Cincinnati	ОН				\$600,000.00	\$600,000.00
University of Massachusetts-Lowell	MA				\$600,000.00	\$600,000.00
Total		\$2,400,000.00	<u>\$1,595,800.00</u>	<u>\$149,200.00</u>	\$4,100,000.00	<u>\$8,245,000.00</u>

#### Workforce and Education

# EM Celebrates Milestone Year for Advancing Workforce in 2023

EM Vol. 16, Issue 5 | Feb. 6, 2024

WASHINGTON, D.C. — EM marked transformative accomplishments in fiscal year 2023 (FY 2023), highlighting significant hiring and innovation advances, and a strengthened commitment to veteran employment and workforce diversity.

#### Highlights

<u>Hiring Achievements: A Leap in Growth and</u>
<u>Opportunities</u>

In FY 2023, EM demonstrated a robust increase in recruitment and hiring activities, with total recruitment actions exhibiting a general increased trend. ...This culminated in a substantial influx of new hires within EM, totaling 260 new hires and Pathways Recent Graduates

EM Headquarters and Site-Specific Recruitment Trends

EM headquarters demonstrated the most substantial growth in total recruitment actions, starting from 26 in October 2022, peaking at 66 in April 2023, and moderating to 21 by this past January.

Hiring and Workforce Diversity: A Commitment to Equity and Inclusivity

Veterans constitute 28% of EM's workforce, with 35 new hires. EM has played a pivotal role in DOE's recognition as the No. 1 veteran employer by Forbes. .... The representation of women has also seen a notable increase, comprising 39.5% of new hires and increasing female representation by 49 employees.

The Excepted Service Initiative: Shaping EM's Future EM's dedicated efforts in talent acquisition resulted in converting 60 employees from the general schedule to the excepted service and hiring 30 new excepted service staff members, with an additional 11 candidates in the recruitment pipeline.

Pathways and Summer Intern Programs
EM has filled all 40 allocated positions within the
Pathways Recent Graduates Program and added three
site-hosted positions.

#### SRS, WIPP Collaborate to Bring Science Bowl to Southeast New Mexico

AIKEN, S.C. – An EM Waste Isolation Pilot Plant (WIPP) employee recently visited the Savannah River Site (SRS) to benchmark its successful science, technology, engineering and math (STEM) outreach programs, which have been in place with local schools since 2008.

Joy James-Foster, WIPP Education Outreach lead, has followed SRS Education Outreach online for years, learning from various STEM related programs. After connecting with Kim Mitchell, Education Outreach Program lead for Savannah River Nuclear Solutions, the SRS management and operations contractor, Foster traveled more than 1,400 miles from Carlsbad, New Mexico, to Aiken to learn from SRS.

"The SRS Education Outreach Program caught my eye after WIPP's new contractor, Salado Isolation Mining Contractors, aimed to host the first Regional Science Bowl in our area as part of our community commitment plan," said Foster. "After multiple virtual meetings with Kim, I decided to take the chance and travel to South Carolina in hopes that this program would positively impact the underserved and rural populations of Carlsbad."

Source: EM Vol. 16, Issue 4 | Jan. 30, 2024

# NRC's 36th Annual Regulatory Information Conference to Focus on Adapting to a Changing Landscape

The Nuclear Regulatory
Commission has opened
registration for the agency's 36th
annual Regulatory Information
Conference, to be held March 1214 in North Bethesda, Maryland,
and online. Several thousand
conferees from the United States
and around the world are expected
to attend this three-day hybrid
event.

This year's conference will focus on adapting to a changing landscape, starting with an address from Chair Christopher T. Hanson, during which he will share his observations and priorities for the agency.

On March 14, Chair Hanson will host a conversation with Lydie Evrard, Deputy Director General and Head of the Department of Nuclear Safety and Security at the International Atomic Energy Agency.

"The RIC is the most significant and well-attended NRC event of the year. It gives attendees the opportunity to learn about the NRC's important safety and security mission and to share perspectives from inside and outside the agency and from around the world," said Hanson.

Additional program highlights include plenary sessions with NRC Commissioners David A. Wright, Annie Caputo, and Bradley R. Crowell. The RIC plenary sessions will also include remarks by Ray Furstenau, the NRC acting executive director for operations; Andrea Veil, director of the Office of Nuclear Reactor Regulation; and John Tappert, acting director of the Office of Nuclear Regulatory Research.

The conference, which is free to the public, is jointly hosted by the NRC's offices of Nuclear Reactor Regulation and Nuclear Regulatory Research. Registration is required to attend. The full conference program and registration information is available on the NRC's RIC website. Follow the NRC social media platforms and look for #NRCRIC2024.

Source: NRC News Release No: 24-006 January 19, 2024 Contact: Ivonne Couret, 301-415-8200

#### Source Security



#### NRC Proposes \$9,000 Civil Penalty **Against Geotechnical and Materials Engineers**

The Nuclear Regulatory Commission has proposed a \$9,000 fine to Geotechnical and Materials Engineers, Inc. for a violation of NRC requirements associated with the control of NRCregulated material.

The violation involved the failure to control and maintain constant surveillance of a portable moisture density gauge containing radioactive material or to use two independent physical controls to secure the gauge. The gauge is used for measuring the moisture content and density of soil and aggregate.

The NRC was notified by the company that a gauge was struck and damaged by a bulldozer at a temporary job site in Fort Wayne, Indiana, on March 22, 2023. The technician then walked away from the gauge, failing to secure it from being removed from the site by an unauthorized user.

Source: NRC News Release No: III-24-002

January 19, 2024

Contact: Prema Chandrathil, 630-829-9663

#### NRC Proposes \$35,000 Civil Penalty to **Radiation Solutions**

The Nuclear Regulatory Commission has proposed a \$35,000 civil penalty against Radiation Solutions of Sugar City, Idaho, for two violations of NRC requirements associated with its use of radioactive materials.

Under its NRC license, Radiation Solutions is authorized to install, repair and provide other types of services on devices that contain radioactive material.

One of the proposed violations involves the company's failure to confine radioactive materials to the locations and purposes authorized in their licenses. The other violation involves deliberate misconduct by a company official who permitted Radiation Solutions to take possession of radioactive materials not authorized in its license.

Source: NRC News Release No: IV-24-003

January 12, 2024

Contact: Victor Dricks, 817-200-1128

#### What are Radioactive Sources?

See the IAEA publication at https://www.iaea.org/newscenter/news/what-are-radioactive-sources

Ф

ąſ

#### Texas - Vermont Compact Proposes Rule Revision

The Texas Low Level Radioactive Waste Disposal Compact Commission has proposed revisions to the Management Rule placed in the Texas Register on January 12. The MLK Jr. Holiday scheduled for Monday does not count as a public comment day, so the Commission will receive comments for 30 days ending on February 12, 2024.

If you would like to comment, please address comments to the Commission and send them to comments@tllrwdcc. org.

The Commission will review and respond to all comments.

The proposed changes to 31 Texas Administrative Code §675.24 improves the quality, frequency, and accuracy of information facilities in Texas report to the Commission about the low-level radioactive waste they receive from outside the Texas Compact.

TITLE 31. NATURAL RESOURCES
AND CONSERVATION
PART 21. TEXAS LOW-LEVEL
RADIOACTIVE WASTE DISPOSAL
COMPACT COMMISSION
CHAPTER 675. OPERATIONAL
RULES SUBCHAPTER B.
EXPORTATION AND IMPORTATION OF
WASTE

31 TAC §675.24 at https://www.sos. state.tx.us/texreg/pdf/ backview/0112/0112prop.pdf at PROPOSED RULES January 12, 2024. SEE PAGE 49 TexReg 123.

#### SECTION BY SECTION ANALYSIS

The proposed amendments to section 675.24(b) describes which facilities are subject to the reporting requirements in this rule.

Renumbered subsection (c) describes the type of radioactive material subject to this rule and expands the definition to material that may become LLRW.

Renumbered subsection (d) defines what information must be reported to the Commission and revises the requirement to report non-compact facility low-level radioactive waste to the Commission from every six months to monthly.

(d) also requires reporting on the generator, source state, curies, date of receipt, date of processing, disposition, physical location of the waste and for export authorizations from other compacts or foreign countries to be made available on request.

Renumbered subsections (e)-(k) clarifies that a report is required regardless of whether it requires an agreement for importation, adjusts the timelines for reporting to the Commission, and makes other technical changes to increase accuracy, transparency, and clarity in the rule text.

Source: Texas Register

#### **Appalachian Compact**

Delaware • Maryland • Pennsylvania • West Virginia

#### DOE's Environmental Management Advisory Board

Rich Janati has been appointed to serve as a member of the DOE's Environmental Management Advisory Board (EMAB). The DOE staff is in the process of scheduling a meeting with the full Board. The Board is divided into three subcommittees. Rich will serve on the Stakeholder/Regulatory Engagement Subcommittee. For information, contact Rich Janati, Administrator, rjanati@pa.gov

#### Atlantic Compact

Connecticut • New Jersey • South Carolina

#### Meeting March 20, 2024

The next Atlantic Compact Commission meeting will be held on March 20 at 9:30 am in room 250 at 1201 Main St., Columbia, SC. For more information please visit the Compact website at https://www.atlanticcompact.org/ or call Max Batavia at 804-240-2774. Contact: max@atlanticcompact.org

#### Southeast Compact

Alabama • Florida • Georgia • Mississippi • Tennessee • Virginia

#### **Hodes Award**

The Richard S. Hodes, M.D. Honor Award will be presented by Donna Hodges, sitting Chair for the Southeast Compact Commission for Low Level Radioactive Waste Management, to the 2024 Richard S. Hodes Award Recipient at the Waste Management Conference 2024. See page 6 for details.

#### Southwestern Compact

Arizona • California • South Dakota • North Dakota

#### NRC Seeks Public Comment on Scope of Environmental Review for Diablo Canyon License Renewal Application

The Nuclear Regulatory Commission will hold two scoping meetings in February to discuss the environmental evaluation and review process for the license renewal application of the two-unit Diablo Canyon Nuclear Power Plant in Avila Beach, California.

Plant operator Pacific Gas & Electric filed the application in November 2023, requesting to renew the licenses for an additional 20 years of operation. Diablo Canyon's operating licenses expire in November 2024 for Unit 1, and in August 2025 for Unit 2.

The NRC staff will conduct a virtual meeting from 10 a.m.-1 p.m. Pacific time on Feb. 1.

The second meeting, which will be in-person only, will be held from 6-9 p.m. Pacific time on Feb. 8 at the Embassy Suites San Luis Obispo, 333 Madonna Rd. in San Luis Obispo, California. Before the meeting,

the staff will hold an "open house" from 5-6 p.m. Pacific time for informal discussions and to answer questions from members of the public. Individuals seeking accommodations or special equipment to attend, or who plan to provide comments, should contact Kim Conway by Jan. 31 through email at kimberly.conway@nrc.gov or by phone at 301-415-1335.

At both meetings, the staff will seek the public's input in identifying potentially significant issues that the staff should address in its environmental review of the plant's application.

A Federal Register notice details the following methods for submitting written comments: Filing on the federal rulemaking website, regulations.gov, under Docket ID "NRC-2023-0192"; emailing to DiabloCanyonEnvironmental@nrc.gov; or mailing to Office of Administration, Mail Stop TWFN-7-A60M, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001, ATTN: Program Management, Announcements and Editing Staff. Comments are due by Feb. 23.

A copy of the Diablo Canyon license renewal application is available for public review at the San Luis Obispo Library, 995 Palm St. in San Luis Obispo. More information about the plant's application also is available on the NRC website.

Source: NRC News Release No: 24-007

January 24, 2024

Contact: Scott Burnell, 301-415-8200

Texas Compact
Texas • Vermont

Meeting February 29, 2024

Due to concerns with scheduling for Commission members, the Texas Low Level Radioactive Waste Disposal Compact Compact Commission has moved their meeting in Austin, Texas to February 29, 2024 meeting at 10 am CDT by webinar and in person. The agenda is not final but will available at the compact website at http://www.tllrwdcc.org/

NRC to Hold a Public Meeting Feb. 15 in Port Lavaca, Texas to Discuss Licensing Process for X-energy/Dow Advanced Reactor Project

Staff from the Nuclear Regulatory Commission will hold a meeting in Port Lavaca, Texas, on Feb. 15 to discuss the agency's process for licensing nuclear power plants.

The NRC is preparing for X-energy and The Dow Chemical Company to apply for a construction permit for a proposed multi-unit advanced reactor facility at Dow's Seadrift site in Calhoun County. The meeting aims to improve the community's understanding of how the agency reviews such applications and how the community can participate.

The meeting will be held from 5-7:30 p.m. Central time at the Bauer Community Center, 2300 TX-35 North in Port Lavaca. The staff will discuss the NRC's safety and environmental review processes for a construction permit and then take questions from the public.

Source: NRC News Release No: 24-009 February 1,

2024

Contact: Scott Burnell, 301-415-8200

#### **Management Rule Revision**

The Texas Low Level Radioactive Waste Disposal Compact Commission has proposed revisions to the Management Rule placed in the Texas Register on January 12. See page 13 for information.



#### **Unaffiliated States**

New Hampshire

District of Columbia

Maine

Massachusetts

Michigan

Nebraska

New York

North Carolina

Puerto Rico

Rhode Island

Membership details available at llwforum.org/membership/

#### Information Resources

- DOE Public Affairs/Press Office 202/586-5806
- DOE Distribution Center 202/586-9642
- EPA (for program information, publications, laws and regulations) www.epa.gov
- EPA Information Resources Center 202/260-5922
- 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
- Government Accounting Office (GAO) Document Room 202/512-6000
- Government Printing Office (to order entire Federal Register notices) 202/512-1800
- Legislative Resource Center (to order U.S. House of Representatives documents)- 202/226-5200
- NRC Public Document Room 202/634-3273
- NRC Reference Library (NRC regulations, technical reports, information digests, and regulatory guides) www.nrc.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) http://www.access.gpo.gov
- U.S. Senate Document Room 202/224-7860
- Variety of documents through numerous links at LLW Forum, Inc. at https://
- H Ilwforum.org/

丩

ᆈ

丩

#### Acknowledgment & Disclaimer

Acknowledgment: 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.



#### Copyright Policy

All LLWF materials are copyrighted and for permission to use or reproduce, please send your request to the Daniel B. Shrum

Executive Director,
dshrum@llwforum.org