LLW notes

Volume 39 Number 6 November - December 2024

A Message from Dan Shrum, Executive Director

Wishing everyone a safe and happy holiday season. Please register for the next Forum meeting in Odessa Texas on April 9-10, 2025 and consider joining us on the tour of WCS and URENCO on April 8, 2025.

Daniel B. Shrum, Executive Director

For Spring Meeting information,
click here.

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

In this Issue...**Find excerpts from Uranium Resources in the State of Texas Comprehensive Review, DSWG Update, anticipated report on Supply Chain for Lithium-7, along with compact and regional news.**

© Low-Level Waste Forum produced by Daniel B. Shrum, Executive Director
Margaret Henderson, Editor

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.

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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
EPA	U.S. 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	U.S. Nuclear Regulatory Commission
OAS	Organization of Agreement States
TENORM	Technologically enhanced naturally occurring radioactive material

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Forum Focus

The Future

Forum Spring Meeting April 9-10, 2025 Odessa Texas

Tour WCS and URENCO April 8, 2025

Click here for information.

DSWG Meeting
April 11, 2025
Odessa, TX

LLWF 24th Anniversary
January 2025

NRC RIC
March 11-13, 2025
Charting the Next 50 Years
Click here for information.

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Disused Sources Working Group Update – December 2024

by Michael Klebe

The DSWG held a hybrid meeting on Friday, October 11, 2024, following the LLW Forum meeting in Reno, Nevada.

Sam Meyer, a support contractor for the Office of Radiological Security, NNSA, provided a presentation on DOE disposal of sealed sources.

John Salzman, Texas Low-Level Radioactive Waste Disposal Compact Commission, provided an interactive discussion regarding access to the Texas compact disposal facility.

Ned Woodward, GAO, began by providing an overview of a current work in progress.

Ryan Whited, NRC Low-Level Waste Branch, provided an overview of the current rulemakings waiting for Commission approval to proceed.

Highlights of the DSWG Discussions

DOE Disposal of Sealed Sources

Sam Meyer, a support contractor for the Office of Radiological Security, National Nuclear Security Administration (NNSA), provided a presentation on DOE disposal of sealed sources.

Eligible sources for the Offsite Source Recovery Program (OSRP) include the US-origin transuranic (TRU) sources with no commercial disposal pathway and the high activity beta gamma (HABG) sources.

The TRU sources include:

- **AM-241**
- **Pu-238/Pu-239 and**
- **AmBe sources and other neutron generating mixed sources.**

The HABG sources include the large (>200 Ci) Co-60, Cs-137, and Sr-90 sources with no commercial disposal pathway.

This program was started in the 1990s or earlier. Post-9/11, the mandate expanded, and it became part of NNSA and the predecessor to the Office of Radiological Security, which was the Global Threat Reduction Initiative (GTRI).

TRU Source Disposal

Disposal of the TRU sources is done at the WIPP facility. TRU sources recovered are consolidated at the Gammatron facility in Houston, TX.

- **Commercial domestic origin TRU can be disposed of at WIPP since the radioactive material has a defense origin.**
- **WIPP is limited by statute to be for defense related waste only.**

A significant portion of the americium sources in use today contains Russian origin americium. Russia has stated that they will not accept repatriation of the americium since once it is put into commercial used and manufactured into a source there is no way to confirm it is of Russian origin.

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Disused Sources Working Group Update – December 2024

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DOE Disposal of Sealed Sources - continued

Sam was asked if commercial sealed sources, especially foreign origin sources, could be disposed of at the NNSS or other DOE facilities. He replied that he didn't think so, regardless of origin.

HABG Source Disposal

HABG sources are consolidated at the Southwest Research Institute (SwRI). Following source verification, the sources are packaged and shipped to the Nevada National Security Site (NNSS) for disposal. Typically, a half dozen shipments are sent to NNSS every year. This year will see an increase because there's a backlog of material at SwRI.

Highlights of the DSWG Discussions

The Texas Compact

John Salzman, Texas Low-Level Radioactive Waste Disposal Compact Commission, provided an interactive discussion regarding access to the Texas compact disposal facility.

The Compact

The Texas compact consists of two party states, Texas and Vermont. All other states and territories are considered non-party states. Party states have access to the facility and pay a more favorable rate. Non-party states must apply for access to the facility through an import permit process.

Compact Source or Waste Determination

In determining whether a sealed source is a **"compact source or waste,"** the Commission looks at who was the last beneficial user. If that entity is in the compact region, then the source or waste is deemed to be in compact waste. This approach prevents a source recycler from accepting out of compact sources for the purpose of reclassifying them in compact. Without the in compact beneficial use, the source remains as out of compact waste.

Foreign Origin Americium

As it relates to foreign origin americium, the Commission is not interested in the entity that produced the radioactive material in the sealed source. What the Commission looks at is the entity that owned and used that source. Their policy has generally been that if the entity that owned and used that source was either a United States company or the federal government, then that source is considered to be a United States source and is potentially disposable at the at the facility in Andrews.

John mentioned that the Commission has a position paper on their website that addresses establishing the generator of waste for purposes of determining party vs. non-party status.

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Disused Sources Working Group Update – December 2024

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Highlights of the DSWG Discussions

GAO Work in Progress

Ned Woodward, GAO, began by providing an overview of a current work in progress.

Supply Chain for Lithium-7

GAO expects to have a report out in January or February 2025, looking at the supply chain for **Lithium-7, an isotope that is used to buffer the acidity of water in pressurized water reactors.** This isotope is only produced in China and Russia. China is aggressively expanding its use of nuclear power including molten salt reactors which utilize significant amounts of Li-7. The US is interested in also developing molten salt reactors. Combine this with a potential resurgence of nuclear power, this will put a strain on the fragile supply chain for Li-7. With the current geo-political tensions, vendors have stopped working with Russian suppliers. The report will include some observations GAO has about the supply chain and recommendations for dealing with it.

NRC and Radiological Security Risks

The GAO issued a report in early October documenting the lack of NRC implementation of past GAO recommendations and **the need for congressional action.** The report is GAO-24-107014 - PREVENTING A DIRTY BOMB: Nuclear Regulatory Commission Has Not Taken Steps to Address Certain Radiological Security Risks.

Ned explained that Congress holds the GAO accountable for producing results. **Congress expects about an 80% implementation rate.** NRC compliance is not typical in their implementation rate. DHS has implemented nearly all the 22 recommendations made to them. It is a contractual expectation for their managers to implement the recommendations. This report to Congress was prepared because NRC was either unwilling or unable to address the vulnerabilities that GAO had identified, and those are strong terms that GAO doesn't use very often. **When GAO says unwilling, it's because NRC has outright said no multiple times, including in the last few months before they put out this report about considering socioeconomic impacts when considering the potential adverse effects from a dirty bomb involving Category 3 sealed sources.**

GAO Concern About a Dirty Bomb

A concern expressed through the report is GAO thinks this is important because we want to avoid the pain and suffering associated with a dirty bomb and the extensive socioeconomic impacts. The NRC as a regulatory agency must consider costs and benefits. Frequently, GAO would make recommendations and find out the reason they don't want to implement it is the costs exceed the benefits. However, the NRC doesn't consider the

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Disused Sources Working Group Update – December 2024

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GAO Work in Progress - continued

fiscal exposure to the federal government from the risk of a dirty bomb. An event like this is not covered by private insurance or if you have insurance, it's capped. There is a terrorism risk insurance act that says for these types of events, there's only so much private insurance available. **So ultimately the federal government is going to be on the hook with this fiscal exposure.**

Cost Benerfit Analysis

When GAO talks about cost benefit analysis and the regulatory cost exceeding the benefit it's because the NRC does not consider the massive fiscal exposure for cleanup. **The cost of adding Category 3 sources to the national source tracking system is about $20 million over 10 years, or $2,000,000 a year compared to billions of dollars in potential fiscal exposure.** This is one of the reasons why GAO is bringing this forward to Congress and to say, we think the cost benefit process would intuitively work out a different way.

Several recommendations made that NRC seemed open to, NRC said they were going to address through a future rulemaking. A proposed rule would come up from the staff and it would be with the Commission for an extended period and on more than one occasion, it would end with a two-to-two vote, meaning the proposed rule that had been years in the making, was not going through. Faced with that situation, GAO thought it was important to take this straight to Congress.

Highlights of the DSWG Discussions

NRC Current Rulemakings

Ryan Whited, NRC Low-Level Waste Branch, provided an overview of the current rulemakings waiting for Commission approval to proceed.

Integrated Low Level Wastes Rulemaking

The first is the integrated low-level wastes rulemaking, formerly known as the 10 CFR Part 61 and greater than Class C rulemaking. The proposed rule package for that rulemaking was sent to the Commission on May 29, 2024. It is publicly available and can be found by searching for SECY-24-0045. If the Commission approves the proposed rule, then it will be published in the Federal Register and be out for comment. There'll be a series of public meetings, likely in the four states with the Part 61 facilities (Utah, Texas, South Carolina and Washington) and possibly a webinar or virtual meeting to comment on the proposed rule.

Financial Assurance Requirements

The other rule making is to expand financial assurance requirements for category 1 and 2 and perhaps category 3 sources. Staff has developed a Regulatory Basis document, which is the first step of the rule-making process. The document has gone through review by the Agreement State programs and the advisory committee for the medical uses of isotopes. The comments so far have been favorable. **The status is that Regulatory Basis document is in the concurrence process, it's moving along and is supposed to be sent to the Commission in January 2025.** Hopefully it will be out for public comment in the February – **March 2025 timeframe.** Documents related to this rulemaking can be found by searching for SECY-23-0062.

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Excerpts from Uranium Resources in the State of Texas - A Comprehensive Review

About this report

The report focuses on Texas, but also discusses worldwide history, implications of political and climate factors on supply of enriched uranium, location of uranium deposits, economics of production, availability of enrichment facilities and other factors. Excerpts from the 102 page report are presented in this article. *Uranium Resources in the State of Texas - A Comprehensive Review,* published November 15, 2024, is available in the public domain at https://www.tceq.texas.gov/downloads/permitting/radioactive-materials/publications/uranium-resources-in-the-state-of-texas.pdf. The report was prepared by Frank H. Dotterweich College of Engineering and the College of Business Texas A&M University-Kingsville, Kingsville, Texas, under contract with TCEQ. For references cited, see page 18 of this newsletter.

"This assessment will lead to the development of recommendations for Texas to incentivize the development of the uranium mining industry and its processing to become fuel adequate for current and future nuclear reactors."

Power Reactors

According to the Power Reactor Information System, in 2022, there were 415 nuclear reactors located in 31 countries, with the United States hosting the largest number of them with 94 reactors (IAEA, 2024).

Advanced Reactors

The current advancements in nuclear technologies, such as advanced reactors and fuel recycling, present an opportunity to optimize uranium utilization while simultaneously minimizing waste generation.

Government incentives and support are expected to play a significant role in incentivizing and promoting the development of this more efficient and inexpensive technology.

Historical Production

In an earlier 2016 assessment of uranium resources of the US, it was determined that approximately 80 million pounds of U_3O_8 were recovered in Texas between 1955 and 2013 from an estimated ninety-two mines and one tailings facility (Hall et al., 2017). In the same assessment, about 200 million pounds had been mined from Wyoming Basins and 340 million pounds from the Colorado Plateau.

Waste Issues

Depleted Uranium (DU)

For every ton of natural uranium (NU), only 13% becomes enriched fuel, and the rest is depleted uranium (DU). The effort to increase domestic production of uranium in the US is imperative due to instability in some areas where foreign uranium is exported. In this effort to improve production, the state of Texas plays a pivotal role.

Compliance with Waste Management

Waste management regulations dictate the proper handling and disposal of radioactive waste generated during uranium mining and processing, with strict oversight to prevent leakage and contamination. Mining companies must engage with local communities and address concerns related to uranium mining, with public hearings and consultations forming part of the regulatory process to ensure transparency and gather community input.

Additionally, permit reviewers will need to review plans for project waste management and disposal, transportation....

Excerpts from Uranium Resources in the State of Texas - A Comprehensive Review

Global supply

Considering the recent restriction of global supply and continuing interest in growing electricity generation from nuclear energy, there has been a noticeable interest to increase uranium production across the US, and particularly in Texas (EIA, 2023f).

Resources in US

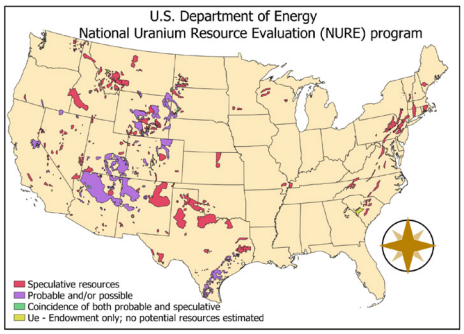

Figure 2: National Uranium Resource Evaluation (NURE) areas, as provided by the US Department of Energy (EIA, 2020a).

The National Uranium Resource Evaluation (NURE) program was initiated in 1973 to identify uranium availability in the United States. It was originally administrated by the Atomic Energy Commission and later by the US Department of Energy. Closing in 1984, the NURE program sampled diverse areas of US territory during its existence. to generate updated maps to ascertain uranium resource distribution in the US (EIA, 2020a). These maps were updated on October 21, 2020 by the EIA (EIA, 2020a).

... the United States holds over 1% of the identified in situ resources for uranium, ranking fourteenth among the world nations.

Texas Total Uranium Reserves

It has been estimated that 60 million pounds of U_3O_8 identified resources remain within the Texas Coastal Plains (Hall, 2017; DOE/EIA, 2010).

Consumption Issues

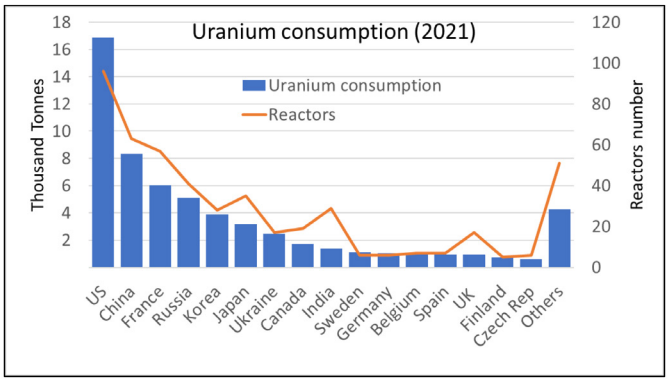

Figure 12: World uranium consumption per country including number of reactors in operation and in construction as reported by the Nuclear Energy Agency and the International Atomic Energy Agency (NEA, 2022; BGR, 2023).

...the United States (US) is the country which consumes the most uranium in the world, accounting for more than 28% of global supply, almost twice the consumption of the second ranked country, China. Furthermore, the US has almost one fifth of all reactors in operation or in construction in the world. ... securing supply of this fuel is a main priority to ensure the resilience of the electricity-generating system in the US.

Although the US consumed 28% of the world uranium supply in 2021, it mined less than 0.02%. Furthermore, more than 60% of uranium production takes place in locations affected by geopolitical instability such as the war in Ukraine and civil war in Niger. ..... Lack of local uranium production in the United States may therefore generate vulnerabilities for the electrical energy required to support consistent economic growth and development.

International conflicts and its associated instability led to the passage of H.R. 1042 Prohibiting Russian Uranium Imports Act, which took effect on August 11, 2024. This law bans uranium imports from Russia, seeking to eliminate US dependence on Russia, while simultaneously developing a strong US national uranium supply. **Reviving the US nuclear fuel production is one of the goals of this legislation.**

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Excerpts from Uranium Resources in the State of Texas - A Comprehensive Review

Economic Pricing Effect on Production

...performance has been uneven in the US as the nuclear mining industry decreased its growth during the last two decades of the twentieth century and the imported supply of uranium from international locations increased.

- A main reason for the decrease of the US national uranium production is the low price that uranium resource has experienced over the last two decades.....
- The uranium price has remained below $60 dollars per pound, except for a period in 2007. This low price, generated by abundant supply from government and inexpensive imports, caused many of the US uranium producers to scale down or close their facilities.
- Recently a significant increase in prices has been experienced, due to the restriction on the world uranium supply, geopolitical instability for some of the major international producers, and a renewed interest in nuclear energy generation to curb climate change.
- This confluence of factors is expected to continue maintaining high uranium prices, creating incentives for US producers to reactivate their facilities.

Coupled with the reactivation and life extensions of many existing nuclear reactors worldwide, demand for uranium is expected to keep at high levels for the foreseeable future.

Uranium prices are therefore also expected to continue at high levels, with Citibank forecasting the average price per pound of uranium reaching $110.00 (Shan, 2024). This creates significant incentive for US producers.

Enrichment Challenges

To be useful as fuel for nuclear reactors, uranium needs to be converted and enriched … to increase the concentration of U-235. Most modern reactors require U-235 concentrations between 3 and 5%.

Russia hosts nearly half of the world's uranium enrichment facilities….

The US contains just one enrichment facility in New Mexico, owned by the British – German – Dutch consortium Urenco.

To overcome these challenges, great interest has been indicated, in different countries, to grow uranium enrichment capacity.

The US federal government initiated a process to incentivize US investment in uranium enrichment services, earmarking $2.2 billion dollars to achieve this objective (NEI, 2023). The goal is promoting the development of enrichment facilities to process domestic uranium resources.

See page 11 for a related note on enrichment.

Excerpts from Uranium Resources in the State of Texas - A Comprehensive Review

Challenges

Climate Change

In the face of climatic warming, alternative energy solutions – such as nuclear, wind and solar – are imperative to mitigate the effects ….

Workforce Challenges

Constraints on the availability of qualified workers have also been indicated as a potential challenge for the uranium industry.

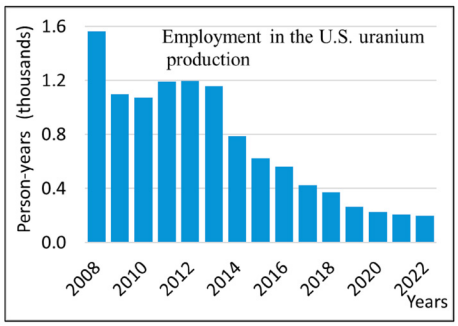

Figure 23: Employment in the U.S. uranium production (EIA, 2023a).

The nuclear and uranium industries require a broad variety of skills in their workforce, from the administrative personnel to the extraction areas, processing, enrichment, reprocessing, transportation, remediation, and disposal.

...the high turnover rate within TCEQ staff as a particular item of concern.

The high turnover rate may be due to lower salaries for agency employees. Staff are often hired and trained to get familiar with the application review process and then subsequently resign to take new employment elsewhere for a higher salary.

Without the retention of knowledgeable and tenured staff, the permitting process is sure to have delays due to the detailed nature of the process.

Community Acceptance and Community Impacts

Community and Social Acceptance

Community and social acceptance are considered one of the main factors that can impact the successful development of new mining and industrial activities.

Community Impact

Uranium mining in Texas supports economic growth and provides job opportunities for local communities.

Community and Social Opposition

For uranium mining, social and community opposition in diverse locations have impacted its successful development and operations, hindering its growth and financial viability.

See a related articles on enrichment capabilities:

Nuclear 2024 roundup: 'Urenco can scale up HALEU operations where needed'
10 December 2024

"Urenco USA selected for HALEU enrichment award by U.S. Department of Energy"

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Supreme Court Ruling Anticipated in 2025

Nuclear Regulatory Commission v. Texas, 23-1300, and Interim Storage Partners v. Texas, 23-1312.

Does the Atomic Energy Act Authorize the Commission to License Temporary Storage of Spent Nuclear Fuel Away From Nuclear Reactors?

The Supreme Court is expected to rule in 2025 on a federal appeals court ruling that the Nuclear Regulatory Commission lacked authority to issue such a license for a facility in Andrews County, Texas.

See https://www.supremecourt.gov/docket/docketfiles/html/public/23-1300.html

Bills Filed 118th Congress

H. R. 10227 H.R.10227 — 118th Congress (2023-2024) Introduced in House (11/21/2024)

To direct the Secretary of Energy to establish a program for the interim storage of high-level radioactive waste and spent nuclear fuel, and for other purposes.

See the text at https://www.congress.gov/bill/118th-congress/house-bill/10227/text?s=1&r=6&q=%7B%22search%22%3A%22radioactive%22%7D

S. 5157 118th Congress (2023-2024) Introduced 9/24/24

To require the Secretary of Energy to study new technologies and opportunities for recycling spent nuclear fuel, and for other purposes.

See the text at https://www.congress.gov/bill/118th-congress/senate-bill/5157/text?s=1&r=7&q=%7B%22search%22%3A%22radioactive%22%7D

Nuclear Waste Cleanup: NNSA Should Improve Its Strategy for Managing Anticipated Waste from Defense Activities

GAO-25-107636
Published: Dec 11, 2024. Publicly Released: Dec 11, 2024.

Generated waste amounts. Though the strategy's scope is a 25-year period, the 25-year outlook does not include anticipated waste from important upcoming activities, such as reestablishing plutonium pit production capability or surplus plutonium disposition.

Disposal options. The strategy did not identify disposal facilities, including any needed modifications. It states that other locations that could be used to dispose of high-risk waste should be identified or developed.

See the full report at https://www.gao.gov/products/gao-25-107636?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)

Tuesday, January 14, 2025
9:00 a.m.
(Contact: Araceli Billoch Colon: 301-415-3302)

Additional Information: The meeting will be held in the Commissioners' Hearing Room, 11555 Rockville Pike, Rockville, Maryland. The public is invited to attend the Commission's meeting in person or watch live via webcast at the Web address – https://video.nrc.gov/.

Advanced and Small Modular Reactors

NRC Seeks Comment on Advanced Reactor Licensing Proposed Rule

The Nuclear Regulatory Commission is seeking comment on a proposed rule and draft guidance for a commercial nuclear power plant licensing process that uses risk insights to set performance standards applicable to any reactor technology. This is the first comprehensive regulatory framework, called Part 53, developed for advanced technologies and designs that includes non-light-water reactors.

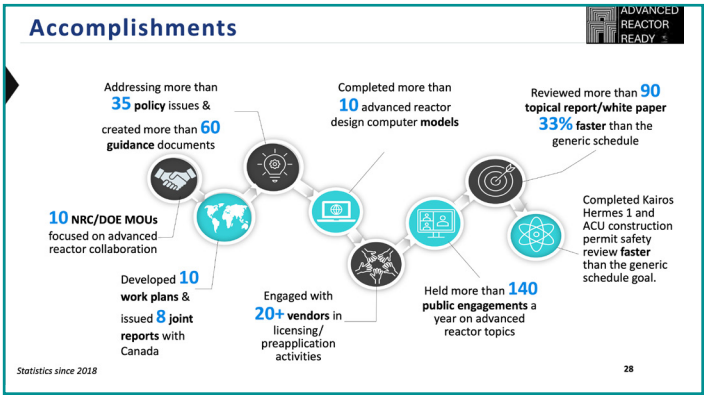
The proposed rule will create a Part 53 section under the NRC's regulations (10 Code of Federal Regulations) as an alternative to the existing licensing approaches under Parts 50 and 52. The rule will give plant designers and plant operators flexibility in determining how their nuclear power plant will meet safety criteria. The proposed rule also modifies agency regulations for operator licensing, employee fitness-for-duty, physical security, and site access authorization among others.

Comments can be submitted via regulations.gov under Docket ID NRC-2019-0062, via email to Rulemaking.Comments@nrc.gov, or via U.S. mail to Office of Administration, Mail Stop TWFN-7-A60M, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

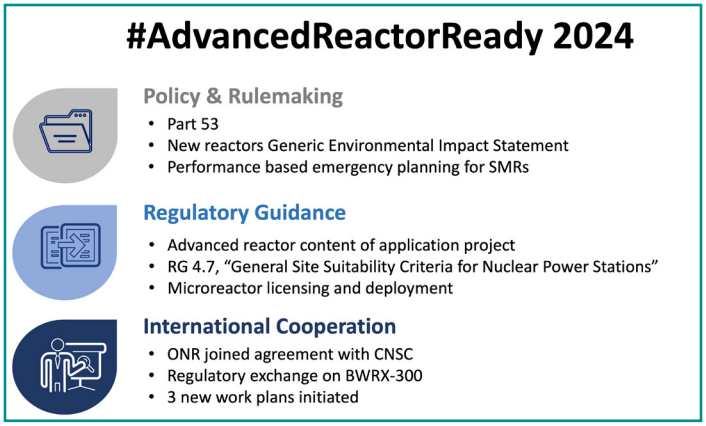
The NRC has decided to extend the public comment period until February 28, 2025 to allow more time for members of the public to develop and submit their comments and for the NRC staff to engage with stakeholders on the proposed rule language. Source: Federal Register, November 22, 2024.

Source of slides: Strategic Programmatic Overview of the Operating Reactor Business Line Commission Meeting November 14, 2024

The NRC refers to non-light water reactor (non-LWR) designs as advanced reactors. These reactors will use different technologies from existing operating reactors such as passive safety features, using different fuel or coolant, or scaling the entire reactor smaller. The NRC refers to light water reactor (LWR) designs generating 300 MWe or less as small modular reactors (SMRs). The NRC has engaged in varying degrees of pre-application activities with several SMR designers over the past several years. In August of 2020, the NRC approved a design for an SMR from NuScale Power, LLC.



Source: Greg Bowman
Deputy Office Director for New Reactors Office of Nuclear Reactor Regulation



Jeremy Bowen, Director
Division of Advanced Reactors and Non-power Production and Utilization Facilities Office of Nuclear Reactor Regulation

SCATR

SCATR Accomplishments 2024

By Mike Snee, CRCPD Technical Assistant

	1st Quarter 2024	2nd Quarter 2024	3rd Quarter 2024	Year to Date*
Number of unwanted sources removed	4102	1043	972	6117
Activity of sources removed	60.244 Curies	18.388 Curies	82.695 Curies	161.327 Curies
Number of facilities assisted	47	60	50	157

*Prepared December 12, 2024

Information on SCATR can be found at The CRCPD SCATR Program (lanl.gov) or contact Michael Snee at msnee@crcpd.org

Consent-based Siting

Lessons from the Nuclear Waste Negotiator Era of the 1990s by Matt Bowen

The report reviews efforts for siting in light of new consent-based policies and undertakings. Recommendations are given. See the report at this link.

Workforce

NRC Workforce Dynamics - Management Discussion and Analyses

The agency's most valuable resource is its staff, and its ability to recruit, hire, train, motivate, and retain qualified staff in a competitive job market is critical to meeting its strategic goals. The agency must also maintain a high-performing, diverse, engaged, and flexible workforce supported by a healthy organizational culture with a focus on safety, security, and continuous improvement to meet mission needs. This will require the NRC to better understand and meet the needs of its employees and become a more flexible and agile organization.

Source: Fiscal Year 2024 – Agency Financial Report (NUREG-2220, Volume 8) November 2024.

Updates from Appalachian Compact and Central Midwest Interstate Compact

Appalachian Compact Update (Host State PA)

Information contributed by Rich Janati

Rich Janati has announced that he will be fully retiring as an annuitant from the Pennsylvania Department of Environmental Protection (PA DEP) at the end of December 2024. Rich originally retired from PA DEP in 2020, returning as an annuitant to provide technical advice and consultation to PA DEP while managing the activities of the Appalachian Compact Commission.

Effective January 1, 2025, Rich will continue to take on the duties of the Administrator of the Appalachian Compact Commission as an independent contractor. While this marks the end of his tenure at PA DEP, his experience and expertise will remain vital to the Commission in this new capacity.

In addition to his work with the Appalachian Compact Commission, Rich has also served on the DOE's Environmental Management Advisory Board (EMAB). The EMAB provides critical expertise and recommendations to the DOE on various aspects of its clean up and environmental restoration activities. Recently, EMAB was asked by DOE to provide input on the upcoming update of the EM Strategic Vision document for the next 10 years.

About the ACC

The Appalachian Compact Commission is one of the major generators of Low-Level Radioactive Waste (LLRW). It is expected that there will be a significant increase in LLRW volumes in the upcoming years requiring disposal. This increase is mainly due to the decommissioning of the TMI-2 reactor, as well as the Army Corps of Engineers project to excavate and dispose of a significant amount of primarily LLRW from the Parks Township Shallow Land Disposal Area in Armstrong County, PA. The clean up is part of the Formerly Utilized Sites Remedial Action Program (FUSRAP).

Central Midwest Interstate Low-Level Radioactive Waste Commission LLRW Volume Projections 2024 - 2030

LLRW Volume Projections (ft^3)
2024 – 2030

	2024	2025	2026	2027	2028	2029	2030
Academic	83	82	80	78	78	78	78
Fuel Cycle	55250	40050	20050	20050	20050	20050	20050
Government	15	15	15	15	15	15	15
Industrial	7377	12870	12870	12870	12870	3432	3377
Medical	370	368	367	367	367	367	367
Reactor	97680	92260	92287	99575	92260	92237	99575
Total	**160775**	**145645**	**125669**	**132955**	**125640**	**116179**	**123462**

IEMA-OHS 2023 Annual Survey

Note: "History has indicated that the non-reactor generators underestimated volumes and activities by three to four times what was actually generated and disposed."

Kentucky generator reports and volumes are given in the annual report. Published for FY 2024, July 1, 2023 – June 30, 2024.

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Appalachian Compact
Delaware • Maryland • Pennsylvania • West Virginia

For news about personnel change and future waste disposal expectations, see the article contributed by Rich Janati on page 16 of this issue.

Atlantic Compact
Connecticut • New Jersey • South Carolina

Meetings
March 13, 2025

The next meeting of the Atlantic Compact Commission is scheduled on March 13, 2025 in Columbia, SC. For more details please contact Max at max@atlanticcompact.org

Central Midwest Compact
Illinois • Kentucky

Annual Report FY 2024
The annual report has been published and is available at https://cmcompact.org/wp-content/uploads/FY24%20CMCC%20Annual%20Report.pdf. See waste volume summary on page 16 of this issue.

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

Meeting

Hanford Public Engagement

RICHLAND, Wash. — During a 30-day public comment period, the U.S. Department of Energy Office of Environmental Management's Hanford Field Office (HFO) hosted its annual Hanford Site 5-Year Plan public meeting this fall to engage the public about Hanford Site cleanup work to be completed or initiated during fiscal years 2025 to 2029.

HFO representatives provided an overview of Hanford's goals and objectives in major areas, including tank waste treatment, risk reduction and site infrastructure.

Representatives with the U.S. Environmental Protection Agency and Washington State Department of Ecology also shared their perspectives, followed by a Q and A session with meeting attendees. HFO will use feedback collected during the comment period to better understand the public's project priorities as it develops future budget submissions.

Source: https://www.energy.gov/em/articles/public-meeting-focuses-hanford-site-5-year-plan

Texas Compact
Texas • Vermont

Meetings
December 12, 2024
February 6, 2025

The Commission met December 12 and the agenda included a Rules Committee Report and discussion on reporting on all imported waste and potential management rule and a Capacity Committee Report on capacity and future reservations of capacity.

A Public Education Workshop was held December 13, 2024.

The Texas Nuclear Caucus

The Caucus promotes the nuclear industry to achieve future benefits for Texas and the US.

For members and mission and objectives, see https://texasnuclearcaucus.org

Excerpts from Uranium Resources in the State of Texas - A Comprehensive Review

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Hawaii
Idaho
Montana
Oregon
Utah
Washington
Wyoming

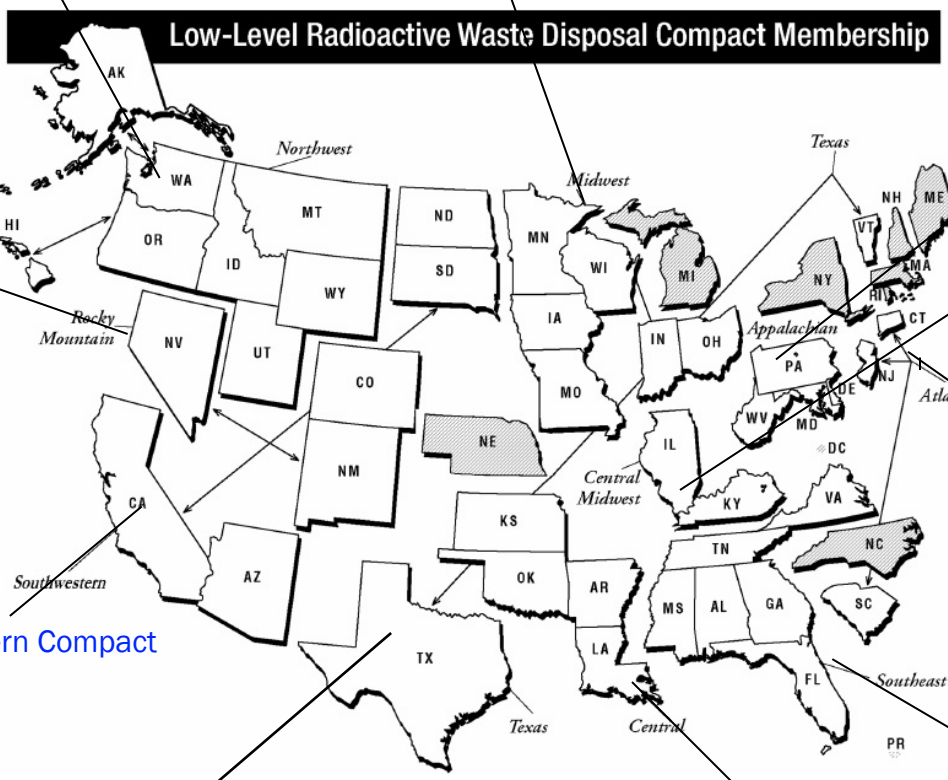
Midwest Compact
Indiana
Iowa
Minnesota
Missouri
Ohio
Wisconsin

Appalachian Compact
Delaware
Maryland
Pennsylvania
West Virginia

Central Midwest Compact
Illinois
Kentucky

Rocky Mountain Compact
Colorado
Nevada
New Mexico

Northwest accepts Rocky Mountain waste as agreed between Compacts



Southwestern Compact
Arizona
California
South Dakota
North Dakota

Texas Compact
Texas
Vermont

Central Compact
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Louisiana
Oklahoma

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- 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
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- Variety of documents through numerous links at LLW Forum, Inc. at https://llwforum.org/

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