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**DOE-ID Operations Summary
For the Period April 1, 2015 – April 30, 2015**

***EDITOR'S NOTE:** The following is a summary of contractor operations at the Idaho National Laboratory Site, managed by the DOE- Idaho Operations Office. It has been compiled in response to a request from stakeholders for more information about health, safety and environmental incidents at DOE facilities in Idaho. It also includes a brief summary of accomplishments at the Site.*

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Advanced Mixed Waste Treatment Project (AMWTP)

Nothing to report for this period

Notable Accomplishments: AMWTP Workers Eager to Check Condition of Waste Moved to Cargo Containers Decades Ago: From 1952 to 1970, workers buried drums containing radioactive waste from the now-closed Rocky Flats site at the Idaho site's Subsurface Disposal Area. In the 1970s, the Idaho site wanted to find out how those waste drums change over time if they are packaged in cargo containers instead of buried under dirt so workers unearthed some of the drums from the pits and trenches. They moved the drums into 209 cargo containers and stored them above ground. The goal of the experiment was to shed light on the risks associated with waste retrieval from subsurface storage and the best approaches to safely retrieve and repackage buried waste.

Since November 2014, workers with Idaho Treatment Group (ITG), the cleanup contractor that manages the Advanced Mixed Waste Treatment Project, have been opening the large containers to survey their contents.

"We were confident in the engineering and administrative controls we had in place to start our new retrieval campaign," ITG Retrieval and Cargo Manager Scott Biorn said. "Our employees were careful but eager to see what was inside and to figure out the safest most expeditious way to get the waste out."

The workers have found some drums intact after more than four decades, while others decayed so much they disintegrated when touched. ITG hopes to finish emptying 55 of the containers in the site's Transuranic Storage Area Retrieval Enclosure by October. A previous Em contractor unloaded 105 of the containers in 2009 and 2010.

Similar to a railroad boxcar without wheels, a container measures 8 feet wide by 20 feet long by 8 feet tall. The drums inside the containers are 30-, 55- or 83-gallons in volume. For ease of handling, workers repackage the old drums in 85-gallon drums reused from a previous project, which saves taxpayer money. The repackaged waste is then characterized, treated, and shipped to an out-of-state facility for permanent disposal. The emptied cargo containers are then cleaned and decontaminated before they are permanently disposed of in the Idaho CERCLA Disposal Facility at the Idaho site.

"We trust in the processes and hazard controls that ITG has in place," DOE-Idaho Retrieval Activity Manager Mary Willcox said. "It's evident when overseeing the operations that there's a high degree of communication and feedback among the crews and that they are prepared to use

good judgment with step-backs and lessons learned for varying conditions and contingencies required to complete unloading the cargo container.”

Biorn said the crews identified several improvements to enhance the safety and efficiency of the retrieval process. “We firmly believe that with a balanced approach, where safety, compliance, and production are equal, performance follows,” he said.

Idaho Cleanup Project (ICP)

Nothing to report for this period

Notable Accomplishments: STAR of Stars awards spotlight shining examples of those who promote safety: A number of stars in CWI’s constellation of outstanding individuals recognized by the Company Employee Safety Team (CEST) for their active involvement in contributing to CWI’s safety culture shined bright this past year.

Each January, Employee Safety Teams across CWI choose a fellow employee (STAR) from colleague nominations, and those employees are honored at CWI’s recognition ceremony for their involvement in the company safety programs.

“The STAR of Stars awards recognize employees who have gone over and above in their roles in safety,” Voluntary Protection Program Manager Bonnie Anderson said. “This is an opportunity for employees to recognize their coworkers who reach out to others to protect their safety.”

CEST leaders, with input from managers, ultimately select the STAR of Stars from nominees across the site whose contribution has been to the entire company. Keeping CWI employees safe at all times cannot be over emphasized. Each employee plays an important role in ensuring everyone returns home safely each day after completing a full shift whether it is day or night.

The STARs of Stars are commended for their contributions to our safety conscious work environment and serve as stellar examples all INL site employees can follow and emulate.

Idaho National Laboratory (INL)

April 5: The Specific Manufacturing Capability facility lost ability to communicate with INL Fire Department alarms and notifications due to an unexpected telephone system interruption, resulting in the facility being without immediate emergency response capability. SMC did not experience an emergency during the period that the phone service was interrupted. Compensatory actions were taken to ensure communications capability. [NE-ID--BEA-SMC-2015-0002]

April 7: A subcontractor of Battelle Energy Alliance was observed performing work at the DOELAP Irradiation Facility construction site prior to reading all applicable safety requirements and acknowledging understanding thereof via signature. Work on the project was halted until the Job Safety Analysis and pre-job briefs were updated and reviewed and an overall event discussion, including a lessons learned, was held. [NE-ID--BEA-STC-2015-0003]

April 9: A Laydown Area Temperature Instrument at the Advanced Test Reactor (ATR) failed its initial calibration check. The ATR was shut down and defueled at the time of this event, and the instrument was not required to be operable. [NE-ID--BEA-ATR-2015-0014]

April 20: A protection relay installed on a breaker for a deep well pump at the Advanced Test Reactor was not working properly due to a capacitive energy storage failure. The protection relay will be replaced. The ATR was shut down and defueled at the time of this event.[NE-ID--BEA-ATR-2015-0015]

April 23: One of three channels on a stack radiation monitor at the Advanced Test Reactor (ATR) failed high. The two other channels along with other radiation monitoring instruments, continued to read normal. The instrument channel was declared out-of-service. The ATR was shut down and defueled at the time and the instrument was not required to be operable. [NE-ID--BEA-ATR-2015-0016]

April 26: A clear plexiglass portion of a transmitter drain header burst during performance of a helium manifold operation. The drain header inadvertently over pressurized due to a clogged drain. The operator secured venting and notified management. [NE-ID--BEA-ATR-2015-0017]

April 29: A confinement door at the Advanced Test Reactor would not close or latch as required. The bottom of the door was found to be rubbing on the threshold. At the time of discovery the ATR was shut down and defueled, and confinement was not required to be operable. [NE-ID--BEA-ATR-2015-0018]

April 29: A side seal on a confinement door at the Advanced Test Reactor was damaged when moving material through the door. The seal was bent and prevented the door from closing and sealing. At the time of discovery the ATR was shut down and defueled, and confinement was not required to be operable. [NE-ID--BEA-ATR-2015-0019]

April 29: A carpenter at the Advanced Test Reactor tripped on a step, resulting in collar bone ligament tear. The injury required surgery to repair. [NE-ID--BEA-ATR-2015-0021]

Notable Accomplishments: INL Program trains military for radiological response

INL is one of only a few locations able to provide a realistic training environment that immerses students in scenarios with authentic measurements, equipment and radiological source materials. Several locations across the laboratory's 890-square mile Site are employed for the training, presenting the students with a range of challenges that includes using their equipment in an isolated and rugged landscape and sweeping buildings with multiple levels and a large perimeter.

Military branches from across the U.S. Department of Defense (DOD) register top candidates for this intensive Radiological Hazards and Operators Training and Field Exercise course (RHOT) conducted by the U.S. Army Medical Center and School. These students are brought to the Department of Energy's Idaho site where they immediately begin training to use radiological monitoring equipment, perform radiological calculations and implement protective measures.

“Over the past decade, we have continued to refine the training to better prepare these radiological emergency responders for the situations they can anticipate in the real world,” said Jennifer Turnage, INL program lead for Emergency Response and Readiness. “Our goal is to provide them with confidence in their equipment and the required skills to manage difficult situations without hesitation.”

Two weeks of intense training has transformed these responders into a cohesive unit able to work together to take decisive actions to secure and survey an area for radiological hazards. Several days of instruction occur prior to being put through a series of intense training environments designed to push their newly acquired skills to the limit and force the newly formed team to rely on each other. The service members’ specialized skills and knowledge are culled through several days of course work and practical exercises.

“We have some of the best and brightest who attend this course at Idaho National Laboratory, and they are challenged by the course work and training,” said Captain Aaron Thompson, DOD lead coordinator for the course. “This training pushes them to excel and make the most of this valuable training experience that you just don’t get anywhere else.”

The top-notch students are met by an impressive staff with decades of experience working with radiological materials and instrumentation. As the nation’s lead research institution for nuclear energy, INL employs experts with extensive knowledge in safeguards, forensics, measurement and interrogation.

“The training objectives are about ensuring that at home and abroad we have radiological responders prepared to engage an environment without hesitation,” said Major Kim Alston, RHOT lane officer in charge and instructor. “These service members will leave this training confident in their skills and ready to take on any situation they incur.”

Since the inception of this joint-training program, hundreds of U.S. service members have been trained in radiation survey methods and techniques and proper use of radiation detection equipment. Through the use of real-world situations, instructors are equipping the participants with the skills required to characterize and mitigate radiological and nuclear hazards, assess the risk, and provide recommendations to decision-makers on how to protect people and the environment from the potential harmful effects of radiation.