U.S. DEPARTMENT OF ENERGY

MEDIA CONTACTS:
John Britton, WRPS, (509) 376-5561
Erik Olds, ORP, (509) 372-8656

FOR IMMEDIATE RELEASE:
September 2, 2010

HANFORD'S TANK WASTE EVAPORATOR RESTARTS

THE 242-A EVAPORATOR WILL CREATE ADDITIONAL TANK STORAGE CAPACITY

After a series of upgrades and improvements, Hanford's only nuclear processing facility, the 242-A Evaporator began an operating campaign that will reduce the volume of waste in double-shell storage tanks by more than 500,000 gallons, creating additional space to store high-level radioactive and chemical waste that will be removed from aging single-shell tanks.

The evaporator last ran in 2009, when it reduced the waste volume in the double-shell tanks by more than 940,000 gallons. The evaporator campaign will create double-shell tank storage space that will allow radioactive and chemical waste to be removed from single-shell tank C-111 later this year.

"The evaporator is critical to the safe and timely cleanup of Hanford's tank waste," said Stacy Charboneau, DOE-Office of River Protection Assistant Manager for the Tank Farms. "It's the evaporator's job to make storage space in the double-shell tanks. Without the evaporator, we would have limited storage space and, without storage space, we could not retrieve waste from the single-shell tanks. That's why it is so critical to maintain and upgrade this facility."

Originally expected to operate for 10 years, upgrades have kept the evaporator operating safely for more than 30 years. Major upgrades completed between 1994 and 2004 extended the evaporator's life to 2018. A series of additional upgrades are expected to keep the facility operational until 2040. These upgrades include modernizing the ventilation system, updating the monitoring and control system, replacing the raw water system and decontaminating the condenser room to make it safer for workers. Several of the recent upgrades were funded through American Recovery and Reinvestment Act funding.

In the evaporator, liquid tank waste is heated under vacuum so it will evaporate at a temperature of about 125 degrees Fahrenheit. Water vapor from the boiling waste is captured, condensed, filtered, sampled and sent to the nearby Liquid Effluent Retention Facility for further treatment and disposal. The concentrated waste is returned to the double-shell tanks.

Since it began operating in 1977, the 242-A Evaporator has reduced the total volume of waste in Hanford's 28 double-shell storage tanks by 67 million gallons. Managing the liquid volume helps avoid the cost of building new double-shell storage tanks at Hanford.

###