Distributed on February 11, 2016

DOE-ID Operations Summary
For the Period November 1, 2015 – November 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 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)

November 11: A maintenance worker at the Advanced Mixed Waste Treatment project was observed moving between waste processing cells without de-energizing all equipment in the destination cell prior to entry. De-energizing all equipment in the cell protects entrants from mechanical hazards of moving equipment when performing maintenance activities. All cell entrants were ordered to place work in safe configuration and exit the cell. [EM-ID--ITG-AMWTF-2015-0015]

Notable Accomplishments:

• AMWTP successfully completed the annual recertification audit by DOE’s Carlsbad Field Office that oversees operations at the Department’s Waste Isolation Pilot Plant. There were 35 members participating in the audit group composed of representatives from the State of New Mexico Environment Department, DOE-Headquarters, and the Idaho Department of Environmental Quality.

• AMWTP upgraded the respiratory protection to the new 3M Versaflo Powered Air Purifying Respirator (PAPR). Employees in Retrieval Operations and the Treatment Facility were the first to use the new PAPR system. Utilizing ISMS and VPP concepts and guidelines, employee feedback enabled the selection of the new PAPR to provide better protection through new technologies and additional safety features.

Idaho Cleanup Project (ICP)

November 24: A Large Cell Cask lift plate was damaged during an underwater relocation activity at the Idaho Nuclear Technology and Engineering Center’s Fluorinel Dissolution Process and Storage Facility, CPP-666. The LCC lift plate was being moved with a bridge crane when it snagged on a pool gate storage bracket. Work was stopped, and management has been notified. [EM-ID--CWI-FUELRCSTR-2015-0002]

Notable Accomplishments:

CWI completed the last remote-handled transuranic waste treatment campaign under its contract using its one-of-a-kind sodium distillation system. The sodium will be sent off site as mixed low-level waste for treatment and disposal and the treated debris is being repackaged and will be stored onsite until shipped for permanent disposal to the Waste Isolation Pilot Plant.
Idaho Power provided CWI with a $207,000 incentive check for two energy-conservation initiatives at the Idaho Nuclear Technology and Engineering Center.

Idaho National Laboratory (INL)

November 9: During Advanced Test Reactor firewater pump in-service functional test, a valve pin sheared off of a firewater discharge pump valve leaving the valve in the shut position. The firewater pump remained out of service and was not required for current plant conditions. [NE-ID--BEA-ATR-2015-0044]

November 10: It was discovered that an equipment mechanic at the Hot Fuels Examination Facility had not properly replaced electric motor guards on a pump system following a preventative maintenance activity. [NE-ID--BEA-HFEF-2015-0004]

November 24: An unprotected 120v AC electrical energy connector was discovered at the Hot Fuel Examination Facility (HFEF). [NE-ID--BEA-HFEF-2015-0005]

November 9: An employee at the Advanced Test Reactor Complex twisted his knee when he stepped off of the sidewalk onto an unpaved area. Surgery was recommended to repair the injury. [NE-ID--BEA-ATR-2015-0043]

November 3: A Plant Protective System (PPS) Inlet Pressure High Channel at the Advanced Test Reactor (ATR) failed the Surveillance and Test System (SATS) test. ATR was in pressurized standby at the time of discovery. [NE-ID--BEA-ATR-2015-0042]

November 17: A diesel generator at the Advanced Test Reactor automatically shut down due to a "Reverse Volts, Amps, Reactive Shutdown (VARS) during a monthly surveillance test. A second attempt to start the diesel generator was successful. [NE-ID--BEA-ATR-2015-0045]

Notable Accomplishments:

INL to lead GAIN initiative in partnership with ANL, ORNL: In support of the White House Nuclear Energy Summit, INL has been tasked with a leadership role in a new Department of Energy initiative to spur innovation in nuclear energy technology. DOE-NE has established the Gateway for Accelerated Innovation in Nuclear (GAIN) to provide the nuclear community with access to the broad range of capabilities – people, facilities, materials and data – across the DOE complex, particularly the nuclear energy research capabilities at INL, Argonne National Lab and Oak Ridge National Lab. Through GAIN, INL and its partner labs will provide the technical, regulatory and financial support necessary to move new or advanced nuclear reactor designs toward commercialization while ensuring the continued safe, reliable and economic operation of the existing nuclear fleet. INL Lab Director Mark Peters, Nuclear Science & Technology Director Kemal Pasamehmetoglu and Joint Fuel Cycle Studies director Mike Goff attended the White House summit.

INL expands partnerships with Idaho, small businesses: In fiscal year 2015, INL spent nearly $130 million with businesses in Idaho. This achievement highlights INL’s ability to find qualified Idaho businesses to support its mission and leverage the capabilities of these
businesses to help them grow and prosper. In total, INL spent $195 million for goods and services provided to the lab, surpassing Idaho and small business goals by over 15 percent. INL recently reported its fiscal year 2015 results to the Department of Energy showing its ongoing commitment to working with small businesses. INL relies on them to provide a wide range of materials and services.

**Korean fuel testing begins at ATR:** The Advanced Test Reactor (ATR) is being used to test high-density, high burnup low-enriched uranium (LEU) fuel for the Korea Atomic Energy Research Institute (KAERI) under a Cooperative Research & Development Agreement between INL and KAERI. The fuel being tested is intended for use in the Kijang Research Reactor, the first reactor to be designed around nuclear proliferation-resistant LEU fuel to support medical isotope production in Korea. The lead test assembly will be irradiated in the ATR for approximately 200 days. Following irradiation, the test will be transferred to the Hot Fuel Examination Facility at INL's Materials and Fuels Complex for post-irradiation examination to fully evaluate fuel and cladding performance. The final irradiation report will be used to certify the fuel with the Korean regulatory agency.

**Hispanic Youth Symposium:** INL sponsored the ninth Annual Hispanic Youth Summit, reaching 350 youth from across Idaho. INL’s K-12 staff engaged students in hands-on science workshops that showcased real-world applications of science, technology and engineering work relevant to INL. Students learned about energy and the elements of engineering design. This activity exposed students to the possibility of a STEM career at INL that they may not have previously considered.