May 29, 2018

To: Laura Fresco, NNSA/DOE
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From: Todd Lovinger

Executive Director of Low-Level Radioactive Waste Forum (LLW Forum)
Project Director of Disused Sources & Part 61 Working Groups (DSWG/P61WG)

Re: Annual Report of Activities of the Low-Level Radioactive Waste Forum's Disused Source Working Group and Part 61 Working Group for the Period from April 1, 2017 Through March 31, 2018

Contract DE-NA0003197 (Issued March 31, 2016)

The following is an annual report of the activities that were carried out during the period from April 1, 2017 through March 31, 2018 pursuant to the Low-Level Radioactive Waste Forum's (LLW Forum's) contract with the U.S. Department of Energy's (DOE's) National Nuclear Security Administration (NNSA) for services of the Disused Source Working Group (DSWG) and Part 61 Working Group (P61WG). The information contained in this report is considered to be proprietary and confidential and should not be shared with outside parties.

The report is necessarily summary in nature. Additional information is available on request.

Progress Made During Reporting Period

Narrative Description of Work Completed

During the period from April 1, 2017 through March 31, 2018, the following activities were undertaken by the Disused Sources Working Group (DSWG) and Part 61 Working Group (P61WG) in conjunction with the Low-Level Radioactive Waste Forum's (LLW Forum's) contract for services with the National Nuclear Security Administration (NNSA):

- discuss with state officials opportunities to increase management and disposal options for radioactive sealed sources and devices at existing commercial disposal sites;
- continue working with partners at the Organization of Agreement States (OAS),
 Conference of Radiation Control Program Directors (CRCPD) and Health Physics
 Society (HPS) toward improved management and disposition of disused sources;
- draft and distribute four separate versions of a petition for rulemaking related to enhanced financial assurance for radioactive sealed sources and devices for consideration of submittal to the U.S. Nuclear Regulatory Commission (NRC) or, in the alternative, to explore associated issues in an effort to continue working toward consensus with designated liaisons representing the OAS, CRCPD and HPS;
- communicate with industry and incorporate their input on a draft disposal cost document that will serve as a companion piece to the educational materials for current and prospective licensees;
- review and post stakeholder comments in response to the *Federal Register* notice that was issued on January 9, 2017 in which the NRC announces that the agency is seeking input from licensees, Agreement States and the public to inform the staff's assessment of potential revisions to regulations or processes requiring Category 3 source protection and accountability;
- conduct, and write a report regarding, a stakeholder survey to identify issues associated with and understand industry perspectives concerning the development of an enhanced secure source exchange program in preparation for an upcoming meeting at the CRCPD conference with the organization's Executive Director;
- edit the outline for a proposed workshop on issues related to source management and disposition that is intended to be offered to low-level radioactive waste compacts in association with, or independ from, regular compact commission meetings;
- finalize development, planning and outreach re agenda sessions on source management and disposition, alternative technologies and Part 61 rulemaking activities for spring 2017 LLW Forum and DSWG meetings in Denver, Colorado;
- finalize, format, collect signatures and submit a joint letter from the DSWG, OAS, CRCPD and HPS to the NRC Chair and Commissioners supporting the staff's proposal to initiate an Advanced Notice of Proposed Rulemaking (ANPR) related to enhanced financial assurance for radioactive sealed sources and devices;

- attend and participate in the CRCPD annual meeting in Scottsdale, Arizona on behalf
 of the DSWG/P61WG including a meeting with NNSA and CRCPD officials about a
 proposed path forward to support the development of an enhanced secure source
 exchange program;
- incporporate additional edits on a draft disposal cost document that will serve as a companion piece to the educational materials for current and prospective licensees;
- review agendas, register and make travel arrangements re attendance at upcoming American Nuclear Society (ANS) and HPS annual meetings on behalf of DSWG/P61WG;
- write, edit and submit the annual report for the activities that were carried out during the period from April 1, 2016 through March 31, 2017 pursuant to the LLW Forum contract DE-NA-0003197 with NNSA for services of the DSWG and P61WG;
- planning and PowerPoint for presentation at June 2017 Northwest Compact annual meeting re disused source management and disposition;
- respond to inquiries and follow-up re agenda sessions on source management and disposition, alternative technologies and Part 61 rulemaking activities at the spring 2017 LLW Forum and DSWG meetings in Denver, Colorado;
- review materials, write and distribute News Flash and communicate with stakeholders re Southwestern Low-Level Radioactive Waste Commission workshops on the use and disposition of radioactive materials, including sealed sources and devices;
- write, edit and distribute stories for May/Jue 2017 issue of newsletter re disused source management, Part 61 rulemaking initiative and other issues;
- attend and participate in the annual meeting of the Northwest Interstate Low-Level Radioactive Waste Compact Commission in Helena, Montana on behalf of DSWG and P61WG and side meetings re potential opportunities to increase access to Hanford site for disused sources;
- attend and participate in ANS annual meeting in San Francisco, California to network on behalf of DSWG and P61WG
- incporporate additional edits on a draft disposal cost document that will serve as a companion piece to the educational materials for current and prospective licensees;
- review agendas, register and make travel arrangements re attendance at upcoming OAS annual meeting on behalf of DSWG/P61WG;
- respond to inquiries and follow-up re agenda sessions on source management and disposition, alternative technologies and Part 61 rulemaking activities at the spring 2017 LLW Forum and DSWG meetings in Denver, Colorado;
- attend and participate in the HPS annual meeting in Raleigh, North Carolina on behalf of DSWG and P61WG and side meetings with interested stakeholders re potential opportunities to increase access for disused sources;
- planning and logistics for fall 2017 DSWG meeting that will be held at Hilton Hotel in Alexandria, Virginia on October 18, 2017;
- continue to review and incorporate additional edits from NNSA and DSWG Technical Consultant on a draft disposal cost document that will serve as a companion piece to the educational materials for current and prospective licensees;
- agenda development for fall 2017 LLW Forum meeting sessions related to DSWG/P61WG activities and projects;

- update a recently-published report that provides an overview of compact import and
 export permit requirements to include information and a link regarding a resolution
 recently passed by the Central Interstate Low-Level Radioactive Waste Compact
 Commission that authorizes low-level radioactive waste generators within the region
 to export their low-level radioactive waste without first making application to the
 Commission or paying any export fees;
- write and edit newsletter stories related to DSWG/P61WG projects and activities;
- communication with Southwestern Compact and Qal-Tek re new program for source reuse and reutilization and impacts thereof;
- discussion with Executive Director of Texas Compact Commission re potential for future workshop coordination;
- attend and participate in the OAS annual meeting in Memphis, Tennessee on behalf of DSWG and P61WG and side meetings with interested stakeholders re potential opportunities to increase access for disused sources;
- continue communications with brokers and processors re suggestions for improved management and disposition of disused sources;
- planning and logistics for fall 2017 DSWG meeting that will be held at Hilton Hotel in Alexandria, Virginia on October 18, 2017;
- continue to reviewe and incorporate additional edits from NNSA and DSWG Technical Consultant on a draft disposal cost document that will serve as a companion piece to the educational materials for current and prospective licensees;
- agenda development for fall 2017 LLW Forum meeting sessions related to DSWG/P61WG activities and projects;
- attend and participate in the Rad Waste Summit annual meeting that is hosted by Exchange Monitor Publications in Summerlin, Nevada on behalf of DSWG and P61WG and side meetings with interested stakeholders re potential opportunities to increase access for disused sources and provide state input on the final Part 61 rule;
- review, analyze, summarize, distribute information and respond to inquiries re the issuance of an NRC Staff Requirements Memorandum (SRM) in response to SECY-16-0106, which sought Commission approval to publish a final rule in the *Federal Register* that would amend Title 10 of the Code of Federal Regulations (10 CFR) Parts 20, "Standards for Protection Against Radiation," and Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste;"
- finalize, publicize, market and post to the Resources Page of the DSWG website the working group's report titled, "Disposition Options and Costs for Certain Radioactive Sealed Sources and Devices," as well as generic versions of the educational materials (transmittal letters and brochures to current and prospective licensees of radioactive sealed sources and devices);
- re-formatting of the Resources Page of the DSWG website by dividing the documents into categories with sub-titles in order to make it more user friendly;
- plan logistics for agenda sessions related to disused source management and disposition, as well as the Part 61 rulemaking, for the LLW Forum meeting that would be held at Hilton Hotel in Alexandria, Virginia on October 16,-17 2017 and that would include side meetings with interested stakeholders repotential

- opportunities to increase access for disused sources and provide state input on the final Part 61 rule;
- finalize logistics for fall 2017 DSWG meeting that would be held at Hilton Hotel in Alexandria, Virginia on October 18, 2017;
- transmit information and documents regarding the scheduling of an NRC public meeting on the opening of a public comment period regarding the regulatory analysis for the 10 CFR Part 61 rule entitled, "Low-Level Radioactive Waste Disposal" and the revised guidance for alternative disposal requirements entitled, "Guidance for the Reviews of Proposed Disposal Procedures and Transfers of Radioactive Material Under 10 CFR 20.2002 and 10 CFR 40.13(a);"
- schedule a P61WG conference call to discuss the possibility of coordinating state and compact comments on the final Part 61 rule draft regulatory analysis;
- transmit information and documents regarding the opening of a public comment period regarding the NRC draft revision to its guidance document for alternative disposal requests entitled, "Guidance for the Reviews of Proposed Disposal Procedures and Transfers of Radioactive Material Under 10 CFR 20.2002 and 10 CFR 40.13(a)" and announcing that links to the documents can be found on the P61WG website:
- transmit draft responses from South Carolina and Utah on the NRC's draft regulatory basis document for the Part 61 rulemaking in preparation for the upcoming P61WG conference call to coordinate input from the states and compacts;
- develop and submit P61WG and individual state comments in response to the NRC "Draft Regulatory Analysis for Final Rule: Low-Level Radioactive Waste Disposal;"
- correct, market and outreach re the DSWG working group's report titled, "Disposition Options and Costs for Certain Radioactive Sealed Sources and Devices," as well as generic versions of the educational materials (transmittal letters and brochures to current and prospective licensees of radioactive sealed sources);
- communicate and discuss proposals re consideration of the development of a database for disused radioactive sources and devices;
- plan logistics for agenda sessions related to disused source management and disposition, as well as the Part 61 rulemaking, for the LLW Forum meeting that will held at Hyatt Hotel in San Francisco, California on April 16,-17 2017;
- review, participate, write and outreach re implications to DSWG and P61WG of U.S.
 Department of Energy (DOE) Report to Congress titled, Alternatives for the Disposal
 of Greater-than-Class C Low-Level Radioactive Waste and Greater-than-Class CLike Waste;
- transmit final comment letters from P61WG, South Carolina and Utah on the NRC's draft regulatory basis document for the Part 61 rulemaking;
- draft, distribute and correspond with stakeholders re re-opening of comment period and new deadline to submit feedback re NRC "Draft Regulatory Analysis for Final Rule: Low-Level Radioactive Waste Disposal;"
- inquiry, response and coordination re potential Offsite Source Recovery Project (OSRP) presentation at HPS mid-year meeting;
- work with DSWG staff and NNSA officials re correction of Communications Consultant billing for November 2017;

- communications, conference call, initial calculations, development of revised budget documents re year two billing rate inquiry and subsequent contract modification;
- draft presentation outline and talking points and respond to questions for plenary presentation by Past LLW Forum-Chair at HPS mid-year meeting re activities of DSWG/P61WG;
- outreach and communication re development of agenda sessions for spring 2018 LLW Forum meeting including International Atomic Energy Agency (IAEA)-led panel on disused source management and disposal projects and activities in member countries; case-study project re three-year project regarding the removal of 36,000 sources i.e. overview of what happened, issues/challenges during the cleanup and lessons to be learned therefrom; NRC agency activities re Part 61 rule and source issues; and revisions to the Nuclear Radiological Incident Annex to the National Response Framework by the Federal Emergency Management Agency (FEMA);
- review of materials and registration renewal for regulations.gov communications re associated federal rulemakings i.e., Part 61 rule and draft regulatory analysis, Category 3 source security and accountability, financial assurance, etc.;
- organize, compile and teleconference re development of new website page re NRC rulemakings and stakeholder comments submitted in response thereto;
- work with DSWG Technical Consultant, DSWG membersand organizational representatives re drafting of outline for development of program and database for reuse and recycle of sealed sources and comment thereon;
- work with Southeast Compact Commission Executive Director and Communications Consultant to develop plan re management and maintenance of National Directory of Brokers and Processors website;
- attend and participate in Energy *Solutions* 'conference in Salt Lake City, Utah on behalf of DSWG/P61WG from January 29-31, 2018;
- post information to DSWG website re Revision to Regulatory Issue Summary 2005-31, Control of Security-Related Sensitive Unclassified Non-Safeguards Information Handled by Individuals, Firms and Entities Subject to NRC Regulation of the Use of Source, Byproduct and Special Nuclear Material;
- attend and participate in HPS mid-year meeting with plenary presentation re activities of DSWG/P61WG;
- review coments, write and distribute report to DSWG members and organizational representatives re drafting of outline for development of program and database for reuse and recyle of sealed sources and comment thereon;
- continue development of new website page re NRC rulemakings and stakeholder comments submitted in response thereto;
- continue development of panel for Waste Management 2018 symposium on behalf of P61WG re Part 61 rule and associated draft regulatory analysis, very low-level radioactive waste (VLLW) scoping study and disposal of Greater-than-Class C (GTCC) and transuranic waste;
- review and distribute information to DSWG, P61WG and LLW Forum members and
 organizational representatives re NRC request for public comment on VLLW scoping
 study and regulatory analysis for disposal of GTCC and transuranic waste and then
 participate in NRC public meeting thereon;

- provide information to Harvard Law professor and HPS member re basis for joint letter from DSWG, HPS, OAS and CRCPD in support of increased financial assurance for Category 1 and 2 radioactive sources and devices, per request from HPS-designated liaison;
- attend and participate in the NRC Regulatory Information Conference (RIC) on behalf of DSWG/P61WG;
- attend and participate in Waste Management Conference on behalf of DSWG/P61WG including Co-Chairing Panel 21, *Hot Topics and Emerging Issues in U.S. Commercial LLW Management*, re Part 61 rule and associated draft regulatory analysis, VLLW scoping study and disposal of GTCC and transuranic waste;
- review materials, write and distribute memo re NRC request for stakeholder comment on the various technical issues that should be considered in the development of a regulatory basis or the disposal of GTCC and transuranic waste including sealed radioactive sources;
- review and distribute information to P61WG and LLW Forum members re NRC request for public comment on VLLW scoping study;
- continue communications with brokers and processors re suggestions for improved management and disposition of disused sources; and,
- update and add postings to the dedicated web sites focusing on proper management and disposition of disused sources and 10 CFR Part 61 rulemaking initiative;
- posted information to DSWG website re Revision to Regulatory Issue Summary 2005-31, Control of Security-Related Sensitive Unclassified Non-Safeguards Information Handled by Individuals, Firms and Entities Subject to NRC Regulation of the Use of Source, Byproduct and Special Nuclear Material;

Please see the invoices for additional and more detailed information.

Key Milestones and Dates

During the period from April 1, 2017 through March 31, 2018, the following key milestones were achieved by the DSWG and P61WG in conjunction with the LLW Forum's contract for services with NNSA:

- throughout the period from April 1, 2017 through March 31, 2018, the DSWG and P61WG regularly updated and added postings to the dedicated web sites focusing on proper management and disposition of disused sources and 10 CFR Part 61 rulemaking initiative;
- from April 1, 2017 through March 31, 2018, the DSWG drafted, reviewed and incorporated comments, and finalized layout, on its report titled, *Disposition Options and Costs for Certain Radioactive Sealed Sources and Devices*, which is intended to serve as a companion document to educational materials that were previously released by the DSWG including educational brochures for current and prospective licensees of radioactive sealed sources and devices;

- held spring 2017 DSWG meeting in Denver, Colorado on April 25-26, 2017 in conjunction with the spring 2017 LLW Forum meeting;
- participated in a workshop sponsored by the Southwestern Low-Level Radioactive Waste Compact Commission on the management and disposition of disused sources in Berekeley, California in April 2017;
- in May 2017, the DSWG, CRCPD, OAS and HPS submitted a joint letter to the NRC Commissioners regarding financial assurance for Category 1 and 2 radioactive sealed sources (RSSs) that are tracked in the National Source Tracking System (NSTS), which letter supports the recommendation by NRC staff as contained in SECY-16-0115 (ADAMS Accession No. ML16200A223) dated October 7, 2016 to proceed with rulemaking to expand the financial assurance requirements in 10 CFR 30.35 to include all byproduct material Category 1 and 2 RSSs that are tracked in the National Source Tracking System (NSTS).
- following the spring 2017 LLW Forum and DSWG meetings, the DSWG reviewed and considered broker and processor proposal for a centralized collection facility for disused sources and receipt of sources on bill of lading;
- attended the May 2017 annual meeting of CRCPD that included various sessions on disused sources;
- continued to manage and oversee a consortium with representatives of OAS, CRCPD and HPS to better coordinate our efforts moving forward;
- reviewed, distributed and organized industry meeting sessions regarding a GAO report re disused source management and disposition;
- gave a presentation at the June 2017 meeting of the Northwest Interstate Compact Commission on Low-Level Radioactive Waste Management on DSWG activities and projects;
- attended and participated in the July 2017 HPS annual meeting—including participation in a session on sealed source management;
- participated in the OAS annual meeting in Memphis in August 2017 that included an update and overview of DSWG activities;
- continued to monitor developments on and implementation of the Branch Technical Position on Concentration Averaging and Encapsulation;
- wrote, edited, distributed and posted to Resources Page of DSWG web site information re theft and recovery of nuclear gauges;
- attended, participated and networked on behalf of the DSWG and P61WG at the Exchange Monitor Publication's Rad Waste Summit annual meeting in Summerlin, Nevada in September 2017;
- held the fall 2017 DSWG meeting in Alexandria, Virginia on October 18, 2017;
- in late calendar year 2017, wrote, edited and distributed information re the release of an SRM and related documents on the proposed final rule in the *Federal Register* that would amend 10 CFR Parts 20 and 61 re licensing requirements for land disposal of radioactive waste;
- wrote, edited, distributed information and provided significant written feedback in response to an NRC Staff Requirements Memorandum (SRM) re reevaluation of tracking and security issues related to Category 3 sources;

- attended and participated in the Energy Solutions' conference on low-level radioactive waste management and disposal issues in Salt Lake City, Utah in late January 2018;
- attended and participated in the mid-year meeting the HPS in Denver, Colorado in early February 2018;
- updated and republished a DSWG document identifying import and export authorities in response to inquiries from source manufacturers, brokers, processors;
- organized a panel including topics related to the proper management and disposition of disused sources and the Part 61 rulemaking initiative for the Waste Management symposium—and participated in the subsequent NRC public workshop—that were held in Phoenix, Arizona in March 2018;
- attended and participated in the NRC's RIC in Bethesda, Maryland in March 2018;
- worked with Southeast Compact Commission Executive Director and Communications Consultant to develop plan re management and maintenance of National Directory of Brokers and Processors website;
- transmited information and documents regarding the opening of a public comment period regarding the NRC draft revision to its guidance document for alternative disposal requests entitled, "Guidance for the Reviews of Proposed Disposal Procedures and Transfers of Radioactive Material Under 10 CFR 20.2002 and 10 CFR 40.13(a)" and announcing that links to the documents can be found on the P61WG website;
- reviewed and distributed information to DSWG, P61WG and LLW Forum members and organizational representatives re NRC request for public comment on VLLW scoping study and regulatory analysis for disposal of GTCC and transuranic waste and then participate in NRC public meeting thereon; and,
- coordinated state and compact comments on the final Part 61 rule draft regulatory analysis.

Findings

During the period from April 1, 2017 through March 31, 2018, the DSWG and P61WG reached the following findings in conjunction with the LLW Forum's contract for services with NNSA:

- The CRCPD provides information upon request regarding the reuse and recyle of sealed radioactive sources and devices. However, it appears worthwhile to explore the possible creation of a more comprehensive database, which the DSWG is currently considering and researching.
- The NRC has focused its efforts mainly on Category 1 and Category 2 sealed sources. However, the DSWG continues to receive input that some Category 3 sealed sources have a high enough activity level or can be aggregated and therefore require greater attention. Accordingly, the DSWG encourages the U.S. Government to reach an agreement across agencies on this issue.

- There is significant potential for users to considering the use of alternative technologies, which has gained traction with positive results, particular in the State of New York.
- There does not currently exist a good source of information regarding technologies and the actual costs of reusing, recycling, or disposing of sources when they are no longer needed. Research on alternative technologies to replace sealed sources should be a priority of the federal government and the private sector.
- Financial assurance requirements are not currently adequate to cover the full cost of transportation and disposal. Accordingly, in April 2017, the DSWG and our organizational liaisons sent a letter to the NRC to support an agency staff recommendation—as contained in SECY-16-0115 (ADAMS Accession No. ML16200A223) dated October 7, 2016—to proceed with rulemaking to expand the financial assurance requirements in 10 CFR 30.35 to include all byproduct material Category 1 and 2 radioactive sealed sources (RSSs) that are tracked in the National Source Tracking System (NSTS).
- Inventories of disused sources at sealed source manufacturers, suppliers, and waste brokers should be reduced.
- Comprehensive regulations should be considered to limit the storage of disused sources to two years and authorize regulators to require the disposition of sources in storage for more than two years unless there is a demonstrated future use.
- The impact of the implementation of the two-year storage rule by the State of Texas should be reviewed in late 2019 or early 2020 to determine the impacts (both intended and unintended), benefits, problems and other factors.
- NRC should reconsider its decision to allow foreign sources that may not have a commercial disposal pathway to be imported.
- Federal and private research funding organizations should require grantees to budget for the disposal of sealed sources when they no longer are needed by the grantee.
- A sealed source "exchange" program should be further explored to facilitate the transfer of sources between those no longer needing sources and those looking to acquire sources.
- Additional steps should be undertaken to encourage the private sector to increase the supply of commercially available Type B shipping containers—including fabrication of the new containers developed by NNSA.
- Several internationally-certified Type B shipping containers should be identified that would have widespread applicability to disused sources in the U.S. and applications submitted to have these packages certified by NRC for domestic use.
- The NRC should continue to expeditiously review applications for Type B shipping containers and should aggressively notify licensees and the Agreement States well in advance of the expiration of shipping container certifications.
- An outreach program should be established, according to the DSWG, to assist licensees in identifying resources to assist with packaging, transport, and disposal of disused sources.
- The long-term solution to the disused source problem is to hold the licensees who have purchased and obtained the economic benefit from the sources responsible for the proper reuse, recycling, or disposal of the sources when they become disused.

Problems and Issues Encountered

During the period from April 1, 2017 through March 31, 2018, the DSWG identified the following problems and issues that continue to hinder the proper management and disposition of disused sources:

- the opportunities for recycling and reusing sealed sources are being underutilized;
- users are not sufficiently understanding and planning for the life-cycle costs of managing and ultimately disposing of sealed sources;
- NRC should continue to consider potential revisions to regulations or processes requiring Category 3 source protection and accountability.
- the practices of the NRC and the NNSA do not fully reflect a consistent view of what sources pose a threat to national security;
- the regulatory system is not adequate for the post-9/11 threat environment;
- there are no financial incentives for disused sources to be reused, recycled, or disposed in a timely manner; and,
- Type B shipping containers needed to transport certain high activity sealed sources are in short supply and are very expensive.

Recommendations

During the period from April 1, 2017 through March 31, 2018, the DSWG and P61WG pursued the following recommendations in conjunction with the LLW Forum's contract for services with NNSA:

- To encourage timely disposal, the NRC should develop robust financial assurance requirements for all licensees (Categories 1 through 3). The financial assurance requirements should be adequate to cover the entire cost of packaging, transport and disposal.
- The NRC should proceed with rulemaking to expand the financial assurance requirements in 10 CFR 30.35 to include all byproduct material Category 1 and 2 radioactive sealed sources (RSSs) that are tracked in the National Source Tracking System (NSTS)
- Create a program, possibly through the CRCPD, to educate proposed buyers of sealed sources about the life-cycle costs of sealed sources, including information about the cost of storage, transportation and disposal.
- Now that disposal access is available for most sources in the U.S., the NRC and the Agreement States should expand and make enforceable the General License (GL) storage limit regulation to address all Category 1 through 3 sources in storage for more than two years unless the licensee can make a clear demonstration of future use. There should be clear regulatory authority to direct the disposition (reuse, recycle or disposal) of Category 1 through 3 sources after they have been stored for two years. As part of the process, NRC should review and consider the impacts of the implementation of the new two year storage rule in the state of Texas.

- The NRC should amend its regulations to require a Specific License (SL) for all Category 3 sources.
- The NRC and Agreement States should incorporate procedures in their inspection programs to review the status of Category 1 through 3 sources in storage—including consideration of the length of, reason for, and location of storage.
- NNSA should identify several foreign package designs for Type B shipping
 containers that would have widespread applicability to a number of disused sources in
 the United States. NNSA should submit applications to have these packages certified
 by the NRC for domestic use.
- The creation of a secure "source exchange" program should be considered via an intermediary to work with licensees, source and device manufacturers, and recyclers to provide them with information about sources still having a useful life, with the goal of increasing beneficial reuse and recycle opportunities. The program could identify sources meeting the specific application requirements being sought for reuse or recycling, identify sources containing radioisotopes that can be removed and used to manufacture new sources, and assist with paperwork required for source transfer.
- A detailed study should be conducted—possibly by the U.S. Environmental Protection Agency (EPA) due to their long history of working with reuse and recycling of resources—to identify measures to promote opportunities for the reuse and recycling of sources.
- The NRC and Agreement States should enhance the NSTS to include as a required field the date last used of all sealed sources. These data should be validated during routine inspections.
- To prevent the accumulation of an excessive number of sources by manufacturers and suppliers, the NRC and Agreement States should require manufacturers and suppliers to dispose of those sources that have no recycle or reuse value on an annual basis.
- Federal research agencies should encourage grantors to give preference to applicants proposing to use sealed sources from their existing inventories or alternative technologies; and require applicants to budget for the full life-cycle cost of use and disposition in grant applications.

Memos and Email Transmissions

The following e-bulletins were sent out from April 1, 2017 through March 31, 2018 concerning activities of the LLW Forum's DSWG and P61WG:

- An April 4, 2017 memo to NNSA officials transmitting the invoice, monthly report and supporting documentation for the activities that were carried out during the month of March 2017 pursuant to the LLW Forum's contract DE-NA-0003197 with NNSA for services of the DSWG and P61WG.
- An April 4, 2017 memo to DSWG members, staffs and organizational liaisons and to NNSA officials and consultants transmitting, for review and comment, a three-page report documenting the results of a stakeholder survey regarding the development of a source exchange proposal.

- An April 6, 2017 memo to stakeholders interested in the management and disposition of radioactive sealed sources and devices notifying them of the posting of comments to the Resources Page of the DSWG website in response to a *Federal Register* notice from the U.S. Nuclear Regulatory Commission (NRC) seeking input from licensees, Agreement States and the public to inform the staff's assessment of potential revisions to regulations or processes requiring Category 3 source protection and accountability.
- An April 6, 2017 memo to DSWG members, staffs and organizational liaisons and to NNSA officials and consultants transmitting, for review and comment, draft petitions and transmittal letters for a proposed rulemaking on financial assurance for consideration as a joint submission to NRC from the DSWG, OAS, CRCPD, and HPS.
- An April 7, 2017 memo to speakers and invited guests for the spring 2017 DSWG and LLW Forum meetings transmitting logistical issues and deadlines regarding the submittal of PowerPoint presentations and other documents for the upcoming meeting in Denver, Colorado on April 24-25, 2017.
- On April 19, 2017 memo to DSWG members, staffs and organizational liaisons and to NNSA officials and consultants transmitting, for review and comment, the draft agenda for the upcoming working group meeting in Denver, Colorado and strongly encouraging them to review associated documents in advance of the meeting.
- An April 21, 2017 memo to DSWG members, staffs and organizational liaisons and to NNSA officials and consultants transmitting, for review and comment, an updated version of the revised draft *Disposition Costs for Certain Radioactive Sealed Sources* and *Devices* that is intended to accompany the educational brochures and that addresses comments received from disposal facility operators and other industry members.
- A May 1, 2017 memo to DSWG members, staffs and organizational liaisons transmitting a new and updated 1127-A Guest Travel Expense Reimbursement Form from the Los Alamos National Laboratory (LANL) with instructions for completing and submittal.
- A May 4, 2017 memo to DSWG members and staff, as well as organizational liaisons, transmitting a draft joint letter from the DSWG, Organization of Agreement States (OAS), Conference of Radiation Control Program Directors (CRCPD) and Health Physics Society (HPS) to U.S. Nuclear Regulatory Commission (NRC) Chairman Kristine L. Svinicki, Commissioner Jeff Baran and Commissioner Stephen G. Burns regarding financial assurance for Category 1 and 2 radioactive sealed sources (RSSs) that are tracked in the National Source Tracking System (NSTS).
- A May 4, 2017 memo to NNSA officials transmitting the invoice, monthly report and supporting documentation for the activities that were carried out during the month of April 2017 pursuant to the LLW Forum's contract DE-NA-0003197 with NNSA for services of the DSWG and P61WG.
- A May 18, 2017 memo to LLW Forum officers notifying them that the National Nuclear Security Administration/U.S. Department of Energy (NNSA/DOE) had approved and issued payment for the monthly report and services of the Disused

- Sources and Part 61 Working Groups (DSWG/P61WG) for the month of April 2017 and requesting that they review and issue the requisite authorizations for payment.
- A May 25, 2017 memo to NRC Chairman Kristine L. Svinicki, Commissioner Jeff Baran and Commissioner Stephen G. Burns transmitting a joint letter from the DSWG, OAS, CRCPD and HPS regarding financial assurance for Category 1 and 2 RSSs that are tracked in the NSTS.
- A May 25, 2017 memo to DSWG members, staffs and organizational liaisons and to NNSA officials and consultants notifying them that, earlier that same day, I had transmitted the signed, joint letter to NRC Chairman Kristine L. Svinicki, Commissioner Jeff Baran and Commissioner Stephen G. Burns regarding financial assurance for Category 1 and 2 RSSs that are tracked in the NSTS.
- A May 25, 2017 memo to NNSA officials transmitting the annual report for the
 activities that were carried out during the period from April 1, 2016 through March
 31, 2017 pursuant to the LLW Forum's contract DE-NA-0003197 with NNSA for
 services of the DSWG and P61WG.
- A June 6, 2017 memo to NNSA officials transmitting the invoice, monthly report and supporting documentation for the activities that were carried out during the month of May 2017 pursuant to the LLW Forum's contract DE-NA-0003197 with NNSA for services of the DSWG and P61WG.
- A June 6, 2017 memo to LLW Forum Officers advising them that I have scheduled a conference call for the following Wednesday (June 14) from 3:00 4:00 p.m. ET to make some decisions regarding the fall 2017 and spring 2018 meetings, as well as to discuss how best to explore alternative funding opportunities in light of the anticipated reduction in DOE grant funding, and requesting their scheduling availability therefore for the weeks of June 12-16 and June 19-23.
- A June 16, 2017 memo to LLW Forum Officers providing an update to the Wednesday conference call about the spring 2018 LLW Forum meeting facility, in particular notifying them that the Hyatt Regency San Francisco Airport has notified me that there is now a potential conflict with the proposed dates of April 22-24, 2018 and are therefore instead proposing the week before i.e., April 15-17, 2018.
- A June 20, 2017 memo to LLW Forum officers notifying them that the National Nuclear Security Administration/U.S. Department of Energy (NNSA/DOE) had approved and issued payment for the monthly report and services of the Disused Sources and Part 61 Working Groups (DSWG/P61WG) for the month of May 2017 and requesting that they review and issue the requisite authorizations for payment.
- A June 29, 2017 memo to LLW Forum officers notifying them that I signed and executed a contract with the Hyatt Regency San Francisco Airport for the spring 2018 meetings of the LLW Forum, Disused Sources Working Group (DSWG) and Southwestern Low-Level Radioactive Waste Compact Commission, as well as to assure them that I continue to follow-up with officials from the U.S. Department of Energy (DOE) on the processing of the paperwork to renew the grant that expired on March 31, 2017 for an additional three-year period which I have been notified that, due to recent procedure changes, still has to be signed off on by one more program staff member.

- A July 2, 2017 memo to members and staff of the Disused Sources Working Group (DSWG); organizational liaisons from the Conference of Radiation Control Program Directors (CRCPD), Health Physics Society (HPS) and Organization of Agreement States (OAS); and, officials and consultants representing the National Nuclear Security Administration (NNSA) transmitting to them for review and comment the updated *Disposition Costs for Certain Radioactive Sealed Sources and Devices* that is intended to accompany the educational brochures that were finalized and posted to the working group website in December 2016.
- A July 6, 2017 memo to NNSA officials transmitting the invoice, monthly report and supporting documentation for the activities that were carried out during the month of June 2017 pursuant to the LLW Forum's contract DE-NA-0003197 with NNSA for services of the DSWG and P61WG.
- A July 13, 2017 memo to DSWG members and staff; OAS, CRCPD and HPS organizational liaisons; and, NNSA officials and consultants reminding them that comments on the updated *Disposition Costs for Certain Radioactive Sealed Sources and Devices* were due no later than the close of business on the following day.
- An August 3, 2017 memo to National Nuclear Security Administration/U.S.
 Department of Energy (NNSA/DOE) officials transmitting the invoice, monthly
 report and supporting documentation for the activities that were carried out during the
 month of July 2017 pursuant to the Low-Level Radioactive Waste Forum's (LLW
 Forum's) contract DE-NA-0003197 with NNSA for services of the DSWG and
 P61WG.
- An August 17, 2017 memo to LLW Forum officers notifying them that the NNSA/DOE had approved and issued payment for the monthly report and services of the Disused Sources and Part 61 Working Groups (DSWG/P61WG) for the month of July 2017 and requesting that they review and issue the requisite authorizations for payment.
- An August 17, 2017 memo to Disused Sources Working Group (DSWG) members and staff; organizational liaisons from the Conference of Radiation Control Program Directors (CRCPD), Health Physics Society (HPS) and Organization of Agreement States (OAS); and, officials and consultants representing the NNSA/DOE transmitting to them for review and comment the updated *Disposition Costs for Certain Radioactive Sealed Sources and Devices* that is intended to accompany the educational brochures that were finalized and posted to the working group website in December 2016.
- An August 24, 2017 memo to DSWG members and staff; organizational liaisons from the CRCPD, HPS and OAS; and, officials and consultants representing the NNSA/DOE reminding them that comments and suggested edits on the updated *Disposition Costs for Certain Radioactive Sealed Sources and Devices* are due by the close of business on Friday—August 25, 2017.
- An August 24, 2017 memo to state and compact officials transmitting to them updates
 regarding activities of the U.S. Nuclear Regulatory Commission (NRC) related to
 20.2002 alternative disposal guidance, very low-level radioactive waste scoping study
 and the Part 61 rulemaking that were discussed at the OAS annual meeting in
 Memphis, Tennessee.

- A September 3, 2017 memo to National Nuclear Security Administration (NNSA) officials transmitting the invoice, monthly report and supporting documentation for the activities that were carried out during the month of August 2017 pursuant to the LLW Forum's contract DE-NA-0003197 with NNSA for services of the DSWG and P61WG.
- A September 12, 2017 memo to LLW Forum members and subscribers, as well as stakeholders interested in the management and disposition of low-level radioactive waste, notifying them that the organization's office is currently closed due to the impacts of Hurricane Irma—notifying them that the office has no electric power or direct communication abilities—but is working to restore power and repair the damage so as to get back to normal operations as quickly as possible.
- A September 16, 2017 memo to Part 61 Working Group (P61WG) members and staff announcing the release of a Staff Requirements Memorandum (SRM) in response to SECY-16-0106, which was issued on October 3, 2016 and sought Commission approval to publish a final rule in the *Federal Register* that would amend Title 10 of the Code of Federal Regulations (10 CFR) Parts 20, "Standards for Protection Against Radiation," and Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste."
- A September 20, 2017 memo to LLW Forum members and subscribers announcing the resumption of limited operations following the impacts of Hurricane Irma—notifying them that although the office still has no electric power or direct communication abilities, staff is operating under temporary arrangements at an alternate location, will check and respond to voicemail and email messages daily and plans to resume full operations once the work is completed—and announcing the posting of new material to the Home and Resources pages of the P61WG website including information and document links to the recent issuance of an SRM in response to SECY-16-0106, which was issued on October 3, 2016 and sought Commission approval to publish a final rule in the *Federal Register* that would amend 10 CFR Parts 20, "Standards for Protection Against Radiation," and Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste."
- A September 25, 2017 memo to Officers of the LLW Forum notifying them that the National Nuclear Security Administration/U.S. Department of Energy (NNSA/DOE) had approved and issued payment for the monthly report and services of the Disused Sources and Part 61 Working Groups (DSWG/P61WG) for the month of August 2017 and requesting that they review and issue the requisite authorizations for payment.
- An October 2, 2017 memo to P61WG members and staff, as well as representatives from the State of New York and the Nuclear Energy Institute (NEI), notifying them of a request from John Greeves of Talisman International to request a side meeting during the fall 2017 LLW Forum and to inquire as to their availability to participate therein
- An October 2, 2017 memo to NNSA officials transmitting the invoice, monthly report
 and supporting documentation for the activities that were carried out during the
 month of September 2017 pursuant to the LLW Forum's contract DE-NA-0003197
 with NNSA for services of the DSWG and P61WG.

- An October 4, 2017 memo to P61WG members and staff, as well as NNSA officials
 and consultants, advising them that the NRC has scheduled a public meeting to
 discuss the regulatory analysis for the 10 CFR Part 61 rule entitled, "Low-Level
 Radioactive Waste Disposal" and the revised guidance for alternative disposal
 requirements entitled, "Guidance for the Reviews of Proposed Disposal Procedures
 and Transfers of Radioactive Material Under 10 CFR 20.2002 and 10 CFR 40.13(a)."
- An October 10, 2017 memo to members and staff of the DSWG, as well as designated organizational liaisons representing the OAS, CRCPD and HPS, announcing the completion of the following two tasks: (1) finalizing and posting to the Resources Page of the DSWG website the working group's report titled, "Disposition Options and Costs for Certain Radioactive Sealed Sources and Devices," and (2) re-formatting of the Resources Page of the website by dividing the documents into categories with sub-titles in order to make it more user friendly.
- An October 11, 2017 memo to members and staff of the DSWG, designated organizational liaisons representing the OAS, CRCPD and HPS and officials and consultants from the NNSA, transmitting a draft agenda for the upcoming DSWG meeting that would be held in Alexandria, Virginia on October 18, 2017.
- An October 13, 2017 memo to stakeholders interested in the management and disposition of low-level radioactive waste announcing the release and posting of the DSWG titled, "Disposition Options and Costs for Certain Radioactive Sealed Sources and Devices."
- An October 18, 2017 memo to stakeholders interested in the management and disposition of low-level radioactive waste announcing that on October 17, 2017, the NRC published a *Federal Register* notice requesting comment on the draft regulatory analysis, "Draft Regulatory Analysis for Final Rule: Low-Level Radioactive Waste Disposal," and seeking specific cost and benefit information to better inform the updated draft regulatory analysis and that links to the documents can be found on the P61WG website.
- An October 18, 2017 memo to P61WG members and staff, as well as representatives from the State of New York and officials and consultants representing the NNSA, reminding them that on the following day the NRC staff in the Office of Nuclear Material Safety and Safeguards (NMSS) will hold a public meeting to discuss the regulatory analysis for the 10 CFR Part 61 final rule entitled, "Low-Level Radioactive Waste Disposal" and the revised guidance for alternative disposal requests entitled, "Guidance for the Reviews of Proposed Disposal Procedures and Transfers of Radioactive Material Under 10 CFR 20.2002 and 10 CFR 40.13(a)," transmitting logistical information and announcing that links to associated documents can be found on the P61WG website.
- An October 19, 2017 memo to members and supporters of the LLW Forum reminding them that later the same day the NRC NMSS staff will hold a public meeting to discuss the regulatory analysis for the 10 CFR Part 61 final rule entitled, "Low-Level Radioactive Waste Disposal" and the revised guidance for alternative disposal requests entitled, "Guidance for the Reviews of Proposed Disposal Procedures and Transfers of Radioactive Material Under 10 CFR 20.2002 and 10 CFR 40.13(a),"

- transmitting logistical information and announcing that links to associated documents can be found on the P61WG website.
- An October 19, 2017 memo to Officers of the LLW Forum notifying them that the NNSA/DOE had approved and issued payment for the monthly report and services of the DSWG/P61WG for the month of September 2017 and requesting that they review and issue the requisite authorizations for payment.
- An October 20, 2017 memo to P61WG members and staff, as well as a representative from the State of New York, requesting their scheduling availability for a conference call to discuss the possibility of coordinating comments on the final Part 61 rule draft regulatory analysis.
- An October 2, 2017 memo to stakeholders interested in the management and disposition of low-level radioactive waste announcing that on October 19, 2017, the NRC published a notice in the *Federal Register* requesting comment on the draft revision to its guidance document for alternative disposal requests entitled, "Guidance for the Reviews of Proposed Disposal Procedures and Transfers of Radioactive Material Under 10 CFR 20.2002 and 10 CFR 40.13(a)" and that links to the documents can be found on the P61WG website.
- An October 24, 2017 memo to members and staff of the DSWG, as well as to designated organizational liaisons representing the OAS, CRCPD and HPS, transmitting the paperwork and procedures for submitting travel expense reimbursement for the recent meeting in Alexandria, Virginia on October 18, 2017.
- An October 26, 2017 memo to P61WG members and staff, as well as a representative from the State of New York, scheduling the date and time for a conference call to discuss the possibility of coordinating comments on the final Part 61 rule draft regulatory analysis.
- An October 30, 2017 memo to the P61WG members and staff reminding them that there will be a conference call this coming Wednesday (November 1) from 1:30 2:30 pm ET to discuss the possibility of coordinating any comments on the *Federal Register* notice that the NRC published on October 17, 2017 that requests comment on the draft regulatory analysis, "Draft Regulatory Analysis for Final Rule: Low-Level Radioactive Waste Disposal," and seeks specific cost and benefit information to better inform the updated draft regulatory analysis, and to prepare by reviewing and writing out brief responses to the seven (7) listed questions in the referenced *Federal Register* notice.
- An October 31, 2017 memo to the P61WG members and staff transmitting draft responses from South Carolina and Utah in response to the *Federal Register* notice that the NRC published on October 17, 2017 that requests comment on the draft regulatory analysis, "Draft Regulatory Analysis for Final Rule: Low-Level Radioactive Waste Disposal," and seeks specific cost and benefit information to better inform the updated draft regulatory analysis.
- A November 1, 2017 memo to P61WG members and staff transmitting a table to house the draft comments from South Carolina and Utah in response to the *Federal Register* notice that the U.S. Nuclear Regulatory Commission (NRC) published on October 17, 2017 that requests comment on the draft regulatory analysis, "Draft Regulatory Analysis for Final Rule: Low-Level Radioactive Waste Disposal," and

- seeks specific cost and benefit information to better inform the updated draft regulatory analysis.
- A November 3, 2017 memo to P61WG members and staff transmitting the working group's comments regarding NRC's proposed amendments to 10 CFR Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste," as originally submitted to the agency on July 22, 2015 and reminding them that this document, as well as other documents related to the Part 61 rulemaking initiative, can be found on the Resources Page of the P61WG website at http://part-61.org/resources/.
- A November 4, 2017 memo to National Nuclear Security Administration (NNSA) officials transmitting the invoice, monthly report and supporting documentation for the activities that were carried out during the month of October 2017 pursuant to the LLW Forum's contract DE-NA-0003197 with NNSA for services of the DSWG and P61WG.
- A November 8, 2017 memo to P61WG members and staff transmitting a three-page draft letter from the working group providing very general comments in response to the draft regulatory analysis that refers NRC staff back to the July 22, 2015 P61WG letter providing detailed comments in response to the Part 61 proposed rule and technical guidance document specifically pointing out potential unintended consequences to existing sites and future site development, as well as referencing the proposed alternative approach to address unanticipated waste streams in a new standalone § 61.60 or a new Subpart H.
- A November 13, 2017 memo to P61WG members and staff transmitting a draft response from the State of South Carolina to the *Federal Register* notice that the NRC published on October 17, 2017 that requests comment on the draft regulatory analysis, "Draft Regulatory Analysis for Final Rule: Low-Level Radioactive Waste Disposal," and seeks specific cost and benefit information to better inform the updated draft regulatory analysis.
- A November 14, 2017 memo to P61WG members and staff transmitting a draft response from the State of Utah to the NRC's *Federal Register* notice on the Part 61 draft regulatory analysis document.
- A November 16, 2017 memo to P61WG members and staff transmitting the final letter from the working group, as submitted to the NRC, providing very general comments in response to the draft regulatory analysis that refers agency staff back to the July 22, 2015 P61WG letter providing detailed comments in response to the Part 61 proposed rule and technical guidance document specifically pointing out potential unintended consequences to existing sites and future site development, as well as referencing the proposed alternative approach to address unanticipated waste streams in a new stand-alone § 61.60 or a new Subpart H.
- A November 17, 2017 memo to P61WG members and staff transmitting the final letters, as submitted to NRC, from the States of South Carolina and Utah to the agency's *Federal Register* notice on the Part 61 draft regulatory analysis document.
- A November 24, 2017 memo to stakeholders interested in the management and disposition of low-level radioactive waste notifying them of the posting of information to the Latest News section of the public portion of the LLW Forum website regarding the submittal of a Report to Congress from DOE titled, *Alternatives*

- for the Disposal of Greater-than-Class C Low-Level Radioactive Waste and Greater-than-Class C-Like Waste.
- A November 26, 2017 memo to stakeholders interested in the management and disposition of low-level radioactive waste notifying them of the availability of comment letters from the P61WG, South Carolina and Utah on the NRC's Part 61 draft regulatory analysis document.
- A November 27, 2017 memo to Officers of the LLW Forum notifying them that the National Nuclear Security Administration/U.S. Department of Energy (NNSA/DOE) had approved and issued payment for the monthly report and services of the Disused Sources and Part 61 Working Groups (DSWG/P61WG) for the month of October 2017 and requesting that they review and issue the requisite authorizations for payment.
- A December 2, 2017 memo to National Nuclear Security Administration (NNSA) officials transmitting the invoice, monthly report and supporting documentation for the activities that were carried out during the month of November 2017 pursuant to the LLW Forum's contract DE-NA-0003197 with NNSA for services of the DSWG and P61WG.
- A December 12, 2017 memo to stakeholders interested in the management and disposition of low-level radioactive waste reminding them of the upcoming deadline on the U.S. Nuclear Regulatory Commission (NRC) draft regulatory analysis for the final Part 61 rule.
- A December 21, 2017 memo to speakers for Waste Management Panel 21 titled, *Hot Topics and Emerging Issues in U.S. Commercial Low-Level Radioactive Waste Management*, transmitting some logistical details including notification of the upcoming early bird registration deadline on January 6, 2018 and the panel description for the symposium program.
- A December 26, 2017 memo to Disused Sources Working Group (DSWG) members and staff, as well as Designated Organizational Liaisons and National Nuclear Security Administration (NNSA) Officials and Consultants, transmitting Positions and Recommendations from the revised Health Physics Society (HPS) low-level radioactive waste position statement.
- A December 28, 2017 memo to DSWG members and staff, as well as Designated Organizational Liaisons, notifying them that the U.S. Nuclear Regulatory Commission (NRC) had proposed a \$22,400 civil penalty against Qal-Tek Associates of Idaho Falls, Idaho for violations regarding shipment of radioactive materials.
- A January 1, 2018 memo to DSWG members and staff transmitting to them information about recent revisions to the HPS low-level radioactive waste position statement.
- A January 2, 2018 memo to NNSA officials transmitting the invoice, monthly report
 and supporting documentation for the activities that were carried out during the
 month of December 2017 pursuant to the LLW Forum's contract DE-NA-0003197
 with NNSA for services of the DSWG and P61WG.
- A January 4, 2018 memo to DSWG members and staff, as well as designated
 Organizational Liaisons and NNSA Officials and Consultants, notifying them that Joe
 Klinger had announced his retirement from the Illinois Emergency Management

- Agency (IEMA), but plans to continue as the Central Midwest Interstate Low-Level Radioactive Waste Compact Commission's Chair and designated representative to the LLW Forum, as well as DSWG Chair.
- A January 10, 2018 memo to DSWG members and staff, as well as designated
 Organizational Liaisons, transmitting organizational updates on pending DSWG
 projects and activities including the Spring 2018 LLW Forum and DSWG meetings,
 completion and marketing of educational brochures and disposal cost document,
 development of source recycle database, transfer of the National Directory of Brokers
 and Processors and outreach to compacts regarding workshops on disused sources.
- A January 17, 2018 memo to DSWG members and staff, as well as designated Organizational Liaisons and NNSA officials and consultants, notifying them that on December 26, 2017, the U.S. Nuclear Regulatory Commission (NRC) issued a revision to Regulatory Issue Summary (RIS) 2005-31, Control of Security-Related Sensitive Unclassified Non-Safeguards Information Handled by Individuals, Firms and Entities Subject to NRC Regulation of the Use of Source, Byproduct and Spent Nuclear Material.
- A January 24, 2018 memo to DSWG members and staff, as well as designated organizational liaisons, transmitting a draft outline for review and comment regarding the proposed development of a sealed source reuse and recycle program.
- A January 25, 2018 memo to DSWG members and staff, as well as designated organizational liaisons and NNSA officials and consultants, notifying them that on January 22, 2018, the NRC issued RIS 2018-01, Common Violations Cited During First 2 Years of 10 CFR Part 37, "Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material."
- A January 31, 2018 memo to DSWG members and staff, as well as designated organizational liaisons, reminding them of the deadline to submit comments on a draft outline regarding the proposed development of a sealed source reuse and recycle program.
- A February 2, 2018 memo to NNSA officials transmitting the invoice, monthly report
 and supporting documentation for the activities that were carried out during the
 month of December 2017 pursuant to the LLW Forum's contract DE-NA-0003197
 with NNSA for services of the DSWG and P61WG.
- A February 8, 2018 memo to DSWG members and staff, as well as Designated Organizational Liaisons, transmitting comments that were received from working group members and organizational representatives on the initial outline for the development of a more effective and impactful reuse and recycle program.
- A February 15, 2018 memo to LLW Forum Officers notifying them that earlier that week, NNSA approved the payment for the monthly report and invoice for services to the DSWG/P61WG for the month of January 2018 and transmitting the documents for review and authorization by the Officers.
- A February 21, 2018 memo to DSWG members and staff, as well as Designated Organizational Liaisons and NNSA Officials and Consultants, reminding them that the NRC's Office of Nuclear Material Safety and Safeguards (NMSS) will host a public meeting from 9:00 a.m. to 3:00 p.m. the following day to discuss the VLLW

- Scoping Study and concerns associated with the disposal of GTCC and transuranic waste.
- A February 21, 2018 memo to LLW Forum members and subscribers reminding them that the NMSS will host a public meeting from 9:00 a.m. to 3:00 p.m. the following day to discuss the VLLW Scoping Study and concerns with the disposal of GTCC and transuranic waste.
- A February 22, 2018 memo to DSWG members and staff, as well as Designated Organizational Liaisons and NNSA Officials and Consultants, transmitting the PowerPoint slide presentation and specific questions for the NRC public meeting to discuss the VLLW Scoping Study and concerns associated with the disposal of GTCC waste.
- A February 22, 2018 memo to LLW Forum members and subscribers transmitting the PowerPoint slide presentation and specific questions for the NRC public meeting to discuss the VLLW Scoping Study and concerns associated with the disposal of GTCC waste
- A February 22, 2018 memo to speakers for the LLW Forum-organized Panel 21 for the Waste Management symposium transmitting logistical details and information related to the submittal of PowerPoint presentations.
- A March 2, 2018 memo to National Nuclear Security Administration (NNSA) officials transmitting the invoice, monthly report and supporting documentation for the activities that were carried out during the month of February 2018 pursuant to the LLW Forum's contract DE-NA-0003197 with NNSA for services of the DSWG and P61WG
- A March 9, 2018 memo to International Atomic Energy Agency (IAEA) speakers for the spring 2018 LLW Forum meeting transmitting important logistical information regarding deadlines for the submittal of Power Point presentations in order to allow us to copy documents, prepare and assemble meeting packets, and download and organize presentations.
- A March 12, 2018 memo to LLW Forum Officers notifying them that earlier the previous week, NNSA approved the payment for the monthly report and invoice for services to the DSWG/P61WG for the month of February 2018 and transmitting the documents for review and authorization by the Officers.
- A March 14, 2018 memo to compact and state members of the LLW Forum and members and staff of the Part 61 Working Group (P61WG) outlining a path forward for the LLW Forum/P61WG to compile and submit comments to the U.S. Nuclear Regulatory Commission (NRC) regarding their request for stakeholder comment on the agency's plans to conduct a Very Low-Level Radioactive Waste (VLLW) Scoping Study and asking for input and feedback thereon.
- A March 15, 2018 memo to members of the LLW Forum's Disused Sources Working Group (DSWG) providing an overview of comments during the plenary presentation by NRC Commissioner Jeff Baran emphasizing the need for source security and accountability including consideration of the use of the License Verification System (LVS) or some other mechanism to verify the validity of a transferee's license prior to the transfer of Category 3 sources, as well as an evaluation of the pros and cons of including Category 3 sources in the National Source Tracking System (NSTS).

- A March 16, 2018 memo to IAEA speakers for the spring 2018 LLW Forum meeting transmitting important logistical information regarding deadlines for the submittal of Power Point presentations in order to allow us to copy documents, prepare and assemble meeting packets, and download and organize presentations.
- A March 16, 2018 memo to speakers for the LLW Forum-organized Panel 21 for the Waste Management symposium transmitting final logistical details and information related to the submittal and uploading of PowerPoint presentations.
- A March 28, 2018 memo to DSWG members and staff, as well as to NNSA officials and consultants, reminding them to review and provide feedback in response to the *Federal Register* notice issued by the NRC in February 2018 to request stakeholder comment on the various technical issues that should be considered in the development of a regulatory basis for the disposal of Greater-than-Class C (GTCC) and transuranic waste.

Meetings

DSWG and P61WG members and staff participated in the following meetings on behalf of the working groups from April 1, 2017 through March 31, 2018:

- DSWG members, staff and other interested stakeholders met in Denver, Colorado on April 25-26, 2017 in conjunction with the spring 2017 LLW Forum meeting. In preparation for the meeting, during the month of April 2017, we reached out to working group members, staff and organizational representatives re scheduling and worked with the Embassy Suites Hotel in downtown Denver on room reservations and logistical arrangements. In advance of the spring 2017 DSWG meeting, during the month of April 2017, we drafted and distributed for review and comment four separate versions of a draft petition for rulemaking related to enhanced financial assurance for radioactive sealed sources and devices; continued communications with boards of CRCPD, OAS and HPS to get their perspectives and input on a list of outstanding action items and priorities; distributed for review and comment an updated disposal cost document that will serve as a companion piece to the educational materials for current and prospective licensees; conducted, and wrote a summary report regarding, a stakeholder survey to identify issues associated with and understand industry perspectives concerning the development of an enhanced secure source exchange program; and, posted and reviewed formal comments in response to the Federal Register notice that was issued on January 9, 2017 in which the NRC announces that the agency is seeking input from licensees, Agreement States and the public to inform the staff's assessment of potential revisions to regulations or processes requiring Category 3 source protection and accountability.
- The DSWG/P61WG Executive Director and Communications Consultant traveled to Scottsdale, Arizona from May 7-12, 2017 to attend and participate in the annual meeting of the Conference of Radiation Control Program Directors (CRCPD).

- The DSWG Project Director traveled to Helena, Montana from June 7-9, 2017 to attend and participate in the annual meeting of the Northwest Interstate Compact on Low-Level Radioactive Waste Management on behalf of the DSWG.
- The DSWG Project Director traveled to San Francisco, California from June 10-16, 2017 to attend and participate in the annual meeting of the American Nuclear Society (ANS) on behalf of the DSWG.
- The DSWG Project Director traveled to Raleigh, North Carolina from July 9-14, 2017 to attend and participate in the annual meeting of the Health Physics Society (HPS) on behalf of the DSWG and P61WG.
- The DSWG Project Director traveled to Memphis, Tennessee from August 20-24, 2017 to attend and participate in the annual meeting of the Organization of Agreement States (OAS) on behalf of the DSWG and P61WG.
- The DSWG/P61WG Project Director traveled to Summerlin, Nevada from September 5-8, 2017 to attend and participate in the annual Rad Waste Summit conference that was hosted by Exchange Monitor Publications on behalf of the DSWG and P61WG.
- The DSWG/P61WG Project Director traveled to Alexandria, Virginia from October 13-19, 2017 to attend, participate, moderate and facilitate the fall 2017 meetings of the LLW Forum and DSWG on behalf of the DSWG and P61WG.
- The DSWG/P61WG Project Director and Communications Consultant traveled to Salt Lake City, Utah from January 29-31, 2018 to attend and participate in the Energy*Solution's* conference on behalf of the DSWG/P61WG.
- The DSWG/P61WG Project Director and Communications Consultant traveled to Denver, Colorado rom February 4-7, 2018 to attend and participate in the HPS mid-year meeting on behalf of the DSWG/P61WG.
- The DSWG/P61WG Project Director traveled to Bethesda, Maryland from March 12-15, 2018 to attend and participate in the U.S. Nuclear Regulatory Commission (NRC) Regulatory Information Conference (RIC) on behalf of the DSWG/P61WG. (See above for additional information.)
- The DSWG/P61WG Project Director traveled to Phoenix, Arizona from March 17-23, 2018 to attend and participate in the Waste Management Conference—including the Co-Chairing of Panel 21 titled, Hot Topics and Emerging Issues in U.S. Commercial LLW Management—and the NRC public meeting on 10 CFR Part 61 and other low-level radioactive waste activities, initiatives and rulemakings on behalf of the DSWG/P61WG. (See above for additional information.)

Phone Calls and Conference Calls

From April 1, 2017 through March 31, 2018, the following phone calls and conference calls were undertaken in support of activities of the DSWG and P61WG as follows:

• to prepare for the spring 2017 meeting that was held in Denver, Colorado on April 25-26, 2017 in conjunction with the spring 2017 LLW Forum meeting;

- to obtain input and feedback regarding a disposal cost document that will serve as a companion piece to the educational materials for current and prospective licensees of sealed radioactive sources and devices;
- to conduct a stakeholder survey to identify issues associated with and understand industry perspectives concerning the development of an enhanced secure source exchange program;
- to continue follow-up tasks and assignments from the spring 2017 meeting that was held in Denver, Colorado in April 2017;
- to gather input and feedback on draft petitions for rulemaking related to enhanced financial assurance;
- to finalize, obtain signatures and submit a letter to the NRC in support of a proposed ANPR to review and increase financial assurance for the management and disposition of disused sources:
- to receive comment and perspectives regarding a recently-published report that provides an overview of compact import and export permit requirements;
- to follow-up on a letter to the NRC in support of a proposed ANPR to review and increase financial assurance for the management and disposition of disused sources;
- to plan for the upcoming meetings that would be held in Alexandria, Virginia in October 2017;
- to develop and submit P61WG and individual state comments in response to U.S. Nuclear Regulatory Commission (NRC) "Draft Regulatory Analysis for Final Rule: Low-Level Radioactive Waste Disposal;"
- to continue follow-up tasks and assignments from the fall 2017 meeting that was held in Alexandria, Virginia in October 2017;
- to develop agenda sessions related to sealed source management and disposition for the spring 2018 LLW Forum and DSWG meetings that will be held from April 16-18, 2018:
- to draft and incorporate DSWG comments in response to the NRC *Federal Register* notice seeking input from licensees, Agreement States and the public to inform the staff's assessment of potential revisions to regulations or processes requiring Category 3 source protection and accountability;
- to collect information from individual states re source calculation and methodology re number of sealed sources;
- to coordinate implementation of the updated list re DSWG recommendations and priorities; and,
- to draft P61WG comments in response to the NRC *Federal Register* notice seeking input on the draft regulatory basis for the proposed final Part 61 rule.

(See above for additional information.)

Travel

The following travel was undertaken from April 1, 2017 through March 31, 2018 concerning activities of the LLW Forum's DSWG and P61WG:

- DSWG members and staff traveled to Denver, Colorado from April 23-27, 2017 to attend and participate in the spring 2017 DSWG meeting and the spring 2016 LLW Forum meeting.
- The DSWG/P61WG Executive Director and Communications Consultant traveled to Scottsdale, Arizona from May 7-12, 2017 to attend and participate in the annual meeting of the Conference of Radiation Control Program Directors (CRCPD).
- The DSWG Project Director traveled to Helena, Montana from June 7-9, 2017 to attend and participate in the annual meeting of the Northwest Interstate Compact on Low-Level Radioactive Waste Management on behalf of the DSWG.
- The DSWG Project Director traveled to San Francisco, California from June 10-16, 2017 to attend and participate in the annual meeting of the American Nuclear Society (ANS) on behalf of the DSWG.
- The DSWG Project Director traveled to Raleigh, North Carolina from July 9-14, 2017 to attend and participate in the annual meeting of the Health Physics Society (HPS) on behalf of the DSWG and P61WG.
- The DSWG Project Director traveled to Memphis, Tennessee from August 20-24, 2017 to attend and participate in the annual meeting of the Organization of Agreement States (OAS) on behalf of the DSWG and P61WG.
- The DSWG/P61WG Project Director traveled to Summerlin, Nevada from September 5-8, 2017 to attend and participate in the annual Rad Waste Summit conference that was hosted by Exchange Monitor Publications on behalf of the DSWG and P61WG.
- The DSWG/P61WG Project Director traveled to Alexandria, Virginia from October 13-19, 2017 to attend, participate, moderate and facilitate the fall 2017 meetings of the LLW Forum and DSWG on behalf of the DSWG and P61WG.
- The DSWG/P61WG Project Director and Communications Consultant traveled to Salt Lake City, Utah from January 29-31, 2018 to attend and participate in the Energy Solution's conference on behalf of the DSWG/P61WG.
- The DSWG/P61WG Project Director and Communications Consultant traveled to Denver, Colorado rom February 4-7, 2018 to attend and participate in the HPS mid-year meeting on behalf of the DSWG/P61WG.
- The DSWG/P61WG Project Director traveled to Bethesda, Maryland from March 12-15, 2018 to attend and participate in the U.S. Nuclear Regulatory Commission (NRC) Regulatory Information Conference (RIC) on behalf of the DSWG/P61WG. (See above for additional information.)
- The DSWG/P61WG Project Director traveled to Phoenix, Arizona from March 17-23, 2018 to attend and participate in the Waste Management Conference—including the Co-Chairing of Panel 21 titled, *Hot Topics and Emerging Issues in U.S. Commercial LLW Management*—and the NRC public meeting on 10 CFR Part 61 and other low-level radioactive waste activities, initiatives and rulemakings on behalf of the DSWG/P61WG. (See above for additional information.)

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