MINUTES

APPALACHIAN STATES LOW-LEVEL RADIOACTIVE WASTE COMMISSION ANNUAL MEETING

November 5, 2014

CALL TO ORDER

Mr. Summers, the Commission vice-chair, called the meeting to order at about 10:00 AM.

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
- Richard Roman, Alternate from Pennsylvania
- Robert Summers, Member from Maryland
- Edward Hammerberg, Alternate from Maryland
- Frieda Fisher-Tyler, Alternate from Delaware
- Matthew Higgins, Alternate from Delaware
- Michael Dorsey, Alternate from West Virginia

Commission Staff

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

Others Present

- Dana Aunkst, PA DEP
- James Barnhart, PA DEP
- Ben Seiber, PA DEP
- Cheryl Miller Laatsch, PA DEP
- Matthew Smith, WV DEP
- Jamie Browning, WV DHHR

ADOPTION OR MODIFICATION OF THE AGENDA

There were no modifications to the proposed meeting agenda.

APPROVAL OF THE MINUTES OF THE PREVIOUS MEETING

Mr. Summers asked if any member had any modifications, changes or clarifications with regard to the minutes of the October 31, 2013 annual meeting. There were no comments and the Commission voted to approve the minutes unanimously.

REPORT OF THE CHAIRMAN AND EXECUTIVE DIRECTOR

Treasurer's Report

Mr. Janati discussed the Treasurer's Report, which is a statement of revenues and expenditures for fiscal year 2013-2014. The only source of revenue for the Commission is the interest income from the operating fund. This fund is invested by the Pennsylvania Treasury Department under the INVEST Program. Interest from the operating fund was \$110, which is \$10 more than the projected amount of \$100. Actual expenses for this period totaled \$26,952, which is lower than the budgeted amount by \$1648 however, the Commission's expenditures exceeded its revenues by \$25,502. Mr. Janati pointed out that at the current rate of expenditures, the balance in the operating fund would last about eight years.

Review of Independent Auditor's Report for FY 2013-14

Mr. Janati discussed the Independent Auditor's Report for fiscal year (FY) 2013-2014. 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, its laws and regulations. The audit concluded that there were no findings or items of non-compliance.

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 \$2650 as of June 30, 2014. The Commission's total net assets were \$2,893,342 as of June 30, 2014. The balance sheet also reflects an amount of \$215,990 as appropriated fund, including \$10,000 for legal services and \$205,990 for fiscal stabilization. In 2013, the Commission adopted a motion to eliminate the project restart fund and combine the amount of \$200,000 in the restart fund with the amounts in the fiscal stabilization fund to create a new fiscal stabilization fund.

The surcharge fund is the money the Commission received from the Department of Energy (DOE) as part of incentives paid to regions and states to meet federally set milestones in the development of the regional low-level radioactive waste (LLRW) disposal facilities. This money is being retained in a restricted fund with the INVEST Program. As of June 30, 2014 this fund had a balance of \$2,673,363 and earned an interest amount of \$1339 during FY 2013-14. Mr. Janati stated the money in the restricted fund may only be used for the development of a regional LLRW disposal facility in Pennsylvania.

The audit report pointed out that the Commission was not involved in any litigation that could adversely affect its financial position.

Status of Commercial LLRW Disposal Facilities and Recent Developments

Mr. Janati provided an overview of the regional compacts and discussed the status of the commercial LLRW disposal facilities.

There are currently four (4) commercial LLRW disposal facilities in the United States. These facilities are Barnwell in South Carolina, the EnergySolutions facility in Utah, Richland in Washington and the new 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. This facility is not a regional facility, and it is regulated by the State of Utah. In April of 2012, the State of Utah approved a variance request for the disposal of Class A radioactive sealed sources at this facility. The variance has a term of one (1) year from the date the first shipment is received at the Clive facility and is partially funded by the Conference of Radiation Control Program Directors (CRCPD). Mr. Janati stated the first shipment of sealed sources was received at the EnergySolutions facility on September 30, 2013. As part of a sealed source round-up coordinated by the CRCPD Source Collection and Threat Reduction Program (SCATR), only the recovered Class A radioactive sealed sources are authorized for disposal at the Clive facility. Mr. Janati stated that under the SCATR Program, about 500 Class A sealed sources and about 400 Class B and C sealed sources were collected from the Appalachian Compact licensees as of mid-August, 2014. Mr. Janati also noted that on September 29, 2014, the state of Utah approved a request by the EnergySolutions to extend the expiration date of the license variance to December 31, 2014, allowing for disposal of additional disused sealed sources at the Clive facility.
- 3. The Richland facility is a regional facility and accepts all classes of LLRW, but only from the member states of the Northwest and Rocky Mountain Compacts. This facility continues to accept radium sources from the Appalachian Compact and other states and 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 including the collection and disposal of sealed sources. Additionally, the Texas Compact Commission has established rules for the importation and exportation of LLRW into and out of the Texas region. Mr. Janati stated that the current facility license limits disposal of out-of-region waste to a maximum of 30 percent of the total facility volume. The facility is able to receive and dispose of large components as non-containerized waste. Mr. Janati stated that Texas has recently approved several changes to the original license for the WCS facility, including removal of the annual limit on the volume of imported

waste, increase in the radioactivity limit for the imported waste from 120,000 Ci to 275,000 Ci, increase in the total capacity of the commercial facility from 2.3 million ft³ to 9 million ft³, removal of radioactivity limits for isotopes C-14, TC-99 and I-129, and disposal of large quantities of depleted uranium.

Mr. Janati stated that the majority of the nuclear power plants in the Appalachian Compact have access to the WCS facility and some have already made shipments of LLRW to the facility for disposal.

Mr. Allard asked that the Commission, through its membership at the Low-Level Waste Forum, to monitor disposal of waste at the WCS facility to ensure that the Appalachian Compact generators continue to have disposal access for their Class B and C wastes. Mr. Janati concurred and added that the DOE's Manifest Information Management System (MIMS) database has been modified to include waste disposal information at the WCS facility. He said the Commission uses the MIMS database for tracking and reporting LLRW disposal information for the Appalachian Compact.

Information on LLRW Generation Information for the Appalachian Compact

Mr. Barnhart provided some background information on the MIMS database and explained that MIMS contains information on waste disposal at the commercial LLRW disposal facilities.

During calendar year 2013, the Appalachian Compact generated about 96,048 ft³ of Class A LLRW. Pennsylvania disposed of about 72,067 ft³ of waste by volume, most of which was generated by the utility and industrial sectors. Maryland disposed of about 23,597ft³ of waste by volume, most of which was generated by government and utilities. Delaware and West Virginia generated about 340 ft³ and 45 ft³, respectively. All Class A waste generated within the compact was shipped to the EnergySolutions disposal facility in Clive, Utah. Mr. Barnhart also provided information on the radioactivity of Class A waste generated in the compact. Pennsylvania disposed of about 459 Ci of waste. Delaware generated about 45 Ci of waste. Maryland and West Virginia generated about 16 Ci and .01 Ci of waste, respectively.

Mr. Barnhart provided a brief discussion of waste generation trends in the compact for the period of 1994 through 2013. As of July of 2008, the Barnwell disposal facility in South Carolina no longer accepts waste from outside the Atlantic Compact. Mr. Barnhart discussed the impact of this closure on LLRW generation trends within the Appalachian Compact. He also pointed out that the information presented does not include low-activity waste from cleanup activities and Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM) that are being disposed of at the RCRA Subtitle C landfills.

Status Update on the NRC Proposed Rule to Amend 10 CFR Part 61

Mr. Janati provided an update on the status of the draft proposed rule to amend 10 CFR Part 61, "Licensing Requirements for Land Disposal of Low-Level Radioactive Waste (LLRW)". He said this rule would impact LLRW disposal facilities that are regulated by the Nuclear Regulatory Commission (NRC) and Agreement States. He stated that if there are no plans for the development of a LLRW disposal facility, Agreement States such as Pennsylvania, would not be required to meet the NRC criteria for a compatible LLRW disposal program.

Mr. Janati noted that in the Staff Memorandum (SRM-SECY-13-0075) published on February 20, 2014, the Commission approved publication of the proposed rule and the associated draft guidance for public comment subject to several changes. The changes involve a period of performance, intruder assessment, Agreement State compatibility, defense-in-depth, and outreach. Mr. Janati said the new SRM is silent on any proposed changes to Part 61 waste classification tables. At the direction of the Commission, NRC staff is proposing to amend LLRW disposal regulations to require new and revised site-specific technical analysis, permit the development of site-specific criteria for LLRW acceptance based on analysis results, and facilitate implementation to better align the requirements with current health and safety standards.

The NRC staff is proposing a three-tiered approach to site-specific analysis including compliance period (1,000 years), protective assurance period (10,000 years beyond the compliance period) and performance period (10,000 years or more). Site-specific analysis for protection of the general public within the 1,000-year intruder assessment would specify a radiation dose limit of 25 mrem/yr. Additionally, the staff is proposing an intruder assessment analysis for a period of 10,000 years, built upon the same assumptions as the compliance and protective assurance analysis. Mr. Janati said the NRC would issue a guidance document which would further explain the staff's proposed performance assessment requirements. The intruder assessment analysis would specify a radiation dose limit of 500 mrem/yr. The radiation dose limit for the protective assurance period would be set at 500 mrem/yr; however, the radiation doses should be reduced to a level that is reasonably achievable based upon technological and economic considerations.

The NRC staff plans to add concepts of defense-in-depth (DID) and safety case to the revised Part 61 proposed rule to support analysis that demonstrate the land disposal facility includes DID protections and safety case as one of the standards for issuance of a license.

The NRC staff plans to assign compatibility category B for the most significant provisions of the revised Part 61 proposed rule including period of compliance, protective assurance analysis period and its analytical threshold, and waste acceptance criteria. Mr. Janati said a compatibility category C would be more desirable because it would allow the Agreement States to adopt more stringent requirements for disposal of LLRW.

The SRM directs NRC staff to ensure a thorough review of the draft guidance by the stakeholders, particularly as it relates to compatibility designations assigned to the various sections of the proposed rule and the radiation dose threshold for the Protective Assurance Analysis period.

Mr. Janati stated that he is a member of the LLW Forum Working Group on 10 CFR Part 61 rulemaking and that the working group has already submitted extensive comments to the NRC on the proposed rulemaking and will continue to monitor the NRC's activities in this area.

UNFINISHED BUSINESS

Permissible Uses of Surcharge Funds Received From the US Department of Energy (DOE)

Ms. Skjoldal provided an overview of the history of DOE surcharge funds and how the funds were handled in the past. She also provided a discussion on the use of surcharge funds and whether the Commission can use such monies to fund its annual budget. This was an action item from the Commission's annual meeting on October 31, 2013.

The surcharge funds were paid to the Commission by the U.S. DOE pursuant to the Low-Level Radioactive Waste Policy Amendments Act of 1985. As prescribed by this Act, the funds may only be used to: (1) establish LLRW disposal facilities; (2) mitigate the impact of LLRW disposal facilities; (3) regulate LLRW disposal facilities; and (4) ensure the decommissioning, closure, and care during the period of institutional control of LLRW disposal facilities.

Ms. Skjoldal explained that at the Commission's meeting in 1995, a discussion of the use of surcharge funds for the Commission's operating expenses was provided in an issue paper (Issue Paper #6). It was stated in the issue paper that a reasonable argument can be made that the activities of the Commission help mitigate the impact of the regional disposal facility in Pennsylvania and as such, operating costs of the Commission could be covered by surcharge funds. This discussion was provided against the background of an active siting process for a regional LLRW disposal facility in Pennsylvania. She stated that when the siting process was suspended in December of 1998, the Commission adopted a resolution (1998-3S) to establish a \$200,000 fund for the re-establishment of an active business office and staff in the event that the suspension of the siting process is terminated. At the time, the counsel advised that a reasonable argument could be made that a re-established business office of the Commission would mitigate the impact of the regional disposal facility on the host state (Pennsylvania) as long as the LLRW disposal facility siting process is ongoing and active. She also said it appears from the review of past budgets and previous minutes of the Commission meetings, that the restart fund was not derived from surcharge funds.

Ms. Skjoldal stated an argument can be made that surcharge funds can be used to support the Commission's activities as long as the host state has developed or is in the process of developing a regional LLRW disposal facility. She said since the process has been suspended, the advice of the counsel is that surcharge funds may not be used to support the Commission's activities. She pointed out that the existing fiscal stabilization fund was not derived from surcharge funds.

Ms. Skjoldal noted that the Commission has the option of asking DOE for a formal opinion on the use of surcharge funds for day-to-day operating expenses. If DOE interpreted the Act as allowing the Commission to use surcharge funds to support the activities of the Commission, even when the siting process has been suspended, the Commission would have a heightened level of comfort and assurance that such use is appropriate. She stated under the principle of Chevron deference, a court reviewing DOE's interpretation of the Act would likely defer to DOE's determination, since this agency is charged with administrating the Act. However, if an opponent were to challenge DOE's interpretation and the court found DOE's determination to be incorrect, the party states would have to contribute money to replenish the surcharge funds. She

stated that DOE could also determine that the Commission cannot use these funds for day-to-day operating expenses. Ms. Skjoldal pointed out that the Commission should weigh these possible outcomes in light of its current operating fund balance and the fund's anticipated future expenditures in determining whether to seek such interpretation from the DOE. She said at this time, the Commission should not use these funds for day-to-day operating expenses, because we do not have a DOE interpretation on the use of surcharge funds and there is not an ongoing siting process.

In response to Commission questions, Mr. Anderson said there are at least a few other commissions that have used the surcharge funds to support day-to-day operations, and there has not been any legal challenges despite the fact that those commissions did not have regional facilities.

Mr. Janati noted that the Commission's finances are sound and at the current rate of expenditures, the balance in the operating fund should last about eight years. He suggested that the Commission not take any actions at this time with regards to the use of surcharge funds. He said the options to consider, when the need arises, should include a formal opinion from the DOE and collection of fees from the party states. Mr. Summers noted that another possibility is an export fee for licensees that ship waste outside the compact.

At the conclusion of this discussion, the Commission decided not to take any action regarding the surcharge funds at this time, but to monitor and be prepared to take actions if necessary.

Update on PA DEP Radiation Study of Oil and Gas Operations (TENORM Study)

Mr. Allard explained that while TENORM is outside the regulatory framework of our low-level radioactive waste statutes, an update is being provided as a courtesy to interested parties. Mr. Allard provided an update on the department's comprehensive radiation study of oil and gas operations in Pennsylvania. His presentation included background information and the impetus for the study, reiterating the points made at the 2013 meeting regarding potential worker radiation exposure, public radiation exposure, and environmental (water, etc.) contamination. He stressed that this review will examine oil and gas waste from cradle to grave and that DEP has the authority to collect samples where needed to protect public health and safety.

Mr. Allard described field work and analysis that has been completed to date and the plan to complete the study report in 2014. The next step is to finalize the draft internally, then provide it to a peer review group for comment.

Ms. Fisher-Tyler asked if the study results contain any surprises. Mr. Allard replied there are no surprises and that by statute, the department is obligated to inform the public promptly of any condition that is considered hazardous to members of the public, workers and the environment.

NEW BUSINESS

Election of Officers

The Commission members voted unanimously to elect Barry Schoch, Secretary of the Pennsylvania Department of Transportation, as the chair and Robert Summers, Secretary of the Maryland Department of Environment, as the vice-chair of the Commission.

Adoption of FY 2015-16 Proposed Budget

Mr. Janati presented the proposed budget for FY 2015-16. He said the proposed budget is very similar to the approved budget for FY 2014-15 except that it reflects an increase of \$100 for the audit and an increase of \$200 for the annual meeting. The Commission voted unanimously to approve the proposed budget of \$30,000 for FY 2015-2016.

PUBLIC COMMENT

There were no members of the public in attendance.

ADJOURNMENT

Mr. Summers adjourned the meeting at approximately 12:41 p.m.

The next annual meeting of the Commission is scheduled for November 6, 2015 in Harrisburg, PA.