Mercaptan Contamination

Iowa City, Iowa - September 2013

Seneca Waste Solutions based in Davenport, Iowa, was called into neutralize, treat and transport water that had been contaminated with mercaptan during a large natural gas pipeline closure at a regional power utility company.

The project

The mercaptan-contaminated water was stored in five (5) 21,000 gallon frac tanks by the client until it could be properly cleaned. The odor caused by the contaminated water was particularly strong, to the point of being overwhelming. Seneca Waste Solutions personnel needed to reduce the odor before they could properly treat the contaminated water. First, Waste Solutions personnel introduced enzymes and deodorizing concentrates into the water before taking it to a water treatment plant for conditioning.

Following the completion of a one (1) week process, all liquids were removed by Seneca Vacuum Pumper trucks and transported off-site to a facility located in Cedar Rapids for waste water disposal. The frac tanks were then entered by Waste Solutions personnel under a confined space entry permit process. The tank interiors were decontaminated utilizing a detergent and Seneca’s Hydro-Blasting Equipment Combo truck with a 4K PSI high pressure wash method. Once the interior work was completed, the frac tanks were released for off-site transportation by the frac tank supplier, in order to be put back into use by the owner.

Seneca Waste Solutions knew the close proximity of residential areas and local businesses to the project site. As a result, the clean-up strategy was adjusted, taking into account wind directions in order to minimize any disruption with the local residents. Additionally, Seneca personnel maintained constant contact with the Client.

What is mercaptan?

Mercaptan can be described as a colorless, odorless gas in its natural state. It often is used as an additive in natural gas because it takes on the smell of rotten cabbage or eggs when a gas leak is present. That smell helps people to detect natural gas leaks.