

Meeting of the Northwest Interstate Compact on Low-Level Radioactive Waste Management

May 9, 2018

Westmark Anchorage Hotel & Conference Center
Anchorage, Alaska

Present

Earl Fordham, NWIC Chair
Kristen Schwab, NWIC Executive Director
Young Ha, Alaska
Jeffrey Eckerd, Hawaii
Dennis Meier, Idaho
Todd Boucher, Montana
Ken Niles, Oregon
Rusty Lundberg, Utah
Lilia Lopez, Compact Counsel
Cheri Kennedy, Compact Staff

Audience and Presenters

Mike Ault, General Manager, US Ecology
Ron Skinnarland, Washington Department of Ecology
Dan Shrum, Senior Vice President, EnergySolutions
Gary Robertson, Disused Sources Working Group, Low Level Radioactive Waste Forum
Todd Lovinger, Executive Director, Low Level Radioactive Waste Forum
Leonard Slosky, Executive Director, NWIC Rocky Mountain
Bill Maier, NRC
Shannon Miller, State of Alaska Inner Agency Coordinator

Opening

Cheri Kennedy, Northwest Interstate Compact (NWIC) Staff, briefed the members at 8:45 am on travel reimbursement paperwork.

Discussion of having the NWIC meeting in Hawaii was mentioned. We can hold the meeting in any state and Hawaii was one of the Compact states. Earl said he got no push back from the State of Washington on Alaska but indicated a couple attendees did. He said he would make it his priority to work on Hawaii.

Earl Fordham, NWIC Chair, convened the meeting at 9:00 am with introductions. The committee unanimously approved the meeting minutes from the June 2017 held in Helena, Montana with motion to approve by Rusty Lundberg and second the motion by Dennis Meier.

Party State Reports

Washington

Earl Fordham reported that the Nuclear Regulatory Commission (NRC) is still looking for two Commissioners. Baron's term expires at the end of July 2018. Earl will be returning as NWIC Executive Director and will remain Chair due to Kristen's promotion as Supervisor of Waste Management. This transition will occur within the next month or so. Kristen will remain as the Alternate Executive Director. The Integrated Materials Performance Evaluation Program (IMPEP) has been completed and it wasn't as stellar as hoped. All satisfied but needs improvement in training and multiple database lost licenses. NRC is trying to formalize their training program. Earl reported on 10 CRF Part 61 updates.

Hawaii

Jeffrey Eckard had nothing new to report. Jeff expressed concern on flooding and lava flows. If Hawaii was hit by a nuclear attack, where would waste go? Accident scenario. Hawaii would ask for assistance from NWIC with disposal and how to proceed.

Idaho

Dennis Meier reported on NUSCALE small modular reactor (SMR) stating the preliminary evaluation report was accepted and would be completed by 2020 at the earliest. It was asked if Dennis could provide the number or report on Idaho's waste.

Alaska

Young Ha didn't have any updates to report. Bob Blankenburg, Young's Supervisor and Solid Wastes and Pesticides Program Manager for the Alaska Department of Environmental Conservation, is dealing with the definition of radiation. Bob mentioned there's really no program that houses radiation in Alaska, it's basically spread around and they end up getting the Waste Management part. Bob's also the Sub-Committee Chair for State and Territorial State and Waste Management who does have a Radiation Task Force.

Oregon

Ken Niles reported that the state is getting an increased number of inquiries about whether specific waste streams can be disposed of in Oregon. Oregon's existing rules are more than 20 years old, and are more lenient than some other states. Ken said it was not the Oregon Legislature's intent to have Oregon become a disposal site for radioactive waste from around the nation, even if the concentrations are low. Ken indicated that the Oregon Department of Energy (DOE) is likely to begin a rulemaking proceeding within the next few years to clarify its rules on disposal and that may include tighter restrictions.

Utah

Rusty Lundberg stated he would provide the Utah update during his presentation.

Montana

Todd Boucher wasn't present to report.

Wyoming

Luke Esch wasn't present to report.

Round Table Discussions

Kristen opened the floor for round table to talk about the TENORM wastes that were an upcoming issue. Todd Lovinger and Leonard Slosky are familiar with these types of TENORM issues. As far as the accident scenario, where does the waste go, Washington State would like to keep this topic alive as there isn't the depth and resources to talk about it at this meeting. Kristen stated a follow-up to these concerns would take place outside the meeting.

US Ecology Activities Overview

Mike Ault, General Manager of US Ecology Richland, provided a presentation on the US Ecology Washington Low-Level Radioactive Waste (LLRW) Site. The facility accepts A/B/C Class LLRW from with the NWIC and Rocky Mountain (RM) Compact, NARM and Radium sources nationwide, and exempt waste nationwide. US Ecology has a lease from the State of Washington to operate a LLRW site and rate-regulated by WA Utility and Transportation Commission. Operations will cease in 2056 to allow for closure activities to occur before termination of the lease in 2063. Currently the site has two active disposal trenches, Trench 18, Class A – unstable and Trench 19, Class A/B/C – stable. Types of waste accepted are, NW & RM compact Class A/B/C LLRW, NARM Waste Nationwide (includes Radium sources), and Exempt Waste nationwide. The facility accepted 13,809.7 ft³ in 2017 and 5,618.0 ft³ through April 2018. The site has ample capacity to last through the operational life of the lease (2056). Mr. Ault provide a brief overview of the Model Toxics Control Act (MTCA) investigation. Currently, all the MTCA reimbursement agreements have expired.

Utah Activities Overview

Rusty Lundberg reported on the Legislative changes, NRC IMPEP follow-up, the Clive Facility, and public outreach. Rusty reported the Legislation House Bill 169 for Commercial Waste Fee Amendments modified Fees paid by owner of commercial radioactive waste treatment or disposal facility. Bill 169 reduces the annual fee paid by the owner of a commercial radioactive waste treatment or disposal facility that receives radioactive waste and credits the amount of tax paid towards the flat fee and appropriates that amount from the General Fund. If the Legislature fails to appropriate adequate funds, the owner or operator pays the balance. The tax was funneled

into general fund and now going towards education fund. Technical Policy 4 Part approval process local, state, governor's office, legislation can be done concurrently.

The Senate Joint Resolution 11 authorizes *EnergySolutions* to create a landfill for non-radioactive waste. Grants provisional legislative approval for construction and operation of a Class Vi commercial non-hazardous solid waste landfill. Additional approvals required: Tooele County, Division and Governor.

Follow-up to NRC Program Evaluation, July 2015 full IMPEP and November 3, 2016 IMPEP found to be compatible. Next full IMPEP will be July 2019. Update on Clive updated Generator site access permits to Generator and/or broker are issued annually. It was Agency oversight for arriving shipments and areas of focus by modules – professional disciplines. *EnergySolutions* withdrew its request for approval for disposal of the Erwin Resin *Solutions* Facility waste at the Clive Facility. The Division is still evaluating how to proceed. On license renewal, the Division is currently working on license conditions with the facility and is planning on having the license out for public comment within the next few months. Ongoing oversight and activities are incoming shipments, containerized waste, waste management operations and site monitoring program, final cover construction for a portion of the LLRW cell and rehabilitating clay borrow pits. The 11.e.2 by product disposal license was renewed November 30, 2017. The Division is reviewing *EnergySolutions* request for changes and is planning to respond soon to groundwater permit amendments. The Clive mixed waste permit is ready for renewal. The Division is drafting a research; development and demonstration (RD&D) permit to resolve the treatment in the cell issue. The Division will work with EPA for approval.

Rocky Mountain Compact Overview

Leonard Slosky provided an update on the RM Compact. Leonard gave a brief informative overview of the history of the Compacts for Young Ha and Bob Blankenburg.

The Compact has been issuing import/export permits and addressing NORM/TENORM issues. The RM Compact regulates NORM/TENORM, and believes there is waste moving in and out of the compact without authorization. It has been a big challenge. There was an effort to try and educate the oil and gas industry of the permit requirements, though it did not appear to be successful in increasing the number of import/export permit applications. The compact is exploring the use of enforcement actions.

National and Region Issues

Kristen Schwab reported the NWIC received two amendment requests for administrative changes to PERMA-Fix Northwest's import/export permits.

Todd Lovinger provided an update on the other compacts throughout the country. Issues facing Compacts are maintaining Compact System and Long-Term viability of existing sites and developing a path forward for the future direction of the nuclear industry. Disposal sites are struggling with declining waste volumes and concerns about economic viability. According to

David Carlson's presentation at the Spring, 2018 LLW Forum meeting, WCS has gone 20 years without making a profit. Premature reactor shutdowns have many factors that affect and can delay decommissioning after closure that can result in waste being stored on site for up to 60 years. Todd stated greater coordination and consultation is needed amongst States and Compacts. The NRC has a significant number of ongoing and planned rulemaking, initiatives and activities that will impact the industry such as, completion of work on a final rule to amend Title 10 of the Code of Federal Regulations (10 CFR) Parts 20, "Standards for Protection Against Radiation", and Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste", preparation for a very low-level radioactive waste (VLLW) scoping study to identify possible options to improve and strengthen the NRC's regulatory framework for disposal, consideration of potential rulemaking on waste classification tables, development of regulatory basis for the disposal of Greater-than-Class C (GTC) and transuranic waste. Todd stated, all stake holders need to be involved and provide feedback to NRC as the agency works through these issues.

The Central Midwest Compact is challenged with NORM and TENORM issues. David has been named the new WCS President and Chief Operating Officer (COO). The Texas Compact and WCS are looking at fee adjustments as a way to increase competition and encourage greater use of the WCS Facility.

EnergySolutions Activities Overview

Dan Shrum, Senior Vice President, *EnergySolutions*, provided a status update of the Clive Facility. Dan provided an overview of the *EnergySolutions* company operations, including the company's focus on industrial and radiation safety, license and permit statuses, sealed source and large component disposal, facility capacity, disposal volumes and depleted uranium.

In 2017, *EnergySolutions* awarded the Voluntary Protection Program (VPP) Star for Industrial Safety. They were above 12 days between incidents, 1,977,740 work hours since last lost workday case (November 2010), prior to an incident in December 2017, 947,650 work hours since last Occupational Safety & Health Administration (OSHA) recordable injury and 2010-2017 received the Annual National Safety Council (NSC) Awards for Safety. For Radiation Safety, As Low As Reasonably Achievable (ALARA) – the average radiation worker individual Total Effective Dose Equivalent (TEDE) was 41 mrem/year, the highest general public fence-line CEDE 0.26 mrem/year and highest general public effluent exposure dose 0.29 mrem/year.

The Clive Disposal Facility has over 30 years of proven experience treating and disposing of radioactive waste. Unique bulk and containerized waste facilities for Radioactive Material Licenses (LLRW & 11e(2)), RCRA Permit (treatment & disposal of MW), TSCA Permit (PCB waste streams), SNM Exemption (concentration-based limits), over 11 miles of onsite rail for efficient and cost-effective waste handling, long-term federal and commercial contracts.

The Clive Facility Licenses and Permit Status is RML 2300249 Low-Level and is under "timely renewal". Renewal application was submitted on October 2012 and projected to be renewed July 2018. RML 2300478 11e (2) is active and renewed November 30, 2017. The State-issued Part B Permit is under "timely renewal". Renewal application was submitted on October 2012 and projected to be renewed December 2018. The GWQDP is active and renewed in 2014.

The Clive's disposal available capacity for the proposed Federal Cell 11e (2) (3,430,261 yd3), The LARW is closed, the Class A West (4,030,749 yd3), the VITRO is closed, and Mixed Waste (361,917 yd3). In 2017, the disposal volume for waste disposed (yd3 per year) was 130,000.

The Depleted Uranium Authorization for Utah Moratorium passed June 1, 2010 and may not receive or dispose of significant quantities of concentrated DU until PA approved. The PA, Revision 0 was submitted June 2011. PA, Revision 4 was submitted November 2015. The Regulatory review is underway with a decision projected for Q4 in 2018.

Update on Legal Issues

There were no current legal issues.

Committee Business

Kristen talked about Compact business stating it was fairly quiet. One of the things that was being worked on last year was moving the Compact website. Originally hosted by WA State Department of Ecology, but they want to trim down their hosting. It was thought to move it to Washington Department of Health (WDOH) but if we host, WDOH logo's will be place all over the website; which would not appropriate. Earl, Kristen and Todd have discussed having the LLW Forum host the website; which looks to be a serious move forward and would bring numerous benefits. It's also a great place to go for a wealth of information about anything that going on. They also have the resources and ability to support.

It was discussed holding the next meeting location in the member state of Oregon.

Public Comment

There were no public comments.

Closing

Earl Fordham thanked the attendees and adjourned the meeting.