Storage Tank Gas Kills Worker

INCIDENT

Workers in the oilfield face existential hazards when working several stories off the ground on an oil derrick or working around spinning equipment like cranes and forklifts.

Toxic gas notable H_2S hydrogen sulfide, a component of crude oil that carries a distinctive rotten — egg odor can be lethal and deadly.

It was hydrogen sulfide, that took the life of Gregory Claxton, an Iraq War veteran and the father of a 3-year-old boy, in Montague County, Texas, on February 14, 2015. Claxton, 29, was a crude hauler for Twin Eagle Transport LLC of Houston. Twin Eagle was a contractor for EOG Resources, a large exploration and production company also based in Houston.

Claxton moved oil by truck from a battery of storage tanks at EOG's Cooper B Unit, near the town of Forest burg, to a pipeline in Wichita Falls some 70 miles away. It was part of his job to dip a bottle on a rope, known as a thief, into the tanks to collect a sample so the oil's consistency, or specific gravity, could be ascertained. (The lighter the oil, the more it is worth). He also was to measure the oil's depth and temperature to calculate the volume in the tank.

On the morning of his death, Claxton climbed onto a catwalk above a tank holding crude from Well 1H. Opening the hatch, he was hit with a wave of H₂S. He died so suddenly that his body was found upright, as if frozen in place. After performing an autopsy, a pathologist with the Dallas County medical examiner's office listed the cause of death as "Toxic effects of hydrogen sulfide."

Randall and Shellye Claxton of Nocona, Texas, believe the death of their son, Gregory, from hydrogen sulfide exposure was preventable.

NEED TO KNOW

Oil field work — it's among the most dangerous industries in America says the Governor of South Dakota.

From 2008 through 2017, 1.566 workers died from injuries in the oil-and-gas drilling industry and related fields, according to data from the U.S. Department of labor's Bureau of Labor Statistics. That's almost exactly the number of U.S troops who were killed in Afghanistan during the same period.

BUSINESS / REGULATIONS

EOG, the big oil production company based out of Houston and twin Eagle, the long-distance hauler of the crude declined to comment.

EOG denied the family allegations in a lawsuit while twin Eagle reached a settlement out of court with the Claxton family.

Randall, who was hauling crude for Twin Eagle from a different location the day Gregory died, left the oil business after the accident. Now a long-distance truck driver, he said there is a culture of denial on H_2S that extends to the Texas Railroad Commission — which, despite its name, regulates oil and gas drilling in the state. "I've got a lot of friends who work in the oilfield," Randall said. "Every one of them told me there is no H_2S in Montague County. They've been lied to."

The Texas railroad commission pushed back in the issues and the Claxton's. They conducted "tests" 5 days after the tragedy.

The commission delivered a fatuous report saying there are no $\rm H_2S$ – designated fields of $\rm H_2S$ in Montague county with levels of 100 ppm or above.

The key to understanding the issue of H_2S field is to understand that hydrogen sulfide levels drop precipitously and effectively disperse within a few minutes after the "hatch" is opened by the operator.

Unfortunately, in this case Greg opened the "hatch" and was dead in a few minutes after inhaling the H_2S .

OSHA says it takes <u>at least 700 ppm</u> of the gas to cause "rapid unconsciousness [and] 'knockdown' or immediate collapse within 1 to 2 breaths," as apparently happened with Claxton.

QUESTION?

Why would a regulatory agency insist there was no problem in Montague County with hydrogen sulfide or H₂S?

"They don't want to document it, because once they document it these companies will have to put procedures in place, that will cost them money they don't want to spend says Greg's parents."

In sum, the commission does not want to find out what really happened.

In Shellye Claxton's view, however, there is no substitute for the strict policing of companies bent on making as much money as quickly as possible.

"There are little things they can do" to enhance safety, she said, "but they don't want to spend the extra dollars."

STATISTICS

The National Institute for Occupational Safety and Health (NIOSH) provides data to high-lite that a worker in the oil and gas industry is 6 times more likely to die on the job than the average American work.

The fracking boom in the U.S. in the years 2001 to 2012 reported 663 worker deaths.

Oilfield work often appears on lists of the most dangerous professions. As the oil and gas industry boomed from an average of 800 active drilling rigs in the 1990s to approximately 1,300 in the time period from 2003 to 2006, the worker fatality rate increased, with over 400 workers losing their lives on the job. The Centers for Disease Control found that the <u>annual fatality rate climbed</u> to 30.5 per 100,000 workers over those four years alone.

In addition to an alarming high worker death rate in the oil and gas industry, life-altering injuries can also occur. In 2016 alone, at least 20 workers a month were hospitalized or lost a body part while on the job. Oilfield workers can also experience major burns and fractures, among other injuries. The Labor Department speculates that employers under report injuries by as much as 60 percent. The former head of the Occupational Health and Safety Administration (OSHA) pointed out that a culture of not reporting these incidents in the oil and gas industry is common, so even more workers are probably hurt or injured on the job.

Global demand for oil continues to increase. In the United States alone, over 7.2 billion barrels of petroleum products were consumed in 2016—an average of almost 20 million barrels a day. Almost 40 percent of employers in the oil and gas industry plan to increase their workforce by at least 5 percent over the next year to expand production. This poses a regulatory problem in safeguarding a workforce already under great peril to remain safe.

Production pressures and the temptation to cut corners intensify during boom times as America is experiencing now due to a rush of fossil fuels exports.

PREVENTION

There is no more dramatic example of ounce of prevention fetches a pound of cure than to implement improved safety measures in the most dangerous industry in America. Dangers in the workplace are going to get worse based on industry projections to increase productivity by 5%.

Here are the best prevention practices:

- Tighter safety precautions by regulators.
- More oversight of oil operations can help spot potential problems to curb the number and severity of oil field accidents.
- Active monitoring for hydrogen sulfide.
- Enable OSHA to investigate accidents other than fatalities or require hospitalization.

- Make sure all workers have proper protective equipment and receive proper training.
- Ensure existing safety measures are rigorously and correctly followed.