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**DOE-ID Operations Summary
For the Period August 12, 2013 through August 26, 2013**

***EDITOR'S NOTE:** The following is a summary of contractor operations at the Idaho National Laboratory, managed by DOE- Idaho Operations Office. It has been compiled in response to a request from stakeholders for more information on health, safety and environmental incidents at DOE facilities in Idaho. It also includes a brief summary of accomplishments at the Site. POC –Danielle Miller, (208) 526-5709.*

Advanced Mixed Waste Treatment Project (AMWTP)

August 14, 2013: The Idaho Treatment Group (ITG) discovered that a safety requirement had not been completed when an Expert Technical Reviewer (ETR) for the Idaho Treatment Group downgraded the Assay Fissile Gram Equivalent value for a waste box in the Waste Tracking System (WTS) prior to an independent review by a second ETR. AMWTP administrative controls require an independent review of box assay FGE values prior to downgrade in WTS. Movement of the waste box was restricted, and Box Assay production operations were stopped. [EM-ID--ITG-AMWTF-2013-0016]

Notable Accomplishments:

Idaho Waste Treatment Facility Improves Worker Safety and Efficiency, Saves Taxpayer Dollars

The Idaho Treatment Group announced that a recent development in retrieval operations will save taxpayer dollars and illustrate advancements in employee safety and efficiency. Retrieving degraded, decades-old wooden boxes containing waste at AMWTP is a hazard for retrieval crews. Workers must retrieve and transport the boxes and safely treat and repackage them for shipment to permanent disposal at sites outside of Idaho.

This year, employees developed a process to simplify the retrieval of boxes. The box retrieval forklift carriage (BRFC) is a unique tool conceived by ITG retrieval employees and designed by their co-workers in the company's radiological and engineering organizations to handle degraded boxes safely. The BRFC is mounted on the end of a fork lift that holds four of the six sides of the boxes. The BRFC greatly reduces the chances boxes will fall apart during retrieval, provides a more streamlined process, enhances employee safety and allows work to be completed more quickly.

Idaho Cleanup Project (ICP)

August 14, 2013: During a post maintenance test being performed by CH2M-WG Idaho, LLC (CWI), tubing attached to a pressure test assembly which is used to pressure test an instrument stand ruptured. Maintenance personnel during a fact finding that the flexible tubing was underrated for the pressure test being performed. [EM-ID--CWI-IWTU-2013-0010]

August 20, 2013: Personnel monitoring equipment (and later a direct scan performed by a Radiological Control Technician) detected contamination on a CWI employee's right forearm and modesty clothing during an exit scan. The worker was performing decontamination activities on a

crane in located in a high contamination area in preparation for maintenance repairs. Radiological control technicians (RCTs) performed appropriate skin decontamination resulting in no detectable alpha or beta/gamma contamination, and the worker was released. [EM-ID--CWI-ICPWM-2013-0003]

August 22, 2013: A CWI equipment operator, driving a forklift at the Sludge Repackage Project accidentally spilled sludge outside of a secondary containment pan onto the soil after placing a tray on the secondary containment. The equipment operator immediately stopped and reported the spill to the foreman. The spilled waste and the soil beneath the spill to a depth of 4 inches were cleaned up and returned to the proper containment. No personnel were exposed to the hazardous waste, there were no injuries as a result of this spill, and the hazardous waste was not released to the environment outside the Retrieval Enclosure. [EM-ID--CWI-RWMC-2013-0003]

Notable Accomplishments:

Age-old process treats complex transuranic waste at the Idaho Nuclear Technology and Engineering Complex

The Idaho Cleanup Project announced that they are using an age-old process to treat complex transuranic waste left over from nuclear reactor experiments. Developed in the first century and perfected by moonshiners in the 19th century, distillation will be used at the Idaho Nuclear Technology and Engineering Complex (INTEC).

The process for distilling sodium metal from nuclear material was developed by the Idaho National Laboratory who uses it to remove sodium from experimental fuel for research purposes. This method of separating mixtures with heat will has been adapted to isolate about 100 pounds of ignitable, reactive metal sodium from metal and debris designated as remote-handled transuranic waste because of its high-activity level. Due to its sometimes violent reactivity with air and water, sodium must be removed before the waste can be shipped to EM's Waste Isolation Pilot Plant (WIPP) in New Mexico for permanent disposal. The waste is primarily a product of experiments from the Engineering Test Reactor, Experimental Breeder Reactor-II and other fast reactor tests.

ICP will treat the sodium-contaminated debris in a hot cell, where the waste will be sorted and segregated before it is loaded into baskets that are lowered into the distillation unit. The material will be heated, and vapors will be drawn from the debris. That sodium vapor will be condensed into a metal solid, collected and sent offsite as mixed low-level waste for treatment and disposal. The treated debris will be repackaged and sent to WIPP for disposal.

Idaho National Laboratory (INL)

August 12, 2013: Battelle Energy Alliance determined that the current cable configuration inside of an electrical panel located in the Advanced Test Reactor control room may not meet safety requirements accounted for in the safety analysis. A prior inspection of the panel revealed that it contains both Safety-Related Plant Protection System and non-Safety-Related cabling in close proximity. This configuration may not meet minimum separation requirements. The ATR was shut down in support of the scheduled outage. [NE-ID--BEA-ATR-2013-0028]

August 19, 2013: A method used to test fire water flow testing paths at the Advanced Test Reactor was determined to be inadequate. The ATR was shut down, defueled and depressurized, at the time of discovery, and the detailed operating procedure used to perform the firewater flow testing was re-written to resolve the issue. [NE-ID--BEA-ATR-2013-0029]

August 21, 2013: During performance of Core Change evolutions at the Advanced Test Reactor, a Log Count Rate Meter (LCRM) channel "A" recorder indication was observed to have been off scale for a short period of time. ATR operating procedures require a local LCRM and the ATRC console LCRM recorder to be operable. Appropriate notifications were made and a critique determined that the issue was isolated to a failure of the one channel on the console LCRM recorder. [NE-ID--BEA-ATR-2013-0030]

August 22, 2013: A discharge check valve on a Primary Coolant Pump (PCP) at the Advanced Test Reactor did not close completely after the pump was shut down. The check valve was declared out of service pending repair or replacement. The ATR was shut down in support of the scheduled outage during the time of the valve failure. [NE-ID--BEA-ATR-2013-0031]

Notable Accomplishments:

Advanced Test Reactor National Scientific User Facility names scientific director

Idaho National Laboratory has selected Illinois Institute of Technology (IIT) associate professor of physics, Jeff Terry, as scientific director of the Advanced Test Reactor National Scientific User Facility (ATR NSUF). It is a U.S. Department of Energy-Nuclear Energy user facility and is the nation's only designated nuclear energy user facility.

The search for a new director began when previous director Todd Allen stepped down to assume the position of INL's deputy director of science and technology in January 2013.

"I am very pleased that Jeff Terry will serve as the next ATR NSUF scientific director," Allen said. "He is a highly respected researcher and professor who has a strong relationship with the research community and experience working with DOE, national laboratories and universities."