

Appalachian States Low-Level Radioactive Waste Commission

MEETING MINUTES

October 28, 2022

CALL TO ORDER

Mr. Allard called the meeting to order at 10:02 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

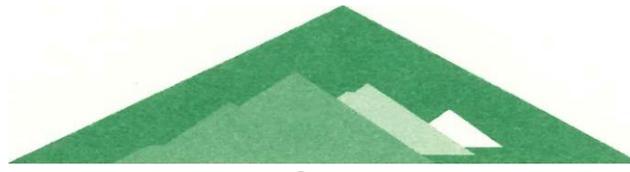
- David Allard, Member from Pennsylvania
- Edward Hammerberg, Alternate Member from Maryland
- Kaley Laleker, Member from Maryland
- Clifford Mitchell, Member from Maryland
- Tera Patton, Member from West Virginia
- Harold Ward, Member from West Virginia
- Richard Roman, Alternate Member from Pennsylvania
- Albert Romanosky, Alternate Member from Maryland
- Matthew Smith, Alternate Member from West Virginia
- Matthew Higgins, Alternate Member from Delaware
- Molly Magarick, Member from Delaware

Commission Staff

- Rich Janati, Administrator, PA DEP
- Maria Kennison, Esquire, Troutman Pepper

Others Present

- Dwight Shearer, Staff Member, PA DEP
- Wade DeHaas, Staff Member, PA DEP
- Michelle Foster, Staff Member, PA DEP
- Molly Adams, Staff Member, PA DEP
- Stephanie Banning, Staff Member, PA DEP
- Hena Farid, Staff Member, PA DEP
- Tyler Van Well, Staff Member, PA DEP
- Vern Rogers, EnergySolutions



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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

Mr. Allard asked if any member had modifications or changes to the minutes of the November 5, 2021 annual meeting. There were no comments and the Commission voted to approve the minutes unanimously.

REPORT OF THE CHAIRMAN AND EXECUTIVE DIRECTOR

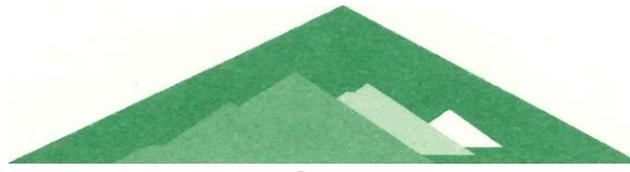
Review of Treasurer's Report for FY 2021-22

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) 2021-2022. This fund is being invested by the Pennsylvania Treasury Department under the INVEST Program. Interest from the Operating Fund during this FY was \$57. Actual expenses for this period totaled \$27,178 which is less than the budgeted amount of \$31,200 by \$4,022. The main reason for being under the budgeted amount significantly is that both the Commission's annual meeting and the Low-Level Waste Forum (LLW Forum) meetings were held virtually. The Commission's expenditures exceeded its revenues by about \$27,121. Mr. Janati stated that going forward we will use interest income from the Department of Energy (DOE) surcharge funds that we received several years ago. He said at the current level of expenditures, we should have funds available in the Operating Fund for another 35 to 40 years.

Mr. Janati said at the end of June 2022, the Operating Fund and the Surcharge Fund had a balance of \$20,762 and \$2,840,939 respectively. He said the principal amount of DOE surcharge funds that the Commission received from DOE is approximately \$1.65 million. Mr. Hammerberg recommended that for the future meetings it would be helpful to show the breakdown of Surcharge Fund into principal and interest amount. Mr. Janati said the independent auditors inquired about the Surcharge Fund during the conduct of the annual audit and they did not raise any issues or concerns with it.

STATUS OF COMMERCIAL LLRW DISPOSAL FACILITIES AND RECENT DEVELOPMENTS

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).



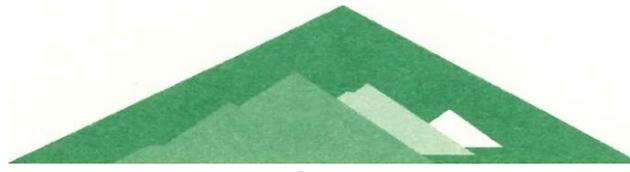
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There are currently four (4) commercial LLRW disposal facilities in the United States. These facilities are Barnwell in South Carolina; the EnergySolutions facility in Clive, Utah; Richland in Washington; and the Waste Control Specialists (WCS) facility 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. EnergySolutions is also seeking approval for license renewal of Class A waste, licensing of a federal cell and exempted waste cell. They hope to receive a significant amount of depleted uranium from the DOE and plan to dispose of this waste at the EnergySolutions facility in Utah.
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, 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 Ci, but there is no annual limit on volume for out-of-compact waste. About 70% of licensed capacity is for in-compact waste and about 30% is for out-of-compact waste. Disposal of large quantities of depleted uranium and Greater-Than-Class C (GTCC) waste is being considered by WCS.

Mr. Janati stated most of the high-concentration waste from the compact is being disposed at the WCS facility in Texas. Primarily, waste from the nuclear power plants. Most of the low-activity waste is being disposed of at the Clive facility in Utah.

Mr. Janati stated that the TCC has formed a capacity committee to gather information and develop metrics for the TCC to ensure appropriate data will be available for future decisions relative to approval of the imports and to ensure future economic stability of the WCS facility.



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INFORMATION ON LLRW DISPOSAL FOR THE APPALACHIAN COMPACT

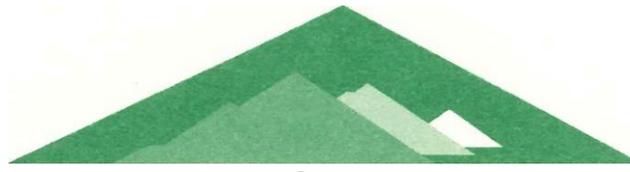
Mr. Janati provided background information on the DOE's Manifest Information Management System (MIMS). MIMS contains information on LLRW disposal at the current commercial LLRW disposal facilities. He said we also receive disposal information directly from the commercial LLRW disposal facilities for recording and reporting of waste disposal information in our compact.

Mr. Janati discussed the waste disposal information for calendar year 2021. The Appalachian Compact disposed of about 69,946 ft³ of LLRW. Pennsylvania disposed of about 58,078 ft³, most of which was generated by the industry and the nuclear utilities. Maryland disposed of 11,824 ft³, most of which was generated by the industry, the nuclear power plants, and the government. West Virginia disposed of 36 ft³ and Delaware disposed of 8 ft³. Most of Class A waste generated within the compact was shipped to the EnergySolutions Clive Facility in Utah. Mr. Janati also provided information on the radioactivity (curie) of waste generated in the compact. The compact generated about 1,683 Ci of LLRW. Pennsylvania generated about 1,615 Ci of waste and Maryland generated about 68 Ci of waste. Both Delaware and West Virginia generated less than 0.1 percent Ci.

Mr. Janati provided a brief discussion of waste disposal trends in the Compact for the period of 2001 to 2021. He said in 2001, several facilities were undergoing decommissioning and cleanup activities, so the amount of waste volume was very high. The Barnwell disposal facility in South Carolina stopped accepting waste from outside the Atlantic Compact in July 2008, resulting in the storage of Class B and C wastes, mainly by the nuclear utilities, for about five years. Beginning in 2014 and through 2021, the reported radioactivity also includes Class B waste that was shipped to the WCS facility in Texas. In 2016, the Safety Light facility in PA started cleanup efforts under the EPA's Superfund Program. The cleanup continues but currently there is not much LLRW being generated by this facility.

Mr. Janati provided a brief discussion of radioactivity of waste for the period of 2001 through 2021. From the years 2001 through 2008, the radioactivity of waste was very high due to the availability of the Barnwell facility to our compact. The nuclear power plants in the compact shipped large quantities of high activity irradiated components and reactor cleanup resins to Barnwell in 2007 and 2008, knowing that they will no longer have access to this facility.

The radioactivity of waste has been relatively low after the closure of the Barnwell facility to our compact beginning in 2009. We began shipping waste to the WCS facility in 2014 and we have been able to ship Class B and C wastes that contain higher activity to this facility. In 2018, the reported activity is very high because of a shipment of irradiated reactor components from a nuclear power plant in PA to the WCS facility in Texas.



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Mr. Janati presented a pie chart showing that in 2021, about 66% of the compact's LLRW by volume was disposed at the Clive facility in Utah and about 34% by volume was disposed at the WCS facility in Texas. In comparison, about 53% of the compact's LLRW radioactivity was disposed at the Clive facility and about 47% of radioactivity was disposed at the WCS facility.

Mr. Janati stated that in the Appalachian Compact the definition of LLRW does not include TENORM (Technologically Enhanced Naturally Occurring Radioactive Material). TENORM is being tracked separately from LLRW. The TENORM reported from the compact is mainly from hydraulic fracking operations in Pennsylvania. In 2016, the volume of TENORM shipped to a commercial disposal facility was about 38,400 ft³. In 2021, the volume increased to 212,750 ft³. The radioactivity content of TENORM is very low. Both the Clive facility in Utah and the WCS facility in Texas have accepted TENORM from the Appalachian Compact. The total amount of TENORM disposed at these two facilities during 2016 through 2021 was 787,670 ft³ and the total amount of LLRW was 1,295,403ft³. We have been tracking and reporting TENORM that is being disposed at the facilities in Texas and Utah.

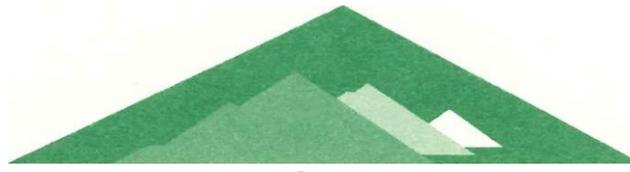
Mr. Romanosky asked if there is any radioactive waste produced via fracking? And if so, how is that handled? Mr. Allard responded if the waste is from an agreement state or an NRC-licensed facility, then it would be considered radioactive waste. A significant amount of TENORM waste from facilities is going into our Resource Conservation and Recovery Act (RCRA) Subtitle C landfills for many years and it has been tracked by PA DEP's waste management programs. The important point I want to mention and have in the record is that we continue to utilize RCRA Subtitle C sites in Idaho and Michigan. One of the big cleanup sites in western PA sends a lot of waste as unimportant quantities to the Michigan facility.

UNFINISHED BUSINESS

Discussion of Proposed Changes to the Bylaws

Ms. Kennison described the proposed changes to the Commission Bylaws that involves several editorial changes, but the major changes are in Article IV, Section One, regarding the location of the meeting; Article V, Section Four, regarding hiring of a part-time administrator for the Commission; and Article VIII, regarding the annual report. She said we inserted language in Article IV, Section One, regarding the location of the annual meeting. We ask some flexibility where the meetings can be held at any location in another party state, as opposed to just the host state, and that would fall on the chairperson's discretion as far as making that call.

Ms. Kennison also stated we added language to the bylaws to authorize a contract with an independent contractor or hire an employee to fulfill the duties of the Commission and with respect to the administrator specifically, it would be whatever functions of the executive director



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are delegated to the administrator, and that ties into a subsequent item on the agenda which is the independent contractor agreement.

Mr. Romanosky asked if every state in our compact needed to be represented to have a quorum? Ms. Kennison stated that a majority vote of the Commission members and a majority vote of the host state's members shall be necessary for the Commission to take any action related to the host state's regional facility and management of LLRW within that host State. Mr. Janati stated the Commission bylaws do not specify whether every state should be present at the meeting for the purpose of the quorum.

Ms. Kennison also suggested a minor change in Article VIII to change the date for the completion of the annual report from October 31st to December 31st.

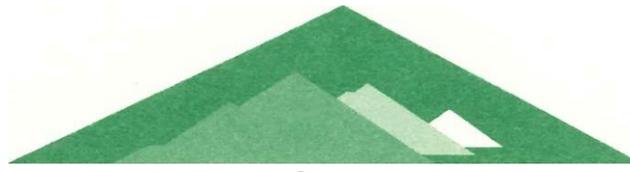
Mr. Hammerberg asked who would chair the meeting if both the chair and vice-Chair are absent? Mr. Janati stated if we have a quorum, a chair protem can be elected to conduct the meeting.

Update on LLW Forum Activities

Mr. Hammerberg provided an update on recent activities of the LLW Forum (Forum), an organization that the Commission is a member of. The Forum also includes as members other interstate LLRW Compacts, several independent states and federal agencies including NRC, EPA and DOE, LLRW generators, and industrial sectors such as the processors and the disposal facilities. It provides an opportunity for the members to interact and discuss radioactive waste management and disposal issues.

The fall meeting was held in Baltimore and the meeting was quite successful. He said one of the highlights of the meeting was that the Chairman of the NRC delivered the keynote address and he made himself available for questions following his address. One question asked was about Greater-than-Class C (GTCC) waste and if compacts would have the ability to restrict access to those facilities with respect to GTCC waste. The chairman could not provide a concrete answer, but Mr. Hammerberg feels this is something that will come under discussion. He said the presentations and recordings from the fall meeting are posted on the Forum's website.

Mr. Hammerberg stated the Forum is really serving its purpose and it has been through some changes over the recent years with the new executive director. There has been some internal dissention and contention, but I think this is all behind us and I think at one point some of the compacts had dropped out of the organization or threatened to do so.



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For several years, the Forum faced budget deficits. Since we hired a new executive director and the dues continue to increase, we no longer have a budget deficit. Mr. Janati stated with respect to the Forum, the Appalachian Compact is very proactive. Mr. Hammerberg is the Chair of the Mission and Operations Subcommittee. Mr. Janati is on the Agenda Committee and serves on 10 CFR Part 61 and Disused Sealed Sources Working Groups.

Mr. Hammerberg also stated that the Forum receives grants through the DOE, and the DOE has been quite satisfied with their current state of the organization and they would like to see this funding continue.

NEW BUSINESS

Election of Officers

The Commission voted unanimously to elect Dave Allard, Retired, Bureau of Radiation Protection, Pennsylvania Department of Environmental Protection, as the chair and Kaley Laleker, Director, Land and Materials Administration, Maryland Department of the Environment, as the vice-chair of the Commission for another year.

Hiring an Administrator for the Commission

Mr. Allard stated that the Commission would like to hire a part-time administrator to work on behalf of the Commission. Mr. Janati retired two years ago. He has returned as an Annuitant by the PA DEP for the past two years. He hopes to be renewed again and continue to work for the Compact. Mr. Allard stated that in the event Mr. Janati does not get renewed, we could hire Rich via the Compact Commission, as a part-time administrator or an independent contractor with salary. Ms. Kennison discussed the terms of the agreement for hiring an independent contractor. She stated that Mr. Janati would not be hired as an employee but as an independent contractor. He would receive an hourly rate in addition to the annual compensation to account for any possible work or substantial time that it takes should the need arise. The term of this agreement would be for one year. Standard provisions would be included such as checking confidential information and it would also apply to anything that would be made available to the public under the Sunshine Law. There may be some information that would still need to be kept confidential. Travel expenses would also be included to attend the Forum meetings.

Mr. Allard stated that the agreement would allow the Commission to hire an administrator now or in the future. Mr. Janati said the PA DEP has agreed to continue its current level of support for the Commission.



At the end of these discussions, the Commission approved the engagement of an independent contractor pursuant to the terms of the independent contractor agreement circulated for the role of part-time administrator. The agreement outlines the terms and conditions of the working arrangements and a description of the services that the independent contractor will provide as the Commission's administrator.

LLW Forum Representation

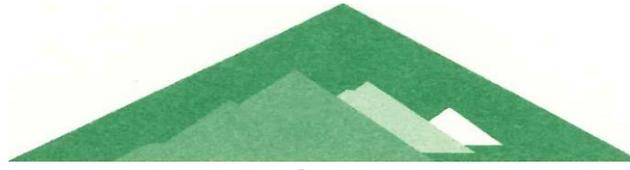
Mr. Janati stated now that the chair of the Commission has expressed interest in attending the Forum meetings, there is a need to discuss travel costs for three persons to attend these meetings. Currently, the administrator of the Commission and a member from Maryland attend the Forum meetings on a routine basis. He said the budget has been revised to reflect additional costs to attend the Forum meetings in person. He also stated that the Commission passed a resolution for this several years ago. Ms. Kennison stated when researching the resolution, they found one from 1998 that states that the chairman of the Commission is the representative to the Forum and he or she gets to designate a second person to go as well. That is the current standing with the resolution.

Mr. Janati stated that we don't have to take any further action on this at this meeting because it is included in the additional travel costs in the proposed budget to be approved by the Commission.

Mr. Hammerberg asked if all Commission resolutions could be scanned and distributed to the party states. Ms. Kennison stated they have a lot of them scanned and will double check to see if they are all scanned and noted they will also be tallied.

Adoption of the Revised Approved Budget for FY 2022-23 and Proposed Budget for FY 2023-24

Mr. Janati presented the revised budget for FY 2022-23 and the proposed budget for FY 2023-24. He stated we are revising the previous budget for FY 2022-23 because the actual interest amount on the Operating Fund is significantly lower than the projected amount and the new budget also incorporates the salary of a part-time administrator for six months, beginning January 1st and ending June 30th of 2023. The FY 2023-24 budget is very similar to the budget for 2022-23 except that we have added an additional travel cost of \$2,500 for a third person to attend the Forum meeting. The proposed budget for FY 2022-23 is \$43,700 and for FY 2023-24 it is \$46,200.



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Mr. Romanosky inquired if the DOE ever responded to the Commission's letter regarding the use of interest income on surcharge funds for the routine expenses of the Commission. Mr. Allard stated they did not, which is good as that was the best response we could have received. Mr. Janati stated he spent a significant amount of time on the telephone to educate the DOE staff about the surcharge funds and the Commission's intention to use the interest income from the surcharge funds for routine activities of the Commission.

The Commission voted unanimously to approve the proposed revised budget of \$43,700 for FY 2022-23 and a proposed budget of \$46,200 for FY 2023-24. The budget includes the salary for a part-time Commission Administrator.

2023 Annual Meeting

The Commission passed a motion to accept October 27th, as the primary and November 1st as the secondary date for the 2023 annual meeting.

PUBLIC COMMENT

There were no members of the public in attendance.

ADJOURNMENT

Mr. Allard adjourned the meeting at 12:29 pm.