



**OFFICE OF
LEGACY
MANAGEMENT**

COMMITMENT TO
STEWARDSHIP

OCTOBER-DECEMBER | **2024**

PROGRAM UPDATE



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LM International Work Example of Worldwide Cooperation

With 2024 coming to an end, it's easy to reflect on the past year and realize that there are many issues that invite disagreement.

But isn't it refreshing when we come across issues that are universally agreed upon? When we find solutions to problems that everyone can support, it is rewarding because of the positive impacts that occur.



LM Director Carmelo Melendez speaks at the Wismut GmbH in August 2024.

One example is environmental cleanup. There are, of course, disagreements on approaches and processes, but in principle there is agreement that if environmental impacts have occurred, they must be cleaned up.

In 1989, following the end of the Cold War, the U.S. Department of Energy (DOE) established the world's largest environmental cleanup program to address the cleanup of the nation's nuclear weapons complex. As many sites around the United States were remediated, it became clear that long-term stewardship was necessary,

and in 2003 the DOE Office of Legacy Management (LM) was created.

Throughout DOE's cleanup efforts and long-term stewardship work, we have learned many lessons and understand better how to remediate sites, how to keep them safe, and how to engage with all interested parties.

LM's international efforts allow for sharing those lessons and, equally important, allows us to learn from the experiences of other similar efforts abroad. In a complex world, it is comforting to know that people of all backgrounds and from different places across the globe can work together to protect human health and the environment, no matter where it is needed.

In this edition of *Program Update*, there are several examples of international efforts that show not only a cooperative spirit, but long-term commitments that illustrate a determination to help one another and ensure people and the planet are protected, no matter where the work is being performed.

Inside these pages are articles about LM's cooperation with representatives from Canada, Germany, Japan, and other partners from the International Atomic Energy Agency. This work ranges from cleanup and remediation approaches and surveillance and maintenance activities to stakeholder engagement and more.

We look forward to future interactions with international partners as we continue our mission here at home while playing our part as a global leader in solving complicated technical and environmental issues.

It is important work, and work that illustrates cooperation like this means we accomplish a lot more together than we can alone.

Warm Regards,

Carmelo
Carmelo Melendez



OFFICE OF LEGACY MANAGEMENT

COMMITMENT TO STEWARDSHIP



GOAL ONE
Protect human health
and the environment.



GOAL TWO
Preserve, protect,
and share records
and information.



GOAL THREE
Safeguard former
contractor workers'
retirement benefits.



GOAL FOUR
Sustainably manage
and optimize the use
of land and assets.



GOAL FIVE
Sustain management
excellence.



GOAL SIX
Engage the public,
governments, and
interested parties.

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COVER: LM Director Carmelo Melendez, second from right, and Tania Smith Taylor, right, talk with Wismut GmbH Managing Director Michael Paul and Dr. Mandy Schipek in Leipzig, Germany, in October. LM and Wismut GmbH signed a Memorandum of Understanding that established collaboration and information exchanges for the management of uranium legacy mines and mills.

Welcome to the OCTOBER-DECEMBER 2024 issue of the U.S. Department of Energy Office of Legacy Management **Program Update**.

This publication is designed to provide a status of activities within LM. Please direct all comments and inquiries to LM-ProgramUpdate@lm.doe.gov.

LM International Programs Crucial to Remediation, Stewardship Projects Worldwide

LM's international program works to maintain relationships and engagement with global partners

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) has not only committed to protecting human health and the environment in the United States, but also across the world. Since 2010, LM has collaborated with professionals and international groups to support long-term stewardship, particularly related to uranium mining and milling in places like Europe, Central Asia, and Canada. LM supports remediation efforts across the globe and looks for opportunities to help and improve communities.

"LM's international programs are important to ensure that sites continue keeping the public and environment safe and how to manage those sites long term," said LM Technical Director Tania Smith Taylor, who oversees LM's international program.

Smith Taylor has been focused on building LM's international relationships and strengthening engagement worldwide since she was promoted to the position in 2023. LM's international activities include meetings, symposiums, and workshops across the globe. LM and LM Strategic Partners have also welcomed personnel from organizations like the International Atomic Energy Agency (IAEA), the IAEA Coordination Group on

Uranium Sites, and the Nuclear Energy Agency (NEA). Through these partnerships, LM has further forged relationships with entities from Canada, Portugal, and Germany that are all managing cleanup and long-term stewardship of radiological sites that are part of the world's atomic and Cold War legacy.

LM works within these agencies, providing guidance on site remediation and long-term surveillance and maintenance (LTS&M) of mines and sites.

Since taking the job in 2023, Smith Taylor has noticed that the most crucial role LM plays is offering guidance and advice on the management of these sites.

"Having 20 years of experience, LM is at the forefront of LTS&M. We are the leaders, and people are learning from us," Smith Taylor said. "However, fresh perspectives from international partners help us see some challenges differently. We will always learn from each other."

Over the past year, LM has continued to make big strides in stakeholder engagement across several different countries.

In August, LM Site Manager Brian Zimmerman gave a virtual presentation during IAEA's Technical Meeting



Representatives from the DOE Office of Legacy Management and Office of Environmental Management attended the eighth International Forum on the Decommissioning of the Fukushima Daiichi Nuclear Power Station in Japan in August. The event provided a great opportunity for LM and EM to meet with peers and discuss best practices, lessons learned, challenges, and solutions.



University of Porto workshop participants visit the remediated Urgeirica mining area near Canas de Senhorim, Portugal.

in Vienna, Austria, where the theme was “Nuclear Site Repurposing and Stakeholder Engagement in the Context of Circular Economy and Sustainability.” Zimmerman covered the topic of “Practical Case Histories in Site Repurposing” and applied the topic to the Fernald Preserve Site near Cincinnati, Ohio.

“LM continues to be actively engaged within the IAEA. The IAEA looks at LM as being one of the leading organizations in the world for post-remediation management of nuclear sites, particularly given the large variety of sites that LM manages,” said Smith Taylor.

LM Director Carmelo Melendez spoke at the eighth International Forum on the Decommissioning of the Fukushima Daiichi Nuclear Power Station in Japan Aug. 26. LM was invited to attend by the Nuclear Damage Compensation and Decommissioning Facilitation Corporation. The forum provided a great opportunity for LM and the DOE Office of Environmental Management to meet with peers and discuss best practices, lessons learned, challenges, and solutions.

Melendez also visited Wismut GmbH in Saxony, Germany, this past August. LM and Wismut GmbH have a longstanding cooperative agreement to advise international organizations and governments on remediation issues. During the trip, LM shared insights drawn from decades of institutional knowledge and success in long-term site stewardship. LM also toured several sites managed by Wismut. LM also visited Leipzig, Germany, in October to sign a Memorandum of Understanding related to mutually beneficial cooperation.

“This ongoing partnership between Germany and the United States exemplifies LM’s shared commitment on

environmental remediation and protection, reflecting our collective responsibility to safeguard human health and the environment,” said Smith Taylor.

Most recently, LM participated in a workshop at the University of Porto in Portugal on environmental remediation challenges and long-term stewardship. The workshop allowed LM to exchange information with university professors, Portuguese remediation experts, government representatives, and regulators, who all play a role in cleanup of Portugal’s uranium mining and processing legacy. Additionally, LM participated in NEA’s Forum on Stakeholder Confidence National Workshop in Solna, Sweden. The workshop was used as an information exchange and public meeting about Sweden’s national repository for waste.

“Having these discussions and engaging with our partners across the globe not only helps them, but helps us as well. There may be a challenge we have that is similar to our partners’, especially those in Europe, where physical space is limited and proximity of radiological sites to populations is a challenge. Our site managers are having discussions with our global partners that have helped them view their own site challenges in a new way,” Smith Taylor added.

Looking ahead to the future of LM’s international activities, the schedule is full of meetings, delegation visits, and webinars.

“We are excited to see where the international program continues to grow,” Smith Taylor said. “Since this program is still new, we are constantly finding new ways to engage our partners abroad and continue to grow those relationships with our stakeholders.” ■



Canadian Delegation Tours LM Sites, Furthering International Collaboration

North American counterparts share information about remediation, beneficial reuse, and long-term stewardship of nuclear legacy sites

LM welcomed officials involved in the cleanup of Canadian nuclear legacy sites during a tour of facilities in Colorado and Pennsylvania in September.

Representatives of Atomic Energy of Canada Ltd., Canadian Nuclear Laboratories, and the town of Port Hope, Ontario, joined LM and staff from the city of Grand Junction and the Colorado Department of Public Health and Environment on-site in Grand Junction, Colorado. The Canadian delegation then traveled with LM staff to Canonsburg, Pennsylvania, where they met with state Department of Environmental Protection representatives and officials from the city of Canonsburg.

During the week of Sept. 16-20, the group toured the former uranium-processing site now known as Las Colonias Park, the Grand Junction Disposal Site, and the city of Grand Junction's Residual

Radioactive Material (RRM) Interim Storage Facility before traveling to Canonsburg, where they visited the disposal site there.

The multi-stakeholder Canadian contingent had an opportunity to see the full spectrum of sites from an open and in-service RRM facility to post-remediation and enhanced beneficial reuse sites and discuss the collaborations between federal, state, and local officials both before and after site cleanup. The Canadian delegation wanted to learn about the process of transferring a formerly contaminated site post-remediation to a community for beneficial reuse, as well as the long-term stewardship mission.

Though the Ontario sites are still in the cleanup phase and the transfer of their sites for community reuse is still years away, LM Site Manager Sara Woods said the group wanted to learn as much as they could from their American counterparts' experience.

"To have the opportunity to share the history and success of LM sites, in hopes of enhancing other long-term



From left: LM Field Support Center Office Manager Paul Kerl; Canadian Nuclear Laboratories Director of Programs and Compliance/Historic Waste Program Stephen Morris; Canadian Nuclear Laboratories Manager of Historic Waste Program Environmental Management Jennifer Turner; LM Site Manager Sara Woods; Atomic Energy of Canada Ltd. Director of Decommissioning and Site Restoration Jim McCafferty; LM Site Manager Tiffany Drake; Municipality of Port Hope Chief Administrative Officer Candice White; and Mike Cosby, Colorado Department of Public Health and Environment.

“To have the opportunity to share the history and success of LM sites, in hopes of enhancing other long-term stewardship projects, both domestic and internationally, is priceless.”

—SARA WOODS

stewardship projects, both domestic and internationally, is priceless,” said Woods. “The Canadian delegation was particularly interested in the successful partnerships that LM has achieved over the years, either with regulators or government entities, how those partnerships drove success, and how important it has been to positively maintain them over the years.

“We should never discount the things that we can learn from having a conversation with the person across the table,” she said. “At the end of the day, we are all trying to achieve the same mission — to protect human health and the environment while maintaining the legacy of these sites. This week has been a superb opportunity to benchmark against each other.”

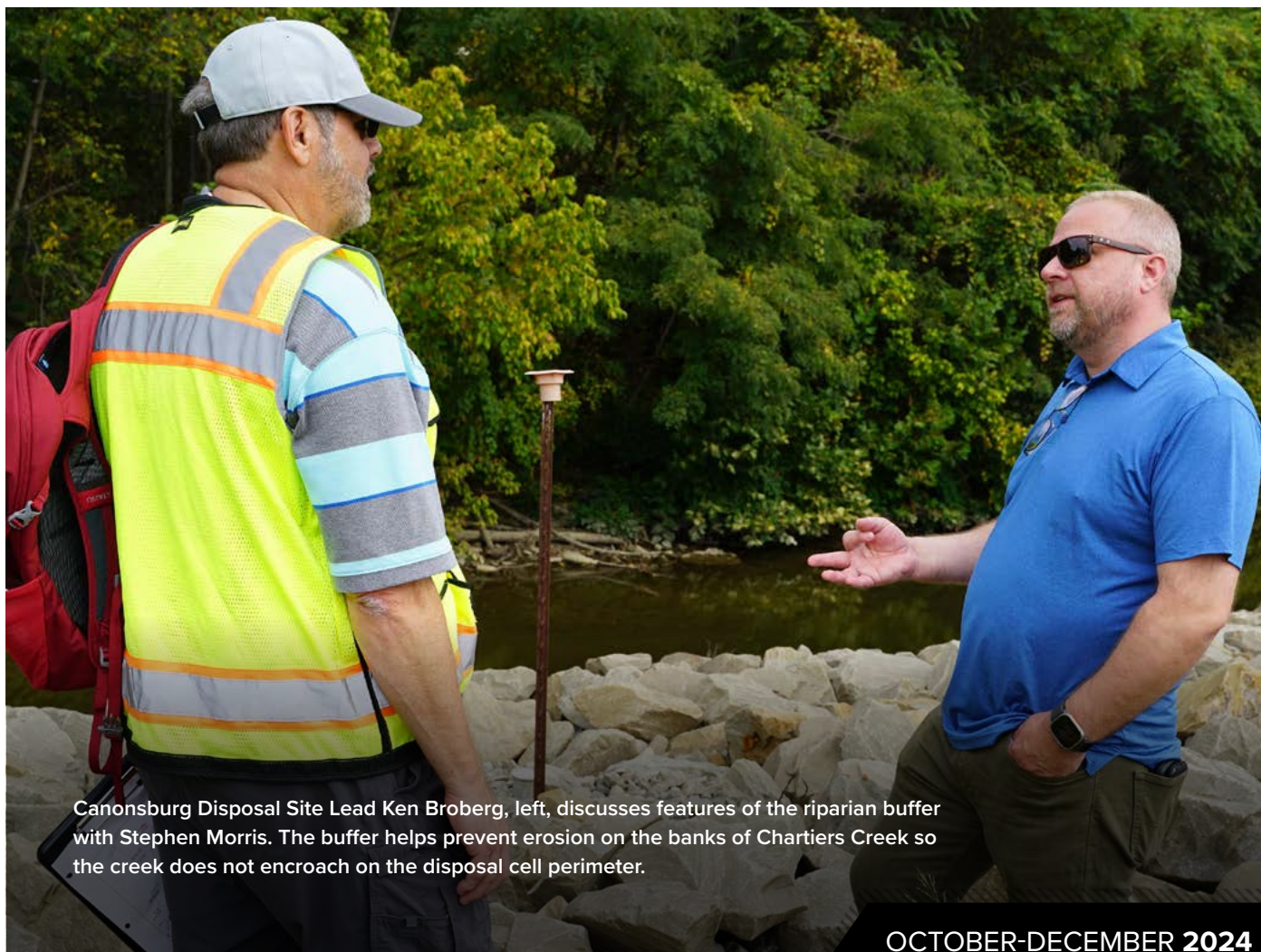
Port Hope played a key role in the Manhattan Project in the 1940s. For the first three years of the Manhattan

Project, ores processed at Port Hope made up the majority of the uranium oxide used in the development of the world’s first nuclear weapons.

From 1942 until 1945, workers in Canada’s Northwest Territories mined hundreds of tons of uranium ore, or pitchblende, and shipped them across the country to Port Hope, where the ore was refined and later delivered to Los Alamos, New Mexico, to be used in the first atomic bomb.

At the time, Port Hope was one of the few places in the world that had a facility that could process pitchblende into usable uranium oxide, the key element in producing the fission reaction in the weapons.

As with U.S. facilities, the byproducts of the process left soil and groundwater contaminated with radioactive elements. Remediation of the sites continues to this day. ■



Canonsburg Disposal Site Lead Ken Broberg, left, discusses features of the riparian buffer with Stephen Morris. The buffer helps prevent erosion on the banks of Chartiers Creek so the creek does not encroach on the disposal cell perimeter.



LM Director Presents Meritorious Service Award to German Counterparts

Melendez praises Wismut GmbH for its contributions and support of LM's mission over past two decades

On Oct. 28, U.S. Department of Energy (DOE) Office of Legacy Management (LM) Director Carmelo Melendez presented a Meritorious Service Award to LM's German partners for ongoing collaboration in rehabilitating uranium mining and processing sites. The award, presented to Wismut GmbH, recognizes the federally operated company's contributions to the success of the Department of Energy's mission for more than two decades.

The company's actions and distinctive achievements provided substantial value to DOE's analogous missions in the Offices of Environmental Management and Legacy Management, Melendez noted in the award.

"Our similar responsibilities of protecting human health and the environment, reducing post-closure related health risks in a cost-effective manner, and improving long-term sustainability of environmental remedies have greatly benefited from your cooperation and technical assistance," he wrote. "Our progress thrives on collaboration."



LM Director Carmelo Melendez (left) presents a plaque of appreciation to Michael Paul (center), managing director of Wismut GmbH. At right is John R. Crosby, consul general of the U.S. Consulate General in Leipzig, Germany.

Melendez presented the award in a visit with LM's German counterparts in Leipzig. Annette Moore and Jonathan Damiano accompanied Melendez during the visit.

LM's Office of Site Operations Director Jay Glascock also spoke to officials gathered at the ceremony and described for them LM's mission of long-term stewardship of remediated nuclear sites.

Glascock told the group that after environmental remediation is completed, long-term stewardship responsibilities transfer to LM. For sites where



From left to right: LM's Annette Moore, Carmelo Melendez, and Jay Glascock, along with Axel Hiller and Jana Goeth of Wismut GmbH, look at a regional map dated from 1930 illustrating the geology of the German state of Saxony.

residual hazards remain, any combination of long-term surveillance, monitoring, treatment, reporting, maintenance, and management of institutional controls may be required to ensure the continued protection of human health and the environment.

"Our organization came into being from pressure exerted from states and Tribes," Glascock said. "They wanted someone to stick around as the various cleanup organizations move on to the next cleanup site."

Glascock said the scope of work varies across LM's 103 sites in more than 30 states and territories. Each site has its own set of complexities, culture, and personalities, he said. LM expects to receive at least 20 more sites for long-term stewardship within the next five years.

"We are continuously receiving defense nuclear sites from multiple cleanup organizations, such as the U.S. Nuclear Regulatory Commission," he said. "We engage with numerous Tribal nations. We formally consult with them to discuss our work plans well before we make any decisions. In some instances, the site is on Tribal land, and in other cases, is adjacent to a Tribal reservation. In either case, we are in constant contact with the impacted Tribes."

Glascock described the relationship between LM and cleanup organizations. Once LM takes responsibility for a site, the scope of work shifts from construction to maintenance, he said.

"There may be an opportunity to provide feedback based on our long-term care operational experiences and we may be able to influence the construction specifications of the next disposal cell at the next site," he said. "In the end, we both want the same thing; we inform one another, and we have the shared interest to better protect human health and the environment."

LM Quality Assurance and Risk Program Manager Jonathan Damiano and LM Environmental and Geospatial Data Management Program Manager Annette Moore also engaged with Wismut GmbH during the trip. Damiano discussed LM's Quality Management System, which LM uses to refine processes for corrective actions and gather data from lessons learned. Moore shared her team's ongoing improvement in data management using remote telemetry, field-data collection using tablets and cellphones, and the development of user-friendly data views and dashboards.

Initiated in 1991, the Wismut GmbH program is nearing the point of having many of its sites enter long-term stewardship and seeks to benefit from LM's experience. In turn, Wismut GmbH has also experienced beneficial reuse at many of its sites, an accomplishment that can assist LM in its reuse efforts. ■



LM officials visited a memorial to miners at a site in Aue, Germany. The statue is part of the art and historical memorabilia collection for the SDAG Wismut organization, now known as Wismut GmbH. SDAG Wismut was the original name of the then Soviet-German owned uranium mining company in East Germany during the Cold War. The group was dressed in protective gear for their visit to the water treatment plant at the site. From left: Jay Glascock, Carmelo Melendez, Annette Moore, and Jonathan Damiano.



Japanese University Students and Educators Visit Rocky Flats Site

Presentation and tour highlight site history and current activities

A group of Japanese students and professors interested in long-term stewardship toured the U.S. Department of Energy Office of Legacy Management's (LM) Rocky Flats Site in Colorado in September. Participants came from the University of Tsukuba, Tohoku University, Saitama University, Kyoto University, Shinshu University, and Tokyo Institute of Technology.

The site team gave a presentation and led a tour that provided the group with information on site history, cleanup, and long-term surveillance and maintenance. The visitors also had the opportunity to ask Rocky Flats Site staff questions and engage in discussions related to their areas of interest.

LM Rocky Flats Site Deputy Site Manager Michelle Franke welcomed the group to the LM Operations Center in Westminster, Colorado, and presented information about the Office of Legacy Management's mission. LM Strategic Partners (LMSP) Rocky Flats Site Groundwater Lead John Boylan provided information on history, remediation, end-use strategies, and ongoing monitoring at the site.

After the presentation, the group drove to the Rocky Flats Site to see the rolling hills and grassland that were previously a small city. Boylan, who has worked at the site for more than 30 years, shared historical insights and described the long-term monitoring and surveillance that takes place at the site today.

The tour started at the site's former West Gate, which Boylan said was once monitored by guards. It served as an entry checkpoint for workers and guests to the Rocky Flats Plant, which operated between 1952 and 1994. Boylan shared an aerial photo of the former buildings and infrastructure.

The group traveled along what used to be the plant's Central Avenue, and Boylan described how waste from the plant was transported during cleanup and how some structures were left underground.

While driving on-site, the students and educators saw hundreds of elk running and bugling on a hillside in the midst of their rut.

BEFORE



AFTER



The group started its tour at the former West Gate, which served as a point of entry to the Rocky Flats Plant. The left photo is the West Gate in May 2002. The right photo is the West Gate in 2024.



Tour group members saw hundreds of elk during the tour of the Rocky Flats Site in Colorado.

The group viewed the Solar Ponds Plume Treatment System from afar, and Boylan explained how the system treats nitrogen and uranium from the former Solar Evaporation Ponds. Construction is currently taking place to build a new uranium treatment component.

LMSP Rocky Flats Site Ecologist Karin McShea told the group about the revegetation process after the buildings were removed. The focus was to revegetate with native grass species, which also support the site's wildlife. Noxious weeds are treated using a variety of techniques, including herbicides and biological controls that only impact the weeds.

The group saw part of the site's long-term monitoring network at a stop at the Walnut Creek Point of Compliance (WALPOC). The Rocky Flats Site Points of Compliance (POCs) monitor surface water for specific contaminants before the water travels off-site. WALPOC monitors for plutonium, americium, uranium, and nitrate. LMSP Rocky Flats Site Surface Water Lead George Squibb described the layered monitoring system at the site. POCs are downstream from Points of Evaluation (POEs), which are closer to the former industrial areas. POEs are early indicators for contaminant exceedances because they are upstream of the POCs.

Water quantity also affects the concentration of contaminants. For example, when there is less direct runoff, the stream flow contains a higher proportion of groundwater from seepage, so it may contain



Rocky Flats Site Surface Water Lead George Squibb, left, an LM Support Partner, explains the Walnut Creek Point of Compliance to the group.

higher concentrations of contaminants associated with groundwater, like uranium and nitrate. Squibb explained that there are secondary automated samplers at selected locations to ensure water sampling continues if the primary sampler fills during high flow periods, such as during significant floods.

Boylan showed the group the location of the former 903 Pad at the final stop of the tour. He explained how the 903 Pad stored drums from the Rocky Flats Plant that contained volatile organic compounds and radioactively contaminated oils that leaked. Remedial action was taken to clean up the soil as directed by the 1996 Rocky Flats Cleanup Agreement.

"We enjoyed meeting all the students and educators and providing them with insights from Rocky Flats that will hopefully support their studies and future careers," said Franke. ■



Stakeholder Engagement When a Deep Geological Repository Site for Spent Nuclear Fuel is Licensed

LM participates in Sweden forum on best practices, lessons learned

For almost two and a half decades, the Nuclear Energy Agency (NEA) Forum on Stakeholder Confidence (FSC) has served as a platform to build understanding and enhance stakeholder engagement in the fields of radioactive waste management, decommissioning, and legacy management.

To progress on these themes, the NEA convened 70 participants from 15 countries at an FSC Swedish National Workshop focused on “Dialogue and Transparency When a Site and Method are Licensed.” The workshop was organized by the FSC and hosted by the Swedish Radiation Safety Authority (SSM) and municipality of Östhammar Sept. 23-24, 2024, in Sweden.



Östhammar Mayor Julian Sjöberg presents at the Nuclear Energy Agency Forum on Stakeholder Confidence in September in Östhammar, Sweden.



After the workshop, the Forum on Stakeholder Confidence members provided “country updates” about communication activities during the past year.

The workshop provided a forum to share experiences and exchange information on stakeholder engagement after a geological repository site for spent nuclear fuel has been chosen and licensed.

The first day of the workshop, held at the SSM offices in Solna, focused on the present and future role of SSM on stakeholder engagement to further explore topics raised by research projects, including:

- How to meaningfully include stakeholder participation from a regulatory perspective.
- To what extent present generations need to be consulted regarding future post-closure costs and effective mechanisms to engage them in discussions.

To discuss these questions, seven groups consisting of waste management organizations, regulators, government agencies, and representatives from the municipality of Östhammar had roundtable discussions from the perspective of ensuring inclusive and meaningful stakeholder participation in dialogues around future steps in the sustainable management of radioactive waste and spent fuel, and ultimately, post-closure.

The second day of the workshop featured meetings with community members in Östhammar, which was chosen as the site for Sweden’s geological repository in 2009, and with high school students from Östhammar Vattenfallsgymnasiet, who were invited to share their views. Municipality of Östhammar and Swedish Nuclear Fuel and Waste Management Company (SKB) representatives also provided insights into how they have been engaging with local stakeholders through the siting and construction processes for the repository.



Kristen Holmes, a public affairs specialist, and Brian Zimmerman, the site manager at the Fernald Preserve in Ohio, represented the DOE Office of Legacy Management at the forum.

“Some key impressions I gained from the workshop are that the people involved in Sweden have persistence, as this process is taking a long time, and they have the financing necessary for the repository,” Holmes said. “More importantly, their municipality holds open meetings with SKB, the public, and local businesses to take into account everyone’s opinions.

“People care about what is best for the municipality and there is voluntarism in Östhammar. There is an openness and transparency in the regular public meeting process, as well as cooperation between local municipalities.”

A key part of the discussion highlighted the importance of applying the good practices and lessons learned over the decades in building safe, secure, and sustainable energy systems to address societal needs now and in the future. The need for early and proactive engagement and “cradle-to-grave” planning starting early in decommissioning was recognized as a mechanism to “get ahead of the curve” in terms of radioactive waste management, with consideration of recycling and reuse to minimize waste.

Shared experience during the workshop will aid in the establishment of international good practice on stakeholder involvement relating to deep geological repositories for nuclear spent fuel and radioactive waste in Sweden and beyond. ■

Some information in this article provided courtesy of the Nuclear Energy Agency.

Congressional Black Caucus Braintrust Addresses Issues at Legislative Conference

Panel focused on opportunities and benefits of solar power to Black communities

The Congressional Black Caucus Foundation Annual Environmental Justice (EJ) Braintrust was held at the Walter E. Washington Convention Center in Washington, D.C., during the 53rd Annual Legislative Conference titled “From Vision to Victory: Amplifying Black Voices.”

The conference identifies environmental issues and recommends strategies that help policymakers develop forward-thinking, comprehensive environmental policy that recognizes and fosters the unique relationship between environmental protection, human health, EJ, and economic development.

EJ Braintrust Chair and U.S. House Representative James E. Clyburn (D-SC) hosted a member session Sept. 13, 2024, called “Solar Justice: Bridging the Energy Divide in Black Communities.”

Solar Energy Industries Association Senior Director of Congressional Affairs Charles Bolden moderated the panel. Panelists included:

- U.S. Environmental Protection Agency Former Senior Advisor Jahi Wise.
- Volt Energy Founder and Chief Executive Officer Gilbert Campbell.
- Edison Electric Institute Vice President of Government Relations Eric Grey.
- D.C. Public Service Commission Chairman Emile C. Thompson.
- South Carolina Office of Resilience Chief Resilience Officer Ben Duncan.

The panel conversation focused on pathways for Black communities to embrace the economic opportunity and environmental benefits of federal resources dedicated to solar deployment and development. ■



LM, EM Participate in International Forum in Fukushima, Japan

Local community focuses on best practices and lessons learned

Carmelo Melendez, director of the U.S. Department of Energy (DOE) Office of Legacy Management (LM), joined DOE Office of Environmental Management (EM) leaders at the eighth International Forum on the Decommissioning of the Fukushima Daiichi Nuclear Power Station in August in Japan. The forum provided Melendez and accompanying staff the opportunity to engage with nuclear cleanup experts from Japan and other countries.

“LM was honored to have been invited to attend by the Nuclear Damage Compensation and Decommissioning Facilitation Corporation,” said Director Melendez. “The forum provided a great opportunity for LM and our colleagues with the Office of Environmental Management to meet with peers and discuss best practices, lessons learned, challenges, and solutions.”

As forum host, the Nuclear Damage Compensation and Decommissioning Facilitation Corporation (NDF) welcomed 632 attendees — 287 of whom were from Fukushima Prefecture — and provided an opportunity for the international community to learn about the latest progress of the Fukushima Daiichi Nuclear Power Station cleanup. The U.S. and other countries also shared technical and communication best practices and lessons learned during decommissioning and remediation of nuclear legacy sites.



On Aug. 26, LM Director Carmelo Melendez provided remarks at the 8th International Forum on the Decommissioning of the Fukushima Daiichi Nuclear Power Station. LM was honored to have been invited to attend by the Nuclear Damage Compensation and Decommissioning Facilitation. The forum provided a great opportunity for LM and our colleagues with the Office of Environmental Management to meet with peers and discuss best practices, lessons learned, challenges, and solutions.

On the first day, Japanese and international government and industry leaders engaged with community members in a panel discussion focused on the impact of the Fukushima Daiichi NPS decommissioning on the local community. The discussion provided both information on the process and space for a robust dialogue, where professionals and participants shared ideas, hopes, and visions for the future.

On the second day, technical experts discussed ongoing progress and the upcoming full-fledged debris retrieval process at the Fukushima Daiichi Nuclear Power Station and shared stakeholder engagement lessons learned and best practices. Director Melendez provided remarks on LM’s experience with long-term stewardship in the United States.

“Collaboration between our countries helps us navigate remaining cleanup challenges, including all aspects of decommissioning nuclear facilities,” EM Principal Deputy Assistant Secretary Jeff Avery said. “It helps us achieve our respective missions by enabling the sharing of best practices, allowing greater leverage

of science resources, and providing opportunities to innovate.”

EM and Japanese officials have been working together to address the Fukushima cleanup for more than a decade. DOE offices have conducted technical workshops, welcomed Japan government officials and their technical organizations to DOE sites, and supported key stakeholder engagement events, like this year’s forum. LM’s participation this year expanded the U.S. perspective to span from cleanup to long-term surveillance and monitoring.

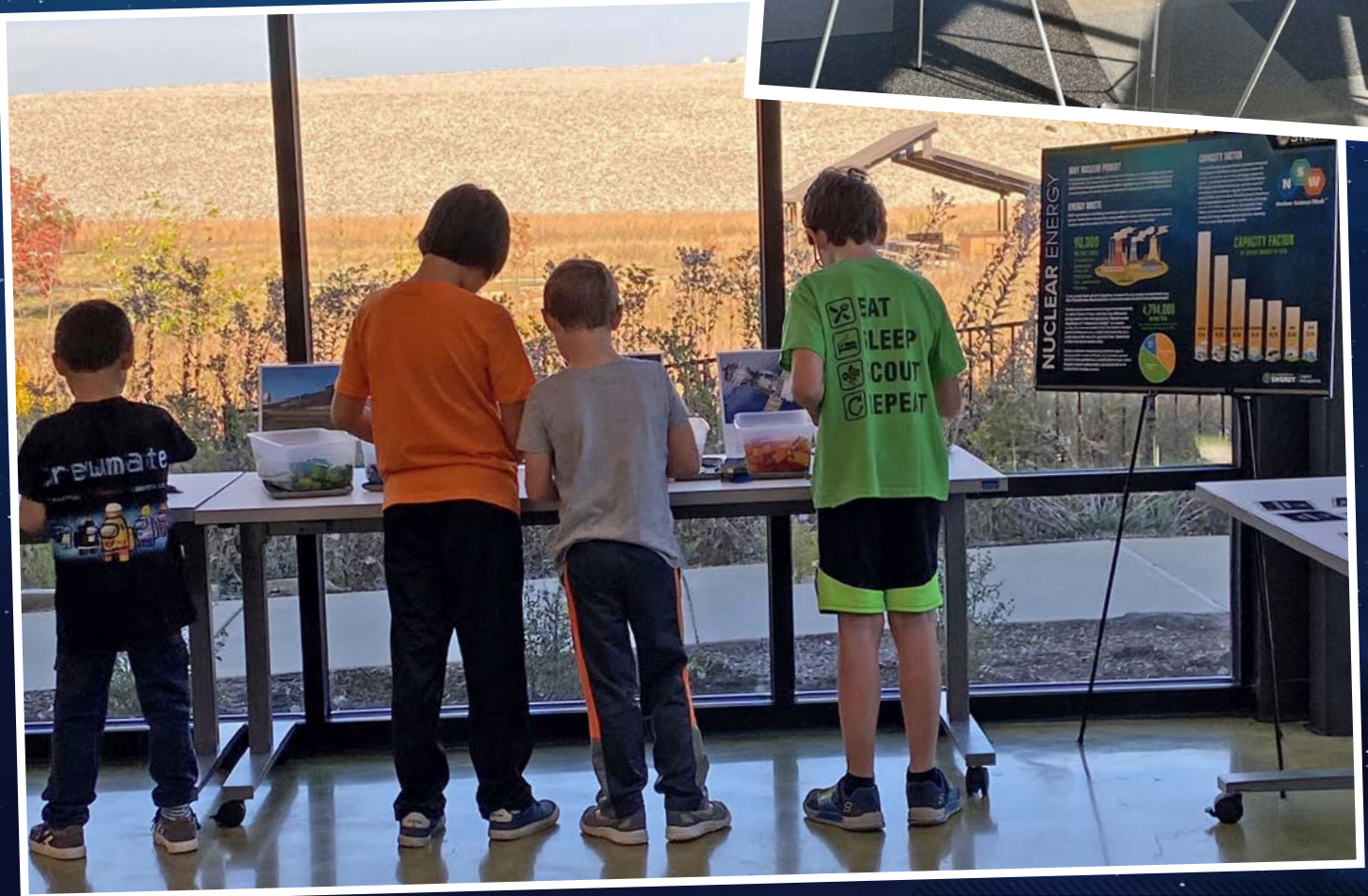
“It is truly valuable for us if the DOE and the NDF can foster a good relationship in the field of long-term stewardship programs,” NDF President Hajimu Yamana wrote to Director Melendez after the event. “We will continue our long journey to decommission and dismantle Fukushima Daiichi NPS towards the eventual cleaning-up of the site, and of course we will keep listening directly to the local community’s voices to achieve the NDF’s mission.” ■

Note: Some information in this article was previously published by the DOE Office of Environmental Management.



Nuclear Science Week™

Staff at LM's three interpretive centers welcomed members of the public to celebrate Nuclear Science Week Oct. 21-25. LM is proud to help safely manage America's nuclear legacy through the use of science and technology, protecting human health and the environment. Staff at the Weldon Spring Site Interpretive Center in St. Charles, Missouri; the Fernald Preserve Visitors Center near Hamilton, Ohio; and the Atomic Legacy Cabin in Grand Junction, Colorado, guided visitors through temporary exhibits about nuclear energy and technology.





A Missouri Department of Conservation employee shows young visitors how to net monarchs for the tagging station.



Monarch Madness Event Returns

LM's annual butterfly festival brought more

More than 400 visitors gathered for the annual Monarch Madness event at the Office of Legacy Management's (LM) Weldon Spring Site Interpretive Center in St. Charles County, Missouri, Sept. 14. The family-friendly festival was organized by the Missouri Pollinator Network, the Missouri Department of Conservation, Missouri Master Naturalists, and several other volunteers.

The event is scheduled every year during the height of the monarch butterfly migration and is heavily attended by families across St. Louis. The festival brings awareness to the declining monarch population, showcases the beneficial reuse of the Weldon Spring Site, and inspires communities to act in supporting healthier pollinator habitats.

Festival attendees had the opportunity to participate in hands-on educational activities and crafts, visit local craft vendors, and listen to a range of guest speakers.

"We are always excited to be able to host this amazing event. It provides visitors the opportunity to see what they can do to support pollinators like this species and how they play such a crucial role in our environment," said LM Site Manager Rebecca Roberts.

"Monarch Madness was created to educate and inspire those in the community to embrace all kinds of pollinators in hopes of helping protect our world," said Monarch Madness 2024 Event Lead Nicole Snyder. "Pollinators are vital to humans' well-being, not only in the food we eat, but in the landscapes we enjoy and the air we breathe. This event will hopefully give people a better understanding as to their importance in all these things."

Guest speakers included experts from the Missouri State Parks, the Audubon Society, and the Ameren Electric Power Research Institute and Certified Crop Advisor



Monarch Madness

Return to the Weldon Spring Site

More than 400 visitors to Missouri site Sept. 14

Program. Topics of focus were “All About Bees,” “Birds Need Pollinators Too,” and “Power of Pollinators.”

After catching a presentation inside one of the classrooms, visitors could step into the exhibit hall and learn about the site’s history and remediation through one of the scheduled tours from interpretive center staff. The 4,500-square-foot space allowed interested guests the opportunity to immerse themselves in Weldon Spring’s story. From World War II to the Cold War and beyond, the exhibit hall depicts the site through historical objects, photos and video, and interactive features.

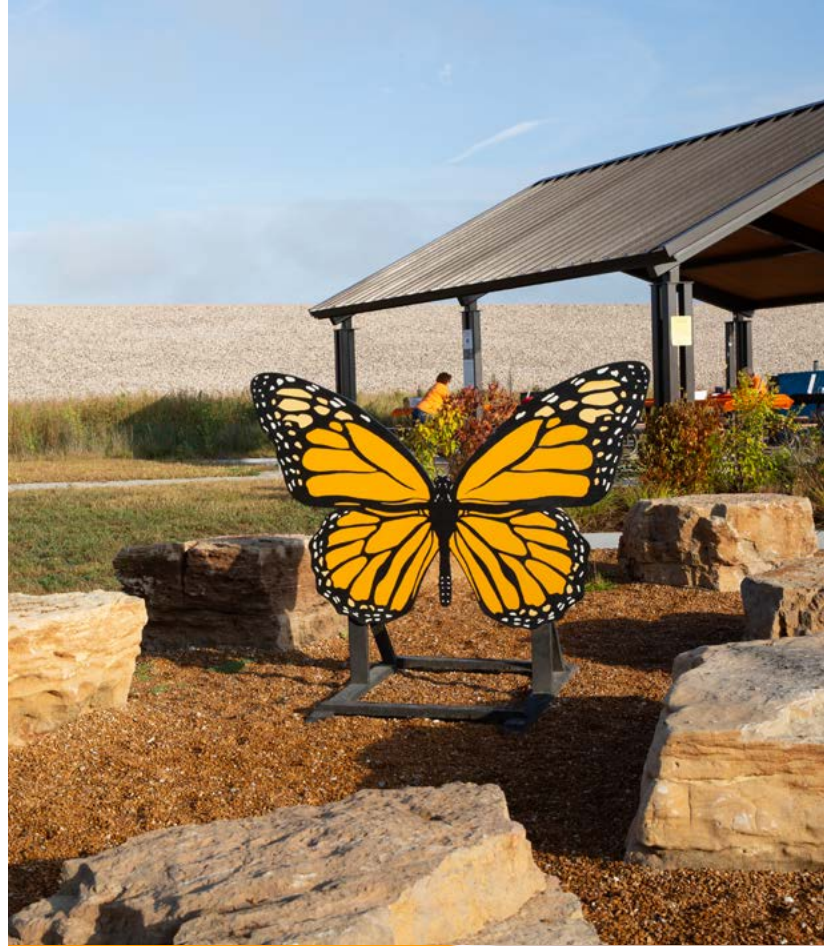
“The exhibit hall is a great way to showcase some of the beneficial reuse at the site and provide the local community with valuable information about the site’s cleanup and its long-term stewardship,” Roberts said.

Outside the interpretive center, attendees could hike the 75-foot-high disposal cell or walk through the site’s Howell Prairie. The 150-acre area is a key piece of the monarch’s migration pathway.

“The Howell prairie contains 80 species of native prairie grasses and wildflowers, which serves as an ideal habitat for wildlife and pollinators,” Roberts said. “The prairie is a crucial piece of the beneficial reuse done at the site and is enjoyed by visitors year-round.”

In addition to the featured events and activities, one of the most unique parts of the festival was the monarch tagging station set up by the Missouri Department of Conservation. Visitors were able to net butterflies and watch as workers tagged these important species so their migration patterns could continue to be studied.

“We are so happy to see how successful this event has been, and we look forward to having more events like these in the future,” Roberts said. ■



Visitors learn how to make butterfly rings during the 2024 Monarch Madness event.



LM Partners with BCI to Complete Bat Survey at Bluewater Site

Earlier this year, partners collaborated on biological survey of potential habitat in New Mexico

In 2024, the Office of Legacy Management (LM), along with Bat Conservation International (BCI), completed an assessment of surface and underground areas to determine the presence of bat habitat and bat species at LM's Bluewater Disposal Site in New Mexico.

Understanding species composition is a crucial part of LM's work for safeguarding the environment and promoting biodiversity. Bats and their ecosystems face threats from forest fires, droughts, and diseases such as white-nose syndrome, which is why LM teamed up with BCI in 2020 to protect these important pollinators.

BCI, founded in 1982, has grown into a globally recognized conservation organization dedicated to ending bat extinctions. Over the past four years, BCI has assisted LM with several sites, including abandoned mine sites in LM's Defense-Related Uranium Mines (DRUM) program. This year, BCI surveyed areas at LM's Bluewater site to identify potential bat habitat, determine the presence of specific species, and outline next steps for LM to further support these pollinators on-site.



Townsend's big-eared bat. Photo courtesy of BCI.

BCI surveyed a small cave on the property and other landscape features such as basalt lava tubes, sandstone rock outcrops, blister caves, and dead trees. During the assessment, BCI found guano in basalt deposits and collected samples. Two samples showed the presence of Townsend's big-eared bat (*Corynorhinus townsendii*) and long-eared myotis (*Myotis evotis*). BCI also collected many more guano samples from a blister cave, hoping to rule out the presence of a fungus that leads to white-nose syndrome in bats — a fatal disease specific to our fuzzy flying friends.

All samples analyzed for white-nose syndrome were negative, and impacts to bats at the Bluewater site are unlikely due to the environmental conditions and marginal habitat for winter-roosting bats.

"Due to the physical aspects of the cave, the bats are relatively exposed to the outside weather and predators. The cooling cracks, which are used for roosting, are not deep enough to provide protection from weather in the winter and other potential predators," said LM Beneficial Reuse Manager Diana Kamenel Trettin.

"The good news is that the bats that do use Bluewater for roosting are well protected from the public and other threats that occur on publicly accessible lands," Kamenel Trettin said.

With the surrounding landscape changes around the Bluewater site and the threat of climate change, bats could potentially use this area as a refuge in the future.

"BCI provided us with a lot of great recommendations on how to support bat foraging habitat and water resources at the site," said LM Site Manager Nicole Olin. "These include focusing on ways to increase food and water supplies at the site. This would not only help bats that roost at Bluewater, but provide further support for surrounding wildlife."

"We are going to take BCI's recommendations into consideration, and we have already installed a wildlife water drinker to support these crucial pollinators," Kamenel Trettin added. ■



Though almost imperceptible, several pellets of guano were found in a small cluster on this piece of metal mesh. They were collected for genetic sampling. BCI photo by Myriam Bishop.



In Bluewater Cave, BCI Subterranean Specialist Kathleen Slocum thoroughly inspects every available crack to look for roosting bats. BCI photo by Myriam Bishop.



LM and USACE Conduct 9th Annual FUSRAP Joint Meeting

Meeting strengthens LM and USACE overall collaboration and planning for upcoming FUSRAP site transitions

On Oct. 23-24, members of the Formerly Utilized Sites Remedial Action Program (FUSRAP) held their ninth annual joint meeting at the Joe L. Evans Federal Building in Oak Ridge, Tennessee. Under FUSRAP, the U.S. Army Corps of Engineers (USACE) transfers sites to the U.S. Department of Energy (DOE) Office of Legacy Management (LM) for long-term stewardship after completing cleanup.

The annual meeting provided the two agencies an opportunity to review the program's accomplishments, share updates, and identify strategies for future collaboration. This year the meeting was also an opportunity to mark the 50th anniversary of FUSRAP and reflect on each agency's contributions to the program's success.

"FUSRAP is a dynamic and evolving program. These meetings are extremely valuable for our teams

to get together and assess what has worked well for us in the past year, plus streamline processes between our organizations as USACE continues to transfer sites to us," LM Environmental Team Leader Cliff Carpenter said. "The teamwork and collaboration between USACE and LM are a hallmark of the long-term success of FUSRAP and our commitment to our stakeholders and communities."

The annual meeting brought together more than 50 LM and USACE teammates who support FUSRAP projects, with teammates traveling in from across the country to engage face-to-face with their project counterparts and program leadership.

"For more than two decades we have been working together with LM to advance our efforts under FUSRAP to protect the health and well-being of communities and the environment," said Nicki



Fatherly, USACE FUSRAP National Program Manager. "In addition to our ongoing activities at 20 active FUSRAP sites, USACE has closed out and transferred 12 sites back to LM for long-term stewardship since we entered the program in 1997, with more to come. Our enduring partnership has enabled us to maintain this momentum, and together we will bring this program to completion and provide direct benefits to communities across the country."

During her presentation, Fatherly updated attendees on USACE's national and regional leadership changes during the past year, projects that are close to transfer, and expectations for upcoming



LM and USACE FUSRAP teammates gather outside the K-25 History Center in Oak Ridge, Tennessee.

budget. She also provided an instructive overview of USACE's Headquarters, division leadership, management organizational structures, and the geographic boundary differences between Military and Civil Works Directorate environmental program responsibilities.

To mark the 50th year of FUSRAP, LM Program Analyst Padraic Benson discussed the creation and evolution of the program. FUSRAP was established by the U.S. Atomic Energy Commission (AEC) in 1974 to identify sites that were formerly utilized by the Manhattan Project and AEC and determine if they had residual radiological contamination requiring remediation.

When DOE was established in 1977, responsibility for FUSRAP transferred to the new cabinet-level agency. USACE joined FUSRAP in 1997, after Congress transferred administration and execution of FUSRAP cleanups from DOE to USACE. During the last five decades, more than 600 sites have been reviewed for FUSRAP cleanup eligibility. There are currently 35 completed FUSRAP sites under LM's long-term stewardship and 20 active sites being remediated by USACE for a total of 55 sites.

LM FUSRAP Program Manager Ken Kreie led a discussion of the successful transition and lessons learned from the recent transfer of the Tonawanda, New York, Landfill Site, which became LM's 103rd long-term stewardship site. Four more FUSRAP sites are scheduled to transfer to LM over the next five years.

During the two-day event, meeting participants also toured the East Tennessee Technology Park (ETTP) in Oak Ridge. The group visited the K-25 History Center, which tells the story of a massive gaseous

diffusion plant that produced enriched uranium for the Manhattan Project and the Cold War weapons complex. The FUSRAP team also learned about the DOE Office of Environmental Management's cleanup of ETTP, which included demolishing more than 500 structures and addressing major areas of soil contamination.

"2024 was another year of tremendous growth and progress for USACE and LM within FUSRAP," said Kreie. "This year we saw the successful transfer of the Tonawanda, New York, Landfill

Site — another milestone for the program. These moments aren't just a mark of success of the collaboration of our organizations, but also the work we do with state and federal agencies, local governments, and the communities we serve across the country."

LM long-term stewardship responsibilities for FUSRAP sites include managing site-related records and responding to stakeholder inquiries. Many FUSRAP sites have been released for unrestricted or industrial reuse and most are privately owned. ■



USACE FUSRAP National Program Manager Nicki Fatherly welcomes both groups at the start of the first day of meetings.



Left to right: USACE FUSRAP National Program Manager Nicki Fatherly, USACE National FUSRAP Account Manager Natalie Watson, USACE Deputy FUSRAP National Program Manager George Bock, LM Environmental Team Leader Cliff Carpenter, and LM FUSRAP Program Manager Ken Kreie mark the program's 50th anniversary.

LM Showcases STEM at AISES Conference

More than 1,000 attend college, career fair in San Antonio

Staff from the U.S. Department of Energy (DOE) Office of Legacy Management (LM) attended the 2024 American Indian Science and Engineering Society (AISES) National Conference Oct. 2-4 in San Antonio, Texas.

The AISES National Conference is the leading conference for Indigenous high school and college students and Native American educational professionals from throughout the United States and Canada. Science, technology, engineering, and mathematics (STEM) are highlights of the conference, which includes a variety of exhibitors with representatives from Tribal nations, Tribal enterprises, Indigenous-owned businesses, government agencies, nonprofits, and educational institutions. AISES also emphasizes Native American culture, and it provides students with skills, tools, and resources for various careers.

The three-day event with special activities attracted more than 1,000 attendees this year and included at least 200 exhibits and more than 100 sessions. AISES also features a market where native artisans sell Native American jewelry and regalia.

LM Site Managers Angelita Denny and Joni Tallbull, LM Public Affairs Specialist Gwen Smalls, LM Program Communication Specialist Shawn Montgomery, and LM Support Partners participated in this year's conference, which included a STEM Activity Day and college and career fair.

The interactive STEM event included hands-on activities that focused on Navajo ecology and the role it plays on the Navajo Nation sites. Students were able to engage with plants and other Navajo cultural items that are used in traditional lives of Navajo people. There was wool that can be dyed and made into a rug, moccasins made from buckskin,

Photo top: LM Support Partners (LMSP) Navajo Nation Public Affairs Specialist Lillie Lane demonstrates the Navajo ecology model to an attendee during the AISES National Conference STEM Activity Day.

Photo left: Left to right: LM Site Manager Joni Tallbull and LMSP Navajo Nation Public Affairs Specialist Lillie Lane talk to students during the college and career fair about what LM and LMSP scientists do in the field.





Attendees during the career and college fair had fun posting pins onto the map to show where they are from.

coming to relax and bead together while talking about school, the AISES event, and their beadwork, as well as cultural topics. I hope that the students left our display feeling grounded and confident going into the AISES conference.”

The college and career fair featured educational institutions, prominent federal and Tribal agencies, and brand name companies who shared opportunities for higher education and careers. Approximately 300 high school and college students attended the event.

and Navajo tea for students to sample. Students also made cedar bead bracelets, which was part of the STEM demonstration. Navajos believe cedar beads are protective and use them to adorn the young.

“The students had a positive reaction to the Navajo ecology model, and I think that they appreciated the display and hands-on activities that were inspired by cultural traditions,” said Tallbull. “It was great to hear the conversations that came about and to see the students

“I felt the STEM event was an overwhelming success. The activities this year were unique and interactive. I could tell the students really enjoyed it and they got to take something with them afterwards,” said Smalls.

DOE has sponsored AISES conferences for years. AISES includes many more events for students. All these events support students with information for their education and careers. ■



Left to right: LMSP Navajo Nation Public Affairs Specialist Lillie Lane, LMSP Public Affairs Tribal Specialist Shine Salt, LM Public Affairs Specialist Gwen Smalls, and LMSP Outreach Coordinator Kayla Bia set up at the AISES National Conference Career Day.



High school students gather at LM's table to create their own beaded bracelets and sample Navajo tea during STEM Activity Day.



Students work in project teams to engineer a solution to prevent stream erosion.



Observing the groundwater model helps students understand groundwater contamination and movement of contaminants.

LM Joins Students at Camp Qungaayuġ to Teach Environmental Science and Stewardship

Hands-on exercises give insights into issues faced by Alaskan communities

Office of Legacy Management (LM) and LM Support Partners (LMSP) staff were part of the many activities at Camp Qungaayuġ in Unalaska, Alaska, from July 28 to Aug. 3. Camp Director Anfesia Tutiakoff invited STEM with LM to teach children about environmental stewardship and careers in environmental science.

Camp Qungaayuġ brings together Alaska Native fourth through 12th grade students to learn cultural and subsistence traditions of the Qawalangin Tribe of Unalaska. LM and LMSP provided programs about groundwater pollution and methods of erosion control used by environmental engineers.

Presenters first demonstrated a groundwater model that introduced dye into the water so students could observe as the pollutant (the dye) moved through the groundwater. Students could extract water from wells, determine which wells were safe and which wells were unsafe, and watch as pollution emerged in lakes and rivers.

The erosion program next gave students an opportunity to work as a team and develop solutions for stream erosion. They had to work within a budget and manage a project.

Both programs helped students learn about real world problems faced by many communities and connected the work that LM and LMSP do to protect human health and the environment. In addition to sharing the environmental stewardship activities, LM and LMSP were able to participate in activities that enhanced cultural education and the relationship between LM and the Unanga-ġ.

When asked why this camp is important for the children of the Qawalangin Tribe, Tutiakoff said, "Camp gives us the opportunity to share our culture with the community of Unalaska. For our Tribal members, it's an opportunity for them to participate in a lot of culture and traditions." ■



Environmental Justice and Health Care Go Hand-in-Hand

Fall 2024 Culturally Sensitive Care National Conference advances health equity

On Oct. 17-18, 2024, Dr. Latecia Abraham-Hilaire, conference chair, conducted the fall 2024 Culturally Sensitive Care National Conference, sponsored by the U.S. Department of Energy's Environmental Justice program, at the Ballantyne Hotel in Charlotte, North Carolina. The 100 conference participants were health professionals, educators, students, community leaders, and policymakers.

The national conference educates participants in culturally sensitive care approaches using Culturally and Linguistically Appropriate Services, or CLAS, Standards published by the U.S. Department of Health and Human Services Office of Minority Health. National CLAS Standards advance health equity, improve quality, and help eliminate health care disparities by establishing a blueprint for health and health care organizations.

This year's conference topics addressed minority populations' and underserved communities' health care needs through policy and advocacy updates from local, state, and nationally renowned guest speakers. Sessions included discussions about health disparities, nutrition and physical



Attendees of the Culturally Sensitive Care National Conference.

activity, racial and ethnic factors, social determinants of health, environmental justice, communities in schools, and vulnerable and underserved populations. Presenters delivered course content through expert lectures, panels, and discussion groups.

Dr. Thaddeus John Bell, private practice physician and Closing the Gap in Health Care founder, was a keynote speaker. Bell presented about a variety of health care topics, including prostate cancer. Dr. Thomas Ellison also delivered a keynote address, emphasizing the

importance of the Affordable Care Act (or Obamacare), disparities in the Stroke Belt, advocacy, voting, and bias.

Conference attendees participated in moderated panels and discussions about CLAS Standards, emerging research scholars, environmental justice and health, autism, burned survivors care, breast cancer, Alzheimer's disease, HIV and AIDS, prostate cancer, artificial intelligence, mental health, social determinants of health, home ownership, small businesses, and voting. ■

For more information about the conference, visit:

<https://pico.library.musc.edu/culturallysensitivecarenationalconferencecharlotte>



TREAT Workshop in South Carolina Strengthens Relationships Through Collaboration

Event supports teaching radiation and encourages future workforce

Melinda Downing, U.S. Department of Energy (DOE) Environmental Justice program manager, participated in the Oct. 16-18 Teaching Radiation, Energy, and Technology (TREAT) workshop at the Allendale County Courthouse, J.W. Wall Jr. Council Chambers, in Allendale, South Carolina.

Savannah State University (SSU) Project Director Kenneth Sajwan gave opening remarks and introduced guests: the Honorable Lonnie Hosey, South Carolina state representative; Michael Budney, Savannah River Site (SRS) manager; and the Honorable Lessie B. Price, District 2 Aiken, South Carolina, city council member and Amentum Services Government Affairs and Community Relations manager.

DOE's Environmental Justice program sponsors TREAT workshops through a grant and in partnership with SSU and SRS. Sajwan works directly with SRS, community

leaders, and community members to build relationships and coordinate TREAT workshops, which educate K-12 teachers and Central Savannah River Area community leaders. Fifty participants attended the October workshop.

Workshop participants learn about radiation, radiation sources, radioactive waste management, radiation's effects on environmental health, and environmental radiation exposures' negative effects on people. Once equipped with this vital knowledge, teachers can educate their students about radiation and encourage them to seek careers in engineering and nuclear fields.

Experts from DOE, SRS, Savannah River Nuclear Solutions, U.S. Environmental Protection Agency (EPA), South Carolina Department of Health and Environmental Control, Savannah River Site Citizens Advisory Board, and the SRS Community Reuse Organization

DOE Savannah River Operations Office Deputy Manager Edwin Deshong, left; DOE Environmental Justice Program Manager Melinda Downing, second row, third from left; and TREAT participants.



*Environmental Justice 101:
“Can’t Get Ready — Got to Be Ready.”*

— REV. ALEXANDER POPE

gathered to teach, answer questions, and discuss career opportunities.

DOE Savannah River Operations Office Deputy Manager Edwin Deshong gave a site overview. Jamellia Reid and Skip Johnson of Savannah River Nuclear Solutions Radiological Control led the group during a Radiation 101 overview and demonstration. Jon Richards, EPA Region 4 radiation project manager, led the group in a survival game, and Rev. Alexander Pope wrapped up the conference speaking on “Environmental Justice 101: “Can’t Get Ready — Got to Be Ready.”

Local teachers and community leaders value TREAT workshops and recognize them as model environmental justice programs for communities around federal facilities. Workshop collaboration strengthens public involvement in negatively affected communities. ■



Alexander Pope Jr. addresses Allendale teachers and community leaders at October’s TREAT Workshop.



A virtual reality demonstration occurs at the TREAT Workshop.



Tuba City Site Presented with EPA Excellence Award

LM honored with Site Reuse Award for photovoltaic system project at disposal site in Arizona

The U.S. Environmental Protection Agency (EPA) presented the Office of Legacy Management (LM) with the 2024 Federal Facility Excellence in Site Reuse Award for LM's Tuba City, Arizona, Disposal Site Sept. 19. The ceremony was held in person at the Tuba City Chapter House and was livestreamed.

The awards highlight accomplishments of government agencies, partners, and communities in restoring and reusing contaminated lands.

Groundwater remediation is ongoing and powered by the solar photovoltaic system, a renewable energy source. The operation uses about 50 kilowatts of solar electricity for remediation processes. The additional 285 kilowatts the solar array generates is contributed to the Arizona Public Service electrical grid, which connects to the community and the U.S. electrical grid.

During the ceremony, LM Director of Site Operations Jay Glascock thanked EPA for honoring the work done at Tuba City.

"Beneficial reuse is at the heart of LM's mission and those of our partner organizations. It represents an opportunity for revitalization and growth, converting remediated sites to commercial, residential, or recreational spaces," Glascock said. "Our Tuba City Tribal partners and community stakeholders are critical to our success."

"What's incredible to me is the total energy that this system has been able to produce in just a year gave enough power for 600 homes," Glascock added. "It's great to be able to give back to the community and the grid. We are going to be able to do that for a lot of years to come."

The Tuba City site is leased from the Navajo Nation and located close to the Hopi Reservation. A uranium mill operated there from 1956 to 1966 before DOE remediated the site under the Uranium Mill Tailings



Stephen Etsitty, executive director of the Navajo Nation Environmental Protection Agency, addresses attendees at the ceremony Sept. 19 in Tuba City, Arizona.

EPA awarded the Tuba City site with the 2024 award in the Superfund Non-National Priorities List category. The award is given to recognize exceptional work of remediating sites for beneficial reuse. The Tuba City site was awarded for the solar photovoltaic system and ongoing partnership and community engagement.

“ *What's incredible to me is the total energy that this system has been able to produce in just a year gave enough power for 600 homes.*

— JAY GLASCOCK

”

The solar photovoltaic system at the disposal cell in Tuba City, Arizona.





Hopi Moenkopi Village community member Leonard Selestewa speaks to attendees at the ceremony Sept. 19 in Tuba City, Arizona.

Remedial Action Project in 1990. Since its transfer, LM has been responsible for long-term stewardship activities, including inspections, record-keeping, and maintenance as needed. LM also ensures that the site's groundwater remains safe for human health and the environment.

U.S. Department of Energy Environmental Justice Program Manager Melinda Downing expressed her gratitude to all partners who worked to make this project a success and emphasized the importance of the site reuse program.

"The site reuse program clearly demonstrates what environmental justice means and who should receive the benefit. This award is a true testament for what can be achieved when there are committed partners, ongoing

communication, and having top agency management like LM Director Carmelo Melendez meeting with Hopi leadership and other partners," Downing said. "The result led to creating jobs, environmental justice, and environmental protection of human health and the environment."

LM Site Manager Bill Frazier also expressed his appreciation for the hard work of many LM employees in support of the Tuba City project.

"It's a great honor, and we are extremely happy and thrilled to accept this award and it gives us momentum," Frazier said. "We have a lot of work still to do and things like this give us a positive feeling to keep moving forward." ■





LM Engineer Wins FEMP 2024 FEDS Spotlight Award

Office of Legacy Management Engineer Lisa Saurborn recognized as 2024 FEDS Spotlight Honoree by Federal Energy Management Program

Engineer Lisa Saurborn of the U.S. Department of Energy Office of Legacy Management (LM) has been selected as a 2024 FEDS Spotlight Honoree in the Professional Achievement Award category. Saurborn was honored at a ceremony Oct. 17 in Washington, D.C.

Established in 2017, the FEDS Spotlight Award recognizes hard-working people who implement exceptionally resilient, efficient, and secure energy and water management practices and projects. Saurborn was selected for her development of several high-profile projects across LM.

Saurborn's peers nominated her for both her leadership and her continuation of LM's mission to protect the environment through her help designing the sustainable building repair of the LM Field Support Center in Grand Junction, Colorado.

Saurborn was also a sustainable-buildings advocate on the sustainability team at LM. She was instrumental in securing LM's first AFFECT grant for a Topic Area 1 feasibility study targeting deep energy retrofits, building automation systems, geothermal heat pumps, electrification, on-site renewable energy, LED lighting,

"I'm truly honored to be recognized for this award. I'm thankful to have the support of an amazing team."

—LISA SAURBORN

and water conservation. The project also includes the installation of electric vehicle stations, electric heat pumps, and solar panels.

Saurborn expressed her gratitude on winning the award and for the help she gets from her colleagues.

"I'm truly honored to be recognized for this award. I'm thankful to have the support of an amazing team," Saurborn said. "The people, LM, and its contractors are amazing. They are highly intelligent, hard-working, and passionate about their work. It's a joy to work with such a great group of professionals."

Saurborn, who joined the LM Support Partners (LMSP) in 2019, started working in facility management at a



From left: Anna Siefken, Federal Energy Management Program deputy director; Ingrid Kolb, DOE chief sustainability officer and director of Office of Management; LM Engineer Lisa Saurborn; LM Director Carmelo Melendez; Mary Sotos, director of the Federal Energy Management Program; and Terry Reid, FEDS Spotlight Program manager.



coal power plant after obtaining her degree from North Carolina State University with a Bachelor of Science in mechanical engineering.

When asked how she got started in the field, Saurborn expressed a great admiration for it.

“I’ve always been interested in how things work,” Saurborn said. “In college, I was introduced to electrical power generation and loved it — yes, I like thermodynamics.”

Saurborn’s work at the coal power plant taught her how equipment, controls, and systems operated together and the maintenance and care needed to keep everything operating at peak performance. Afterwards, she moved her skills to West Virginia University.

“I took my maintenance knowledge to WVU and was able to focus on facility improvements funded through energy savings,” Saurborn said. “Once I came to LMSP, I focused on asset management and facility management. As with most of us, my skills and interest have grown throughout my career, and I consider myself fortunate to be a part of LM.”

After some time with LMSP, Saurborn transitioned to LM in May 2022 on the Asset Management Team. Since then, she has expanded her role into project management and energy management programs manager, where she provides facility and project management technical support within LM.

“I manage projects, apply for grants, research, and evaluate and recommend alternatives for LM to meet energy and sustainability goals and requirements,” Saurborn said.

Saurborn has also been integral in the early adoption of LM’s electrical fleet vehicles and charging station infrastructure to support field operations.

Saurborn’s hard work and dedication have also consistently been recognized by her colleagues.

“Among LM’ers, Lisa is a leader in executing our mission, whether it be looking for grant opportunities like AFFECT or leading high profile and critical projects,” LM Asset Manager Bud Sokolovich said. “She is well deserving of the FEMP 2024 Spotlight Professional Achievement Award.”

As for future endeavors within LM, Saurborn hopes to continue the development of LM’s project management and energy management programs.

“I’m excited to continue working on those programs and help them evolve and grow,” Saurborn said. “I look forward to taking those programs into maturity.” ■

Workshop and Information Exchange Builds Communication, Trust

LM and Alaskan communities come together to improve understanding

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) convened an Aleutian Region Environmental Justice Workshop and Information Exchange Oct. 8-9, 2024, at the Anchorage Marriott Downtown in Anchorage, Alaska.

The goal of bringing the Aleutian Tribes, village corporations, and community members together with representatives of LM was to improve understanding of LM’s mission and activities at the Amchitka, Alaska, Site; build relationships; and support environmental justice initiatives with the Aleutian communities. Information Exchange partners include the Aleut Regional Corporation, Ounalashka Corporation, the DOE Arctic Energy Office, and the DOE Environmental Justice program.

Objectives of the workshop included:

- Improve communication and trust between LM and Unanga.
- Give the Aleutian Tribes, village corporations, and community members a forum to communicate questions or concerns related to LM’s mission at the Amchitka site.
- Provide a forum for LM to share Amchitka site sampling and monitoring results.
- Listen to Aleutian Tribes, village corporations, and community members on opportunities to improve environmental justice in the Aleutian region.
- Provide an opportunity to discuss energy-related projects and the ambassador program.
- Finalize the charter for an environmental justice working group.

The following key topics were covered:

- LM and its overall mission, a general history of the Amchitka site, and LM’s long-term surveillance and maintenance responsibilities there.
- STEM with LM program.
- Arctic Energy Ambassador program and energy justice.
- Department of Energy Environmental Justice program and how it relates to the Aleutian region. ■



Summer 2024 Interns Contribute to DOE's Mission

The diverse projects interns worked on this summer are geared toward LM meeting its goals

This summer, the Department of Energy (DOE) Office of Legacy Management (LM) welcomed the greatest number of interns in LM history. The Educational Collaboration initiative, the Florida International University (FIU) Fellows' program, and the Mentorship for Environmental Scholars (MES) program embraced students from five geographically diverse schools and offered them a summer filled with opportunities to learn, sharpen skills, foster connections, and take steps toward their future STEM careers. As the interns worked alongside their mentors, they also spent the summer upholding numerous LM goals.

LM's primary mission is protecting human health and the environment. Through their work on various projects over the summer, the interns learned about the effort LM undertakes to meet this goal.

Interns Valeria Ocampo and Ethan Au, both based at the Legacy Management Field Support Center (LMFSC) in Grand Junction, Colorado, spent much of their time in the lab. "From eight in the morning until lunch, I am running water

through my columns," Ocampo said. "The experiments I run help me understand the amount of uranium concentration in water throughout time."

As the current FIU Fellow on-site with a background in biochemistry, Ocampo worked closely with Au and their mentor, Ray Johnson, to complete work that aided in both her and Johnson's studies. Ocampo's work focused on the use of the naturally occurring mineral hydroxyapatite in different temperatures and pH levels, with the goal of testing its effectiveness for removing uranium. At the end of the summer, Ocampo created a presentation and wrote a report on her findings.

Au spent the summer conducting his own study on uranium mobility under natural anoxic conditions and helping Ocampo with her projects. Au recently graduated from Colorado Mesa University with a degree in chemistry and noted that working on this team "aided in shining light into what professional science can translate to." He believes that learning different lab techniques laid the groundwork for

fulfilling his future goal of working in a laboratory.

The two MES interns located at the LMFSC, Mikayla Bia and Jasmine Engel, also worked diligently throughout the summer to produce a report and presentation on their findings. Bia said she "returned to Grand Junction because of the good atmosphere and learning opportunities it provided that are helping me decide my future career path."

While double majoring in environmental engineering and mathematics, Bia was referred through the Pre-College University last summer to work alongside the Defense-Related Uranium Mines team to create an ecological guide for the Navajo Nation. This summer, Bia expanded on that base and spent the summer traveling to various LM sites to catalog their ecological findings. "I was lucky that I was in good hands in regard to my mentors," Bia said, and mentioned that she is excited for the opportunity to continue to work with them next summer.

Engel, who studies environmental science at Florida Agricultural and



Legacy Management Support Partners, from left to right: AS&T Intern Hannah Przystup; Interpretive Center Manager Richie Ashcraft; FIU Fellow Valeria Ocampo; Atomic Legacy Cabin Intern Hailey Antill; Hydrogeologist Mike Morse; AS&T Intern Ethan Au; Senior Geochemist Ray Johnson; Hydrogeologist Erica Evans; and AS&T Educational Collaboration Initiative Lead Chris Jarchow.



AS&T Intern Kaitlin McKenna.



Mentorship for Environmental Scholars Intern Mikayla Bia.



Mentorship for Environmental Scholars Intern Jasmine Engel.

Mechanical University, conducted vegetative assessments at various LM sites. Alongside the work of her mentor, David Holbrook, she assessed revegetation techniques at the Grand Junction, Colorado, Disposal Site and compared them to the Rifle, Colorado, Disposal Site. Engel said the work she performed “felt like I was making an impact, because the plants will be here long term and I am contributing to long-term information.”

Another intern, Hannah Przystup, experienced a comprehensive and impactful summer. Utilizing her background in environmental science and mass communications, she crafted two distinct articles that highlighted both the efforts of her supervisors and the accomplishments of her fellow interns. Przystup split her time supporting a variety of different LM studies in the field and the lab, where she learned scientific techniques firsthand, and the office, writing about the efforts of those around her. Reflecting on her experience, Przystup said, “I had a well-rounded experience and was able to make connections in nearly every department that LM has. My time here highlights the broad scope of work that LM and LMSP accomplishes every day.”

Through their individual projects, these five interns contributed

significantly to DOE’s overarching mission of protecting human health and the environment. Their work exemplifies the agency’s commitment to fostering the next generation of scientists.

In contrast to the lab and field work, interns Kaitlin McKenna and Hailey Antill had a different summer experience. McKenna studies psychology with a minor in chemistry, while Antill studies history with a minor in women and gender studies. Both interns spent the summer preserving, protecting, and sharing records and information, LM’s second goal.

McKenna, having spent time conducting research in a chemistry lab, was intrigued by the idea of obtaining an internship in the science field. She was sent an internship position posting from a relative who works for LM Support Partners (LMSP) and McKenna, though feeling unqualified, applied for the position and received it. For the summer, McKenna spent her days with data collected from the Rocky Flats Site in Colorado related to per- and polyfluoroalkyl substances (PFAS) contamination in groundwater, surface water, seeping water, and marshes.

“I am looking for any patterns that exist amongst the data,” McKenna said, “looking for a connection

between two things, correlational studies, that affect the results of the concentration of PFAS.” McKenna will continue working part-time with LMSP as she goes to school to continue the mission of preserving data.

Antill’s project was, perhaps, the most unique out of all the interns’ work. Antill wrote a condition report for more than 200 artifacts stored in the Atomic Legacy Cabin’s basement. When Antill was not measuring and reporting on the condition of the artifacts, she assisted with educational programming. Alongside her mentor, Richie Ashcraft, Antill facilitated activities, led history tours, and traveled to several middle schools. Antill finished the condition reports in record time, and her work supported LM’s second goal to preserve and protect records.

DOE’s summer internship program not only advanced the personal interests of these interns, but also the broader mission of LM. Their time spent at LMFSC and the LM Operations Center in Westminster, Colorado, granted them the opportunity to find a sense of clarity of their future career paths and a deep appreciation for the mentorship and guidance they received from DOE’s finest scientists and scholars. ■



The Green Scorecard Warriors: Behind LM's Asset Management Team

LM surpasses 90% score for accuracy of data collection in annual validation

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) conducts annual real property asset data validations in accordance with DOE Order 430.1C, supporting the Facilities Information Management System (FIMS). FIMS is the corporate database for all DOE assets.

For fiscal year 2024, the asset data validation was conducted by DOE Headquarters, and LM received Green Scorecards across its assets. This Green Scorecard recognizes a 90% or greater accuracy on data collection and is the product of several people, teams, and activities that take place throughout the year within the LM and LM Support Partners (LMSP) FIMS team. Performing this annual validation provides DOE Headquarters and LM with valuable information regarding its assets, their conditions, and potential cost and liabilities which span the entire portfolio.

Bud Sokolovich, the supervisor of the Asset Management team with LM and a 19-year FIMS program veteran, recognizes the teamwork required under fast-paced deadlines and collaboration across most teams within LM.

"It's pretty intense if you're involved in it because the sites are constantly changing. They're evolving. Fences go down new roads, there's new paving, or a new visitors center is added to the site. This system captures all the assets," he said.

So, what does this annual validation actually mean? Starting in January, the FIMS team assembles data validation packages for its real property assets. Information in these packages include certain data fields that are required to manage and maintain these assets throughout the program. Data is collected through various sources, including condition assessment survey inspections conducted at the sites. Actual costs and

The disposal cell near Grand Junction, Colorado, is one of LM's real property assets.



projected costs for these assets is also included in these packages to be validated. These activities require heavy involvement from the LM site managers and LMSP site leads, as well as various functional groups, to verify the information or alert the FIMS team of any real property assets that may have been updated or inadvertently omitted at their sites.

The FIMS team fill in and validate more than 8,000 data fields annually to update the FIMS database. And what happens once the annual data validations are complete? The FIMS team begins planning for the next annual data validation.

“There are specific dates that are set up by Headquarters for when information needs to be put into the system,” Sokolovich said. “Then you have a certain amount of time to put that in, and they do that staggered throughout the year.”

Last year, the FIMS team had a particularly challenging and successful data validation cycle. During the COVID pandemic, the condition assessment survey inspections were hindered and delayed. The FIMS team spent the last couple years working tirelessly with the LM site

managers and LMSP site leads to perform these delayed inspections and to update the database with current information on the assets.

Ann Wei, director of Asset Management for LMSP, said this past year’s annual data validation involved a tremendous effort that required the support of various parties, including LM site managers, LMSP site leads, the LM and LMSP Asset Management team, and the LMSP Business Services team, particularly document management, cost estimating, project controls, and accounting.

“The FIMS team went above and beyond this year. Their dedication, collaboration, and attention to detail set a standard of excellence for our work moving forward,” Wei said.

The work effort and time invested into this year’s FIMS data validation offers a unique look at how a data-driven and collaborative integrated project team is successful. From working with the site leads to document management, the FIMS team gets unparalleled knowledge of how most offices within LM operate. ■





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