

# Argonne Accomplishes Recovery Act Work to Reduce its Legacy Nuclear Footprint

**ARGONNE, Ill.** — Argonne National Laboratory used \$79 million from the Recovery Act to complete two major decontamination and demolition projects and significantly reduce its radioactive materials and waste inventory.

That work reduced the site's legacy nuclear footprint and lowered on-going surveillance and maintenance costs.

The Lab's Recovery Act work benefited about 500 workers. Many of those workers were employed by small businesses awarded contracts for the demolition work at the radiological facilities. Their work included fence construction, asbestos removal, and site restoration.

Recovery Act workers demolished the 52,743-square-foot Chicago Pile-5 Reactor facility in 2010. That reactor was the fifth and final member of the Chicago Pile family of pioneering research reactors. Workers are installing an asphalt cap over the building's footprint and planting native grasses over the rest of the site.



In 2011, workers demolished the former Experimental Waste Processing, Storage and Shipping Building. Prior to demolition, they removed asbestos and decontaminated the 41,434-square-foot building.

More than half of the Lab's Recovery Act funds supported two material- and waste-disposition campaigns that reduced the site's inventory of transuranic (TRU) waste and irradiated fuel specimens left over from former research activities.

By the end of September 2011, Recovery Act workers packaged and removed 250 drums of remote-handled TRU waste from three of Argonne's nuclear facilities — the Alpha Gamma Hot Cell Facility (AGHCF), Building 205 K-Wing, and Building 200 MA/MB Wing.

More than 180 of those drums have been disposed at the Waste Isolation Pilot Plant (WIPP) in New Mexico, including 40 drums of fuel examination waste. Argonne was the first facility in the DOE complex to ship that waste — a unique category of remote-handled TRU waste with high activity — to WIPP. The remaining drums will be shipped to WIPP through spring 2012.

On Sept. 30, 2011, Argonne shipped the last of the Lab's legacy contact-handled TRU waste inventory — contained in 70 drums — to Idaho National Laboratory (INL) for processing before it is permanently disposed at WIPP.

In December 2010, all of the irradiated sodium-bonded fuel specimens at AGHCF were shipped to INL. Those



These photos show the site of former Experimental Waste Processing, Storage and Shipping Building before and after a Recovery Act-funded demolition.



These photos show the site of the Chicago Pile-5 Reactor facility before and after a Recovery Act-funded demolition.

specimens were originally sent to Argonne for research purposes from reactors at the former Argonne-West facility, which is now part of INL. □

Bottom left two photos: The top photo shows a hot cell in the 205 K-Wing where many containers of fuel specimens were located. Prior to the Recovery Act-funded cleanup, the facility was designated a Hazard Category 2 nuclear facility. The bottom photo shows the cell following the cleanup. All of the research and development fuel specimen material was processed for disposal at the Waste Isolation Pilot Plant in New Mexico as remote-handled TRU waste. The facility was downgraded from a nuclear facility to a radiological facility after the cleanup.