Decontamination Decommissioning Remediation and Waste Management

Waltz Mill Site Remediation

Background

As the licensee and asset owner, Westinghouse Electric Company, LLC (WEC) has performed the role of designing, managing and completing the decommissioning of the test reactor, several reactor support buildings and impacted soil areas at the Waltz Mill Site (WMS).

The most recent WEC project at the WMS included soil remediation at the location of a previous debris disposal. This involved radiological and chemical characterization, mechanical waste sorting, packaging, transportation logistics and environmental aspects such as air effluent permits, wildlife and waterways management.

Description

The WMS site had been historically licensed and permitted as part of the test reactor installation that was decommissioned earlier. This specific project involved remediation of a 3.5 acre site that was characterized, visually inspected, excavated, segregated, sampled and the various materials dispositioned as waste, or as materials suitable for re-use as backfill.

- Project Key Statistics
  - Over 60,000 cubic yards of soil and demolition debris were processed
  - Depth of debris ranged from just below surface to burial at 19 feet below ground surface
  - Addressed delicate species management issues for both indigenous and migratory populations in accordance with state regulations
  - Maintained historically safe waterway sampling levels during and after the project

Site Remediation: Pollinator Field

Site Remediation: Screening

Site Remediation: Restoration

Westinghouse

Benefits

As the licensee and asset owner, Westinghouse was able to transfer best practices from our operating business to a nuclear site remediation effort. This enabled the project to use the controls and management system that ensures critical milestones are met safely and to schedule.

To minimize material handling, screening using hand-held gamma radiation detectors, and onsite gamma spectroscopy were employed. These technologies served to identify noncompliant materials, and this information was then used to maximize planning and work flow efficiencies.

Working closely with the site environmental health and safety experts, the contractors also benefitted from the hands-on knowledge this group was able to provide.

Deliverables

Westinghouse was able to cost-effectively deliver a completed project by incorporating our industry leading nuclear project management procedures to achieve safe and on-time performance under budget. This enabled maximum contracted work efficiency and helped these parties align to cascading activity windows in the project schedule. Westinghouse worked closely with the Pennsylvania Department of Environmental Protection, meeting or exceeding all reporting standards.

- Project Key Deliverables
  - Preplanning, screening and assessment
  - Radiological and chemical surveys and sampling
  - Mechanical segregation and crushing for re-use as backfill
  - Excavation
  - Waste packaging
  - Waste transportation and disposal logistics
  - Stockpile management
  - Water management
  - Storm Water Pollution Prevention Plan
  - Air Effluent Control Permitting
  - Soil grading and re-vegetation
  - Final status survey and reporting

Experience

Westinghouse has performed integration management of remediation at multiple sites in the world including the United States of America, Spain and Bulgaria.

Westinghouse Electric Company
1000 Westinghouse Drive
Cranberry Township, PA 16066

December 2016 / DDR-0116