**Present**

Earl Fordham, Executive Director/Chair, Washington, and WA State Department of Health (WDOH) Deputy Director

Cheri Kennedy, Compact Admin

Daryl Sawyer, Idaho

Kaylie Holland, Alaska

Matt Hendrickson, Oregon

Doug Hansen, Utah

Ross Barnes, Montana

Karin Quigley Wyoming

Lilia Lopez, WA Compact Legal Counsel

**Presenters & Guests**

Dane Blakinger, DOH

Douglas Frenette, US Ecology

Sherry Frenette, Guest

John Price, Ecology

Edward Holbrook, Ecology

Theresa Howell, WA Department of Ecology

Vern Rogers, Energy*Solutions*

Leonard Slosky, Executive Director, Rocky Mountain Compact

Dan Shrum, LLRW Forum

**Opening**

Cheri Kennedy, NWIC Staff, began recording at 8:45. No travel reimbursement will be recorded this year.

Earl Fordham, Executive Direct and Compact Chair, convened the meeting at 9:00 am with introductions.

**Compact Business**

The committee unanimously approved the meeting minutes from June 29, 2021, held virtually in Richland, WA. Kaylie Holland motioned to approve the 2021 Meeting Minutes and Doug Hansen second the motion. No discussion was held.

**Party State Reports**

Earl expressed interest on whether low-level active waste was discussed in a broader context in the states that do not have a disposal site. What are the instances when the topics come up. Kaylie indicated there was some discussion in the state of Alaska. Earl stated he’d be interested in hearing a bit more from Kaylie on this topic so we can address within this meeting and if not get together after the meeting.

**US Ecology, Inc. Activities Overview**

Doug Frenette is the new General Manager at the Washington site US Ecology, Inc. and provided an oversight on a few things that would be interesting to a few attendees that have seen a previous presentation and helpful for the new attendees. Republic Services, Inc. announced they had acquired US Ecology, Inc. The US Ecology, Inc. would be part of the “Environmental Solutions” Division of Republic Services lead by Senior Vice President Richard Kang. The US Ecology, Inc. Richland Facility is in the Pacific Area of Operations which continues to be under the leadership of Simon Bell and Terry Geis. It’s been a lengthy process moving a company of ~4000 employees into a company of ~36,000 employees. US Ecology, Inc. will be rebranded in the next year and the facility name will change to Republic Services, but the legal name “US Ecology, Inc.” will remain the same. Republic Services, Inc. is the nation’s leading environmental services provider. Through our subsidiaries (US Ecology, Inc., ACV Enviro, Ecoflo), they provide superior service offerings to ensure compliance while partnering with customers to create a more sustainable world. Republic Services, Inc. vision is to be the premier provider of Comprehensive Environmental Services. Their capabilities are treatment, recycling and disposal, industrial & field services, and emergency response. The US Ecology, Inc. Richland Facility has one of four in the United States Part 61 LLRW Facility and is located on 100 acres within the Department of Energy (DOE) Hanford Reservation. US Ecology, Inc. was originally licensed in 1965 and designated the Northwest Interstate Compact (NWIC) Facility (accessible to 11 states in NW and RM Compacts as of January 1, 1993, and operates through lease agreement with the State of Washington and is rate-regulated by WA Utility and Transportation Commission. The Richland US Ecology, Inc. Facility has 24 fulltime employees compared to other LLWR Facilities very small volumes are received, typically volumes are ~13,000 – 28,000 cubic feet of LLW annually with the mean right around 21,000 cubic feet. US Ecology, Inc. construct their trenches and are designated for stable or unstable LLW. The trenches are built of various sizes and can be up to 50 ft deep, 150 ft wide, and 1,000 ft long and provide disposal capacity for their compact waste generators through 2056. They handle the disposal of NARM/NORM which includes radium sources nationwide. They have special provisions for that and exempt radioactive or exempt Radway. This is throughout the nation, though that’s not just limited to the folks from the compact. A bit of an overview of the site footprint, we occupy 100 acres. We have three active trenches at this moment. Trench 18 will probably be capped in the next couple years, if not sooner. It’s an unstable trench along with Trench 12 which is much newer. Trench 19 is our stable waste trench that can accommodate type class ABC stable. This trench has a lot of life left for years to come. Each year the commission looks at the cost of running our facility. Based on our waste projections from the waste generators, we forecast what that will be, and the rates are set. A couple high dose rate shipments are forecasted in December that will true up the exposure category. There were a couple notable overages in their collections and that was the volume in container categories were a result of a 2022 waste campaign that was realized after the rates were set. What this means is there will be refunds provided to those waste generators who ship directly to the site. The site availability category is forecasted to be adjusted before the end of the year resulting in a small under collection. Their Radioactive Materials License (RML) Amendment 42 of License # WN-1019-2 was renewed in 2022 by the Washington Department of Health with the term extended through July 31, 2027. Most of the changes were associated with site responsibilities with no changes to waste acceptance criteria. In highlighting a few things that are going on, we have multiple environmental stations. We do soil sampling, vegetation sampling, air monitoring, monitor the fence line for radiation making sure we meet the requirements.

There are 10 groundwater sampling wells of various depths. For the waste receipt process, we can handle the containers that come in with some Type B packages. Type A casks that are shipped from various generators like shipyards and nuclear power plants are supported. As part of the receipt process, we have physical inspections that do take place on containers that are designated by our regulator, the Washington DOH who will randomly select a container from a shipment they designate and will bring into our lab facility where it will be opened, and the contents inspected. A hole will also be punctured in the bottom of the container to look for potential liquids. The secondary containment requirements are built in our fabrication shops for tritium, iodine 129, carbon 14, uranium, and Tc 99. These radio nuclides are restricted when reach a certain threshold. This is done as a compromise or better solution than having to line the disposal cells themselves. A lot of interest occurs when we get some irradiated hardware. These shipments are typically sent to us in the TN-RAM cask which is capable of several thousands of rads per hour dose rate fields. *EnergySolutions* has a comparable case. The 360 B which I’ve handled previously at other facilities, but we haven’t handled that cask at our facility. The process is involved. We brought a much larger crane to set the cask up. When the lid is pulled, everyone gets a long way away. There’s a case buried at the bottom of the cell, and you can see the funnel. The liner will be taken out of the cask, transferred over, placed in there and grouted in that location. These are very high dose rate shipments. Matt Hendrickson, Oregon questioned in 2017 there was only 13,000 as the total, but most of the other years, the totals were 20,000. What was the reason for that discrepancy? Was there a shutdown? Doug replied by saying he didn’t know other than it was in percentage it was significantly different. Doug asked Earl if he remembered during that timeframe what was going on. Earl mentioned one of their larger generators had a violation that ended up with their site use permit being suspended. They had to go through reinstatement process and that can take anywhere from a few weeks to several months. So, if they had a campaign of shipments lined up then you know we don’t allow any further shipments once the permit is suspended, they must wait until the permit gets reinstated.

**Hazardous Waste Investigation at US Ecology Overview**

Theresa Howell gave an overview on the Model Toxics Control Act (MTCA) Investigation update at US ECY, Inc. US ECY, Inc. is the Commercial LLRW Disposal Facility in Benton County. It’s on approximately 100 acres of land leased to the State of Washington, subleased to US ECY, Inc. and is located 23 miles northwest of Richland, WA. The MTCA is commonly known as MOTCA, and that’s Washington state clean up law. We’ve been conducting the investigation for quite a long time, so I know some of you have been following it for a while. Hopefully, I can provide some new and updated information today. At the facility, US Ecology, Inc. is the disposal facility operator and there are two regulators.

The DOH holds the radioactive materials license (RM) and oversees the operations and closure and serves as the Chair of the Northwest Interstate Compact (NWIC). The Department of Ecology manages the lease for the state and oversees remediation of the chemical contaminants that originated from the closed trenches. This is done under the MTCA investigation. The investigation began in the late 1990s when hazardous non-radioactive chemicals were detected above the state’s cleanup levels in groundwater and soil gas and the areas under the groundwater constituents of concern at the site are primarily TCE and hexavalent chromium. The site also has commingled contamination in groundwater because it’s located on the Hanford Site and adjacent to operable units that have similar contaminants of concern. The MTCA investigation has been going on for decades and there are several challenges because of the configuration of the closed trenches. It’s very costly to drill around the site and installation of any kind of containment system has been technically challenging. For example, we’ve considered horizontal well drilling, but the depth and expanse of the trench area makes this unlikely to be successful. We’ve also faced legal challenges over the years with Yakama Nation and Heart of America Northwest.

Yakama Nation and the state are partnered together to move the investigation forward. However, Yakama’s raised some concerns, and they would like to see material in the trenches characterized, which is a technical and safety concern for the state and the facility. In addition, we’ve not been successful in identifying receptor scenarios that Yakima agrees with, which makes identifying the remediation goals a challenge for us. The contamination at the site is technically challenging to remove beyond a certain threshold as nonaqueous phase liquids (NAPL) are present in the groundwater and they’re notoriously difficult to find and difficult to restore to drinking water standards, even using the best technologies that exist.

Some history on where we’ve been and where we’re headed with the investigation. The DOH required a cover to be placed on the older closed trenches to meet the NRC closure requirements. In 2010, Yakama Nation and the Heart of America sued the state to stop the cover based on a position that delaying work until a MTCA decision was made would be more appropriate, and that the 2004 SEPA EIS did not compare the cancer risk from MTCA-regulated constituents for placement of the cover. In 2015, the Legislature required a consultant study already underway be subject to a proviso, and the state agreed to delay the cover pending determination of how health and cancer risks will be addressed via the MTCA process. The lawsuit was dismissed with prejudice in 2020, but the state is still bound to the requirements of the Legislative report and is working collaboratively with Yakama Nation to reach a mutually agreeable endpoint for the investigation.

The first step in the legislative report requirements is for Data Gaps to be issued that summarizes all the concerns raised by the consultant study. The Data Gaps report is the first step in coming to agreement between the parties on how the investigation will proceed. US Ecology, Inc. hired a contractor in early 2021 to complete this report and developed an updated cost estimate and update the relevant work plans. The report is still in draft, but it recommends we install soil vapor monitoring wells to monitor for volatile organic constituents and install four additional groundwater monitoring wells, collect soil samples during the well drilling, and then conduct a soil vapor extraction pilot test to fill some of the Data Gaps. In May 2021, a draft was received of the Data Gaps report and US Ecology, Inc. is working with Yakama Nation to resolve their comments ever since. Yakama Nation would like to see radionuclides included in the MTCA investigation, however, there are no state cleanup numbers for radionuclides.

US Ecology Inc. was able to perform ground penetrating radar and electromagnetic surveys in the field in May 2022, so well placement could be better defined, and those surveys bolstered their thinking around the idea it’s not safe to drill between the closed trenches. The next steps are for the Department of Ecology to finish a data quality objectives process with Yakama Nation so everyone agrees on the site receptors and can proceed with issuing the Data Gaps report and closing those gaps. We’ll also need to complete the work plans and finalize the cost estimates.

US Ecology, Inc. is working with their hired contractor, LIDOS to evaluate the technologies that were screened in the feasibility study and add any additional technologies that they as the third-party consultant think are appropriate. Soil vapor extraction is also planned to further refine the cost estimate that will be included in the cleanup action plan.

The path forward in the investigation is to resolve Yakama comments on the Data Gaps report, write cost estimate and work plans, drill wells and run SVE treatability test, collect additional data as needed, update FS, write EIS supplement in parallel, and write a Cleanup Action Plan (CAP) for comment. Once this is complete, we’re still probably years out from a draft CAP. We would likely not issue one until the SME system runs for about two years of data collection. We may want the Nuclear Regulatory Commission (NRC) Part 61 rulemaking to be complete before we issue that draft cap because knowing the parameters for cover design is likely to be a key component.

Matt Hendrickson, Oregon mentioned a few of the contaminants of concern are at the neighboring sites. Have you worked with your colleagues to see how SVE has worked there? Theresa Howell replied, “yes, there is one treatability test that I’m aware of that was done on the Hanford Site and an adjacent operable unit”. “Whether they reached cleanup goals through running that SVE system or whether it was just performed as a treatability test, I’m not sure as it was most likely a decade ago”.

**Utah Activities Overview**

Doug Hansen, appointed Director of the Division of Waste Management & Radiation Control in May 2021, went over the changes in the Utah program. They are the newest division within the Department of Environmental Quality (DEQ) and used to be two different divisions but were combined into one about six to seven years ago. This move was made because of Energy*Solutions* and the fact that they crossed over with their solid waste programs, which were largely RCRA based and NRC programs, so with that nexus, the legislature combined them into one agency and have been operating as a single division since. Usually, we provide a legislative update as part of this presentation. On the low-level waste (LLW) site, it was a relatively quiet session with very little activity. Our legislature instead seemed to be more obsessed with waste tires than radioactive waste, and so we spent a lot of time talking about how much money to reimburse recyclers in the state and not so much about the level waste. For those of you who aren’t familiar with the Clive Facility, it’s a little over an hour’s drive West of our offices in Salt Lake City. We have one section of my staff that’s totally dedicated to all things for Enery*Solutions* within the State of Utah. We have a generator site access program that’s in charge of approving facilities outside of the state to ship waste to Energy*Solutions*. We deal with containerized waste and verification of waste classifications as the waste streams come in. We have Waste Management Operations and site monitoring activities that go on year around as well as engineering inspections and verifying the engineering work that’s been done in addition to the RAM license and their RCRA permit. There’s a groundwater permit out at the facility, so we have hydrogeologists and engineers looking at the best available technology for the groundwater permit as well as health physics inspections. These are going on continually throughout the year. This particular year, Energy*Solutions* has been working on a new Rotary Dump Facility and constructing that, so we’ve been present in inspecting the progress of that structure. Our new RML renewal is in progress and has our top priority. License amendment 26 was issued and completed. We also have an application in place for an exempt cell as well as the federal cell for the depleted uranium license application. We’re also reviewing an amendment to address sealed sources and their surety which will be wrapping up shortly.

Utah is hosting the Fall LLW Forum meeting in 2023 and will be putting together a tour of the Clive Facility. Doug presented a layout of the Clive Facility showing the active cells, mixed waste disposal cell, 11e.(2) Byproduct disposal cell, the proposed LLRW disposal cell, Exempt cell and Federal disposal cell for depleted uranium which are not yet constructed. An amendment was issued for the 11e.(2) byproduct cell about a year ago to reduce the footprint of that cell. It is nearing capacity based on the reduction in the footprint, so anticipate at some point the cell will be closed. An application was received for the proposed exempt cell and the LLRW disposal cell which is under review. We’ve had some follow up conversations with Energy*Solutions* on the exempt cell and we’re probably need to rework the application so expect to see an updated version probably in 2023. For the LLRW disposal cell, we’ve closed out Phase 4 and done engineering inspections on the cover. There’s been a need to revisit the flowable fill that they’re using in the cell as it was initially approved to use fly ash and as part of the formulation that flash became unavailable during the year, so we’ve approved a variance for them to use Alon instead of Flash. In the mixed waste disposal cell, they had some issues with the formula for the macro encapsulation material as it was initially approved as a Type 2 concrete but again with supply chain issues, has become inaccessible, so we’ve been able to issue a variance. The groundwater permit, we have ongoing best available technology inspections that are continuous and we’re working on some challenges around site drainage. On sealed sources, because that’s one of the things that seems to come up routinely and is a question in just about every low-level waste forum meeting, there is an amendment #27 that will allow Energy*Solutions* to receive sealed sources because they’re current license prohibits that. In this case, the amendment will allow sealed sources to come in as long as the source material would be Class A waste rather than a hotter waste.

For those of you that were here last year, you might remember we received a license application for depleted uranium and completed a completeness review and issued a letter around May. It was decided there were some things that Energy*Solutions* wanted to address more completely so they took back their application and reworked it. We received an updated application on August 4th of this year, and it was significant enough in its changes. Another completeness review was completed in September. On September 15th, we issued an approval completeness review approval letter and are currently undergoing the technical review of the application. We’ve been in constant communication with Energy*Soltutions*. Several requests for information have been sent. The Request for Information (RFI) process will be ongoing throughout the review. Energy*Solutions* provides responses as they’re able. The process will be ongoing until we’ve completed the review. A third-party contractor, SC&A is assisting us in this process and have been engaged throughout. We want our communication back and forth between Energy*Solutions* and our technical staff to be straightforward and consistent and have developed a new tracking process for this. In conclusion, Earl asked if it was Utah’s intent the sealed source would have to be classified in accordance with Part 61 based on its weight or its actual size, right? Doug replied, “yes, the source in and of itself is what that would be based on”.

**Alaska Activities Overview**

Kaylie Holland spoke about Fort Greely stating Texas is where they’re trying to go and they’re trying to go to the federal facility to circumvent the compact stuff, but they have not issued the contract yet. Once the contractor gets the contract, they can change disposal options. We fully intend to make a statement about checking with the compact once they get the contractor who sends us the disposal plan. Right now, the core of the engineers is theoretically saying they’re going to ship everything out or they’re going to leave it there. They don’t really know what they’re doing. They’re slapping something together to get a bid and once we get the bid, then we can negotiate where things are going.

Kaylie Holland stated they made a mistake about 10 years ago in the regulations under the DOH and said that no radioactive material could be buried in the State of Alaska. This was challenged creating the State of Alaska to come up with a level that was acceptable to be buried. which they picked effectively close to background as they could. Anything above this needed to be shipped out. Being an oil, gas, and mining state, all the stuff they use on the slope for fracking must be shipped out if tested higher than 5 picocuries. They ship a lot of waste out of state, and they get a lot of pipe scales that trip this 5 pCi limit. Kaylie stated Kristen Schwab has reached out several times with concern that someone didn’t do something right and it hit the port and hit triggers. This is something they face on a regular basis. None of this stuff can go into their subtitle D disposal facility. They don’t have hazardous waste disposal facility or a radiation disposal facility. Kaylie mentioned Fort Greely is decommissioning their nuclear reactor from the 1950’s with debate on what’s low level and what’s not. They have contaminated soil they need to determine who this falls under. The military bases do not fall under NRC as they have their own regulations that are implemented by them. They are looking at piloting micro-reactors at Fort Greely as well as a few other communities that have them. It’s expensive to get power to the remote four to five villages the legislator wants to make possible the sighting of micro-reactors. This will be something else the State of Alaska will need to deal with. Earl asked the question about the legislator getting involved with the sighting of the small modular reactor and is there a state law for reactors in general? Kaylie stated there wasn’t guidance on this and the past legislator just passed a rule stating the State of Alaska can handle but they must come up with regulations and figure out what the NRC states. Kaylie stated they’re in the dark on this as they don’t have anyone knowledgeable about this. Earl Fordham offered his assistance as we agree in the State of Washington and maintain regulations that are compatible with the NRC. The reactor regulation is not something that’s delegated to an agreement state as it’s maintained by the NRC.

Matt Hendrickson mentioned with regards to what Kaylie stated no radioactive waste is allowed to be buried in the State of Oregon. Oregon has the same issue with material that came in from the North Dakota fields, the TENORM that was buried in Arlington, OR which started their legislator down a new set of rules giving them more enforcement power. Along with this, they are in the middle of their rule making with the NRC lowering the public dose rate from 500 mem in a year down to 100 mem in a year. They’re going through their tables trying to decide what is radioactive waste and what isn’t. If it can’t stay in Oregon, it gets expensive to ship out especially for their casting group. Matt stated their various rule making groups are working on this currently. The new derive concentrations that came out have created a lot of work for Matt. Matt indicated they do not have any SMR’s in their state that he’s aware of.

**Rocky Mountain Compact Overview**

Leonard Slosky provided an update on the Rocky Mountain Compact. Rocky Mountain has a contract with the State of Washington NWIC for use of our facility and long-term history cooperating closely with the NWIC on many issues of mutual interest over the decade. Leonard stated there’s a long history of close cooperation between the NWIC and the Rocky Mountain Compact. Back in the early 80s, the Northwest Compact was the first compact which was negotiated, and the Rocky Mountain Compact was the second compact that was negotiated between the states. The Rocky Mountain Compact has export authority where the NWIC does not so the Rocky Mountain Compact issues export permits to always leave their compact. Until the early 90s, we had a full-service disposal site in Baity, Nevada which you’ve heard mentioned, so little waste left the compact, but since that waste site closed to radioactive waste almost all our waste is exported. We do have a NORM TENORM disposal site operated by Clean Harbors, in Deer Trail in eastern Colorado, which are generators not obligated to use but generators within the compact that can be used and generators outside the compact that can be used with approval. We issue around 100 permits and amendments a year, so that’s administratively what keeps staff most occupied.

Unfortunately, we have several violations per year. Our statute gives us enforcement authority, including civil penalty authority, so we must go through that process like how most of you are familiar. There is a typical enforcement proceeding I want to speak about which raised an interesting issue which Earl brought to the Forums attention that created a working group which Earl, the Texas compact, and I are on. This issue occurred in 2019 but didn’t get resolved until about 9-10 months ago when we discovered waste had been shipped from our compact and disposed of at Waste Control Specialists (WCS) LLC in Texas at the Compact Disposal Facility without our approval. This was a violation of our compact rules. It was also a violation of the Texas Vermont Compact requirements. Rocky Mountain undertook an enforcement proceeding which was quite difficult to resolve. When it was finally resolved, a civil penalty was paid. What was discovered in the process, which is of interest to you and interest to other compacts that control waste flow is a processor was failing to identify the original generator of the waste it was sending waste for disposal from our compact and manifesting it as their own waste which they generated which is in violation of quite a few things. Such a practice totally undermines any compact which is trying to control and track their waste. This was an issue in the mid-80s when the compacts were first approved by Congress. It had been established that the original generator of the waste would be maintained through any treatment and processing, so this was quite a disturbing find. This issue has been resolved and hopefully will not occur again. Leonard continued to mention the reason they have access to the disposal facility in Washington State is that in the early 90s, we negotiated a contract between Rocky Mountain Compact, the NWIC, and the State of Washington to utilize their disposal facility. Rocky Mountain Compact paid about $2M for the availability of this access. Rocky Mountain’s budget has been greater than our income and the pandemic really aggravated that causes our deficit to increase significantly. Our board is currently looking into potentially increasing our fees. Fees are charged for waste that’s exported and a compact surcharge on waste that’s disposed of at our regional disposal facility in Deer Trail. It’s expected early next year a hearing by the board will occur to consider increasing our fees.

There has been a lot of increased interest in NORM and TENORM disposal. Largely, but not exclusively, from mineral and oil gas extraction. Colorado recently passed a comprehensive regulation for the first time. They had guidance that now they have a promulgated regulation, so we expect more TENORM going to our regional facility which should help our budget situation. NORM and TENORMs has been a challenge for the compact because the gas generators are not very attuned to being regulated from a radiation standpoint, so it’s a new system for them. We’ve had several enforcement actions regarding oil gas shipments that have not been permitted by us.

Matt Hendrickson, Oregon asked, “were the original violator that you had your enforcement and penalty action on referred to other agencies for investigation, or was this more of a one-time thing?” Leonard replied, “Well, it actually occurred with several permits and several generators”, and the processors, the brokers are generally located out of our region, so it’s not like we can go, and we don’t have field investigators”. Leonard continued to state, their staff is slightly more than ½ FTE, so we’re a small bureaucracy. We do freeze any permits from either generators or waste going to those brokers or disposal facilities until the issue gets resolved and communicated with other sister compact, the Texas Vermont Compact where the waste ended up and I think are still contemplating exactly what to do.

**NWIC/WA State Updates**

Earl provided an update on the NWIC activities that he’s been involved with, as well as the State of Washington updates. A lot of compacts are separate entities from their state regulatory agencies in the State of Washington, where embedded in the regulatory agencies initially the compact was placed with the Department of Ecology and for many years, Mike Garner and Larry Goldstein were our compact representatives, and as we all know, people tend to leave state service and, in both cases, it was retirement. The agencies were trying to figure out how to do succession planning and my experience was deemed appropriate. I spent 12-13 years as the resident inspector at US Ecology, Inc. with offices out at the site, as well as becoming familiar with operations. Perma-Fix Northwest, the Rad waste broker in North Richland who handles a lot of the processing of RAD waste in an earlier time frame, is now involved with the DOE Waste processing. Leonard alluded to how the business agreement was set up between Rocky Mountain Compact and the NWIC, and over 3-4 years will have somebody interested in trying to join the NWIC as either a business partner or perhaps a state who’s adjacent to the NWIC to join the compact together. It does tend to be rather onerous to become a full member that has to get your regulations set up to be identical to what has been passed by the other eight states, and still get approval from Congress for the compact change. This sets the bar high that people aren’t necessarily wanting to do that but there’s still the option of what Leonard and the Rocky Mountain Compact did, and that was to come under contract with the NWIC. For these kinds of differences, I sent to Lilia to get a legal opinion or at least some sorting out of this, and we concluded that we need to be talking to the state. This means the governor of the state that wants to join and not the Chief Executive Officer (CEO) of a certain business.

Earl commented Doug at US Ecology, Inc., are rate regulated and it’s been several years since they were able to exercise the rate for decommissioning. It was back with Portland General Electric (PGE) when they were decommissioning their Trojan plant. Fort Greeley, in Alaska, if the Army knows is probably not looking to come to US Ecology, Inc. with their waste but if they do, then that would be something under the decommissioning rate. We do have interesting waste streams that we see every now ang then. One of those is Framatome Ash. Framatome is a nuclear fuel fabrication facility immediately north of Richland, WA. They’re a subsidiary of the parent company out of Germany. They have an interesting piece of processing equipment that has an incinerator where you incinerate material that would make it easier to get the uranium of the incinerated material by further processing. This is tracked as potential waste that is coming from Germany which doesn’t have inherent rights to our disposal site. It must come from within the eight states of our compact.

Over the last year, you may have read in the newspaper that the Navy is going to be going through decommissioning of the USS Enterprise. This aircraft carrier had eight reactors and at one time there was talk about how they were going to decommission the radioactive areas of the aircraft carrier. Our colleagues at US Ecology, Inc. may have some better information on this, but they are looking at potentially not using our disposal trench here at Hanford, which is operated by the DOE for Navy reactor compartments and having all the decommissioning work being done by a private contractor without having to send the material here to US Ecology, Inc. The issue there was what state would the USS Enterprise be coming out of for the waste that would be generated. Would it be coming from Washington, if it was home ported in Bremerton, or would it be out of compact if its last operational sailing was to Norfolk, VA which is clearly out of compact. If we do get work that there is some opportunity for waste to come here some further operational restrictions may be placed on the Navy.

Earl addressed the US Ecology, Inc. compliance inspection, the oversight that the State of Washington does. We do inspections at US Ecology, Inc. so that we cover the entire radiation protection program in what we call a slice of pie inspections, whereas the actual audit may be several pages long in a written document. As an example, in February, of a given year, we’ll do pages three and eight then a couple months later we may come back and do pages four or five and nine so it’s not just one time going in with a massive amount of people to do the compliance review and leave. We would still like to have the ability to send a team in which gives us more visibility which gives a greater snapshot of what their activities are going on over there. The final part of the audit is still in flux as the weather has thrown us for a loop. We may end up sending a team out in 2023 to complete the 2022 oversight inspection. The State of Washington had a physical presence at US Ecology, Inc. for many years. We used to have much higher volumes than Doug showed for the last many years. Back in the early 2000s, it was not uncommon we were somewhere in 60 to 80,000 cubic feet and as the volume dropped off, we needed to find additional work for our resident inspector to do, and this kind of tag teamed the US Ecology, Inc., and Perma-Fix Northwest as both waste brokers in North Richland. As the volumes have continued somewhere around 20 to 21,000 cubic feet, we have opted to no longer maintain a presence with a resident inspector office at the disposal site which we are decommissioning the trailer that we used to be in. At one point it was thought there were two trailers because we didn’t have our offices in Richland. We thought since we bought this trailer for a healthy sum of money, we should be able to get a reimbursement or capitalize on the trailer, so we tried to sell it on eBay which wasn’t a wise choice by the DOH. We didn’t come out ahead in that choice which was a very good learning experience for us and our facilities people who posted it on eBay.

John Price, WA Department of Ecology, asked Earl to speak more about the Fort Greeley project and what their disposal options are especially what permissions, if any they need from the compact to exercise those options. Earl replied that the only thing he’s seen is a draft Environmental Impact Statement (EIS) and one of the options in our disposal at US Ecology, Inc. wasn’t listed. It is kind of disheartening that I think Kaylee said it is the Army and it plays by the Armies rules. I have spoken to him a couple times and asked if he’s sure this isn’t going to break federal law. The problem is you know Leonard stated he has export prohibition authority built into his regulations signed by Congress. That has been an issue over and over people who routinely want to send their waste to WCS in Texas. We have a PAT answer to that as it’s not by policy, we don’t support the export of waste out of the NWIC, so we ensure the viability of our site out to the year 2063 which is key as Theresa alluded to the fact there is a prime lease on the 100 acres. At that time the prime lease was 99 years starting in 1964. So, 2063 is the end of our prime lease. The lease with US Ecology, Inc. is a 15 year with the right of first refusal.

Dan Shrum was asked his thoughts and stated he doesn’t speak for WCS, but when Energy*Solutions* was trying to license their federal cell, we needed to get them a long-term stewardship agreement with DOE, so we patterned ours from what WCS received from DOE. There are strict controls on what can go into the DOE federal cell at WCS. If it’s coming from anything other than DOE, they must get approval from DOE for it to go there because DOE takes long term stewardship of that waste. Dan stated Fort Greeley is the Department of Defense (DOD). It’s not to say they can’t overcome that hurdle, but need to be aware there’s that hurdle because we were told by DOE that they would not allow other ways to go into the facility at Energy*Solutions*. Earl Fordham asked, “if this means that since it’s going to the federal cell the Texas Vermont Compact wouldn’t have any say in that either?” Dan replied, “Yes, that part is true”. The long-term stewardship agreement was hammered out 10-12 years ago so that’s where the issue needs to be overcome. Matt Hendrickson asked if the old Navy nukes the subs and cruiser compartments are at Hanford and if the compartments are sizably larger as he aware they have multiple. Earl Fordham replied stating they have eight reactors and they’re trying to figure out whether after defueling send them individually to Trench 94 up at Hanford or do them in pairs.

**Energy*Solutions* Activities Overview**

Vern Rogers, Director of Regulatory Affairs, Energy*Solutions*, stated they run a variety of sites and services across the country which includes a disposal site in Barnwell, that’s the Atlantic Compact site. They also have a site in Utah that is located within the NWIC. We appreciate and work closely with Leonard and Earl as we support their missions to protect their compact side. We typically take waste from outside of the compact into our Utah facility. We also work closely with Director Hansen and appreciate his update and will add a few things. They do have a daily presence at our Clive, Utah site and we appreciate the guidance and oversight they provide which help us to continuously improve what we do and make sure we do it in a safe and compliant manner. We did have a company/ownership change earlier in 2022.

Prior to 2012, when Envirocare was purchased by Energy*Solutions*, at the time it was a publicly traded company. The 2013 timeframe, majority of the stock was purchased by Energy Capital Partners, and we were taken private. It’s been a great partnership/ownership working agreement with Energy Capital Partners that provided valuable capital and synergy with some of their other projects to support our work. In 2018, a portion of that was sold from Energy Capital to TriArtisan Capital. They worked as a minority owner through this year and then earlier this year, 2022, TriArtisan Capital took the remainder of the ownership from an Energy Capital partnership. We are now completely owned by TriArtisan Capital and provide some additional capital for the work we’re doing, the improvements we’re making as well as some other synergies with some of their other projects. We’re excited to move forward under the new ownership agreement.

As for the Clive Facility, it’s located in Utah. We take and accept waste outside of the NWIC as well as the Rocky Mountain Compact. We have a large facility. There is a large section of property where we’ve got a railyard. Energy*Solutions* does have a fleet of railcars as well as cask track trailers that we provide the industry so we can make sure that they’re available and turn quickly and appropriately placarded and registered and used for a LLW management transport. We have our Class A West Facility embankment. There’s about 3.3 million cubic yards of capacity remaining. That is our Class A LLRW license disposal facility and below that facility is the VITRO cell that is a DOE Legacy Management cell. It was created when uranium mill tailings were removed from Salt Lake in the 1980s. We purchased property around that and are custodians on behalf of DOE Legacy Management. We do have a proposed federal cell that’s under licensed review. We have an application with the state and have been working closely with them and their contractor. It’s our hope that decision would be made so we can move forward in management of depleted uranium into that cell sometime in 2023. Our 11e.(2) cell only has about 2000 cubic yards of capacity left. 11e.(2) has dropped significantly in volume so we had some licensing changes. The 11e.(2) cell is our low activity rate of active waste cells. It is the first cell that we opened and licensed when we first started the company with Envirocare. Originally the 11e.(2) cell was licensed for roughly 5,000,000 cubic yeads of waste and amended to just over 1.6 million cubic yards. Energy*Solutions* has a long history of working with low activity, radioactive waste, managing and disposing of it. We have mixed waste cells that contain hazardous and radioactive constituents with about 350 cubic yards of waste capacity still available. Lastly, we propose to license a new low activity radioactive waste cell.

The low activity waste or Very Low-Level Waste (VLLW) exempt waste is evaluated and worked with the state and attorneys in several different ways and regulatory and statutory legal approaches. We feel at this point for a company to support the business plans that we have licensing a low activity waste cell is consistent with the history, the practice and probably the most straightforward within the State of Utah from a regulatory perspective. We are working closely with the state.

The Low Activity Waste cell has significant volumes of very low activity waste generated by D&D projects across the country. We’re actively involved with four currently. We’re looking at waste acceptance criteria that would be very low activity, less than 10% of what would be normal for Class A. It’ll be wasted, shipped to Clive where we’ll screen and if it’s above the waste acceptance or exemption criteria, it’ll go into our Class A cell and anything below means it will go into our low activity cell. We’re going to revise the application that will be sent to the state. We’re hoping to have this license sometime by 2023 or 2024.

With the reduction in the 11e.(2) disposal capacity, we have submitted a license application for a Federal Cell. Withing the State of Utah, disposal of depleted uranium in federal waste is governed by a new statute. The statue had three requirements. One would be a site-specific performance assessment that evaluated some of the unique characteristics of depleted uranium, like the end growth and the generation of radon, as well as a unique license that would manage that federal waste. At one point, prior to 2010, we were managing and disposing of depleted uranium in our Class A cell and was part of our Class A license. This process will separate that, and we’ll have a separate license covering each. Dan already indicated there will be a perpetual stewardship agreement, where DOE will take ownership and management of the site. This was completed in 2020 and we have been working closely with the State of Utah and their contractor to make sure the loose ends are tied up. This is part of the license application that we have filed with the State of Utah that’s under review. We have two of the three license applications that are under review, and we hope to have those completed by 2023. The third license application was completed several years ago.

Some of the other things we’ve been working on is supporting some of the changes that were made post 9/11 with Homeland Security and some of the waste and sources that were of interest to the federal government. We worked closely with the Conference of Radiation Control Program Directors (CRCPD) with the State of Utah to manage and dispose of some of the abandoned and disused sources that were being stored and not tracked across the country. It was a positive experience and we appreciated working with CRCPD. The State of Utah managed over 40,000 disused and abandoned sealed sources and got them disposed of. Because of some of the clarity that we were provided by NRC in 2015 when they updated the Branch Technical Position (BTP) on concentration averaging, we have applied with the State of Utah to have that variance made formal into our license application for Amendment 27.

The LLRW cover construction is a robust, multi-layered engineered cover. Our LLW class west embankment is excavated down about 10 feet below grade. We have the waste then we have a clay liner cap as well as rock layers of different gradations of rock on top. We have gone through four phases of cover and just completed phase four this year. We’re pulling together the final documentation and the as-builts report that were provided to the state, and then we’ve got phases 5-6 and 7, which will continue to move north. To cover the remainder of the lower half of the cell, the domain capacity is up to the north of the Selden.

The D&D Project Waste pipeline is principally driven by the large volumes of waste that are being generated and planned to be generated as part of the four D&D jobs that we’re actively managing. We’ve got several under our belt closed and completed successfully. We are working with TMI through Mile Island as well as Kwani and sending over to California and then Fort Calhoun. As those projects continue and go through the rest of their work, we expect to have large volumes of that waste coming into the site.

Matt Hendrickson noted multiple cells and asked if there was an estimated lifespan. Vern stated it’s subject to the federal cell as well as the low activity cell. At the current rate of consumption, we feel like we’ve got several decades left of capacity in our current Class A waste cell. Some of that is subject to floor space, things that are common in large components that can only be placed on the floor so that capacity gets used at a different rate than the rest of the air capacity in that cell. If that changes, we’re able to put some of the waste into a low activity cell or the federal cell. We do own the two square miles to the west if there is a need to expand.

**Idaho Activities Overview**

Daryl Sawyer stated there wasn’t a whole lot of activity occurring in Idaho. They have a US Ecology, Inc. Facility in Idaho which is a commercial hazardous waste subtitle C landfill that we have approved for disposal of radiological waste. It’s not associated with the compact but gives other states and members of the compact other options of disposal of waste if it doesn’t need to go to those facilities. The US Ecology, Inc. Idaho Facility is approved for disposal of NORM and TENORM waste. They’re also allowed to accept any waste that has been exempted by regulation, rule order, license condition, or letter of interpretation. US Ecology, Inc. Idaho accepts waste if it isn’t a general or specific exemption form the NRC or an agreement state that allows them to dispose and not have to go to any specific site, if they have a release of control from DOE, do they have a determination from the D&D that the radioactive material is no longer regulated. They do allow them to dispose of some special nuclear material if they have received alternative disposal exemptions. We go through the process, review the environmental impact statements, and make sure we’re not going to have any issues for the site and regulations. Currently, US Ecology, Inc. Idaho is completing expansion of one of their hazardous waste cells which will allow them to continue the acceptance of more radiological waste for several years. This one cell, when complete, will be 74 acres and will have quite a bit of disposal capacities for years to come.

Earl asked if Daryl knew where their annual volume is. Daryl stated he didn’t know off the top of his head, but they do submit quarterly reports on the radioactive materials that are submitted.

Leonard added additional information on the Army DOD stating they’re the most frequent violator and have dealt with them for several decades. The NWIC does not have the authority to keep the waste within your compact wherever it’s going to. Many of the places where they might take the waste, the receiving compact would have to be approved so, there are some interesting loopholes in the WCS Facility. There’s a Federal Facility, with a federal disposal cell, and if they could access that, then they would not need the approval of the Texas Vermont Compact or if they could take it to the Nevada Test Site, then our compact would not have to approve it. There are several classified shipments that come into our compact that we don’t try to have the state police stop and inspect, so there they might need the receiving compacts approval. Leonard stated there are a couple of disposal options where they would not, but he hasn’t seen the EIS.

**Transfer of Northwest Compact Activities**

Earl stated the ongoing endeavor that started about 10 years ago of the transferring of the NWIC to activities from the original state agency or Department of Ecology to the DOH. Some time ago, it was a split between who would regulate the site and at the time, RML was an important document. It’s not to say that it’s still but knowing the NRC had an agreement with the WA State DOH to regulate LLRW sites and other radioactive materials in the state that became the agency for the licensing effort. They decided to have the compact be associated with our sister agency, the Department of Ecology. It was mentioned previously that Mike Garner and Larry Goldstein were employees of the Department of Ecology.

One of the main activities that goes along with running the compact is the funding of the compact and part of that deals with the site use permit program that we alluded to a bit earlier when Matt noted there was a drop in the volume in one of the years that Doug showed for receipts by US Ecology, Inc. Richland. That was because one of our generators had their site use permit suspended. This permit is the funding mechanism for our compact and by having different scales, the base document is $440 for a basic permit, and it goes all the way up to $44,000 if you’re a major user such as the power plant. The permit program started out with the Department of Ecology and about 15-18 years ago there were efforts to bring the program over to the DOH. Diane Hallisey was working at the Ecology headquarters and came over to DOH to run the program and train our staff. The program continued to slowly migrate over, and when Diane retired, we took one of our Health Services Consultants and gave her the responsibility to do that as well as a promotion. Eileen Kramer is our site use permit issuer. She collects the funds and issues the permits typically in the early spring around February, March timeframe.

In the Legislature back in 2012 or 2013, formally transferred the permit duty over to the DOH. The Department of Ecology ran everything else with the compact, including the compact meetings and any kind of questions that came up with the waste being acceptable for disposal at US Ecology, Inc. Then around 2017, US Ecology, Inc. and DOH decided to see if we could make this transition work and move all the remaining activities from the Department of Ecology over to DOH. We drafted legislation with the assistance of our Attorney General’s Office and got the local representatives and senators from the legislature to sponsor these bills and the work went well to the Senate. It went through the committee hearings without issue. We worked together with the Yakama and the Heart of America. The Senate passed 49 to 0 which was a good sign that maybe this is our year to get it done. When it shifted houses from the Senate to the House, the executive director of Heart of America was also a representative of the House of Representatives and put up some roadblocks and asked some questions which caused delay. It did slow us down and we ran out of time, so we opted to stop trying to get this done. We’re still working with the Department of Ecology, with our policy makers, to figure out when we’re going to make the transfer as it doesn’t make sense for the Department of Ecology to handle when they don’t have anybody directly involved anymore. Theresa Howell and John Price are by far the most involved with what’s going on at US Ecology, Inc. and their main efforts are in the MTCA investigation. The compact is a separate entity that is, while still the responsibility of the Department of Ecology, it is handled via a memorandum of understanding (MOU) memorandum of understanding between DOH and Department of Ecology to have the responsibilities transfer over to DOH, but only via MOU, not formal transfer, transition by the actual work of the legislature.

**Update on Legal Issues**

Lilia Lopez mentioned she’s been involved with radiation issues on and off since the mid-90s. As for an update on legal issues, it’s been quiet with nothing fascinating to share.

**LLRW Forum Overview**

Dan Shrum stated he’s been in this position for three years. He started in December of 2019, just in time for COVID and since we’ve added two board members. I would like to thank the Forum for keeping me on during COVID because there was a bit of a challenge, but we still had our meetings. We had semi-annual meetings and we all learned how to use Webex together.

After the passage of the 1985 amendments to the LLRW Policy Act, the LLRW Forum got together. It was part of a committee of the National Governors Association and the goal was to fulfill the objectives of the LLRW Policy Act. The members of the forum are ten compacts and the four states that host sites are Utah, Washington, Texas, and South Carolina. There are also some states that were supposed to be host states but they’re not. These states are California and New York. Hopefully we’ll get additional states to join.

The Forum has become an independent, nonprofit organization. Our goals and objectives are to support the compacts and facilitate the compacts getting together and meeting and working through issues. As someone who can attend all the compact meetings, I try to attend every year. The compact meetings have the same mission and goals but are run differently depending on whether they have a compact site within their boundaries or some of the states have strict export rules, which adds another dynamic. It’s fascinating to see how the ten compacts work independently from each other, but with the Forum, we can learn from each other which is the purpose of the Forum.

One of the things I was asked to talk about is 10 CFR Part 61 that is being updated. Recently the NRC sent out what’s known as an SRM 22-0098, that happened on April 5, 2022. This is from the Commissioners to the staff asking them to put GTCC back in the Part 61 rule. If you’re not familiar, the Part 61 was going to be modified starting in 2005 based off the information on the URENCO Facility in New Mexico who are going to start producing depleted uranium. During the same time, the DOE decided their depleted uranium might not go to a DOE disposal site but go commercial. The NRC evaluated their Part 61 rule and although depleted uranium was contemplated in the draft rule, the final rule didn’t have an expectation that large quantities of depleted uranium would be going to the commercial disposal sites. This triggered the remake of Part 61 and the biggest thing they wanted was for regulators to require performance assessments if you’re going to dispose of depleted uranium. An issue with depleted uranium is over time, it becomes more radioactive because of the ingrowth of the progeny. This was the concern so many iterations, and timeframes were considered on how you would do a performance assessment was being considered. Then the State of Texas was curious if they could regulate the disposal of GTCC that is greater than Class C waste, so that got introduced into Part 61. Then the Commission said no, separate GRCC from Part 61. The NRC wanted GTCC to be done quicker. As of April 5, 2022, GTCC is back in Part 61 Rule, which is really where it belongs. This way, it’s all in one place for the disposal of LLRW in the United States. The NRC had a timeframe to work on getting the rule done and in concurrent with that, they’re also going to have guidance done. They’ll be a rulemaking and then there’ll be a guidance document that will go along with the rulemaking. It is believed their goal is to have a rule to the Commission by November of 2023 along with a guidance. They hope to have the final rule published in November of 2025. There’s one other thing that has changed and that is the timeframe. Initially, the timeframe was you had to evaluate using a performance assessment tool for 20,000 years and data 10,000 year then it got dropped to 1000 years because some of the Commissioners at the time didn’t believe you could understand much beyond 1000 years when you’re doing a performance assessment.

The latest SRM has the following written by Chair Hanson. His recommendation is rather than using the same compliance period for disposal sites containing significant amounts of depleted uranium GTCC or transuranic waste, the staff should consider a site-specific graded approach based on when the peak dose is projected to occur or establish a longer compliance period for disposal sites containing significant quantities of mobile along the dichotomies. In reading this document, you know depleted uranium’s peak dose, because the ingrowth doesn’t occur until about 2,000,000 years after disposal. My concern is we want to protect the four disposal sites. They are critical to the system of the uranium cycle, they’re critical to have disposal sites, so let’s protect them and make sure they’re viable. I don’t know rhetorically how you can evaluate anything for 2,000,000 years. We believe the staff, based off a discussion I had with Chair Hanson, is something that needs to be worked through and discussed. In the upcoming waste management meeting in Phoenix, we’re going to have a panel which the Forum will host on this very topic with compact representatives and representatives from every other organization that have a vested interest in making sure we end up with a rule that we and the disposal sites can live with. Some of the disposal sites don’t want to take depleted uranium. We want to make sure those have either a grandfather clause or their ability to not have to go through expensive performance assessment modeling to stay in business. The status of Part 61 is ongoing.

Earl asked that I provide a brief WCS update. WCS is a critical component in everything that deals with waste disposal in the United States because they’re the only compact facility that can take B&C waste nationally. The Clive Facility can take A waste. The US Ecology, Inc. stie is limited to the Rocky Mountain and NWIC. Bardwell is limited to the Atlantic Compact. WCS is vital for the health of nuclear power as well as the uranium fuel cycle and they seem to be doing well. They’ve had some challenges with trying to get some regulation changed to make them a little bit more viable. There’s a lot of chatter about wanting to have an interim storage site for fuel and I think this may be causing some consternation within. WCS was purchased by Lehman and Northstar. Northstar is decommissioning Vermont Yankee which happens to be in Texas. Compact is the Texas Vermont Compact, so they’re getting a bit more waste than they used to, and things seem to be moving along well at WCS.

March 22-23, 2023, we’ll have our Forum meeting in Charleston, SC. On the 21st, we’ll have a tour of the Barnwell Facility. It’s interesting to see how this facility has operated and its status. It’s limited in volume like the US Ecology Facility. The meeting will be held on the 22nd and 23rd and the Disuse Source Working Group (DSWG) meeting on the 24th. On October 4th and 5th, we’re going to have the meeting in downtown Utah with a tour of the Clive Facility on October 3rd. One of the committees or groups we have within the Forum is the DSWG. We had a very energetic meeting at our last gathering in Baltimore. I’m mentioning this because I live in the NWIC and know the regulators. If you’re not aware, the GAO did a sting operation where they attempted to get Class 3 sealed sources without having a real license. They forged a license and unfortunately, they got to the point where they could have been given large quantities of Category 3 material. The NRC is taking corrective action on that issue and because of that the DSWG had a good discussion on what we could do to promote the safe disposal of solid sources.

The Forum is here to support the compacts. It’s not the other way around. We support in what you do, and I consider the directors, the executive directors of the compacts, my bosses, because they are. I really enjoy the job and hopefully we can continue to have good meetings and good discussions. Leonard mentioned the other subcommittee that was pulled together on this. Waste coming out of compacts without proper authorization. As they delved into it, they were not attributing the waste properly, which is a big deal. This is not acceptable, and I don’t say that to have anything against any of the companies, but waste attribution is part of how this whole system works. As Earl stated, we must know who’s responsible for it.

Leonard added additional information regarding the depleted uranium by saying most of the focus has been on disposing of the DOE backlog, which began during the Manhattan Engineering district days. I’ve lost track of how many cylinders there are, but there’s more than I want to count. There is another stream of depleted uranium that will be very significant and will come out of our compact. We have the only commercial uranium enrichment facility in the country in New Mexico. URENGO is the operator, and they’ve been in operation for a few years, so they are accumulating the typical US six uranium hexafluoride cylinders of depleted uranium. It’s unknown when and if those are going to be disposed of because they still contain some usable uranium and could be reprocessed. When they are ultimately disposed of and will have to be disposed of at some point, there’s a treaty between URENGO, the State of New Mexico, and the Rocky Mountain Compact about how many cylinders and what duration can be stored in the state. There’s not a disposal facility in our region and none on the horizon, so at some point there’s going to be a large volume coming from our region for disposal. I would presume either at the new federal cell in Utah or the federal cell at WCS.

**Oregon Activities Overview**

Matt Hendrickson introduced himself as the Radioactive Waste Remediation Specialist for Oregon who replaced Jeff Burright. He mentioned he’s looking forward to being a part of the committee and maybe our next meeting could be held in Oregon. Commenting on the challenge to keep staff, Matt said they were fully staffed, but if you looked at our team verses historically, we’ve lost. Most of their members had over 20 years. Matt stated he was lucky that his predecessor left him five-to-six-page essay on what I should be concentrating on. Earl stated his predecessor left him a three-ring binder of about 30 chapters of different things.

**Round Table Discussions**

Earl mentioned this is where you would talk about your biggest challenges in the world of waste handling, waste processing. Doug Hansen kicked off by saying our workforce is starting to age out and retire. Over 1/3 of his staff have more than 25 years of experience with the state. This year, they’ve seen retirements and more on the horizon for next year. It’s a challenge with the workload that we have and everything that’s going on as well as other programs and the natural lag. Energy*Solutions* also keeps us very busy. In state government, with compensation and trying to attract new talent, I don’t know if there’s anything to do about it with this group, but if you’re experiencing the same, it’s probably our biggest challenge. Earl stated he’s looking for a successor for the compact executive director and chair. My time tends to be towards the short end rather than longer. Other members stated they’re experiencing the same challenges with the turnover of staff, experience, and knowledge.

The two choices for our meeting in September, October timeframe was Alaska or Jackson Hole, Wyoming. It was mentioned the meeting was held in Alaska in 2018.

**Public Comment**

There were no public comments.

**Closing**

Earl Fordham thanked the attendees and adjourned the meeting.