

## Plenary Sets the Stage

The Nuclear Regulatory Commissioner William Ostendorff, opened Monday's plenary session explaining that he and his team have travelled across the US to all of the nuclear power plants and the recurring theme of nuclear waste today is "tough choices." He assured the audience of his confidence that the US will do the "right thing and find an appropriate long-term repository." Today, three quarters of all spent fuel is stored in spent fuel pools where the waste was generated. As a result of the decision not to go forward with Yucca Mountain, challenges to the Nuclear Waste Management Fee are in the courts.

The Blue Ribbon Commission anticipates that in 2021 Pilot Storage locations will be identified, with larger Interim Storage Facilities being identified in 2025. A final storage location will be identified and in operation by 2048. Consent from host communities of a final storage location is critical.

The NRC is reviewing longer-term temporary storage at various sites, as well as a study that compares the pros and cons of pool versus dry cask storage. An Environmental Impact Statement and a revision to their Waste Confidence Decision is due within 24 months.

Dave McCauley, the Director of Uranium and Radioactive Waste for the Canadian Natural Resources Division, discussed the great strides they've made in Radioactive Waste Management. Canada boasts a number of "largest" in the world, including:

- sixth largest oil producer,
- third largest Natural Gas producer,
- second largest uranium production, and
- fourth largest hydroelectric and nuclear power generation.



Nuclear energy plays an important role in Canada including four power plants, 19 reactors in operation, and six research reactors. Canada's Federal Government has policy and regulatory authority on radioactive waste management activities, while the individual waste owners manage, fund and develop long-term storage solutions. A deep geological repository site has been selected for Low and Intermediate Waste and a public hearing is scheduled for 2013. Nuclear power is a critical part of Canada's ever evolving clean energy landscape.

EM Senior Policy Advisor David Huizenga shared that much progress has been made in the DOE complex, and an equal amount of challenges exist. Huizenga cited GAOs removal of EM from the High Risk Projects list as an example of progress by improved project management. However, four projects remain on the list, including: the Waste Treatment Plant and the River Corridor Projects at Hanford, the Salt Waste Processing Facility at Savannah

River and a project at Oak Ridge. Accomplishments include:

- WIPP continues to succeed in safely transporting waste and sending it deep into the ground for storage.
- At Idaho, the project has shaved \$440 million off of the baseline for onsite reactor disposal by partnering with regulatory agencies with "out of the box" thinking.
- Progress has been made at the WTP on the lab and balance of plant and the LAW Melter. EM HQ has convened a team to solve the highly complex issues dealing with the HLW and Pre-Treatment Facilities and is expected to make recommendations soon.

Huizenga wants to expand Technology Development activities at EM, but doesn't want to reduce the already strained cleanup funds, and said that EM must find a way to "work smarter and not harder."

## Hodes Award – Kennedy Discusses Lessons Learned in LLW Regulation



“The NRC Principles of Good Regulation - Independence, Openness, Clarity, Efficiency, and Reliability - define our culture at the NRC. The principles demand critical thinking, independence, engagement with others, listening, focus, communicating well and problem solving,” said Mr. James E. Kennedy, NRC Sr. Project Manager. “They make a difference not just for us at the NRC, but also for you - the generators and the public, who provide input to our work and often have to follow the rules we publish.”

Mr. Kennedy received the 2013 Richard S. Hodes, M.D. Honor Lecture Award yesterday in recognition of his extraordinary leadership and innovation in changing the focus of the NRC regulatory framework for the management of radioactive waste to an approach that is directly related to safety and is based on risk assessment and performance requirements. These changes to the NRC regulatory policy for waste management are expected to result in safer, more secure, transparent, and efficient NRC regulated management of waste in the United States.

“Jim is being recognized for his extraordinary leadership and innovative efforts at the NRC that have enhanced public safety and contributed to the efficient management of NRC regulated radioactive waste,” said Michael Mobley, Chairman of the Southeast Compact Commission, who presented the Award to Mr. Kennedy. “His contributions to the proposed Branch Technical Position on Concentration Averaging and Encapsulation, which allows for the increased disposal of sealed sources

that pose a national security threat, and provides guidance for disposal of low-activity waste, are especially noteworthy.”

Mr. Kennedy has held positions as a senior staff member and as a manager in the NRC LLRW program for over 20 years. In these roles, he has been the principal spokesperson for the LLRW program and the NRC on LLRW matters.

In addition, the Southeast Compact Commission selected EnergySolutions, the Utah Department of Environmental Quality, the Conference of Radiation Control Program Directors, and the U.S. Department of Energy Global Threat Reduction Initiative (GTRI) to receive an Honorable Mention in the 2013 Hodes Award program. This group of organizations is being recognized for their innovative, collaborative effort to develop a program for cost-effective disposal of certain sealed sources at the EnergySolutions disposal facility in Clive, Utah.

Ms. Meaghan Jennison of the GTRI at the National Nuclear Security Administration (NNSA) presented a paper on the efforts of this group immediately after Mr. Kennedy’s distinguished lecture. The disposal program is a unique effort by federal, state, private, and nonprofit entities to improve LLRW management in the United States by protecting public health and safety, as well as national security.

The Southeast Compact Commission for Low-Level Radioactive Waste Management established the Richard S. Hodes, M.D. Honor Lecture Award to honor the memory of Dr. Richard S. Hodes, who served as Chair of the Southeast Compact Commission from its inception in 1983 until his death in 2002.

Nominations for the 2014 Hodes Honor Lecture Award are now being accepted. The deadline for submittal of nominations is June 30, 2013. Details are on the Commission website at [www.secompact.org](http://www.secompact.org) or you may contact Ted Buckner at 919/380-7780 or [tedb@secompact.org](mailto:tedb@secompact.org).

## U.S. and Canada Sign Statement of Intent

The Statement of Intent (SOI) between US DOE and Canada Atomic Energy of Canada Limited (AECL) in the field of radioactive waste management, decommissioning and environmental restoration was signed on Tuesday February 26, 2013 in Phoenix, Arizona on the margins of the Waste Management 2013 Symposia. Ms. Alice Williams, Associate Principal Deputy Assistant Secretary for the Office of Environmental Management signed the agreement on behalf of DOE. Ms. Joan Miller, Vice President of Decommissioning & Waste Management, and Ms. Sheila Brooks, Director for Nuclear Legacy Liabilities Program were signatories on the AECL side.

The SOI enables the sharing of information on lessons learned as well as on the development and application of new technologies and approaches to improve the safety, cost effectiveness and schedule of the Office of Environmental Management Program, as well as the Canadian Nuclear Legacy Liabilities Program.

Speaking at the signing ceremony, Ms. Alice Williams said, “EM highly values international cooperation and the SOI is a major step forward in strengthening both the US and Canada’s efforts to expand the technical depth of our cleanup programs.” Ms. Joan Miller said, “AECL looks forward to the information exchange facilitated by this agreement with the Office of Environmental Management which enables both parties to realize benefits to the delivery of our respective missions.”



# International Nuclear Future May Need Paradigm Change, Keynote Speaker Says

“While there’s not exactly a nuclear renaissance going on in the U.S., there’s certainly a renewed interest in nuclear energy,” said keynote speaker Dr. Peter Lyons, the U.S. Department of Energy Assistant Secretary for Nuclear Energy Monday. U.S. energy demands are expected to rise at least 24 percent in the next 17 years.

As evidence he cited four early site permits, 18 construction and licensing applications, four certified designs, three designs under review, four new construction constraints and new plant construction (TVA and Watts Bar).

The rising use of natural gas was clearly going to compete as a green energy form with nuclear energy, he said.

Lyons reported that the current primary focuses of his office were the development of small modular reactors, responses to the Blue Ribbon Commission and the response and research impacts of the Fukushima disaster.

“I am enthusiastic – very enthusiastic – about small modular reactors,” Lyons said. “They represent a paradigm change in the opportunity for nuclear energy, factory-built and controlled, trucked to the site, with very specific safety and economic benefits.

“The jury is still out on whether they will offer an alternative to larger reactors,” Lyons continued.

“The President recognizes the important role of nuclear energy, and has reiterated his commitment to nuclear as a form of green energy, part of the portfolio of ‘all of the above’ strategies for energy growth. Nuclear remains an incredible resource for the nation.”

The Office of Nuclear Energy has four broad objectives:

1. Improve the reliability of nuclear operations, extend the safety foundation and extend the life of the facilities
2. Improve the affordability of new builds, particularly include SMR’s
3. Development of a sustainable nuclear fuel cycle
4. Minimize nuclear proliferation and the resources of terrorists

A Nevada native, Lyons said that he was an adamant supporter of the Administration’s assessment that Yucca Mountain was not a

viable repository site because of the inability to gather public support for the project. Yucca Mountain was originally projected to store 77,000 metric tons of high-level fuel waste; current projections are that the nation will need to store 150,000 MT by the time any repository is built. This means that two repositories will be required at that time.

“Now that the BRC has reported, Congress will have to take action to make its recommendations policy,” Lyons said. Legislation is currently being drafted by four senators. As a basis for discussion, the DOE is supporting a 10 year development program that Lyons believes can make substantial, realistic progress. The program includes consent-based siting, system design, governance and funding.

“There is not one formula for disposal strategy. We recognize that the BRC recommendations are the Administration’s preferred responses, but there are multiple options that we want to examine,” Lyons said. “This particularly includes the phenomenal success of WIPP, which we can build on. Interim storage and pilot repositories are also possibilities. I could not be more enthusiastic about the future potential of these programs.”

Lyons visited Japan in December, 2012 and stood atop Unit 4 at Fukushima. He describes the disaster as a tragedy but maintains that the international community can learn from it. His path to the reactor led through miles of flat, cleared ground, dotted by the remains of home foundations.

“We mobilized amazing resources to aid

Japan following the 2011 tragedy, but now we’re in a second phase, moving into D&D, and it will take collective and sophisticated skills from around the world to plan and implement this phase,” he said.

A task force of DOE, NRC, TEPCO, EPRI and INPO is working to understand the progression of the accidents at the reactors and validate the research. At this stage, the progression at Unit One is relatively well understood, but information on reactors two and three is not as strong.

“Partly as a result of the Fukushima accident, we are looking at light water reactors, accident resistant fuels, fuels that would not generate hydrogen under accident conditions,” he continued. In a separate program expected to take up to 10 years, the DOE is conducting basic research on potential replacements for zirconium reactor fuel cladding.

Modular reactors – such as the mPower units produced by Babcock & Wilcox, which has just signed a DOE Funding Opportunity Agreement – reduce financial risk by removing some of the constraints utilities have in building larger systems, offer incremental increases in capacity, reduce the construction cycle, and may reduce siting issues by offering below-ground siting or air-cooled systems.

The DOE expects to announce a second signing in the near future. The smaller reactors also offer more highly passive safety and security systems and may reduce emergency zones.



## TUESDAY FEATURED SITE IDAHO

# Removing Aging 20th Century Structures Paves Way for 21st Century Missions

The landscape at the Department of Energy Idaho Site is rapidly changing as buildings and structures, constructed in the 1950s and 1960s are being torn down to free up real estate for future Site missions. Ken Whitham, DOE Idaho Operations Office Assistant Manager for Facilities and Material Disposition and Hoss Brown, Vice President for CH2M-WG Idaho (CWI), will discuss this topic in Session 50 (Tuesday, Feb. 26 beginning at 1:30 PM.) and will present videos of some of the more challenging projects.

Since 2005, workers at the Idaho Cleanup Project (ICP) have demolished more than 200 buildings and structures, ranging from equipment shacks to a one-million-pound intact hot cell to historic nuclear reactors. While many of the buildings are free of radioactive contamination, others were used for decades to reprocess or store and examine spent nuclear fuel, resulting in high levels of radioactivity and additional challenges for demolition crews.

While some buildings at the Site can be repurposed, others that were constructed more than 50 years ago under different construction standards contain many hazards to workers. Maintenance and monitoring of these old buildings is also costly.

For several years, DOE tried to find an agency or entity interested in using the Test Area North 607 Complex, which included the Hot Shop, smaller hot cells, high bays, and a spent nuclear fuel storage basin. After no one came forward, the complex was demolished. Demolition of the huge structure took place in phases, with the massive Hot Shop itself as the last phase. Explosives were used in two phases to bring down the structure by first blasting archways into the 7-foot thick reinforced concrete walls, then blasting the remaining columns to bring down the rest.

Arguably, the most challenging project involved the demolition of the reprocessing

complex at the Idaho Nuclear Technology and Engineering Center. First operational in the early 1950s, the Fuel Reprocessing Complex buildings were used for extracting uranium from numerous types of spent fuel. Filled with miles of piping and vessels through numerous heavily shielded processing cells, the D&D work posed numerous challenges.

Residual special nuclear material in the piping and vessels posed a serious cost and schedule challenge. The basement cells of the building, both a radiological and worker hazard, were filled with grout. After demolition, the complex site was capped with several feet of gravel.

ICP workers also removed reactors from the Site - Engineering Test Reactor, Materials Test Reactor and the Power Burst Facility reactor. The reactors were filled with grout and were transported to an onsite landfill for permanent disposal. Another reactor - the Experimental Breeder Reactor-II - was essentially entombed in place.

Demolition crews use a variety of methods for tearing down surplus and aging facilities in addition to explosives. Large processors with crab-like claws make short work of girders and concrete exteriors. In several instances, crews used tow straps and D8 bulldozers to pull down the skeletal structures of buildings. In other cases, buildings are dismantled from the inside out.

Despite the obvious hazards, workers carried out their work in an extremely safe manner. Through their safe work processes, demolition crews helped the overall Idaho Cleanup Project achieve one million hours worked without a “recordable” injury and more than two million hours without a serious “lost-time” injury.

That safety culture allowed CWI to save taxpayers hundreds of millions of dollars through work acceleration and efficiencies. The real estate made available could be used to construct a new reactor, erect an office complex or take on a new, yet-to-be-conceived mission.



## TUESDAY FEATURED SITE IDAHO

### Safe Stewardship of Legacy Reactor Fuel — TRIGA(r) Fuel Storage in Idaho



As part of its ongoing mission to reduce risks to workers, the public and the environment, the Department of Energy (DOE) and its contractor, CH2M-WG Idaho (CWI), manages spent nuclear fuel in interim storage at the Idaho Nuclear

Technology and Engineering Center (INTEC). Some of that fuel is generated onsite, but TRIGA(r)\* fuel, used at more than 60 research reactors at American and international universities and institutes, is sent to Idaho from reactors around the world.

Ken Whitham, Assistant Manager of Facilities and Material Disposition for the DOE Idaho Operations Office, and Jim Floerke, Vice President for CWI, will discuss in Session 50 (Tuesday, Feb. 26 beginning at 1:30 p.m.) how TRIGA(r) fuel is safely transferred from research reactors to interim storage.

As part of the “Atoms for Peace” program that originated in the 1950s, the United States provided peaceful nuclear technology to foreign countries in exchange for their commitment to only use this technology for energy and research purposes. The U.S. provided the fuel for research reactors. When research reactors close, run out of room for fuel storage, or are converted to use low enriched uranium fuel instead of high enriched uranium, DOE is the organization tasked with the responsibility for the collection, safekeeping, and eventual disposition of the spent nuclear fuel. The Idaho site is the designated temporary storage location for TRIGA(r) fuels.

Moving TRIGA(r) fuel from a reactor site to interim storage at Idaho’s Irradiated Fuel Storage Facility is an involved and painstaking process that takes 12 to 18 months from the time DOE notifies CWI that the reactor site has fuel to ship to the time it actually arrives in Idaho. The fuel is examined at the reactor site, carefully packaged, and transported to Idaho. Once in Idaho, the fuel is received, moved from the shipping cask to a storage canister and placed in interim storage.



### Idaho Treatment Group, LLC Leads Waste Management at Advanced Mixed Waste Treatment Project (AMWTP)

There’s more than 4,000 fewer cubic meters of radioactive waste in the state of Idaho, following the first year of operations by the Babcock & Wilcox Technical Services Group, Inc.-led Idaho Treatment Group, LLC (ITG).

Following a successful transition on October 1, 2011, ITG took over operations of the U.S. Department of Energy Advanced Mixed Waste Treatment Project (AMWTP). AMWTP is the most modern and efficient transuranic and mixed low level radioactive waste treatment facility in the DOE complex. AMWTP has enabled DOE to stay on track in meeting its transuranic radioactive waste cleanup commitment to the state of Idaho.

Work is being performed safely and compliantly. ITG employees completed their first year working more than 1.7 million hours without a lost time injury. “Safety is a core value at AMWTP and is embedded in all aspects of our work and attitudes,” said ITG President and Project Manager Danny Nichols. “Our employees and management team are always looking for innovative ideas to help make the workplace safer by eliminating hazards.”

Against this backdrop of safe operations, ITG personnel accomplished a number of major initiatives, including:

- Introducing a new waste treatment and shipping program and operational philosophy to the project;
- Restarting operations to retrieve the remaining stored transuranic and mixed low-level waste. The project recently completed the retrieval of its first 1,000 cubic meters;
- Ramping up its process to deal with large contaminated items in the AMWTP box-lines;
- Successfully introducing a new, safer, and more efficient technique for mixed low-level waste packaging and disposal;
- Collaborating with DOE to change the regulatory framework for treating and disposing of non-compliant items found in the transuranic and mixed low level radioactive waste.

ITG is intent on continuing to set the standards of excellence for transuranic radioactive waste processing, supporting cleanup of the DOE Idaho site. ITG’s first year resulted in a strong, fundamental working knowledge of the project and the capabilities of the workforce that will be the foundation of continuous improvements. “By meeting our production goals, and satisfying DOE needs, I believe AMWTP will continue to be the facility of choice for transuranic waste processing operations for DOE,” Nichols said.

# HANFORD INDUSTRY NEWS

## Hanford Pride: CH2M HILL Committed to Cleanup



Workers in full protective and respiratory equipment install hoisting connections prior to initiating the lift to separate a 10-ton glovebox at the Plutonium Finishing Plant.

CH2M HILL Plateau Remediation Company (CH2M HILL), the prime contractor for cleanup of the Hanford Site Central Plateau, overcame numerous challenges in 2012 to achieve an unprecedented amount of cleanup progress.

In 2012, CH2M HILL treated a record one billion gallons of contaminated groundwater and began operations of the 200 West Groundwater Treatment Facility – Hanford’s

largest and most sustainably built treatment facility to date. Workers demolished the historic plutonium storage vault complex at the Plutonium Finishing Plant (PFP) that once stored finished product for the U.S. nuclear weapons program and the gloveboxes used in production were removed. Irradiated fuel fragments were processed and shipped from the K West Reactor fuel storage basin near the Columbia River. And after nearly two years of preparation, CH2M HILL workers safely demolished the nuclear 209-E critical mass laboratory that was one of the most highly contaminated buildings on the Hanford Site.

Since the beginning of its contract in 2008, CH2M HILL has identified and implemented numerous efficiencies and made improvements to the cleanup processes. Examples include utilizing a treatment resin for groundwater that reduces long-term operating costs by \$20 million; implementing “super dump” trucks, saving 40 percent in the cost of waste disposal; and utilizing helicopter surveys to save \$700,000 and six months of schedule time.

Looking forward, the goal for 2013 is to maintain this positive trend in cleanup and

continue focusing on safety, efficiencies, and good stewardship of taxpayer dollars. CH2M HILL will continue building a system to retrieve the last of the highly radioactive sludge from the K West Basin and moving it away from the river. The company will also continue treating Hanford’s contaminated groundwater and decommissioning the Plutonium Finishing Plant in preparation for final demolition. CH2M HILL workers will also continue surveillance and maintenance of site facilities in the central area of the site until they can be demolished.



Workers are constructing an Annex that will support the sludge retrieval and transfer equipment at the K-West Reactor.

## One System Integrated Project Team

The One System Integrated Project Team (IPT) was formed in late 2011 to improve the efficiency of delivering and treating highly radioactive waste stored in underground tanks at the U.S. Department of Energy’s (DOE’s) Hanford Site. The purpose of the One System IPT is to improve coordination and integration between the Hanford Waste Treatment Plant (WTP) contractor and the Tank Operations Contractor (TOC).

The One System IPT is a formal collaboration between Bechtel National, Inc. (BNI), which manages design and construction of the WTP for the U.S. Department of Energy’s Office of River Protection, and Washington River Protection Solutions (WRPS), which manages the Tank Operations Contract. The goal of both projects – tank operations and waste treatment – is to diminish the risks posed by the waste in the tanks at the earliest possible date.

The team’s vision states: One System is a WTP and TOC safety-conscious team that, through integrated management and implementation of risk-informed decision and mission-based solutions, will enable the earliest start of safe and efficient treatment of Hanford tank waste, to protect the Columbia River, environment and public.

About 200 WTP and TOC employees comprise the One System IPT. Individual work groups within One System include Technical, Project Integration & Controls, Front-End Design & Project Definition, Commissioning, Nuclear Safety & Engineering Systems Integration, and Environmental Safety and Health and Quality Assurance (ESH&QA). Additional functions and team members will be added as the WTP approaches the operational phase.

The team has undertaken several initiatives since its formation to collaborate on

issues, including alternate scenarios for delivery of wastes from the tank farms to WTP; improvements in managing Interface Control Documents; coordination on various technical issues, including the Defense Nuclear Facilities Nuclear Safety Board Recommendation 2010-2; deployment of the SmartPlant® Foundation-Configuration Management System, and preparation of the joint contract deliverable of the Operational Readiness Support Plan.



## The Hanford Long Term Stewardship

The Hanford Long Term Stewardship (LTS) Program on the U.S. Department of Energy Hanford Site in Washington State is responsible for the management of the geographic areas for which active cleanup has been completed. LTS is performed in accordance with the post-cleanup requirements specified in the associated cleanup decision documents. In addition to managing the post-cleanup completion obligations, the Hanford LTS Program manages sitewide natural and cultural resources through the framework of DOE orders, records of decision and applicable federal laws, executive orders, Tribal Nation treaties and Hanford Site procedures.

In order to transition areas that have been cleaned up, a disciplined process is used to ensure all transition steps have been

taken, that the post-cleanup requirements have been fully identified, and that the corresponding LTS information has been transitioned from the cleanup project contractor to the Hanford LTS Program contractor MSA.

Once the transition process is complete, execution activities such as on-site or in-the-field monitoring, assessments and inspections, repairs (if any), etc. are required to maintain the known as-left condition of remediated waste sites and interim safe storage reactors assigned to the LTS Program.

As of today, the program has transitioned three segments of land equal to 98 square miles for surveillance and maintenance. In the summer of 2013, MSA is scheduled to take responsibility for the first cocooned Reactor, 105-F and the surrounding F



F area in 1953



F area today

## Mission Support Alliance – Driving Innovation and Cost Savings at Hanford

Mission Support Alliance (MSA) has achieved savings of more than \$110 million in three years of operation on the U.S. Department of Energy Hanford Site in Washington State. MSA is responsible for operating and maintaining the Hanford infrastructure, including 500 miles of roads and delivering over 450 million gallons of water and 200,000 megawatt hours of electricity without incident.

A robust and healthy infrastructure is critical to any business. And with today's declining federal budget, services such as utilities and telecommunications, as well as logistics and transportation provide the greatest potential for delivering innovation, cost savings and productivity that positively impact cleanup at Hanford today and into the future.

MSA has incorporated alternative fuel

vehicles into the Hanford Site fleet and installed charging stations for new electric cars. These energy efficiency efforts lower carbon emissions and reduce the use of traditional fossil fuels.

DOE has given MSA advance notice of a contract extension through 2017. This decision allows MSA to plan for the site's infrastructure and legacy land management, and to prepare for the start-up operations at the Waste Treatment Plant.

As attention shifts to the remaining challenges at Hanford after DOE 2015 vision for cleanup is achieved, MSA is working on the needs associated with the construction and completion of the massive Waste Treatment Plant, a facility which will vitrify Hanford tank waste products for safe, long-term disposal.

## Hanford Lands Wanted for Reuse

The U.S. Department of Energy Richland Office (DOE-RL) is conducting several concurrent environmental studies to assess its proposed action to convey approximately 1,641 acres of Hanford Site land to a local economic development organization. The Tri-City Development Council (TRIDEC), a DOE-recognized Community Reuse Organization, submitted a proposal requesting the transfer of land located near the southeastern corner of the Hanford Site for industrial and economic development purposes. TRIDEC was joined in the request by the City of Richland, the Port of Benton and Benton County. The request has the support of Sens. Patty Murray and Maria Cantwell, both D-Wash., and Rep. Doc Hastings, R-Wash., plus the Tri-Cities state legislative delegation, all of whom sent letters of support to DOE.

The Comprehensive Land Use Plan for Hanford calls for most land in the 586 square mile nuclear reservation to be used for preservation or conservation as environmental cleanup is completed. However, some of the land is planned for industrial use – directly in support of economic development. Returning cleaned up Hanford lands to beneficial uses – whether for area Tribal Nations to practice traditional cultural activities, for residents to enjoy areas along the river for the first time since the 1940s, for attracting businesses to the region, or to preserve open spaces in perpetuity – is a key objective of DOE work at the Hanford Site.

Due to continuing mission needs on some of the requested lands, DOE-RL is assessing a larger area (4,413 acres) to identify sufficient parcels to total TRIDEC request for approximately 1,641 acres. DOE-RL is developing a National Environmental Policy Act (NEPA) Environmental Assessment (EA) in parallel with reviews under the National Historic Preservation Act (Section 106), CERCLA 120(h) and DOE Order 458.1. DOE-RL anticipates making a decision in the spring 2014 timeframe.

## Canada Consensus Building



Building Consensus with Potential Host Communities and the General Public” was Canada’s opening session on Monday morning. Canadian officials and two local mayors discussed challenges and successes in communicating with the general public about waste remediation and disposal.

The Canadian Nuclear Association was established in 1960 to promote development and growth of nuclear technologies. Currently two initiatives for the development of deep geologic repositories for long-term management of low/intermediate level waste and used nuclear fuel are underway.

While a detailed study of views on radioactive waste management showed there are still many misconceptions, a majority of Canadian citizens are supportive of nuclear energy and believe that it is safe

and responsibly managed. Shipping waste through local communities posed a concern and speakers shared the need for risks to be carefully communicated to not alarm the public. Overall, the study suggested that communities and the nuclear industry must “build a social contract with future generations” to succeed and to engage its citizens.

Mayors’ Linda Thompson and Larry Kraemer of Port Hope and Kincardine, respectively, both commented on the high level of knowledge within their communities. Long term storage of HLW and Low and Intermediate Level wastes are being studied and citizen involvement in those decisions will be a key to success. At Port Hope, a Legal Agreement was signed with government and community representatives that protects property value, allows for a “hosting” fee and provides administrative support which is not typically a municipality expertise. The agreement has enabled a great deal of progress and partnership and could be a model for other communities.

## PECOS President Receives Prestigious Award



Sherry Keeney, President/CEO of PECOS Management Services, Inc has been named as a “Woman of Influence” by Albuquerque Business First.

Nominated by her clients and community support organizations, she was one of 400 entered for the Award in October 2012. She was named one of Albuquerque’s 32 “Woman of Influence” in the Entrepreneur Category in December 2012 and was named as the winner in that Category on February 22, 2013.

PECOS Management Services, Inc. is a Economically Disadvantaged Woman Owned Small Business based in Albuquerque New Mexico. The company specializes in radioactive waste management and environmental compliance with extensive strengths in program/project management, FAR compliance, quality assurance and preparation of the full suite of plans for successful project implementation.

## Irene Ägerter WoWM Panel



Dr. Irene Ägerter, Vice-President, Swiss Academy of Engineering Sciences, will provide a European perspective to the Tuesday evening Women of Waste Management Networking Reception. Dr. Ägerter

holds degrees in Physics, mathematics and astronomy and served in a number of positions prior to becoming Vice-President of the Academy, including positions with the Department of Defense, Division of Atomic and Chemical Warfare, a Member of the City Parliament of Berne, Switzerland and was a co-founder and President of the Swiss Association entitled “Women for Energy”. Dr. Ägerter is also the founder and past president of Women in Nuclear (WIN) International. Please join us and meet Dr. Ägerter this evening at the WoWM Reception in Room 212 BC 6:00 – 7:30 PM.

## Wednesday’s Panel Discussion on Characterization Promises to be of Great Interest

Site characterization and survey techniques have come a long way in the past several years with new and innovative techniques including 3D modeling and visualization. The session “Site characterization and Survey for ,D&D and Waste Management” (session 87, at 1:30 PM , Room 103AB) will focus on updated techniques for radiological characterization and surveys. The panelist include Robert Stewart from ORNL, Arne Larsson from Studsvik (Sweden), Andy Szilagyi from DOE/HQ, Karen Kim from Electric Power and Research Institute, EPRI, and Yvon Desnoyers from Geovariance in France. The session is organized and chaired by Boby Abu Eid of the NRC and Jas Devgun – of Sargent & Lundy, LLC in the D&D and restoration field.

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## Post Golf Tournament Winners



Mark Morgan, Paul Terp, Myron Koop & Tim Hughes

### *First Place Foursome*



John Meyers, Jan Carlin, Tom Yount, Dave French (not shown)

### *Second Place Foursome*



Jim Gallagher, John Bradburne, Kunal Puri, Amar Raval

### *Third Place Foursome*



**Scott Meyer**  
*Closest to the Pin*  
Men's



**Jan Carlin**  
*Longest Drive –*  
Women's



**Judy Camper**  
*Closest to the Pin*  
Women's

## Hottest Hot Topics Panel in EM



Mark Gilbertson, Deputy Assistant Secretary (DAS) for Site Restoration described today's Panel session as the Hottest Hot Topics Panel ever. Gilbertson stepping in for Alice Williams, Associate Principal DAS, indicated that Safety is EM's most important driver. This theme, along with risk reduction and protecting workers was continued throughout all the presentations by the other Deputy Assistant Secretaries.

EM has set a priority on reducing life-cycle costs and increasing cleanup efforts by improving project planning

and management and by utilizing new and innovative technologies. Another focus is to improve communications with stakeholders, regulators and the national laboratories to find efficiencies and leverage resources to maximize value to tax payers.

The EM 2013 budget request of \$5.65 billion will be down from last year's \$6.13 billion dollar figure. About a third of the budget goes to tank waste activities. The reduced budget will impact tank retrievals and delay work at Hanford. Gilbertson also concluded that slow and steady may actually work better for communities and sustain the work force as well as lessen the economic impacts in surrounding areas.

Gilbertson stressed that EM must be systematic, strategic and methodical in their work so that stakeholder. Can better understand the EM mission. He also noted that they will be strengthening the Communities of Practice for remedy reviews, compliance and Risk/Performance assessments.

Ken Pica, DAS for Tank Waste and Nuclear Material, noted that there are 138,000 cubic meters of liquid waste that need processing and disposal. They eliminated 35,280 cubic meters in 2012, 13,450 cubic meters of HLW were vitrified and an additional 11,237 cubic meters of salt waste was processed at SRS.

Pica cited successes in 2012 to include: cleaning of 6 tanks with 16 tanks at Hanford in various stages of retrieval; 404,000 curies of decontaminated salt waste disposed in salt stone; two West Valley WIRs were completed for the vitrification melter and for two vessels, a feed makeup tank and a feed holding tank. West Valley also has installed an innovative tank drying system due to some of their tanks accumulating infiltrating water. (That technology is an example of some that could be utilized at other sites.) The continuation of the Tank Waste Corporate Board which sets high-level policy and strategies to address tank issues was also considered a success.

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# Tuesday Panel Summary

## TUESDAY MORNING PANELS

### Panel Session 32

#### DOE Support for Fukushima Efforts (Part 2 of 4)

US DOE Senior Management will discuss their efforts to support the government of Japan in the Fukushima Daiichi decommissioning and remediation. Room 102B at 8:30 AM.

### Panel Session 33

#### Progress in Implementing US Support to Japan (Part 3 of 4)

Panel to discuss progress made as a result of placing Embassy Science Fellows and international assistance to Japan. Room 102B at 10:15 AM.

### Panel Session 34

#### Emerging Issues that Challenge Traditional Contractor Roles at US and International Sites

Senior panel members debate what can be done, in partnership with DOE, to change and adopt a more efficient model to deal with near-term financial constraints. Room 105B at 8:30 AM.

### Panel Session 37

#### Used Nuclear Fuel and HLW from National and International Perspectives

Navigate options, engineering approaches, technical, regulatory and non-proliferations/security issues being debated by this panel of experts. Room 103A/B at 8:30 AM.

### Panel Session 38

#### Realigning TRU Disposal Priorities in the Aftermath of New Mexico's Worst Wildfire Disaster

This panel will focus on the LANL 3706 Campaign, a voluntary Framework Agreement to accelerate TRU disposal and shipments to WIPP. Room 103A/B at 10:15 AM.

### Panel Session 40

#### Nuclear Power Plant Waste Management – LLW Disposal Issues

Senior utility managers will discuss issues with US commercial LLW disposal site operations. Room 104A/B at 8:30 AM.

### Panel Session 41

#### Nuclear Power Plant Waste Management – LLW Processors' Issues

Senior utility managers will discuss issues with US commercial LLW processors. Room 104A/B at 10:15 AM.

## TUESDAY AFTERNOON PANELS

### Panel Session 50

#### US DOE Featured Site – Idaho

This two-part Panel will focus on the US DOE Idaho site and the fulfillment of the Idaho Cleanup Project (ICP) mission through people, partnership and innovation. Room 102B at 1:30 PM.

### Panel Session 51A

#### Update on the International Framework for Nuclear Energy Cooperation (IFNEC)

This panel updates IFNEC progress over the last year including reports on a London Financing workshop and International Fuel Services approach to addressing the entire fuel cycle. Room 104A/B at 1:30 PM

### Panel Session 51B

#### Addressing the Small Business Barriers to Contracting with the US DOE

In 2012, the US DOE has increased its Small Business contracting goal from 6 – 10 percent. This panel will interact extensively with the audience to address questions. Room 104A/B at 3:15 PM.

### Panel Session 52

#### US DOE Mixed Waste Disposition

Panel to focus on how US DOE sites are dealing with the significant reductions in funding and how decision makers are prioritizing projects. Room 105B at 1:30 PM.

### Panel Session 62

#### Graduating Students and New Engineers – Their Wants and Needs

Panel to focus on new hires and graduating engineers having open lines of communication with employers. Room 103A/B at 1:30 PM.

### Panel Session 63

#### Young Professionals

This panel focuses on young professionals and covers views on radioactive waste management from young persons' perspectives from around the world. Room 103A/B at 3:15 PM.



Phoenix is an important part of America's old west and that means cowboys and chuckwagon food, so bring your appetite to the networking reception and dinner at Rawhide on Wednesday, February 27. This is a casual outdoor setting under the stars where the West is still wild!

This authentic frontier town, celebrating 40 years of entertainment, is Arizona's largest western-themed attraction with specialty shops featuring everything from authentic western wear to Native American art.

The town of Rawhide promises to deliver up a true western experience with western attractions, cowboy games and action-packed shows throughout town. Take a ride back in time on the Butterfield Stagecoach or the Huntington Express Train to get a glimpse of good ol' western transportation.

And, you'd better come hungry because we've got a cowboy feast too good to resist! Sample some tasty appetizers and when you hear the dinner bell ring, treat yourself to mesquite-broiled steaks, chicken and salmon.

If you haven't already purchased them, tickets are \$85. The event includes transportation, two drink tickets, and all the food and fun you desire, until the street lamps go dark.

Buses will pick up at the Monroe Street Exit at the Hyatt Regency Phoenix at 6:00 PM and the event will begin with cocktails at 6:30 PM. Buses will return guests to the conference hotels beginning at 8:30 pm. The last bus will depart Rawhide at approximately 9:45 pm.

Don't forget that the Wild West is a bit dusty and can get chilly after the sun goes down, so please be sure to bring a light jacket and wear comfortable, close-toed shoes.



#### PLEASE NOTE:

*If you have allergies to horses, animal hair or ranch related items, we suggest that you do not participate in the Rawhide event.*

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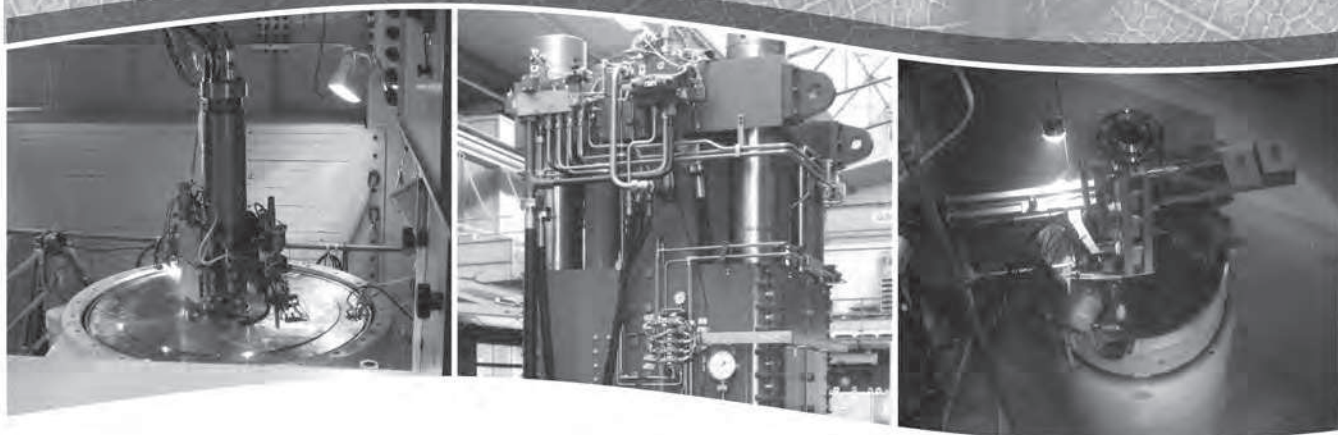
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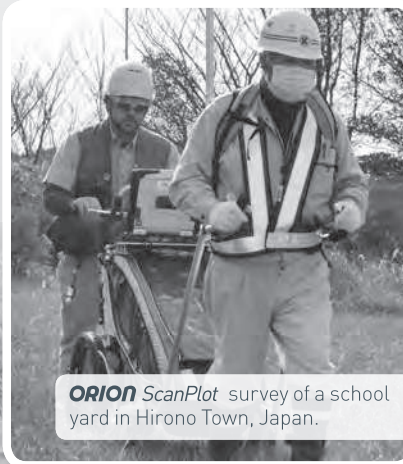
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**ORION ScanPlot** survey of a school yard in Hirono Town, Japan.



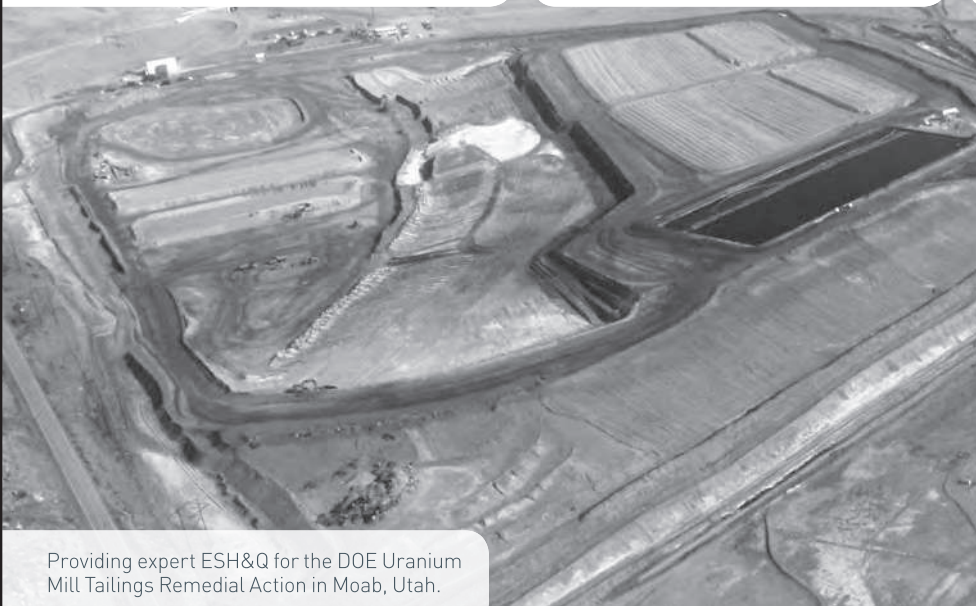
Excavated radiological waste and soil at former nuclear fuel fabrication facility in Windsor, Connecticut.



**ORION ScanSort** is a conveyor-based system used for radwaste segregation & minimization.



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