

Project Profile



ER

Emergency Response

Location	King Fossil Plant in Tennessee
Client	Tennessee Valley Authority
Date of Performance	Early 2009

Description: Just three days before Christmas 2008, a failed dike at Tennessee Valley Authority's King Fossil Plant released about 5.4 million cubic yards of fly and bottom ash. The spilled material covered about 300 acres of adjacent river embankment and shoreline. SWS Environmental Services initially mobilized a small crew of equipment and personnel. Upon assessment of the spill impact, cleanup operations were implemented across the contaminated areas. These operations required SWS Environmental Services to provide 21 boats, 19 vacuum trucks, 16,000 feet of boom, and approximately 160 response personnel.

Containment and cleanup operations included boat crews launched into adjacent rivers and holding ponds to deploy boom for containment control, vacuum truck operations removed fly ash from contaminated surfaces, and roll-off boxes staged throughout the site for shoreline cleanup. Debris and other impacted materials were loaded into the roll-off boxes manually.

Although a significant portion of the response efforts were routine by spill standards, there were some specific challenges encountered. Foremost was reaching the isolated areas inaccessible by land for the purpose of vacuum skimming the fly ash. To adapt, barges with vacuum units were used to access the isolated areas and return the recovered material to the shoreline where it was transferred to vacuum trucks. Freezing conditions caused an unfavorable working environment for water and vacuum truck operations by significantly elevating the viscosity of the product.

At the height of the cleanup operation, crews worked 12 hours per day, 7 days per week for about 6 weeks. Although significant progress has been made since the project began, crews are still onsite focusing on pockets and isolated areas that require a more technical approach in accessing, removing, and transporting the fly ash. Because of the widespread contamination, it has been recently estimated that the cleanup could take a significant amount of time to complete.

Project Highlights

- SWSES provided 21 boats, 19 vacuum trucks, 16,000 feet of boom, and approximately 160 response personnel for the emergency response of spilled fly and bottom ash along 300 acres of adjacent river embankment and shoreline
- Crews worked 12 hours per day, 7 days per week for about 6 weeks