



## **Appalachian States Low-Level Radioactive Waste Commission**

### **MEETING MINUTES**

**November 8, 2019**

#### **CALL TO ORDER**

Ms. Laleker called the meeting to order at 10:00 a.m.

#### **INTRODUCTION AND ROLL CALL**

Mr. Janati conducted the roll call and the members introduced themselves. The attendees are listed below:

#### **Members and Alternates**

- Dave Allard, Alternate Member from Pennsylvania
- Frieda Fisher-Tyler, Alternate Member from Delaware
- Edward Hammerberg, Alternate Member from Maryland
- Matthew Higgins, Alternate Member from Delaware
- Kaley Laleker, Member from Maryland
- Clifford Mitchell, Member from Maryland
- Tera Patton, Member from Maryland
- Richard Roman, Alternate Member from Pennsylvania
- Albert Romanosky, Alternate Member from Maryland
- Matthew Smith, Alternate Member from West Virginia

#### **Commission Staff**

- Rich Janati, Administrator, PA DEP
- Timothy Anderson, Esquire, Pepper Hamilton
- Michelle Skjoldal, Esquire, Pepper Hamilton

#### **Others Present**

- Andrew Taverna, Staff Member, PA DEP
- Robert Brinsfield, Delaware Office of Radiation Control
- Eamon Flynn, Maryland Department of Health



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### **ADOPTION OR MODIFICATION OF THE AGENDA**

There were no modifications to the proposed meeting agenda.

### **APPROVAL OF THE MINUTES OF THE PREVIOUS MEETING**

Ms. Laleker asked if any member had modifications or changes to the minutes of the October 26, 2018 annual meeting. There were no comments and the Commission voted to approve the minutes unanimously.

### **REPORT OF THE CHAIRMAN AND EXECUTIVE DIRECTOR**

#### **Review of Treasurer's Report for FY 2018-19**

Mr. Janati discussed the Treasurer's Report, which is a statement of revenues and expenditures for the Commission's Operating Fund during fiscal year (FY) 2018-2019. This fund is being invested by the Pennsylvania Treasury Department under the INVEST Program. Interest from the Operating Fund during this FY was \$1,827. Actual expenses for this period totaled \$29,285 which is less than the budgeted amount of 30,200 by \$915. The Commission's expenditures exceeded its revenues by \$27,458.

#### **Review of Audit Report for FY 2018-19**

Mr. Janati discussed the Independent Auditor's Report for FY 2018-2019. The audit was conducted by Greenawalt and Company in accordance with the Government Auditing Standards and included a review of the Commission's internal control structure, laws, and regulations. The audit concluded that there were no findings or items of non-compliance.

Mr. Janati said the balance sheet reflects the Commission's assets, consisting of "cash" and "investments." The checking account maintained by Citizens Bank reflects a cash balance of \$6,666 as of June 30, 2019. The Commission's total net assets were \$2,861,146 as of June 30, 2019. The balance sheet also reflects an amount of \$74,305 as appropriated funds, including \$10,000 for legal services and \$64,305 for fiscal stabilization. The money received from the Department of Energy (DOE), the surcharge fund, is being retained in a restricted fund with the INVEST Program. As of June 30, 2019, this fund had a balance of \$2,780,175 and earned an interest amount of \$57,478 during FY 2018-19. He said the audit report noted that the Commission was not involved in any litigation that could adversely affect its financial position. The Commission voted to accept the Treasurer's Report as well as the Independent Auditor's Report for FY 2018-19 as presented.

### **STATUS OF COMMERCIAL LLRW DISPOSAL FACILITIES AND RECENT DEVELOPEMNTS**



Mr. Anderson provided background information regarding the formation of interstate compacts to manage LLRW on a regional basis.

Mr. Janati provided an update on the status of commercial LLRW disposal facilities and recent national developments involving management and disposal of low-level radioactive waste (LLRW).

There are currently four (4) commercial LLRW disposal facilities in the United States. These facilities are Barnwell in South Carolina; the EnergySolutions facility in Clive, Utah; Richland in Washington; and the Waste Control Specialists (WCS) facility in Texas.

1. The Barnwell facility accepts all classes of LLRW from the three members of the Atlantic Compact (Connecticut, New Jersey and South Carolina). As of July 1, 2008, this facility no longer accepts LLRW from outside the Atlantic Compact.
2. The EnergySolutions Clive facility accepts Class A waste from all states except those in the Northwest and Rocky Mountain Compacts. The facility also provides for disposal of bulk waste and large components such as steam generators from the nuclear power plants. This facility is not a regional facility and is regulated by the State of Utah. The Utah Department of Environmental Quality is currently conducting a regulatory review for disposal of large quantities of depleted uranium and Class A radioactive sealed sources at this facility. Mr. Janati discussed Utah House Bill 220, which modifies provisions relating to the disposal of radioactive waste as follows: provides that certain waste classifications are determined at the time of acceptance; allows the Division of Waste Management and Radiation Control to authorize alternate requirements for waste classification and characteristics that would allow an entity to accept certain waste at a specific site, such as allowing waste greater than Class A if based on disposal method, the radiation dose does not exceed Class A limits; requires an approved performance assessment for more than one metric ton of concentrated DU; requires the DOE to accept perpetual management of federal cell for disposal of concentrated depleted uranium and take title to the land for the federal cell, title to the waste in the federal cell, and financial stewardship for the federal land and waste in the federal cell; and imposes tax on certain waste.
3. The Richland facility is a regional facility and accepts all classes of LLRW but only from the Northwest and Rocky Mountain Compacts.
4. The WCS facility is a regional facility for the Texas Compact (Texas and Vermont) and accepts all classes of LLRW from both commercial and federal facilities. In April 2012,



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the Texas Commission on Environmental Quality (TCEQ) authorized WCS to accept waste and begin disposal activities. Additionally, the Texas Compact Commission has established rules for the importation and exportation of LLRW into and out of the Texas region. The annual limit on radioactivity for out-of-compact waste is 275,000 curies (Ci), but there is no annual limit on volume for out-of-compact waste. The TCEQ granted an increase in the total capacity of the commercial facility from 2.3 million cubic feet (ft<sup>3</sup>) to 9 million ft<sup>3</sup>. Additionally, disposal of large quantities of depleted uranium and Greater-Than-Class C (GTCC) waste is being considered by WCS.

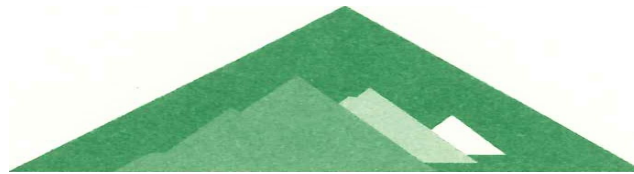
### Recent Developments

Mr. Janati provided an overview of several recent national developments as follows:

**Interpretation of Definition of High-Level Radioactive Waste** – The U.S. Department of Energy (DOE) issued a Federal Register notice seeking public comment on the Department’s interpretation of the definition of “high-level radioactive waste” (HLW). DOE manages large inventories of legacy waste resulting from spent nuclear fuel reprocessing activities. The reprocessing generated large volumes of radioactive waste that remain in storage at several DOE sites in South Carolina, Idaho, and Washington. DOE’s interpretation is that reprocessing waste streams are defined by their radiological characteristics regardless of how they were generated. The new definition of HLW would allow DOE to dispose of some of the waste from reprocessing activities, mainly LLRW that does not exceed Class C limits as defined by 10 CFR Part 61, in NRC or State licensed commercial facilities.

**Nuclear Regulatory Commission (NRC) Issues a Federal Register Notice re Very Low-Level Waste (VLLW) Scoping Study** - NRC issued a Federal Register Notice announcing the agency’s plan to conduct a scoping study and identify possible options to improve and strengthen the NRC’s regulatory framework for the disposal of large volumes of VLLW associated with the decommissioning activities and waste that might be generated by a radiological dispersal device. As part of this process, NRC sought stakeholder input and received significant number of comments. NRC is currently evaluating the comments.

**Status of 10 CFR Part 61 Rulemaking** – NRC is in the process of revising 10 CFR Part 61, “Licensing Requirements for Land Disposal of Radioactive Waste”. The NRC staff had sought Commission’s approval to publish a final rule in the Federal Register, but the Commission directed the staff to make significant revisions to the draft final rule. The NRC staff is currently working on incorporating the Commission’s direction and expects to release the revised draft final rule for public comment in 2019.



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**Greater Than Class C (GTCC) Waste** – NRC issued a Federal Register Notice to seek input from various stakeholders in identifying issues associated with the development of a regulatory basis for GTCC waste. Currently, there is no disposal facility in the United States for GTCC waste. GTCC is LLRW, but its concentration exceeds the concentration limits in 10 CFR Part 61 waste classification table and therefore, it is not acceptable for disposal at the existing commercial LLRW disposal facilities. By statute, NRC is the regulatory agency and DOE is responsible for management and disposal of GTCC waste. In July 2019, the NRC issued a Federal Register Notice to announce the availability of the draft regulatory basis document for GTCC waste. The draft regulatory basis evaluates whether certain GTCC waste could be safely disposed in a near-surface disposal facility. It also evaluates whether regulatory changes would need to be considered to allow such action, and whether the NRC or NRC agreement states should regulate such disposal. In summary, the regulatory basis document concludes that approximately 80 percent of the GTCC waste streams are potentially suitable for near surface disposal, subject to additional controls to protect an inadvertent intruder. It also concludes that almost 95 percent of GTCC waste could be safely regulated by agreement states.

### **INFORMATION ON LLRW DISPOSAL FOR THE APPALACHIAN COMPACT**

Mr. Janati provided background information on the DOE's Manifest Information Management System (MIMS). The MIMS contains information on LLRW disposal at the current commercial LLRW disposal facilities. Mr. Janati said DEP has significantly reduced the regulated community's administrative LLRW reporting requirements by obtaining the appropriate disposal information directly from the MIMS database.

Mr. Taverna discussed the waste disposal information for calendar year 2018. The Appalachian Compact disposed of about 344,184 ft<sup>3</sup> of LLRW. Pennsylvania disposed of about 338,668 ft<sup>3</sup>, most of which was generated by the government (due to the decommissioning of the Safety Light site in PA by the EPA), the industrial and the utility sectors. Maryland disposed of about 5,499 ft<sup>3</sup> of waste, most of which was generated by the utility sector. West Virginia disposed of about 17.0 ft<sup>3</sup>. Delaware did not generate waste requiring disposal in calendar year 2018. Almost all Class A waste from the Compact was shipped to the EnergySolutions Clive facility. Mr. Taverna also provided information on the radioactivity (curie) of waste generated in the Compact. The Compact generated about 42,155 Ci of LLRW. Pennsylvania generated about 42,029 Ci of waste, Maryland generated about 125 Ci of waste, and West Virginia generated about 0.01 Ci respectively.

Mr. Taverna provided a brief discussion of waste disposal trends in the Compact for the period of 1998 through 2018. The Barnwell disposal facility in South Carolina stopped accepting waste from outside the Atlantic Compact in 2008, resulting in the storage of Class B and C wastes during 2009 through 2013. The total radioactivity reported during this period represents only



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Class A waste that was shipped to the Clive facility in Utah. Beginning in 2014 and through 2018, the reported radioactivity also includes Class B waste that was shipped to the WCS facility in Texas.

Mr. Taverna presented a pie chart showing that in 2018, about 99.83% of the Compact's LLRW by volume was disposed at the Clive facility in Utah, and only 0.17% by volume was disposed at the WCS facility in Texas. In comparison, about 5% of the Compact's LLRW by radioactivity was disposed at the Clive facility, and about 95% by radioactivity was disposed at the WCS facility.

Mr. Janati stated that the EnergySolution's facility in Clive, Utah plays an important role in management and disposal of LLRW in the Appalachian compact. He said due to blending of Class A waste with Class B waste, the volume of Class B waste that would have been disposed at the WCS facility in Texas has diminished significantly.

### **UNFINISHED BUSINESS**

#### **Correspondence to DOE re Surcharge Funds**

Mr. Anderson presented the draft letter requesting DOE's consent to use the surcharge funds for Commission's routine expenditures. He explained that under this scenario, there would be an annual transfer of the "income" from the restricted funds or surcharge funds to the unrestricted funds of the Commission. He also said if the DOE does not consent to the use of surcharge funds, the Commission can exercise other options such as requiring the party states to pay for routine operations of the Commission. Mr. Janati said the other option is to establish a fee system for the LLRW generators, but this process would be cumbersome. Mr. Allard suggested that the letter to the DOE include a statement that the PA commissioners fully support this action. He said the letter should also mention that the Commission will begin to use the income on surcharge funds if we do not hear from DOE within a year. The Commission passed a motion to notify the DOE Secretary of the intention of the Commission to use income from the surcharge fund for routine operations of the Commission and the reasons therefor.

#### **Update on LLW Forum Activities**

Mr. Hammerberg provided an update on recent activities of the LLW Forum (Forum), an organization that the Appalachian States LLRW Commission is a member of. The Forum also includes as members other interstate low-level waste compact commissions, several states, including Pennsylvania, various federal agencies, LLW disposal facilities, electric utilities, and other LLW generators and LLW service providers. He said the Forum is an organization where policy issues can be addressed. It provides a venue for the members to interact and discuss topics of mutual interest.



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He said that some members had been dissatisfied with the direction of the organization and the lack of transparency, particularly as it related to the activities of the long-term executive director and the executive director's compensation. Other issues that have been of concern to a number of members include the number of meetings, the meeting agenda topics, and the budget of the Forum. He said the Forum has been facing budget deficits over the past seven or eight years.

He mentioned that the Forum has a new interim executive director in the wake of the departure of the long-term executive director, and there is a process in place to hire a new permanent executive director. The Forum is also considering reevaluation of the organization's mission. He said that the Forum Board of Directors has formed several subcommittees and he serves on the Mission and Operations Subcommittee. The subcommittees have been helpful in addressing some of the near-term issues and they will be involved in longer term planning processes as well. He said the Forum Board of Directors has engaged in general discussions with the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) on best practices for non-profit organizations, taking advantage of ASTSWMO's expertise as a very well managed organization.

### **Nuclear Reactor Decommissioning**

Mr. Janati provided an overview of nuclear reactor decommissioning. He discussed methods and phases of decommissioning, decommissioning funds, decommissioning business model, decommissioning public involvement, current decommissioning issues of stakeholders, status of nuclear power plant decommissioning in the U.S. and independent spent fuel storage installations (ISFSI). He also provided an estimate of LLRW associated with TMI-1 decommissioning as follows:

High Activity Waste

- Class B and C: 1,770 ft<sup>3</sup>

- Class A: 28,152 ft<sup>3</sup>

Low Activity Waste (Class A): 3,373 ft<sup>3</sup>

Very Low Activity Waste (Class A): 316,251 ft<sup>3</sup>

### **NEW BUSINESS**

#### **Election of Officers**

The Commission members voted unanimously to elect Kaley Laleker, Director, Land and Materials Administration, Maryland Department of the Environment, as the chair, and Clifford Mitchell, Director, Environmental Health Bureau, Prevention and Health Promotion Administration, Maryland Department of Health, as the vice-chair of the Commission.



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### **Adoption of the Proposed Budget for FY 2020-21**

Mr. Janati presented the proposed budget for FY 2020-21. He said the proposed budget is similar to the budget for FY 2019-20, but it includes an additional amount of \$7,500 to sponsor the Forum meeting in spring 2021. Mr. Janati said the last time the Commission sponsored a meeting of the Forum was in 2008. He pointed out that the commitment to sponsor the Forum meeting in 2021 is contingent upon a positive response from the DOE regarding the use of the surcharge funds. The Commission voted unanimously to approve the proposed budget of \$37,700 for FY 2020-21.

### **2019 Annual Meeting**

The Commission decided to hold its next annual meeting on November 6, 2020. The meeting will be held at the Hilton Hotel in Harrisburg, PA.

### **PUBLIC COMMENT**

There were no members of the public in attendance.

### **ADJOURNMENT**

Ms. Laleker adjourned the meeting at approximately 12:42 p.m.