

Case Study #9

Paducah, Kentucky, USA

November 2005 – February 2007



Paducah Scrap Yard Cleanup

The Paducah Scrap Yard is located at the Paducah Gaseous Diffusion Plant in Kentucky. Currently, United States Enrichment Corporation (USEC) operates the plant for the U.S. Department of Energy producing enriched uranium.

The contract included a “turnkey” service to sort and segregate, characterize, package, transport, and dispose of an estimated 19,600 tons of low-level radioactive on-site waste. The various waste streams targeted for the cleanup consisted primarily of scrap metal, dry active waste, and asbestos.

In January 2006, EnergySolutions shipped the first unit train off-site which included 12 railcars and 630 tons of waste. Over the next three months, EnergySolutions shipped two additional unit trains off-site that included 53 railcars and 3,000 tons of waste.

Newly designed high-sided “super gons” were used for the first time, doubling the size of the unit train from 24 cars to 50 cars. These were shipped as one unit train per month totaling 12,800 tons of waste. The newly designed “super gons” increased efficiency, reduced cost, and allowed for the project to be completed on time and within budget.

Project Challenges

- Characterization and segregation of waste
- Volume reduction, loading, packaging, and transport
- Limited timeframe

Project Results

- Project mobilization in less than four weeks
- More than 16,400 tons of waste was characterized, packaged, and transported off-site for disposal
- First waste shipments left site within three months of project start
- More than 130,000 man-hours worked without a lost-time accident



Before cleanup



Cleanup operations



Supergondola railroad car is the type used to transport project waste

