# U.S. Department of Energy • Office of Environmental Management







# AMERICAN RECOVERY & REINVESTMENT ACT NEWSLETTER

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# **Overview of the Recovery Act**



The Recovery Act is an unprecedented effort to jumpstart the United States economy, create or retain millions of jobs, and put a down payment on addressing long-neglected challenges to allow the country to thrive in the 21st century. The Recovery Act, which was signed into law by the President on February 17, 2009 is an extraordinary

response to a crisis unlike any since the Great Depression, and includes measures to modernize the nation's infrastructure, enhance energy independence, expand educational opportunities, preserve and improve affordable health care, provide tax relief, and protect those in greatest need.

# Implementing the Recovery Act within Office of Environmental Management (EM)

EM identified several opportunities to significantly reduce its lifecycle costs by making upfront investments on its core mission activities as described in *Report to Congress: Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War* (January 2009). These upfront investments include:

- <u>Near-Term Completion</u> Accelerating the completion of mission activities at EM's smaller sites and at DOE's national laboratories thereby collapsing EM's remaining work to the larger sites;
- <u>Footprint Reduction</u> Accelerating the completion of environmental (soil and groundwater) remediation and facility deactivation and decommissioning (D&D) at the larger sites thereby reducing EM's remaining work to the areas of the site where long-term mission activities still need to be completed; and
- <u>Solid Radioactive Waste Disposal</u> Accelerating the disposal of transuranic waste and low-level radioactive waste in an effort to maximize the use of readily available disposal facilities and capabilities.

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# **Implementing the Recovery Act (continued)**

The 111<sup>th</sup> Congress and the President have given EM the opportunity to execute these initiatives by providing \$6 billion through the Recovery Act. As such, Title IV—Energy and Water Development, Department of Energy, Energy Programs, of the Recovery Act provides

- \$483,000,000 for Non-Defense Environmental Cleanup,
- \$390,000,000 for Uranium Enrichment Decontamination and Decommissioning Fund, and
- \$5,127,000,000 for Defense Environmental Cleanup.

"These investments will put Americans to work while cleaning up contamination from the cold war era," said Secretary Steven Chu. "It reflects our commitment to future generations as well as to help local economies get moving again."

The Recovery Act requires an appropriately significant degree of accountability and transparency, and all progress will be tracked and reported to the President and the American people. The President has implemented a website, Recovery.gov, to provide the public with information regarding progress.

# <u>RECENT NEWS</u>: SRS Hires First 50 Workers with Recovery Act Funds Fifty new employees reported to work this month at the DOE's Savannah River Site (SRS), representing the first of many site jobs created by Recovery Act funding.

The new arrivals completed General Employee Training and medical examinations prior to reporting to their job sites. All 50 are union workers who will be performing various jobs within their trades. Positions include carpenters, electricians and iron workers. They will be working at various places at the Site, including 703-A, the former administrative building, where workers will be removing asbestos before demolition can take place. They will also report to R-Area, where reactor deactivation activities will begin.

During the next few months, SRS will be bringing in additional staff to facilitate the overall increase in the Site's workforce.

# **RECENT NEWS:** Recovery Act Funds Accelerate SRS TRU Waste Shipment

The Savannah River Site began a new phase of waste disposition this month, initiating the first shipment of Remote Handled (RH) Transuranic (TRU) waste to the Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico. These shipments complement the contact handled TRU waste shipments that have been occurring at SRS for almost a decade.

TRU waste is a special class of radioactive material consisting of clothing, tools, rags, debris, and other such items contaminated with radioactive elements, primarily plutonium, with an atomic number greater than uranium. It may also be mixed with hazardous chemicals. This waste is a result of decades of defense-related research and development activities.

# Message from the Deputy Chief Operations Officer for EM

On behalf of the Acting Assistant Secretary for Environmental Management and the EM family, welcome to the first EM Recovery Act newsletter. This newsletter will be issued monthly to keep you apprised of our recovery efforts and progress. I hope you find it informative and useful.

As you know, the Recovery Act is designed to spark growth in our economy; EM is both privileged and now committed to playing an important role. Soon, EM will be executing a stimulus package of nearly \$6 billion, which doubles our annual budget. This is a tremendous opportunity showcase our work and our people. We will be able to deliver a measurable return on investment by completing much of environmental cleanup, facility dispositioning. and radioactive waste disposal much earlier than planned. This opportunity will also test us. We will face challenges in financial management, project management, and contract management. We must deploy all of our resources to make sure we continue to do work safely and to deliver success. We must remember that we are stewards of the taxpayer and ensure this new investment is spent wisely. As such, we must be well-coordinated and ready to meet these demands.

I am very excited to be working more closely with our field and project offices across the country and with a strong integrated project team. Collectively, I am confident that we will continue to delivery quality and demonstrate excellence.

#### **RECENT NEWS:** Recovery Act Funds Accelerate SRS TRU Waste Shipment (continued)

RH TRU waste requires special handling, shipping, and disposal methods due to the waste's radiation rates. This shipment included six drums, or 1.26 cubic meters of RH TRU waste.

Workers continue to repackage, characterize, and ship the remaining legacy SRS TRU wastes to WIPP. With the recent start up of the Recovery Act Project and the resultant additional workforce, shipments of RH TRU waste will nearly double over the course of the 30-month project. About 4,500 m<sup>3</sup> of TRU waste will be shipped or prepared for shipment under Recovery Act Project. The estimated cost for this task is about \$400 million at SRS with additional Recovery Act funding to support WIPP's activities.

## **EM Recovery Act Funding Summary**

#### Washington (\$1.9 Billion)



Demolishing a facility in Hanford's 300 area

To accomplish demolition of nuclear facilities, cleanup of contaminated soils and groundwater, and retrieval of solid waste from burial grounds at the Hanford Site, the Richland Operations Office received \$1.6 billion. This cleanup, which also includes areas along the Columbia River, supports an overall nuclear footprint reduction from 586 to about 75 square miles by 2015.

The Office of River Protection received \$326 million to improve facilities that process liquid waste. The construction of infrastructure and systems that will transfer radioactive liquid waste from aging underground tanks to a modern waste treatment facility for final disposal will be accelerated. These funds will accelerate the design of a high level waste storage facility. Recovery Act funds will be for used to complete upgrades to the Effluent Treatment Facility and the 222-S Analytical Laboratory with the goal of improving the reliability and performance of waste processing operations. Single-shell tank integrity programs will also be developed for safe storage of waste.

#### South Carolina (\$1.6 Billion)

At the Savannah River Site, Recovery Act funds will be used to accelerate the decommissioning of nuclear facilities and contaminated areas throughout the site, including in-place decommissioning of two nuclear materials production reactors. This will reduce the site's industrial area by 40 percent, or 79,000 acres, by September 2011. The Recovery Act work includes shipping more than 4,500 cubic meters of waste out of South Carolina.



Typical nuclear reactor complex at SRS.

#### Tennessee (\$755 Million)



Oak Ridge work funded by the Recovery Act will focus on accelerating the demolition and disposal of remaining uranium enrichment plant buildings, surplus Manhattan Project era buildings, and highly contaminated uranium processing buildings. Soil cleanup will be done at the East Tennessee Technology Park, Oak Ridge National Laboratory and Y-12 sites. EM will also accelerate the cleanup of the areas contaminated with mercury.

(Left) Sediments contaminated with a variety of radioactive elements, are dredged from surface impoundments or open pits at the Oak Ridge National Laboratory.

#### Idaho (\$468 Million)



At the Idaho National Laboratory, Recovery Act funding will be used to accelerate demolition of excess nuclear and radiological facilities to make land available for other beneficial uses. Work will also involve the retrieval of specifically targeted waste and the accelerated shipment of waste for offsite disposal.

(Left) A telehandler removes soil prior to retrieving buried

#### New Mexico (\$384 Million)

The Carlsbad Field Office will use Recovery Act funding of \$172 million to accelerate the final disposal of legacy transuranic (TRU) waste at the Waste Isolation Pilot Plant (WIPP) from the Savannah River Site and seven smaller sites across the country.

At the Los Alamos National Laboratory, \$212 million in Recovery Act funding will be used for demolition of 35 buildings and structures, allowing the transfer of over 100 acres of land to Los Alamos County for reuse.



Workers position TRU waste at WIPP.



#### New York (\$148 Million)

At Brookhaven National Laboratory (BNL), Recovery Act funds will be used to demolish surplus ancillary structures associated with the Brookhaven Graphite Research Reactor, a nuclear reactor used for non-weapons scientific research. Contaminated soil and contaminated buried pipelines will also be removed and disposed offsite.

At the Separations Process Research Unit located at Knolls Atomic Power Laboratory, \$32 million will be used to cleanup contaminated soil at the North Field Land Area.

At West Valley Demonstration Project, \$74 million will be used to build a storage facility for temporary storage of high-level waste canisters that will be removed from a former waste treatment facility thus allowing it to be demolished earlier than planned. An underground treatment system will be installed to cleanup contaminated groundwater.

(Left) Brookhaven Graphite Research Reactor at BNL.

#### Ohio (\$138 Million)

The Mound Facility, located in Miamisburg, is receiving \$20 million in Recovery Act funds to complete remediation of Operable Unit 1, a formed shallow land burial site. The land will ultimately be transferred to the Miamisburg Mound Community Improvement Corporation.

The Portsmouth Gaseous Diffusion Plant's \$118 million in Recovery Act funds will allow the demolition of surplus facilities, including electrical switchyard structures, cooling towers, and one pump house, and clean up of 65 acres of contaminated soils. EM will also remove the source of the highest contaminant concentration groundwater plume on site, preventing further potential groundwater contamination.

#### Utah (\$108 Million)

For the Moab Uranium Mill Tailings Remedial Action Project, \$108 million in Recovery Act funds will be used to accelerate the relocation of uranium mill tailings away from the Colorado River. The funds allow for the disposal of an additional two million tons of mill tailings by 2011, thereby accelerating site cleanup by several years.

## Kentucky (\$79 Million)

Recovery Act funds will be used at the Paducah Gaseous Diffusion Plant to remove and dispose of large process equipment and demolish surplus chemical processing facilities, shrinking the area of contamination.



Tailings pile located along the Colorado River.



#### Illinois (\$99 Million)

At Argonne National Laboratory, \$99 million in Recovery Act funds will be used to accelerate demolition of excess contaminated facilities, making the land available for future beneficial use.

#### Nevada (\$44 Million)

The Nevada Test Site (NTS) is receiving \$44 million in Recovery Act funding to identify the characteristics of soil contamination at three sites and to install ground-water monitoring wells. The removal of contaminated materials and the demolition of three major



Underground Test Area well drilling at NTS.

facilities and two smaller structures will provide opportunities for future beneficial use of the land.

#### California (\$62 Million)

The Energy Technology Engineering Center's (ETEC) initial \$38.3 million in Recovery Act funds will be provided directly to U.S. Environmental Protection Agency to conduct radiological assessments necessary to complete an environmental impact statement that will enable the eventual completion of site cleanup. The remaining \$15.7 million is expected to be released for additional work at ETEC that already has full regulatory approval.

At the SLAC National Accelerator Laboratory at Stanford University, \$8 million in Recovery Act funds will be used to accelerate excavation and disposal of contaminated soil and accelerate installation of groundwater treatment systems.



## **Multiple States (\$69 Million)**

In addition to the various EM projects, \$69 million in Recovery Act funds will be used for cleanup cost reimbursement to companies that formerly processed uranium and thorium for sale to the federal government. These payments may allow companies to accelerate completion of site cleanup work.

## Management and Oversight (\$70 Million)

\$70 million in Recovery Act funds will be used for project management and administration costs at Headquarters and field sites.

For more information on EM Recovery Act work, please visit http://www.em.doe.gov/emrecovery/. Feel free to send questions and comments to EMRecoveryActProgram@em.doe.gov. Your feedback is welcomed.

