

LLW *notes*

Volume 36 Number 2 March/April 2021

A Message from Dan Shrum, Executive Director

Our Spring 2021 Forum Meeting

I again thank the Directors, members and participants of the Low-Level Forum for another successful virtual meeting. The LLRWF is a learning organization and we continue to learn how to host virtual meetings. The feedback received was extremely helpful in planning the second meeting and we look forward to feedback from the Spring Meeting. Hopefully this is our last virtual meeting, but we can translate the lessons learned into making future meetings more successful. Our next meeting is October 13 and 14, 2021, in Denver Colorado--we intend to hold this meeting in person.

Stay safe "until we meet again."

Daniel B. Shrum, Executive Director

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

In this Issue...Find news about the LLRWF Virtual Spring Meeting, updates on NRC risk-informed decision making, interim storage, and legislative issues, 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.

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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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Virtual Annual Spring Meeting

LOW-LEVEL RADIOACTIVE WASTE FORUM MEETING**VIRTUAL SPRING 2021 MEETING****APRIL 7 AND 8, 2021**Presentations: <https://online.fliphtml5.com/ltxgx/mzrr/#p=2>**LLW FORUM VIRTUAL SPRING MEETING**

The LLWF met in a virtual, annual meeting on April 7 and 8, 2021, involving around 140 participants via WebEx. The agenda, filled with a list of broad topics about low-level radioactive waste management and disposal, and updates on evolving rules and concepts included topics of:

- Update on Very Low-Level Radioactive Waste
 - Update on CFR 20.2002
- Part 61 and Greater Than Class C (GTCC) Rulemaking Status
 - Decommissioning
 - Doe Waste Management
- Texas Low-Level Radioactive Waste Compact Commission Contingency Plans and Capacity Study
 - WCS Update
- Overview of LLRWF's Disused Sources Working Group (DSWG)
 - RCRA Facilities for Disposal of Part 61-Like Material
- Use of Processors and Brokers to Ensure Compliant Waste Disposal
- Updates on States, Compact Sites, Industry and Federal Agencies

Regarding the meeting, send comments to Dan Shrum, Executive Director, dshrum@llwforum.org.

The LLRWF especially thanks all the distinguished, expert speakers who provided detailed and informative presentations.

A Few Highlights

FEDERAL AGENCY NEWS

Status Highlights

- Awaiting Commission direction on Part 61, GTCC and TRU Rulemakings for the path forward
- 10 CFR 20.2001 Proposed Interpretive Rule withdrawn (85 FR 81849)
- VLLW Scoping Study - plan to issue report in April 2021
- Uniform Waste Manifest - stakeholder outreach ongoing

NRC Update

Stephen Koenick, Chief
Low-Level Waste and Projects Branch
Division of Decommissioning, Uranium
Recovery, and Waste Programs
Office of Nuclear Material Safety and
Safeguards

Discussion Topics

- Status of 2016 Programmatic Assessment
- Greater-than Class C (GTCC), Transuranic Waste (TRU), and Part 61 Rulemakings
- Very Low-Level Waste (VLLW) Developments
- Uniform Waste Manifest
- Continuous Decommissioning Process Improvements

VLLW Scoping Study

- ▶ Identify the actions that the NRC should take to strengthen its VLLW regulatory framework.
- ▶ Plan to issue report April 2021

**Best
practices
in VLLW
disposal**

**Lessons
learned from
previous
initiatives**

**Public
Engagement**



FEDERAL AGENCY NEWS - continued

DOE Waste Management Update

Doug Tonkay
 DOE-EM Office of Waste Disposal
 & **Theresa J. Kliczewski**
 DOE-EM Office of Waste & Materials
 Management

Summary of Topics

Kliczewski

- Greater-than-Class C (GTCC) LLW
- High-level radioactive waste (HLW) interpretation

Tonkay

- EM headquarters (HQ) organization
- Low-level radioactive waste (LLW)
- Low-Level Waste Disposal Facility Federal Review Group (LFRG)
- Baseline disposition data
- Complex-wide LLW/mixed low-level waste (MLLW) disposal volume by disposal location
- Manifest Information Management System (MIMS)
- Depleted uranium oxide
- Disposal at the Waste Isolation Pilot Plant (WIPP)

LLW: Operating DOE & Commercial Disposal Facilities

OFFICE OF ENVIRONMENTAL MANAGEMENT

Hanford Site

- Onsite LLW/MLLW and Naval Reactors LLW
- Integrated Disposal Facility awaiting commissioning (onsite vitrified low-activity waste)

- All waste is disposed in accordance with each waste disposal facility's waste acceptance criteria.
- Each waste disposal site is licensed to dispose of specific waste types (see map below for examples).



★ DOE Disposal Facility ■ Commercial Disposal Facility
 CERCLA – Comprehensive Environmental Response, Compensation and Liability Act; RCRA – Resource Conservation and Recovery Act

Virtual Annual Spring Meeting

LLW FORUM NEWS

Transformation Update

Fall 2020 Survey Results

Alyse Peterson

The survey sought feedback on the Fall 2020 Virtual Meeting relating to the benefit and offerings and asked what costs would seem most acceptable for future meetings.

The majority responding thought the meeting was beneficial and were satisfied with the agenda, topics, speakers, handouts and format of the meeting. Survey participation included 53 Responses; 58% Members, 42% Non-Members.

Respondents suggested future topics:

- Decommissioning/ Waste Storage
- NRC/DOE Activities
- VLLW/ GTCC/ TENORM/
Part 61/ Disused Sources
- Waste Processing /RCRA Disposal/ Non-LLW Disposal
- Characterization/ PA's/ DU Disposal

The majority of respondents favored costs of \$300 for future in-person meetings.

New Officers

The LLWF thanks the outgoing officers and welcomes the new slate of officers, taking office at the conclusion of the Spring Meeting. Now serving are:

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

Transformation Update

Strategic Planning

Ed Hammerberg

LLWF facilitates the implementation of the Low-Level Radioactive Waste Policy Act by serving as the consolidated voice and face for the compacts and states. The Strategic Planning process continues with emphasis on bringing together stakeholders, sharing information and education about low-level radioactive waste, providing opportunities for exchanges with government officials and other parties, and supporting the mission of the interstate compacts.

Overview of LLW Forum's Disused Sources Working Group (DSWG)

Michael Klebe

- DSWG formed in 2011
 - Report published in 2014 with 24 recommendations for security of radioactive materials, some of which have been accomplished and now priorities are being revised
 - See www.disusedsources.org/resources
 - DSWG draft report on NRC BTP on Concentration Averaging and Encapsulation
- For more detail, see <https://online.fliphtml5.com/ltxgx/mzrr/#p=118>

Virtual Annual Spring Meeting

PANEL DISCUSSION TOPICS & SPEAKERS

The Spring Meeting included two panel discussions on technical topics. Presenters provided detailed information in the form of slides which are included in the flipbook from the meeting, available on the Forum's website.

We encourage you to review the slides at your convenience. Listed below are the panels and links to the presentations.

RCRA Facilities for Disposal of Part 61 – like material Consistent Exposure Standards, VLLW and 20.2002, Finalizing Part 61

Dr. Hans Weger, Texas Commission on Environmental Quality (TCEQ)

<https://online.fliphtml5.com/ltxgx/mzr-r/#p=166>

Chris McKenney, NRC

<https://online.fliphtml5.com/ltxgx/mzr-r/#p=180>

Ty Howard, Utah DWMRC

<https://online.fliphtml5.com/ltxgx/mzr-r/#p=200>

Daryl Sawyer, State of Idaho

<https://online.fliphtml5.com/ltxgx/mzr-r/#p=211>

David Carlson, Waste Control Specialists

<https://online.fliphtml5.com/ltxgx/mzr-r/#p=245>

Use of Processors and Brokers to Ensure Compliant Waste Disposal

Assef Azadeh, Commercial Integration, EnergySolutions

<https://online.fliphtml5.com/ltxgx/mzr-r/#p=278>

Paul Larsen, Veolia

<https://online.fliphtml5.com/ltxgx/mzr-r/#p=326>

John McCormick, Bionomics, Inc.

<https://online.fliphtml5.com/ltxgx/mzr-r/#p=361>

Richard Grondin, Permafix

<https://online.fliphtml5.com/ltxgx/mzr-r/#p=386>

TEXAS & VERMONT: COMMISSION NEWS

Commission Updates

Stephen Raines, Executive Director

Capacity Committee

The Capacity Committee continues its work by Chair Lisa Edwards with Linda Morris as a member. The Capacity Committee continues to develop valuable metrics for members of the full Commission to ensure appropriate data will be available for future decisions relative to approval of imports and ensure the future economic stability of the Compact Waste Facility.

Legislation

Legislation pending in Texas would ban high-level waste, reduce surcharge, change capacity and disposal caps, allow audits and other specifics. NOTE: Legislation status may be different at the time of publication of this article. For current information, contact Stephen Raines, Executive Director
Email Stephen.raines@tllrwfcc.org
Telephone: (512)350-6241

Contingency Plan

Adopted December 2020 and published April 2, 2021 - Committee Chair Jeff Mundy with members, Brandon Hurley, Peter Bradford and Linda Morris.

As part of the Compact, the Commission must adopt a contingency plan for the disposal and management of low-level radioactive waste in the event that the compact facility should be closed.

- A Trigger Event or a disruption of normal operations of the Compact Waste Facility
- The Commission could meet and Act within 72 hours.
- The Commission will amend the current application for permits to include multiple emergency contacts that may be contacted if a contingency event occurs while shipments are in transit in the event that they need to delay or divert such shipments. The permittees should also provide multiple emergency contacts to all relevant agencies.
- Remedies available to the Commission:
 - Suspension of current agreements
 - No consideration of any new import requests
 - Issuance of export permits for in-compact generators
- Currently, there is no plan in place for the State of Texas to assume operation of the Compact Waste Facility in the event of a disruption or cessation of operations due to economic or business decisions of a private operator of the facility.
- In response to inquiries from the Contingency Committee, TCEQ expressed concerns about significant limitations on its ability to step into operating the facility and is very unlikely to do so.
- In the event of a cessation of operations of the Compact Waste Facility due to economics or business decisions of a current operator, leadership of the State of Texas and Vermont, leaders for stakeholders and generators may wish to seek other qualified operators to explore operation of the Compact Waste Facility consistent with the rights and obligations of the current operator/licensee of the Compact Waste Facility.

NRC Risk Insights

Be riskSMART: Guidance for Integrating Risk Insights into NRC Decisions (NUREG/KM-0016)

Abstract

To become a modern, risk-informed regulator, the NRC focused on four transformational areas: (1) managing the workforce, (2) applying risk in decision-making, (3) generating innovative ideas to improve the way that NRC works, and (4) adopting new technologies and approaches to data analytics. The Be riskSMART framework supports the second transformation area by providing a systematic approach to making risk-informed decisions across disciplines. Be riskSMART combines traditional concepts, such as the risk triplet, risk management, the risk heat map and risk appetite, into a plain language framework that gives the staff confidence to apply and communicate risk-insights for all kinds of NRC decisions whether they are in the technical, corporate, or legal arena. This NUREG/CR provides detailed guidance on using the Be riskSMART framework and contains example case studies from across a series of disciplines.

March 24, 2021

Document download <https://www.nrc.gov/docs/ML2107/ML21071A238.pdf>

Lessons Learned from the Implementation of Risk-Informed Initiatives

NRC's Regulatory Information Conference in March 2021 included a technical session on lessons learned about risk-informed initiative.

See the materials at <https://ric.nrc.gov/docs/abstracts/sessionabstract-26.htm>

See the video at <https://nrc.rev.vbrick.com/#/videos/845cac5e-8ea2-4f37-a3a1-8f2717d4812d>

Risk-Informed Decisionmaking Across Disciplines

NRC's Regulatory Information Conference in March 2021 included a technical session on risk-informed decision making.

See the materials at <https://ric.nrc.gov/docs/abstracts/sessionabstract-8.htm>

See the video at <https://nrc.rev.vbrick.com/#/videos/d8a1f8e0-45f7-4ddb-b618-5bd8ca9c-b86e>

Low-Level Radioactive Waste

NRC Publishes Low-Level Waste Disposal Statistics for 2020

Approximately 1.01 million cubic feet and 40 thousand curies of low-level radioactive waste were disposed of in 2020*. The volume and radioactivity of waste vary from year to year based on the types and quantities of waste shipped. Totals may not add up due to rounding.

2020 Volume and Activity by Disposal Facility

Disposal Facility	Volume (Cubic Feet)	Activity (Curies)**
Andrews County, TX	31,560	23,933
Barnwell, SC	31,478	643
Clive, UT	930,528	6,511
Richland, WA	15,291	9,236
TOTAL	1,008,857	40,323

** For sites that accept class A, B, and C waste (Barnwell, Richland, and Andrews County) activity levels can vary significantly from year to year depending on generators shipping waste in a given year.

<https://www.nrc.gov/waste/llw-disposal/licensing/statistics.html>

Uniform Waste Manifest Forms NRC Meeting

The NRC staff held a public meeting on Thursday, February 11, 2021 at 1:30 pm to collect stakeholder input on the status of the implementation of NUREG/BR-0204, Revision 3, and its revised Uniform Waste Manifest (UWM) Forms.

Meeting summary and transcript from the NRC public meeting are now available.

Meeting Summary <https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=M-L21061A325>

Meeting Transcript <https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=M-L21061A030>

FAQs: <https://www.nrc.gov/waste/llw-disposal/llw-pa/llw-uwm/faq.html>

Interim Storage

Holtec International's Application for Specific Independent Spent Fuel Storage Installation License for The Hi-Store Consolidated Interim Storage Facility for Spent Nuclear Fuel – Safety Review Delay and Discussion of Issues

Holtec International (Holtec) submitted to the U.S. Nuclear Regulatory Commission (NRC) an application for a specific independent spent fuel storage installation license to construct and operate the HISTORE Consolidated Interim Storage (CIS) Facility, in Lea County, New Mexico. The license application seeks NRC approval to store up to 8,680 metric tons of commercial spent nuclear fuel for a 40-year license term. NRC staff communicated that it expected to complete the safety and security review and a final safety evaluation report (SER) by May 2021. However, the schedule assumed that Holtec would provide timely and high-quality responses to all outstanding requests for additional information (RAIs) by November 2020, and that no follow-up RAIs would be necessary. If additional RAIs were necessary, the staff would revise its schedule accordingly.

The NRC staff determined that many of these responses do not provide enough information for staff to complete its detailed review and make the required regulatory compliance findings. Accordingly, the staff will not be able to complete its safety and security review and publish a final SER in May 2021.

Within the next month, the staff will issue a letter transmitting a second set of RAIs that will provide a detailed discussion of the remaining issues identified in each of the responses and restate the information that staff needs to complete its safety evaluation and compliance findings. In this letter, the staff will request that Holtec provide, within two weeks of receipt, a proposed schedule for submitting responses to the staff's second RAI. The staff will not issue a revised schedule for the completion of its safety

review, the publication of the final SER, and its final licensing decision until it receives Holtec's responses and determines that they are adequate.

Holtec Public Meeting

April 28, 2021 at 2:30PM - 2:35PM EST

<https://www.nrc.gov/pmns/mtg>

Commission Affirmation Session (Public Meeting) (Tentative) Holtec International (HI-STORE Consolidated Interim Storage Facility), Fasken Land and Minerals Appeal of LBP-20-10 and Motion to Reopen

Virginia Uranium v. Warren: What the Supreme Court's Decision Means for Interim Storage, Yucca Mountain, and Reactors

NRC's Regulatory Information Conference in March 2021 included a technical session on legalities of interim storage.

Transcript https://ric.nrc.gov/Docs/transcript/W21_w21-transcript.pdf

Video <https://nrc.rev.vbrick.com/#/videos/76316b84-f2ba-4f54-934b-421ff9f5727f>

Federal Legislation

H.R. 2097 – 117th Congress (2021-2022)

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.

Sponsor: Rep. Matsui, Doris O. [D-CA-6] (Introduced 03/19/2021) Cosponsors: (5)

Committees: House - Energy and Commerce

Latest Action: House - 03/19/2021 Referred to the House Committee on Energy and Commerce.

For current information, search for H.R. 2097 at <https://www.congress.gov/search?q={%22congress%22:%22all%22,%22source%22:%22all%22,%22search%22:%22radioactive%22}&searchResultViewType=expanded>

Public Information

NRC Revises Policy on Enhancing Participation in Public Meetings

The Nuclear Regulatory Commission has revised its policy statement regarding how the agency conducts staff-sponsored public meetings between the NRC and outside parties.

The revised policy is effective today, following its publication in the Federal Register. The NRC staff expects to update the agency's procedures to incorporate the new policy later this year. The agency's public meeting schedule will reflect the new policy in the near future. The revision defines new public meeting categories:

- **Observation Meeting** – an opportunity for attendees to observe NRC interactions with representatives from one or more groups (such as licensees, applicants or non-governmental organizations). Attendees other than those meeting with the agency can ask questions of NRC staff or make comments about the meeting topic at designated points on the agenda. This type of meeting does not actively seek comments on regulatory decisions.
- **Information Meeting with a Question and Answer Session** – an opportunity for the NRC to share information and discuss applicable regulatory issues and NRC actions with meeting attendees. Attendees can ask

questions of NRC staff or comment about the meeting topic. This type of meeting (such as an open house) does not actively seek comments on regulatory decisions.

- **Comment-Gathering Meeting** – the NRC meets directly with interested individuals to receive comments and solicit feedback on regulatory issues and agency actions (such as a draft environmental impact statement).

The revised policy states that the NRC will provide meeting information (date, time, location, teleconferencing options, etc.) as soon as the staff is reasonably confident the details have been finalized. This will generally occur no fewer than 10 days before a meeting. When a meeting must be scheduled but cannot be announced within the 10-day timeframe, the NRC staff will provide as much advance notice as possible. The policy does not cover non-NRC meetings where staff might participate and includes certain exceptions, such as for NRC meetings involving other government or tribal officials. The policy describes the NRC's expectations for respectful, civil discussions during public meetings and reiterates the agency's commitment to transparency.

Source: NRC News Release No: 21-015 March 19, 2021

Contact: Scott Burnell, 301-415-8200

Appalachian CompactDelaware•Maryland•
Pennsylvania•West Virginia**Meeting**

The next meeting is scheduled for November 5, 2021 from 10:00 a.m. to 12:30 p.m. Details will be available later.

See <https://www.dep.pa.gov/Business/Radiation-Protection/Appalachian/Pages/Meetings-and-By-laws.aspx>

Atlantic CompactConnecticut•
New Jersey•South Carolina**Meetings**

The next meeting of the Atlantic Compact Commission will be held in October 2021. More details will be available in July. The last meeting was held virtually on April 19.

For more information please contact max@atlanticcompact.org

Central Midwest Compact

Illinois•Kentucky

Meetings

March 30, 2021
September 21, 2021

The Central Midwest Interstate LLRW Compact Commission (CMCC) held its Spring meeting on March 30, 2021. The meeting was held virtually, using the Webex Platform.

Chairman McCandless provided a brief update on Compact activities, reminding participants of the upcoming LLW Forum Spring Meeting, April 7-8, 2021.

Kelly Horn from the Illinois Emergency Management Agency (IEMA) gave an update on Illinois activity. Illinois is preparing to file a new rule for water treatment residuals.

AJ Bhattacharyya from the Kentucky Radiation Control gave an update on Kentucky activities.

The meeting was brief as there are no outstanding issues.

The CMCC Annual Meeting is tentatively scheduled, in Kentucky, September 21, 2021.

Northwest CompactAlaska•Hawaii•Idaho•
Montana•Oregon•Utah•Washington•Wyoming**Meeting**

April 8, 2021

A meeting of the Waste Management and Radiation Control Board was scheduled for April 8.

The Agenda and Board packet information for the Waste Management and Radiation Control Board Meeting is available for your review at:

<https://deq.utah.gov/boards/waste-management-and-radiation-control-board-meetings>

The Agenda and Board packet information has also been posted on the Utah Public Notice website at:

<https://www.utah.gov/pmnm/index.html> Source:

Southeast Compact

Alabama•Florida•Georgia•
Mississippi•Tennessee•Virginia

NRC to Hold Virtual Meeting to Discuss 2020 Performance of Grand Gulf Nuclear Power Plant

Nuclear Regulatory Commission staff will discuss the 2020 safety performance of the Grand Gulf nuclear power plant during a virtual meeting to be held March 31.

Grand Gulf, located in Port Gibson, Miss., operated safely during 2020. The NRC determined that the performance at Grand Gulf during the recent quarter was within the Degraded Performance Column, the third highest performance column of the NRC's Reactor Oversight Process Action Matrix. Because of the number of unplanned plant shutdowns, the plant will receive increased oversight and inspection focus during 2021.

Source: NRC News Release No: I-21-003
March 10, 2021

Contact: Diane Screnci, 610-337-5330
Neil Sheehan, 610-337-5331

NRC Proposes \$150,000 Civil Penalty to Florida Power & Light Company

The Nuclear Regulatory Commission has proposed a \$150,000 fine to Florida Power & Light Co., for falsifying plant records and recording inaccurate data in their maintenance records at the Turkey Point nuclear power plant near Homestead, Fla., south of Miami.

The NRC completed two investigations in 2020 and determined that FPL employees engaged in deliberate misconduct during 2019. The first investigation confirmed three mechanics falsified information in a work order associated with the inspection and maintenance of a safety-related check valve.

The second investigation confirmed that two technicians deliberately provided inaccurate information

in maintenance records related to a mispositioned plant component. The NRC also found that a supervisor and a department head influenced others within the department to conceal this maintenance error.

Source: NRC News Release No: II-21-004 April 8, 2021

Contact: David Gasperson, 404-997-4417

NRC Hosts Virtual Meeting to Discuss Safety Performance and Construction at Vogtle Nuclear Power Plant

The Nuclear Regulatory Commission will discuss the 2020 safety performance of the Vogtle nuclear power plant and provide an update on the two units under construction during a virtual meeting to be held April 28.

Plant Vogtle, operated by Southern Nuclear Operating Co., is located near Waynesboro, Georgia, approximately 26 miles southeast of Augusta, Georgia. Units 1 and 2 began operation in 1987 and 1989, and Units 3 and 4, under construction, received combined licenses in 2012.

The NRC determined that Vogtle's operating units operated safely during 2020.

Source: NRC News Release No: II-21-010
April 23, 2021

Contact: David Gasperson, 404-997-4417

Southwestern Compact

Arizona•California•South Dakota•North Dakota

Meetings

May 5, 2021

October in 2021

The Southwest Low-Level Radioactive Waste Compact Commission will hold its Spring meeting on May 5, 2021 at 9:30 am PDT. The meeting will be held virtually,

Log in: <http://www.swllrwcc.org/display/Programs.asp?NAVID=64>

The agenda includes:

Reports – activity and/or status

Exportation actions

Report on activities of LLW Forum

Review & Direct Posting- Notice for Executive Director

Discuss future Spring Tours, Return to participate

Amend approved Budget if required

Approve a Proposed Budget 2021-2022

Review & action of Petition fee

Meeting link: <https://llwforum.webex.com/llwforum/j.php?MTID=m440b18bc727951f339d41e48ac3b9e8d>

Meeting Number: 187 320 6146

Password: ESbXj4ine24

Host key: 256130

- Report on Communications with other Compacts and the Low-Level Forum
- Fiscal and Budget Updates
- Personnel Updates
- Executive Director's report and update
- Discussion of possible change to the timeline provided for a Curie release letter
- Capacity Committee Report
- Discussion of the Contingency Plan

For agendas and webinar links, see <http://www.tllrwdcc.org/about-the-comission/public-meetings/>

If you have questions concerns or comments, please email Stephen Raines at stephen.raines@tllrwdcc.org or contact him via phone at (512) 350-6241.

Contingency Plan Publication

The Texas Low Level Radioactive Waste Disposal Compact Commission has published a Contingency Plan pursuant to the Texas Health & Safety Code § 403.006, Article III, Section 3.04(7).

To read the plan, see

<http://www.tllrwdcc.org/wp-content/uploads/2021/04/Final-Report-of-the-Commission-on-Contingency-Planning-with-Cover-Page-3-18-21.pdf>

Waste Facility Video

For information about the Texas waste generators and the CWF facility, see the WCS video at <https://www.youtube.com/watch?v=9IzoWY0qVqg>

Texas Compact

Texas • Vermont

Meetings

April 15, 2021

Thursday, May 27, 2021

Thursday, July 15, 2021

Texas Low Level Radioactive Waste Disposal Compact Commission is conducting the April 15, 2021 meeting by webinar. The agenda includes:

- Consideration of and possible action on applications for importation of low-level radioactive waste

Nuclear Security

Kentucky - Stolen Radiological Device

The Radiation Safety Officer [RSO] for Kentucky Radioactive Materials Licensee Environmental Concerns Inc., reported the theft of a single Viken Pb200i [TM] XRF device with 5 milliCuries of cobalt-57 from the RSO's vehicle while parked overnight at the user's residence located in Louisville, KY.

California - Gauge Abandoned on Side of Road

A moisture density gauge had been found alongside Jackson Highway in Sacramento the previous night and was being stored at the Caltrans yard in Sacramento. A separate report of the recovered gauge was received from the Department of Energy Radiological Assistance Program, Region 7, after they received a report from Sacramento Hazmat of the recovered gauge.

California - Lost Moisture Gauge

On March 31, 2021, Kern County Roads Department reported that one of their moisture-density gauges was lost while transporting the gauge back to their facility. The gauge was a CPN model MC1-DPR, (10 mCi Cs-137, 50 mCi Am:Be-241, Nominal). At approximately 1130 PDT, the gauge, with the handle/trigger lock in place but outside of the transport case, was left on the tailgate of the truck by the gauge operator. The operator then went into the cab of the truck and started working on paperwork. The gauge operator then left the worksite without securing the gauge. Approximately two minutes later, the operator stopped for gas and found the gauge missing.

Virginia - Lost Tritium Sign

On April 16, 2021, the Virginia Radioactive Materials Program received a report from the licensee that a 6.2 Curie [tritium] exit sign (Shield Source Inc., S/N: 11-36361) was lost. The licensee was performing an inventory of [tritium] exit signs on April 15, 2021. The licensee determined that the [tritium] exit sign was lost and was likely discarded with construction trash.

Colorado - Lost Tritium Exit Signs

During an inventory, a hotel manager discovered two exit signs were lost, each containing 7.62 Ci of tritium.

Florida - Radioactive Source Found at Private Home

Walton County EM advised of potential hazardous materials at a private residence in Defuniak Springs. Caller stated that several containers appear to be medical materials discovered in a storage shed near the residence. The containers are marked with a "radiological material" symbol. The material was discovered in a storage shed on a rented property nearby. The renter does not know how long the material had been there or where it originated. Personnel at the scene were surveyed. No contamination was revealed.

Detailed investigation of the material showed no leakage. Only one lead pig registered slightly above background radiation. The source within the pig was determined to be Thorium-232 'hot source' in a sealed vial. The vial was not leaking.

Source for Incidents: Event Reports at <https://www.nrc.gov/reading-rm/doc-collections/event-status/event/index.html>

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Massachusetts - Sealed Source Missing in Transit

The licensee reported at 1143 EDT on March 31, 2021 that it discovered on the same day (March 31, 2021) at 1044 EDT that a package (Yellow-II, T.I. 0.5, Type B, UN 2916) containing one sealed source (Iridium-192;105.2 Curies) in a model 880 radiography exposure device [was missing in transit].

Licensee reports that it was notified at 1601 EDT on April 6, 2021 that the package had been delivered to its intended destination undamaged.

Louisiana - Sealed Source Missing in Transit

A common carrier picked up a black overpack package from QSA Global containing a Delta 880 Industrial Radiography camera (S/N D15673) containing 106 Curies (3922 GBQ) of Ir-192 at 1623 CDT on April 1, 2021.

The [package] destination was Acuren Inspection [located] at 2060 Afton Place in Farmington, NM 87401. (They have not received it.)

Wisconsin - Source Lost During Shipment

On April 8, 2021, the licensee's [Radiation Safety Officer] RSO reported a missing QSA global model 880 D exposure device containing a 28.9 Ci selenium-75 source. The package was shipped Monday April 5, 2021 via [the common carrier] from Neenah, WI to another Acuren location in Kingsport, TN. Then package arrived on Thursday April 8, 2021, damaged and without the shipped contents. Package weight information gathered as [the common carrier] handled the packaged indicates that the package contents were separated before final delivery, the exact location is unknown at the time of this report.

US Navy - Lost Then Found Source Material

On March 5, 2021, it was discovered that IBIS units (400 micro Ci total) had not been properly removed from 4 helicopter blades that were sent for recycling. The IBIS units were discovered when the detectors alarmed at the recycling facility in Bedford, IN. The blades were redirected to the Army Joint Munitions Command Morris Consolidation facility in Rock Island, IL for proper disposal.

Based on the shipping paperwork, the helicopter blades that contained the four IBIS were received at the recycling facility on 11/17/2020, and were picked up from the facility on 3/16/2021.

The highest reading was 0.7 mR/hr on contact without the cover installed for one blade. For the 3 other blades in their casing, needle deflection was observed, but had no appreciable dose rate.

It is not likely that personnel spent an appreciable amount of time in the vicinity of the helicopter blades.

Massachusetts - Category 2 Package Containing Seven Sealed Sources Lost in Transit

The licensee reported to the Agency [Massachusetts Radiation Control Program] at 1400 EST on March 1, 2021, that it discovered on March 1, 2021 at 1200 EST that a package (Yellow-III, T.I. 2.6, Type B, UN 2916) containing seven sealed sources (Ir-192; 59.9 Ci, 59.2 Ci, 58.1 Ci, 59.9 Ci, 59.5 Ci, 59.8 Ci, and 69.2 Ci) in a model 976C source changer was missing.

The package was shipped by QSA Global, Inc. on February 12, 2021, for export to their customer NDT Instruments, based in Singapore. On March 1, 2021 at 1200 EST, QSA Global, Inc. discovered that the package had not been received.

Nuclear Security

The carrier indicated that the package had been at their Memphis, TN facility on 2/13/2021, and that since then the location is unknown.

Washington - Removable Contamination Exceeds Limits

NSSI of Houston, Texas violated 49 CFR 173.443(b) and will be suspended from further shipments. Contamination was found on shipment packages. No contamination was found outside of the conveyance. No staff were contaminated, or internal dose assigned. WA State licensee corrected the shipment to allow the conveyance to proceed. NSSI's shipping privileges may be reinstated upon submittal of a root case analysis to the department and a successful point-of-origin inspection performed by the department.

On February 24, 2021 NSSI/Recovery Services, Inc. of Houston Texas shipped 38 drums containing liquid tritium, LSA II, Exclusive Use, closed conveyance. Twenty-one drums were destined for Perma-Fix Northwest (PFNW) in Richland Washington for processing, and the additional 17 drums were to proceed to Perma-Fix DSSI, in Kingston, Tennessee.

The truck arrived at PFNW on March 1, 2021. PFNW received and offloaded 21 of the drums. Prior to releasing the truck to continue to DSSI, PFNW conducted surveys of the truck and trailer. On March 3, 2021 the PFNW Radiation Safety Officer notified the WA State Department of Health (Department) that tritium contamination was found inside the trailer (survey results were not provided). PFNW did not find contamination outside of the trailer. PFNW notified and surveyed the driver; no contamination was found on the driver.

After discussions with PFNW, it was determined that PFNW would ensure that the shipment was in compliance by offloading the 17 drums in order to inspect, decontaminate and, if necessary, over-pack

the 17 drums prior to putting the conveyance on the road [to Kingston, TN]. PFNW offloaded, inspected, and overpacked the 17 drums, then loaded them on a new trailer. PFNW stated that the bungs on a few on the drums required tightening. The shipment was received at DSSI in Tennessee without incident.

The Department requested survey results. After receipt and review of the survey results, the Department determined that 6 of the drums destined for DSSI, 1 drum offloaded at PFNW, and areas of the trailer floorboards were in excess of DOT's external contamination limits, 49 CFR 173.443(b). Results ranged from 2,902 - 973,124 [disintegrations per minute per square centimeter] (dpm/cm²) (taking in account the 10 percent wipe efficiency); the 49 CFR 173.443(b) contamination limit is 2,400 dpm/cm² at any time during transit of an exclusive-use shipment. The contaminated trailer is currently at PFNW where the contaminated floorboards will be removed and disposed. Bioassays of the four participating PFNW staff were performed; no PFNW staff were assigned internal dose or were contaminated.

NSSI violated 49 CFR 173.443(b), and will be suspended from further shipments to PFNW. Suspension tracked under WMS-DOT-21-01.

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

- Arkansas
- Kansas
- Louisiana
- Oklahoma

Southeast Compact

- Alabama
- Florida
- Georgia
- Mississippi
- Tennessee
- Virginia

Unaffiliated States

- District of Columbia
- Maine
- Massachusetts
- Michigan
- Nebraska
- New Hampshire

- 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) list-server@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 governmentdatabases) <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

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