



## 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. LLWF 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.

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### Acronyms Used in **LLW notes**

CFR	◆ Code of Federal Regulations
CRCPD	◆ Conference of Radiation Control Program Directors
DOE	◆ US Department of Energy
DOT	◆ US Department of Transportation
EPA	◆ US Environmental Protection Agency
IAEA	◆ International Atomic Energy Agency
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	◆ US Nuclear Regulatory Commission
OAS	◆ Organization of Agreement States
TENORM	◆ Technologically enhanced naturally occurring radioactive material

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### Officers

**Joe Klinger, Chair**  
**Kristen Schwab, Chair-Elect**  
**Earl Fordham, Past-Chair**  
**Alyse Peterson, Treasurer**

# Forum Corner


 LLW  
FORUM

## LLW Forum Meeting Dates

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### Board Meetings

May 11, 2022

June 8, 2022

July 13, 2022

LLW Forum Fall Meeting  
October 12-13, 2022, Baltimore, MD

DSWG October 14, 2022 (AM)

Fall 2023 - in Utah

## Forum Focus

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Forum Officers Recommendations re: Membership/Categories/Recruitment. Officers have met to discuss ways to improve and enhance LLW Forum membership. Categories are listed on the Forum website. Many categories are not utilized. Alyse is taking charge on unaffiliated States. As a group, LLWF will look to the local Compacts for Host State Memberships. Dan is reaching out to some of our Industry partners for membership.

Kristen will provide Spring Meeting Survey results during another meeting call.

Topics in June meeting included the NRC request for comments on Regulatory Basis for Financial Assurance for Radioactive Material Sources. Comments due by June 27, 2022.

## Safety Moment

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Leonard Slosky recalled a DOE Classified Shipment, which had an accident during a blizzard in Colorado. Local law enforcement responded which resulted in firearm engagement on both sides. This reminder stressed the importance of communication and working together.

## LLWF's Disused Sources Working Group (DSWG)

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The DSWG will be providing comments on the NRC regulatory basis to support a rulemaking related to financial assurance for sealed and unsealed radioactive materials.

Michael Klebe, consultant to the DSWG, is requesting input and comments before May 20, 2022.

The DSWG as a group will be commenting, not the LLW Forum, but the information will be shared with the group.

## Focus on Financials

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Finances are in good order. Meeting registration fees were up for this past meeting.

## Mission & Operations Committee

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The committee is working on a survey for Forum membership. The committee hopes to present at the fall meeting and the survey will be sent shortly after that. Meeting topics included an update on implementation of approved Forum Strategic Plan. The five functional areas are Meeting Activities; Organizational Development; Education; Internal Evaluation & Activities; Policy & Technical Matters.

## Texas-Vermont Compact Progresses in Texas Sunset Advisory Commission Review

### Status of Review

The Texas Low-Level Radioactive Waste Disposal Compact Commission (TLLRWDCC “Texas-Vermont Compact”) is undergoing a periodic review by the Sunset Advisory Commission of Texas, during which interviews and inquiries are conducted followed by hearings and recommendations and legislative changes, if deemed necessary. June 22, 2022, the Sunset Advisory Commission conducted a public hearing on the TLLRWDCC. At a subsequent meeting October 12, 2022, the Sunset Advisory Commission will issue its decisions. A subsequent Sunset Staff Report with Commission Decisions will be issued containing the original staff report as well as the commission’s decisions on which statutory recommendations to propose to the Legislature and which management recommendations the agency should implement.

Key issues from the Staff Report are highlighted in the following pages. Source: [Staff Report](#)  
May 25, 2022, 2022-2023, 88th Legislature

## Recommendations and Responses

### Staff Recommendations

#### Change in Statute

Amend the compact commission’s Sunset review date to 2035.

Because the compact commission is not subject to abolishment under the Sunset Act, but the Legislature and the public benefit from continued legislative oversight of it, this recommendation would extend the Sunset date in the compact commission’s statute to 2035, placing it under Sunset review again in 12 years.

#### Fiscal Implication

Continuing the compact commission would require an annual appropriation from the Legislature, which was approximately \$577,000 in fiscal year 2021. The recommendation would not result in any additional fiscal impact to the state.

### TLLRWDCC Response

The TLLRWDCC welcomes the staff’s recommendation to continue the role and functions of the TLLRWDCC while requesting another review by the Sunset Advisory Commission in 2035. Although we are an independent agency created by federal law and the contractual compact among multiple state governments, we value the role the Texas Legislature plays in providing guidance on our operations and ensuring we have the tools to carry out our duties. We want to continue answering any questions staff has regarding our expenditures and hope to always meet expectations

for effectiveness, fiscal responsibility and efficiency. We also hope to continue discussing the request in the TLLRWDCC Self Evaluation Report to grant the Commission the right to assess administrative penalties for violations of our rules and also look forward to furthering conversation regarding our Capacity Committee’s work to gather information on the challenges of guarding the capacity at the Compact Waste Facility to ensure there is always ample space for our in-compact generators’ needs ([Raines letter June 9, 2022](#)).

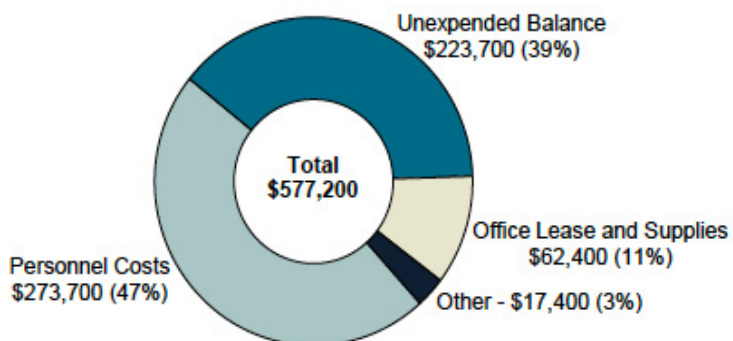
## Texas-Vermont Compact Progresses in Texas Sunset Advisory Commission Review

Staff Report May 25, 2022, 2022-2023, 88th Legislature**Funding**

Texas generates revenue from fees levied for disposal of low-level radioactive waste at the compact waste disposal facility. For Texas to serve as the host state, the compact required Vermont to pay an additional \$25 million to Texas and \$2.5 million to Andrews County.

**Amount to date:** over \$63 million in revenue for the state.  
FY 2021: The Legislature appropriated the compact commission \$577,200.

**Amount lapsed:** Almost \$224,000 unused lapsed back to the general revenue dedicated account for TCEQ to use in the subsequent fiscal year.

**Compact Commission Expenditures - FY 2021**

Texas reimburses costs associated with operation of the compact commission. The remainder of the dedicated account goes to the operational costs of Texas Commission on Environmental Quality's Radioactive Materials Licensing and Compliance programs.

**History**

**1998:** Congress ratified a compact between Texas, Vermont, and Maine to establish the Texas Low-Level Radioactive Waste Disposal Compact Commission.

**2002:** Maine repealed the compact following the closing and decommissioning of its one nuclear reactor.

**2009:** Texas Commission on Environmental Quality (TCEQ) licensed Texas' only current disposal facility for Class A, B, and C low-level radioactive waste, known as the compact waste disposal facility, which a private company called Waste Control Specialists (WCS) operates in Andrews County.

**2021:** WCS began operating the facility.

## Texas-Vermont Compact Progresses in Texas Sunset Advisory Commission Review

[Staff Report May 25, 2022, 2022-2023, 88th Legislature](#)

### Functions

The compact commission oversees the disposal of low-level radioactive waste by performing the following functions:

- Monitors the available capacity for low-level radioactive waste at the compact waste disposal facility.
- Approves the shipment of low-level radioactive waste into the compact waste disposal facility and out of Texas or Vermont.
- Adopts a contingency plan for the disposal of low-level radioactive waste in the event the compact waste disposal facility closes.

### Status

While WCS owns the compact waste disposal facility, the state owns the land on which the facility was built and the low-level radioactive waste disposed within it, including all liabilities for future containment and monitoring of the facility once closed.

#### Current Status:

- Constructed 475,000 of the nine million cubic feet of storage authorized
- Filled about 200,000 cubic feet or about 2 percent of the total authorized space

The most recent study in 2020 projected that by 2044, the facility would only reach about 32 percent of the volume and 15 percent of the radioactivity authorized under its license.

### Import and Export of Waste

#### Import of Waste

The compact commission has authority to approve applications from other parts of the country outside Texas and Vermont to dispose of waste at the compact waste disposal facility based on certain statutory limits.

Limits for disposal nonparty states: may not exceed 30 percent of the available storage.

Cap on the amount of curies of nonparty waste that may be disposed of at the compact waste disposal facility: 275,000 per year.

FY 2021, the compact commission approved 30 importation agreements for the disposal of nearly 20,000 cubic feet of waste at the compact waste disposal facility.

#### Export of Waste

In fiscal year 2021, the compact commission approved two exportation agreements.

Statute prohibits WCS from disposing of waste originating outside the U.S.

## Texas-Vermont Compact Progresses in Texas Sunset Advisory Commission Review

[Staff Report May 25, 2022, 2022-2023, 88th Legislature](#)

### Benefits of Legislative Oversight

While the compact commission carries out a narrow, federally defined role, the state benefits from continued legislative oversight.

The compact commission's role is limited, technical, and largely governed by a congressionally-ratified agreement, which restricts state legislative control more than for a typical state agency governed by state statute.

Statute expressly establishes the compact commission as an independent entity created by federal law, governed by the compact, and specifies it is not a state agency.

While the compact precludes abolishing the compact commission, statute subjects the compact commission to a regular Sunset review to ensure compliance with those open government laws as well as other hallmarks of Sunset review, such as accountability, efficiency, and effectiveness.

Additionally, the compact requires Texas, as the host state, to pay for the compact commission's operations, which requires a state appropriation, necessitating some legislative oversight.

Finally, the compact commission has an integral role in ensuring the viability of safe transport and disposal of radioactive waste in Texas, and the compact gives both the legislature and compact commission discretion and authority to execute this role.

### Balancing Ownership and Operations

While the disposal of low-level radioactive waste is complex, the state provides enough mitigation mechanisms in case of the compact waste disposal facility's closure.

Using a private company to operate the disposal site creates a complicated relationship where the state's and the operator's interests are not always aligned.

Texas owns the long-term liabilities of the disposal site, but WCS must pay the up-front operational costs and the capital costs to expand the disposal site. In overseeing the importation and exportation of waste, the compact commission has to balance the compact's purpose of managing and restricting the amount of interstate commerce around low-level radioactive waste disposal in the party states with the need to ensure the compact waste disposal facility is profitable enough for WCS to continue to operate it.

This balance is complicated by TCEQ setting the rates for waste disposal that generate revenue for WCS, the state, and Andrews County.

### Mitigating Unforeseen Closure

Statute requires the compact commission to adopt a contingency plan for the possible event of a lack of a licensed operator at the facility, a requirement the compact commission complied with in March 2020.

However, during the Sunset review, some stakeholders expressed concerns about WCS's desire and ability to continue to own and operate the facility. Sunset staff evaluated the many mechanisms and actions taken by the state to mitigate the risk of an unforeseen closure of the compact waste disposal facility and found them to be sufficient.

- WCS provided to TCEQ a contingency plan and financial assurance for the facility's closure.
- At least every four years TCEQ has to study the compact waste disposal facility's capacity, which it has done three times since the facility became operational in 2012.

## Recognition

## SOUTHEAST COMPACT HODES AWARD 2022 RECIPIENT

The Commission selected Aldon (Al) Beale to receive the 2022 Richard S. Hodes Award. Mr. Beale was the inventor and first to patent soft-sided IP-1 rated waste packaging for containing and disposing of hazardous and radioactive materials. His career engineering soft side packaging began with the Department of Energy at the Idaho National Engineering and Environmental Laboratory in August 1998. Traditional methods for packaging waste were forever changed by his innovative thinking, passion for design and engineering, and commitment to safety. For over two decades, Mr. Beale's designs continue to be used across North America in the nuclear industry by providing reliable, safe, and cost-effective alternatives to traditional metal waste containers.

THE RICHARD S. HODES, M.D. HONOR LECTURE AWARD honors the memory of its late chairman, Dr. Richard S. Hodes, a strong proponent for innovation in the field of low-level radioactive waste management. Dr. Hodes was a physician, statesman, educator, and, for 19 years, chairman of the Southeast Compact Commission for Low-Level Radioactive Waste Management. The award was created by the Commission to encourage environmental professionals and political leaders to develop innovative approaches to waste management in the United States and, in doing so, to further the mission and objectives of the Southeast Compact Commission.



**Appalachian Compact**

Delaware • Maryland •  
Pennsylvania • West Virginia

**Notice of Retirement**

David J. Allard, MS, CHP, Director of the PA Dept. of Environmental Protection, Bureau of Radiation Protection, is retiring effective Saturday, July 2, 2022.

He plans to remain Chairman of the Appalachian States Low-level Radioactive Waste Compact Commission until PA Agency appointments can be made and confirmed in 2023.

**Atlantic Compact**

Connecticut •  
New Jersey • South Carolina

**Meeting**

September 21, 2022 in Columbia, South Carolina  
Contact: Max Batavia max@atlanticcompact.org

**Central Compact**

Arkansas • Kansas • Louisiana • Oklahoma

**Meeting**

June 30, 2022, 10:00 a.m.

The Annual Meeting of the Central Interstate Low-Level Radioactive Waste Compact Commission will be held via zoom teleconference on Thursday, June 30, 2022 at 10:00 am. Business operations; election of officer; status of audits FY 19, 20 21; discussion of audit for FY22; and review and approval of proposed FY23 budget of \$51,750 are on the agenda.

See the information at the [website](#).

**Central Midwest Compact**

Illinois • Kentucky

**Meeting**

The Central Midwest Compact Commission (CMCC) will hold its Annual Meeting September 13, 2022, in Springfield, IL. Location to be determined. It will be offered virtually as well as in-person. See the online [agenda](#).

**Midwest Compact**

Indiana • Iowa • Minnesota • Missouri • Ohio • Wisconsin

**Meeting**

Friday, June 24, 2022

The Midwest Interstate Low-Level Radioactive Waste Compact Commission will hold its annual meeting by Teams conference call at 10:00 am – 11:00 a.m. CDT (or an earlier adjournment if the business is completed). (Note: 11:00 am – 12:00 pm EDT for Indiana and Ohio).

The public is encouraged to attend the teleconference over a Teams link by sending an email by noon CDT June 22 to Jim Chiles, at jim.chiles@state.mn.us

Agenda items include:

- a. Next three annual audits, FY 2022-24: by Smith, Schafer
- b. Discussion of Executive Director Position, FY 2024 and following
- c. Review of FY 2022 finances
- d. Expenses projected for FY 2023
- e. Adoption of FY 2023 budget
- f. Election of Officers

### Northwest Compact

Alaska • Hawaii • Idaho •  
Montana • Oregon • Utah • Washington • Wyoming

#### Meeting

September -October 2022 timeframe

#### State of Utah

The Waste Management and Radiation Control Board has scheduled a meeting for June 9, 2022, at 1:30 PM. A meeting was held May 12, 2022.

For details about the meeting along with the agenda and information regarding how to participate, see the [website](#).

### Rocky Mountain Compact

Colorado • Nevada • New Mexico

#### Meetings

Rocky Mountain Low-Level Radioactive Waste Board Regular Meeting and Annual Meeting, June 23, 2022. See the [website](#).

The regular meeting agenda items include:

- Updates from the Clean Harbors Regional Facility; URENCO, USA; National Developments/LLW Forum; Compact States of Colorado, New Mexico & Nevada
- Executive Director's Report
- Fiscal Status/Investment Summary
- Permit Fee Revenue for 2021 & 2022
- Expenditure/Budget Comparison FY 2021-2022
- Status of Volumes Authorized for Export and Disposal 2021 & 2022
- Discussion of Board Fiscal Status
- Measures already taken to reduce costs

- Revenue streams that could be enhanced
- Export fees, Import fees, Compact Surcharge (in-region and out-of-region)
- Executive Session to Obtain Legal Advice

Annual meeting agenda includes:

- Election of Officers
- Consideration of Fiscal Year 2022-2023 Budget

### Southeast Compact

Alabama • Florida • Georgia •  
Mississippi • Tennessee • Virginia

#### Meetings

June 27 and 28, 2022

The Southeast Compact Commission will hold quarterly meetings of its finance, administrative, and policy and planning committees on Monday, June 27, 2022 from 12:00 pm to 6:00 pm EDT. The Commission's annual meeting will be held the following day, Tuesday, June 28, 2022, from 9:00 am to 12:00 pm, EDT.

These meetings will be held at the offices of the Georgia Environmental Finance Authority at 47 Trinity Ave., Atlanta, GA 30334 and are open to the public.

Finance Committee agenda items include:

- Review of Financial Status and Management of Commission Funds
- Review and Discussion of Commission's Proposed Annual Budget for 2021/2022
- Discussion of Financial Implications of Possible Commission Committee Members
- Financial Support of Regional Generators Disposing Disused Sealed Sources

The Administrative Committee will review and discuss of budget for 2022/2023.

Policy and Planning Committee will discuss:

- Review and Discussion of the Strategic Plan
- Review and Discussion of Policy Statement Regarding Management of Low-Level Radioactive Waste
- Discussion of Possible Financial Assistance for Small Generators with Disused Sealed Sources

The annual meeting will include reports from:

- Executive Director
- Treasurer
- Committees
- State and Liaison

Chairman-Elect and Secretary/Treasurer will be elected.

Links for the agendas are:

Committee Meeting Agendas 22-06-07

Commission Final Agenda 22-05-26

Contact:

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 Knoxville, TN 37930  
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 secc@secompact.org

Hodes Award Recipient for 2022 has been named.  
 See the separate article in this edition.

## Texas Compact

Texas • Vermont

### Meetings

Thursday, July 21, 2022

via Zoom Meeting webinar and in person in  
 Andrews, TX

Thursday, September 29, 2022

via Zoom Meeting webinar and in person at the  
 Vermont State Capitol in Montpelier, VT

Contact: administration@tllrwdcc.org

### Sunset Advisory Commission Review

The compact has been under review by the Sunset Advisory Commission of Texas and final decisions are expected around October 2022, with any legislation deemed necessary being introduced in the 2023 Legislative Session.

See the article in this edition for more detail.

## Nominations for NRC Key Leadership Posts

On May 3, President Biden announced his intent to nominate the following individuals to serve as key leaders in his administration:

- Annie Caputo, Nominee for Nuclear Regulatory Commission
- Bradley R. Crowell, Nominee for Nuclear Regulatory Commission

### Annie Caputo, Nominee for Nuclear Regulatory Commission

Annie Caputo currently consults with the Idaho National Laboratory (INL) regarding international collaboration on advanced nuclear reactors. Prior to her work at INL, Caputo served as a professional staff member on the U.S. Senate Armed Services Committee (SASC), assisting the Committee with issues related to the National Nuclear Security Administration's infrastructure. Preceding her SASC assignment, Caputo served as a Commissioner of the U.S. Nuclear Regulatory Commission for three years until the term expired in June 2021.

Caputo previously served as a professional staff member and senior policy advisor for the Senate Environment and Public Works Committee and the House Committee on Energy & Commerce from 2005 to 2018. Prior to her positions on Capitol Hill, she worked for Exelon Corporation and its predecessor company Commonwealth Edison, holding positions in both nuclear fuel and government affairs. Caputo has also served on the Board of the American Nuclear Society. Caputo earned her Bachelor's degree in Nuclear Engineering from the University of Wisconsin-Madison. She lives in Virginia with her husband and two children.

### Bradley R. Crowell, Nominee for Nuclear Regulatory Commission

Bradley R. Crowell serves as Director of the Nevada Department of Conservation and Natural Resources (DCNR). Crowell was first appointed as Director in 2016 by former Governor Brian Sandoval and was reappointed by Governor Steve Sisolak in 2019. At DCNR, he leads approximately 1000 employees across 8 divisions and manages a nearly \$300 million biennial budget. Crowell has more than 20 years of experience in the fields of energy, environment, natural resources, climate change, and national security, including executive leadership positions in federal and state government. Prior to his current role, he worked for multiple Members of Congress, including former Nevada Governor and Senator Richard Bryan (D-NV) and Senator Sheldon Whitehouse (D-RI). Crowell served in the Obama-Biden Administration at the U.S. Department of Energy from 2010-2016, and was confirmed by the U.S. Senate in 2013 as the Assistant Secretary of Energy for Congressional and Intergovernmental Affairs.

Crowell resides in Reno, Nevada, with his wife, Mrs. Rebecca Claypool and their 1-year-old daughter Hazel, and is a native of Carson City, Nevada.

## Federal Budget Requests for Radioactive Waste

## DOE OEM Budget Request

The Office of Environmental Management (EM) supports DOE to meet the challenges of the Nation's Manhattan Project and Cold War legacy responsibilities. The FY 2023 Request includes \$7.6 billion for EM to cleanup millions of gallons of liquid radioactive waste, thousands of tons of spent (used) nuclear fuel and nuclear materials, disposition of large volumes of transuranic and mixed/low-level waste, huge quantities of contaminated soil and water, and deactivation and decommissioning of thousands of excess facilities. This environmental cleanup program results from

six decades of nuclear weapons development and production and Government-sponsored nuclear energy research. It involves some of the most dangerous materials known to mankind. To date, EM has completed cleanup activities at 92 sites in 30 states and in the Commonwealth of Puerto Rico. EM is currently responsible for cleaning up the remaining 15 sites in 11 states. Cleaning up these remaining sites will support the Justice 40 Initiative and advance the Administration's equity goals.

<https://www.energy.gov/sites/default/files/2022-04/doe-fy2023-budget-in-brief-v6.pdf>

## USNRC FY 2023 Budget Justification

## Nuclear Materials and Waste Safety Highlights

Business Line	FY 2022 President's Budget		FY 2023 Request		Delta FY 23 – FY 22	
	\$M*	FTE	\$M*	FTE	\$M*	FTE
Spent Fuel Storage and Transportation	28.0	99.0	27.1	99.1	(0.9)	0.1
Nuclear Materials Users	60.3	198.0	63.2	202.0	2.9	4.0
Decommissioning and Low-Level Waste	22.9	85.0	23.9	86.8	1.0	1.8
Fuel Facilities	19.0	71.0	21.3	76.3	2.3	5.3
<b>Total</b>	<b>\$130.2</b>	<b>453.0</b>	<b>\$135.5</b>	<b>464.2</b>	<b>\$5.3</b>	<b>11.2</b>

\*\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

**Major Increases**

- Salaries and Benefits
- Qualification training for the agency's Agreement State program
- Enrichment and manufacturing of high-assay low-enriched uranium fuel, advanced reactor fuel, and accident tolerant fuel

**Major Decreases**

- Accident tolerant fuel research
- Integrated Source Management Portfolio (ISMP)

Source: Congressional Budget Justification: Fiscal Year 2023 (NUREG-1100, Volume 38)

<https://www.nrc.gov/docs/ML2208/ML22087A157.pdf>

<https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1100/v38/index.html>

## Research Grants

### **NRC Awards \$9 Million in Academic Grants to Support Nuclear Science and Engineering Fields**

The Nuclear Regulatory Commission announced today that it has awarded 25 grants to 20 academic institutions, including two minority-serving institutions, in 20 U.S. states, totaling more than \$9 million. Recipients include four-year universities and colleges, two-year trade schools and community colleges.

The University Nuclear Leadership Program, authorized by Congress, directed the NRC to provide federal funding opportunities to qualified U.S. academic institutions. The UNLP aids in bolstering nuclear engineering and related programs to ensure the next generation of scientists and engineers are prepared for evolving future challenges.

These grants include four undergraduate scholarships, one trade scholarship, nine graduate fellowships, and 11 faculty development awards. Each undergraduate scholarship provides up to \$20,000 in financial support to students over the

course of the two-year program, and each graduate fellowship provides up to \$200,000 over the course of the four-year program.

The NRC's trade and community college scholarships provide financial support of up to \$10,000 to students over the course of the two-year program, and faculty development awards provide up to \$450,000 over a single three-year period.

Since the grant program's inception in 2009, the NRC has awarded 598 educational grants totaling more than \$192 million, of which 106 were awarded to minority-serving institutions. This amount includes funding for 166 faculty development grants, 146 scholarship grants, 173 fellowship grants, and 86 trade school and community college scholarship grants. These grants have been awarded to more than 165 individual faculty members and 4,500 students located in 38 states and Puerto Rico.

The complete list of grants awarded and general information regarding the grant program are available on the NRC's public website. The NRC announces grant opportunities on

[www.grants.gov](http://www.grants.gov), which enables the public to find and apply for federal funding opportunities.

## Disposal Site Updates and Issues

### **DOE Proposed Onsite Facility**

OAK RIDGE, Tenn. – More than 100 people attended a May 17 public meeting on the Oak Ridge Office of Environmental Management's (OREM) proposed onsite disposal facility.

The meeting was part of a new phase of public outreach OREM recently launched for the proposed Environmental Management Disposal Facility (EMDF) that includes a 30-day comment period and new website to inform area residents about the project.

EM Update | Vol. 14, Issue 20 | May 24, 2022

## Consolidated Interim Storage Facilities

**Interim Storage Partners LLC -  
WCS Consolidated Interim Storage  
Facility**

Interim Storage Partners LLC submitted an amendment request to revise the WCS Consolidated Interim Storage Facility license condition 17 to clarify the timing of mandatory license amendment requests relating to incorporation of Aging Management Programs for certain spent fuel storage casks with renewed Certificates of Compliance. The NRC reviewed and approved the request. A copy of the approval letter and related documents (safety evaluation, revised license, etc.) can be obtained using the NRC Agencywide Documents Access and Management System (ADAMS). The ADAMS accession number is ML22138A361 or use this [link](#).

**NRC Letter to Holtec International  
– Revised Review Schedule for  
Holtec HI-STORE CISF License  
Application**

On May 26, 2022, NRC staff issued a letter notifying Holtec International that it has revised the schedule for the completion of its detailed safety, security, and environmental reviews of Holtec's application for a license to construct and operate the proposed HI-STORE Consolidated Interim Storage Facility (CISF), in Lea County, New Mexico. The NRC staff's letter may be viewed under ADAMS Accession Number ML22126A132, or use this [link](#).

## Spent Fuel, Decommissioning, Financial Security and Waste Storage

### Decommissioning Financial Assurance for Sealed and Unsealed Radioactive Materials

The U.S. Nuclear Regulatory Commission (NRC) is requesting comment on a regulatory basis to support a rulemaking that would amend its regulations for decommissioning financial assurance for sealed and unsealed radioactive materials. The rulemaking would revise NRC's decommissioning funding requirements for radioactive material based on the relative risk to public health and safety from different radioisotopes, including naturally occurring and accelerator-produced radioactive material. The potentially affected licensees are those authorized to possess byproduct and special nuclear material. Submit comments by June 27, 2022.

Source: 87 FR 25157

#### Abstract:

This rulemaking would amend the NRC's regulations to add radionuclides and corresponding possession values not currently listed in 10 CFR Part 30 Appendix B for calculating a licensee's decommissioning funding requirement to possess a radionuclide with a half-life greater than 120 days. It would also apply a uniform and more risk-informed method for setting possession values for all radionuclides listed in Appendix B. The rulemaking will apply to all entities, including those in Agreement States, licensed to possess sealed or unsealed byproduct or special nuclear material with a half-life greater than 120 days.

Rulemaking docket: <https://www.regulations.gov/docket/NRC-2017-0031>

### NRC Proposed Rule to Amend Its Regulations That Relate to the Decommissioning of Production and Utilization Facilities

NRC published a proposed rule to amend its regulations that relate to the decommissioning of production and utilization facilities.

NRC's goals in amending these regulations are to maintain a safe, effective, and efficient decommissioning process; reduce the need for license amendment requests and exemptions from existing regulations; address other decommissioning issues deemed relevant by the NRC; and support the NRC's Principles of Good Regulation, including openness, clarity, and reliability.

The NRC will hold public meetings to promote full understanding of this proposed rule and to facilitate public comments.

Comments were due by May 17, 2022.

### Louisiana Energy Services, LLC, - Urenco USA Executed Financial Assurance Instruments For Decommissioning

The document may be viewed under ADAMS Accession Number ML22137A036.

Date: June 3, 2022

### International Conference on the Safety and Security of Radioactive Sources: Accomplishments and Future Endeavours from 20 to 24 June 2022 in Vienna

Topics are safety and security matters of radioactive sources throughout their lifecycle; collaboration among national stakeholders; regulatory control of radioactive sources; sustainability and effectiveness of national infrastructures, including lessons learned from the COVID-19 pandemic; international cooperation and preparation and response to radiological incidents and emergencies involving radioactive sources. Information is available at this [link](#).



## Small Modular Reactor Waste

## Discussions Exchanged about Study of Amount of Radioactive Waste Generated by Small Modular Reactors

In the *Proceedings of the National Academy of Science* (May 2022) and a Stanford news article, “Stanford-led research finds small modular reactors will exacerbate challenges of highly radioactive nuclear waste,” (May 30, 2022 by Mark Shwartz), authors of the study from Stanford and the University of British Columbia conclude that small modular reactors actually will generate more nuclear waste than conventional nuclear power plants. They attribute this factor to the higher neutron leakage and activation of components and the exotic fuels and coolants used. They cite a higher level of radiotoxicity in wastes.

One manufacturer, NuScale, wrote to explain that the analysis performed on their product did not consider the 250-MW thermal core and instead considered the 160-MW thermal core. In considering the 250-MW core, the author from

NuScale noted that wastes would be typical of those in the current fleet of reactors. The study’s authors responded that they analyzed the 160-MW thermal core for which information was on file. The 160-MW thermal core that had been submitted to NRC and so certified. Additionally, pertinent designed information had not been released to them for the study, so calculations were made. When the 250-MW thermal core information is submitted and accepted by NRC and information is available, the authors may evaluate this information they commented. The authors suggest that the 250-MW thermal core may generate less waste per unit energy-equivalent but that small reactors likely will be shown to generate more waste.

### References

[Stanford-led research finds small modular reactors will exacerbate challenges of highly radioactive nuclear waste](#), May 30, 2022

Mark Shwartz

[NuScale responds to SMR critique](#)

Thu, Jun 2, 2022, 8:30AM

Jose Reyes, NuScale’s chief technology officer and cofounder

[Authors of SMR study reply to NuScale comments](#), June 13, 2022

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IAEA - [What are Small Modular Reactors \(SMRs\)?](#) - [NRC Small Modular Reactors](#)

Thursday, July 21, 2022, 9:00 a.m. Update on 10 CFR Part 53 Licensing and Regulation of Advanced Nuclear Reactors  
(Contact: Greg Oberson: 301-415-2183)

## Risk-Informed Decision Making &amp; Regulation

**CRCPD Workshop: Continuing Efforts for NORM Regulatory Framework Development and Risk-Informed Decision Making**

**CRCPD Workshop: Continuing Efforts for Norm Regulatory Framework Development and Risk-Informed Decision Making  
E-46 Task Force To Develop A Workshop and Guidance On Radiation Protection Issues Related to TENORM  
Publication # 22-2**

CRCPD has published its report from the NORM IX Workshop Meeting addressing NORM. It notes that “As detection and monitoring of NORM residues increased, the need for consistent guidance on portal monitors and rejecting loads of scrap and waste emerged. Finally, the needs for a consistent framework are underscored when NORM residues are being exported or imported to jurisdictions with varying exemption limits, classifications of low-level radioactive waste, or no NORM regulations at all.”

Discussions of risk-informed issues included:

- Risk Assessment
- Risk Communication
- Dose Assessment for Risk-Informed Regulation

See the report at this [link](#).

## NRC Risk Insights

**NRC Meeting**

Transformation at the NRC – Sustaining Progress as Modern, Risk-Informed Regulator 06/01/22

See this link for [archives](#).

Low-Level Radioactive Waste Disposal Compact Membership

Northwest Compact

- Alaska
- Hawaii
- Idaho
- Montana
- Oregon
- Utah
- Washington
- Wyoming

Midwest Compact

- Indiana
- Iowa
- Minnesota
- Missouri
- Ohio
- Wisconsin

Appalachian Compact

- Delaware
- Maryland
- Pennsylvania
- West Virginia

Rocky Mountain Compact

- Colorado
- Nevada
- New Mexico

Northwest accepts Rocky Mountain waste as agreed between Compacts

Central Midwest Compact

- Illinois
- Kentucky

Atlantic Compact

- Connecticut
- New Jersey
- South Carolina

Southwestern Compact

- Arizona
- California
- South Dakota
- North Dakota

Texas Compact

- Texas
- Vermont

Central Compact

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- Kansas
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### 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](http://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) [listserv@unixmail.rtpnc.epa.gov](mailto:listserv@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](http://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 [www.llwforum.org](http://www.llwforum.org)

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