Description: In February of 2013 SWS Environmental Services responded to a transportation/vehicular accident near Cecil, OH, involving eight commercial tractor trailers and three non-commercial vehicles on a busy highway. A large tanker spilled an estimated 2,000 gallons of Ethanol, in addition to over 15 tons of commodities from a refrigerated tractor trailer. The accident caused both directions of the highway to be closed nearly 20 hours for clean up.

SWS was contracted by three different companies involved in the accident to respond. The larger emergency response tasks involved a leaking tanker carrying the ethanol fuel mixture E95. An estimated 2,000 gallons of ethanol was released into the median of the highway, an adjacent highway ditch and a drainage ditch set between two privately owned farms. The work began midmorning with the isolation of contaminated areas using constructed berms and the subsequent installation of a water bypass system of pumps and hoses to divert the clean water around the impacted zones. Excavators were then used to remove the ethanol impacted soil from the median and from the southern ditch of the highway. On the northern side of the highway, boom and bio-matrix were laid in the drain and ditch line to prevent the contaminant from spreading further until SWS could return to neutralize the area. The remainder of ethanol inside the tanker was offloaded and sent for recycling. In addition to the spilled ethanol, SWS also removed products spilled from another tractor trailer, such as candy bars, toiletries, cigarettes, and other items, totaling over 15 tons. SWS then pumped about 110 gallons of diesel fuel from the vehicles waiting to be towed from the scene, and sent it for recycling. Once this was completed, the median was backfilled and the highway opened back up for traffic flow. The Emergency Response stage of this project was complete, and SWS began assessing the Remediation work that remained to be done.

Project Highlights

- Contracted by three different companies simultaneously for Emergency Response and Post-ER Site Remediation.
- Worked around the clock nearly 20 hours to mitigate hazards and allow the highway to reopen for traffic.
- Over 19,000 gallons of ethanol water and diesel fuel were sent for recycling.

As is typical in roadside spills, once the emergency response work is finished and the highway is reopened, remediation efforts begin. Ethanol, motor oil, hydraulic oil, and diesel fuel were still impacting the sides of the highway and the ditch line between the two farm properties. Due to the
fluctuating Ohio temperatures, mud and water was freezing and thawing each day. The extent of the contaminated areas needed to be monitored and reevaluated throughout the project. The remaining contaminated water contained in the ditch lines was pumped out with vacuum trucks and offloaded into frac tanks for transport and recycling. Due to the elevation and slope of the southern ditch line, the Project Manager mobilized some of SWS’ yellow-iron experts to perform a surgical excavation of the impacted soil. They used a 65 foot, long-reach excavator over four days to move more than 900 tons of ethanol impacted soil from the ditch line and into trucks for transportation and disposal. Further excavation of the drainage ditch was handled by regular excavators and 17 personnel from SWS Service Centers in Decatur, AL, Chicago, and Cincinnati. During excavation activities, SWS returned to the northern side of the highway to remove the boom, jet the line and vacuum up the contaminated materials. Three 55 gallon drums of solids, and four 55 gallon drums of liquids, were collected and taken for disposal. Upon completion of the excavation activities, SWS contoured the ditches to ensure proper water flow, and covered the ditch bank excavation area with straw blankets to prevent erosion.

Throughout the entire Remediation process, SWS maintained traffic control in a half mile lane closure of the highway and continuously swept mud and debris from the roads. At the request of the client, SWS provided daily reports, both written and verbal, of activities planned and completed as well as costs incurred and challenges overcome.

All together, SWS loaded an estimated 925 tons of impacted soil and commodities and transport them to a local landfill. Additionally, over 19,000 gallons of contaminated liquid and diesel fuel were recycled. SWS is planning to return in April and May to conduct backfilling of the ditch lines, seeding, and further beautification.