

CASE HISTORY: Killeen, TX - Stewart & Stevenson HEMMETT/FMTV Project

2005:

In 2005, Linegae Solutions, LLC* was invited by Stewart & Stevenson to see if we could assist them in eradicating their oil and grease discharge from the washing operations at their facility in Killeen, Texas.

Stewart & Stevenson had been assigned government contracts by the U.S. Army to refurbish their military vehicles (HEMMETT & FMTV) that were being returned from Iraq and Afghanistan. Upon the completion of the refurbishing task, the vehicles had to be washed and readied for shipment back overseas. They had established a wash area for this purpose, but they incurred some unforeseen problems. The discharged wash water was going into an open ditch and accumulating oil and grease media that would eventually be washed into common city drains. This had to be eliminated immediately.

Lineage Solutions suggested that Stewart & Stevenson use LS-1000** in their heated pressure washer that was being used to wash down the trucks. The chemical and heat would breakdown the hydrocarbons and make them more accessible as a food source for indigenous microbes in the wash water and soil.

An inspection forthcoming by the USEPA and the TECQ for the State of Texas deemed it necessary to come up with a plan that would not encumber the operation and at the same time show the regulatory authorities that Stewart & Stevenson were in compliance. Hence, Lineage Solutions laid out a plan in which it captured the runoff in a 1,000 gallon poly tank, and with the aid of a two-inch discharge pump, circulated the media along with LS-1000 for 20 to 30 minutes. The media was then released to a ground drainage ditch. This process was repeated daily and became a standard operating procedure.

Conclusion:

Samples were collected to check the TPH (Total Petroleum Hydrocarbons) levels. The analysis showed that the TPH levels were less than 1,000 ppm. (TECQ regulations call for less than 2,000 ppm prior to discharge.) The background and beginning levels were in excess of 3.5 % or 35,000 ppm. This indicated to Stewart & Stevenson that LS-1000 along with some mechanical assistance would keep them in compliance while helping maintain a safe and environmentally-friendly work environment.

* Formerly known as Texas EnviroChem, Inc.

** Formerly known as TxChem HE-1000