Environmental Management (EM) American Recovery and Reinvestment Act of 2009

U.S. Department of Energy
Environmental Management

Facts at a Glance : Portsmouth

Funds provided: *$118 million*

Jobs to be created/saved: *Over 200*

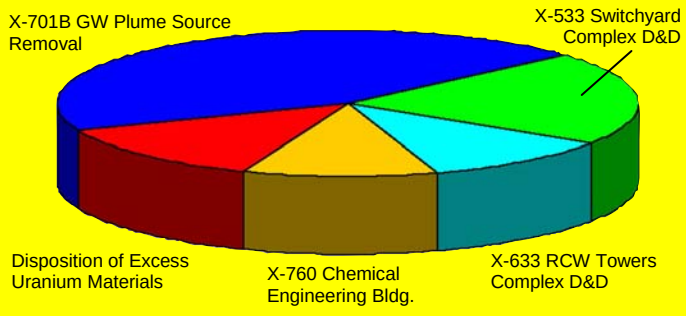
Project duration: *Completion by 2011*

EM's Mission: *DOE is responsible for the risk reduction and cleanup of the environmental legacy of the Nation's nuclear weapons program, one of the largest, most diverse and technically complex environmental programs in the world.*

How were projects identified and selected: *The Portsmouth regulators and the local site specific advisory board have expressed support for acceleration of proposed work activities for decontamination and decommissioning (D&D), soil remediation, and uranium disposition at the gaseous diffusion plant site. It is also anticipated that the local community reuse organization will express interest in the reuse/recycle of surplus materials and equipment.*

Where will information be posted: *Information will be available at the following website:*
~ http://www.em.doe.gov/emrecovery

Allocation of Stimulus Funds at Portsmouth



Projects receiving stimulus package funding at the Portsmouth Gaseous Diffusion Plant will include:

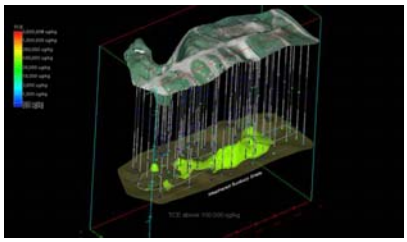
Decontamination and Decommissioning (D&D) of the X-633 Recirculating Cooling Water Tower Complex

- Scope of work will include utilities isolation, hazardous material removal, demolition of structures built in 1954-55, final grading and ground cover of impacted areas; characterization and remediation of underlying soils; containerization, treatment, and disposition of all demolition-related waste; and identification/segregation and characterization of surplus equipment for potential reuse/recycle.
- Estimated total waste resulting from completion of this project is estimated to be approximately 900,000 ft^3 of construction and demolition debris.

Decontamination and Decommissioning (D&D) of the X-760 Chemical Engineering Building

- Scope of work will include utilities isolation, excess equipment removal, hazardous material removal, demolition of 8,047 ft^2 structure built in 1954, ACM (Asbestos Containing Material) removal, final grading and ground cover of impacted areas, characterization of underlying soil, and disposition of all waste.
- Estimated total waste resulting from completion of this project is estimated to be nearly 90,000 ft^3

X-701B Groundwater Plume Source Removal



Trichloroethene (TCE) Concentrations >100 PPM

- Scope of work will include utilities isolation and relocation, hazardous material removal, demolition of structures, characterization of underlying soil, sheeting and shoring for protection of structures, soil and groundwater remediation and disposal, final grading and ground cover of impacted areas, and characterization, containerization, treatment (as necessary), and disposition of all waste.
- X-701B Information
  - X-701B Holding Pond was used from the beginning of plant operations in 1954 until November 1988.
  - Pond was designed for neutralization and settlement of acid waste from several sources. Organic solvents, including trichloroethene (TCE), were also discharged to the pond.
  - Three extraction wells and two interceptor trenches have been utilized at the groundwater plume.
  - Oxidant injection using a solution of hydrogen peroxide was performed at the location from 2005 until 2008. Remedy has been deemed no longer effective in treating the contamination at the lowest levels of the plume.

Uranium Management Center

Repackaging and Disposition of Excess Uranium Materials

- Scope of work is the disposition of approximately 40 percent, or 15 lots, of the total inventory in the Uranium Management Center.
- Project would open and inspect shipping containers for the purpose of receiving an approved Waste Profile for disposal at the Nevada Test Site (NTS). Containers would then be repackaged as necessary to meet the NTS Waste Acceptance Criteria and shipped for disposal.

Decontamination and Decommissioning (D&D) of the X-533 Switchyard Complex

- Scope of work will include utilities isolation, demolition of structures, PCB-contaminated soil remediation, characterization of underlying soil, final grading and ground cover of impacted areas, identification/segregation of surplus equipment for potential reuse/recycle, and disposition of all waste.
- Estimated total waste resulting from completion of this project is estimated to be approximately 703,000 ft^3
- X-533 Information
  - During operations from 1954 until being de-energized in November 2008, the switchyard received power from the Ohio Valley Electric Corporation system. Switchyard then delivered power to the switch houses for distribution to the X-333 Process Building and area auxiliaries.