

# Project Profile



## Emergency Response

<b>Location</b>	Near the Sam Houston National Forest and the Federal Correction Facility near Huntsville, Texas
<b>Client</b>	Explorer Pipeline
<b>Date of Performance</b>	July 14, 2007 through September 2007

**Description:** On July 14, 2007, SWS Environmental Services responded to Explorer Pipeline's emergency request to respond to an estimated 400,000 gallon jet fuel spill. The spill was caused by the rupture of a 28" pipeline located one hundred feet from a creek near the Sam Houston National Forest and the Federal Correction Facility near Huntsville, Texas. Upon SWS Environmental Services's arrival to the site, it was observed that the fuel had flowed into Turkey Creek and had contaminated approximately 5.2 miles of creek, banks, and low-lying overflow areas.

On the initial response, SWS Environmental Services personnel stopped the flow of fuel by constructing several underflow dams beginning approximately 5.2 miles downstream from the release location. SWS Environmental Services continued to isolate the spill by placing containment boom in strategic locations along the creek. At the peak of mitigation, SWS Environmental Services had 65 employees, 16 vacuum trucks, and 2 excavators working 24 hours per day, 7 days per week for 2 months, removing standing fuel from the creek to prevent further migration of the contamination. Additionally, drum skimmers were utilized to minimize waste and expedite recovery efforts. During recovery processes, SWS Environmental Services collected and transported over 1,000,000 gallons of jet fuel emulsions to an approved recycling facility.

### Project Highlights

- SWS Environmental Services's emergency responders worked 24/7 for 2 months to mitigate the spread of contamination
- Fuel spill impacted 5.2 miles of land and creek
- 16 vacuum trucks were utilized to remove standing fuel
- Over 50 frac tanks and 40 roll-off boxes were needed to stage the accumulated material and liquids

The magnitude and severity of the spill in a highly vegetative area required SWS Environmental Services to clear a 4 foot wide path approximately five miles along the creek bed using hand tools, weed trimmers, chainsaws, dozers, trackhoes, and backhoes. The path was created to gain access to the contaminated areas for remediation. SWS Environmental Services utilized over 12 miles of sorbent boom, 1,500 feet of containment boom, and over 1,750 bags of sorbent pads to contain and remove the released product. SWS Environmental Services provided over 1,000,000 gallons of temporary on-site storage for evacuated liquids storage. SWS Environmental Services utilized fifty 21,000 gallon portable storage tanks within a period of two days.

During rainfall events, SWS Environmental Services employed large pumps and several miles of hose to pump the creek overflow water around the contaminated area. This effort was undertaken to ensure that the installed underflow dams would contain the released product during the high-flow of the creek. Several sudden rainfall events occurred, causing SWS Environmental Services to

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scramble 24/7 to protect the dams from over-topping. Protection included installation of additional underflows and “pump-arounds” to divert water from the dam. SWS Environmental Services also created diversion areas and utilized soil, base rock, and heavy clay to build up dam areas. SWS Environmental Services managed all rain events without failure to any of the dams. Conversely, during low-flow periods, SWS Environmental Services hauled freshwater to the head of the creek to increase the flow and thereby aid in the recovery of the released fuel.

Throughout the project, SWS Environmental Services interacted extensively with the EPA, TCEQ, Texas Parks and Wildlife, and the stakeholder (Federal Prison System). SWS Environmental Services provided a comprehensive Emergency Response and Remediation approach throughout the project that complies with these agencies. Additionally, SWS Environmental Services obtained numerous core samples in fractures of the sandstone within the release area. These samples will be used to determine the extent of contamination and aid in the development of further remediation approaches.

In addition to creek remediation, SWS Environmental Services excavated 16,000 cubic yards of contaminated soil from the release site. Soils were being characterized, loaded, transported, and disposed of at an appropriate disposal facility.