U. S. Navy - Simplifying Tank Degassing

A Naval Group in Virginia Beach, VA needed to safely repair a 5,000 gallon gasoline tank that was leaking at the fitting. Draining most of the fuel was easy, but removing the explosive vapors presented a problem. They could not begin welding until they were certain LEL levels were zero. Hazard Control Technologies was asked to provide assistance.

The solution was to use HydroLock Encapsulator Agent to encapsulate the residual gasoline and vapors in both the tank and surrounding area. They used a 3000 psi pressure washer to apply the 3% solution of HydroLock and water. To be safe, they applied 15 gallons of HydroLock in the tank and another 15 gallons around the vessel.

The vessel and surrounding areas were checked with an LEL meter and it was determined to be safe to proceed with welding repairs.

HydroLock for Tank Degassing and Cleaning

- HydroLock “locks up” hydrocarbon vapors and reduces explosion hazards.
- Quickly reduces LELs, allowing safe entry
- Minimizes turnaround time and associated costs
- Softens and dissolves accumulations
- Encapsulates vapors and controls odors
- Nontoxic, noncorrosive and 100% biodegradable
- Excellent for cleaning and degassing underground or above ground tanks and over the road tank trailers

HydroLock - Volume-based Spill Control

To estimate how much HydroLock is needed for a tank degassing and cleaning operation, you need to know how much hydrocarbon liquid remains in the tank. Using the formula below, you need one gallon of HydroLock for every gallon of hydrocarbon. Forty parts of water and agitation from a hose or pressure washer will ensure complete encapsulation. The residue can be safely pumped out and removed from the job site.

Encapsulation Ratio:

1 part HydroLock Encapsulator Agent
8 parts Any Hydrocarbon
40 parts Water