

NATURAL GAS WEEK[®]



Copyright © 2018 [Energy Intelligence Group](#). All rights reserved. Unauthorized access or electronic forwarding, even for internal use, is prohibited.

MON, JUL 16, 2018

Downside of Permian Drilling Boom: Surge of Deadly Truck Accidents

Trucking is the most dangerous and least efficient method of moving cargo in and around the Permian Basin. And yet as gas and oil producers demand ever-increasing loads of product and equipment to support their staggering volumes, a reckoning is looming.

Every rig added to the sprawling West Texas formation brings with it hundreds more commercial trucks hauling loads that are often overweight and barely regulated. While the bounty has contributed significant economic benefits to the people who live there, there has been a steep price to pay.

Indeed, comparing drilling activity with crash data from the Texas Department of Transportation illustrates that as more rigs enter the Permian, so does the frequency and severity of commercial motor vehicle (CMV) crashes.

A sampling of five Permian counties compiled by *Natural Gas Week* revealed that between 2011 and 2017, the rig count rose 15% to 155, while CMV-related crash fatalities in the basin shot up a staggering 119% to 35.

'Hellacious amounts of truck traffic'

Driven largely by a revival in commodity prices not seen in years, E&P companies this year have steered their drilling programs to the prolific Permian and accelerated ([NGW Mar.26'18](#)). During the first six months of 2018, the number of rigs scattered across its sprawling 80,000 square miles peaked in June at 480, constituting 55% of the active rigs in the US and a 29% leap above the same period last year.

In Midland, Texas, the locals are accustomed to sharing the road with the industry's large CMVs, but the supplies to support the shale renaissance have increased the traffic dramatically, said James Beauchamp, president of MOTRAN, an alliance between city leaders in Midland and its sister city, Odessa, to address the region's transportation troubles.

Not only are there more rigs, they're getting bigger and more demanding. When the Permian was still a largely vertically drilled basin, and a standard rig required up to 40 truck loads to put in service. Today's super-spec walking rigs need closer to 100 loads of supplies, said Ronnie Witherspoon, CEO of Aveda Transportation & Energy Services.

Similarly, the needs of contemporary wells have grown exponentially from the average 1,100 truck deliveries needed to bring a vertical well on line. In water and sand alone, the 60-stage frack jobs performed in the Permian today use about 3,600 loads of water and sand from trucks that tip the scales at 80,000 pounds each.

"There's hellacious amounts of truck traffic," Beauchamp told NGW. "It's our bread and butter, our economy. But there's a couple areas where it gets tricky."

Between the increasing supplies needed in the basin and the lack of pipeline capacity to take crude to premium markets, producers are looking to the highway for answers. And despite a track record of fatal crashes that leaves railroads and pipelines in the dust, trucking supports the industry as it unearths the Permian's riches.

Today, there are close to 20,000 CMVs operating regionally in Midland and Odessa, Beauchamp estimated. And the industry likely needs another 8,000 or so trucks in the region. In the central part of the Permian where Beauchamp monitors the trucking issues, the infrastructure is “immature,” and ill-equipped to support the CMVs, each weighing close to 80,000 pounds, that share four-way stop sign intersections with passenger vehicles, he said.

Lines of cars, pick-up trucks and commercial vehicles go for miles in some parts of the city.

Enforcement of CMV laws on truck weight and driver certification is lax, he said. Anecdotally, Beauchamp estimates 40% of CMV drivers are underage and unqualified. But local law officers lack the mandate to enforce those requirements in municipalities of fewer than 125,000 residents, which describes most of the Permian.

In more populated parts of West Texas, local leaders are ramping up roadway construction to deal with the program, but meanwhile, it only exacerbates the problems, Witherspoon said.

“The traffic is heavily congested, and it does create dangerous times to be on the road.”

Green Workforce

The industry’s need for CMVs and skilled drivers comes at a time when a nationwide driver shortage already exists. Plus, fewer workers throughout the supply chain returned to the industry after the last downturn ([NGW Mar.26'18](#)). Many of the most experienced drivers lost their jobs and retired.

And in the current environment, even the six-figure salaries dangled in front of younger workers who were laid-off isn’t enough to lure them back to the grueling schedule and transient lifestyle of long-haul trucking, Witherspoon told NGW. Estimates of exactly how many new drivers are needed in the Permian vary, but adding hundreds or even thousands of more trucks to area roadways is a concern, he said.

But as the industry evolves, trucking will likely play a larger role as CMVs are necessary to move more, bigger pieces of equipment.

“You’re pumping millions of pounds of proppant and millions of gallons of water on a continuous basis. Increasing the frack sizes increases the logistics and the congestion,” Witherspoon said. “You’ll see more and more trucks – the industry is not really driven by and geared around efficiency.”

Some fear that in the industry’s haste to bring drivers to the field, the new workforce isn’t being prepared adequately for the task. Historically, CMVs have had a role in about 11% of the area’s fatal crashes, Beauchamp said. Today, it’s closer to 39%.

“That doesn’t mean the percentage of trucks at fault has gone up. It is really a matter being that normal passenger traffic does not do well with heavy trucks,” Beauchamp said. “It’s just not a good mix. It’s never been a good mix.”

More Trucks, More Deadly Collisions

Houston energy attorney Ken Bullock, a partner at Munsch Hardt Kopf & Harr, said the accidents tend to increase in the more populated parts of the Permian. For example, the city of Odessa is one of the largest in West Texas, and there are more traffic collisions compared to Pecos in Reeves County, where the population of less than 10,000 is less likely to run into CMVs associated with Apache’s developing gas play at Alpine High ([NGW May14'18](#)).

“You could probably draw a distinction when you’re looking at an increase in rig count that is right in the heart of the Permian, right in the middle of Midland and Odessa,” he told *NGW*. “I think there is a proportional increase in roadway activity that’s heavy-truck related when you have an increase in the rig count because all of the things that go along with it.”

Personal injury litigators say their caseloads from the Permian’s truck traffic are on the rise, and typically the client

was behind the wheel of a passenger vehicle. Houston attorney Ryan Zehl said along with the increasing activity and CMV crashes in the Permian, training and safety of the truck drivers is a huge concern for everyone who shares the road with them.

“An accident between two sedans is bad enough, but when a wreck involves a vehicle with the power and size of an 18-wheeler, the results have a much greater tendency to be catastrophic,” he said.

One of Zehl’s recent clients is a 30-year-old mother of three who was driving to her job at a sand mine in Ward County when she struck an 18-wheeler hauling sand before sunrise.

According to court documents, the truck driver attempted to make an illegal U-turn and became stuck, blocking the narrow roadway. With no flashers or reflective devices to alert her to the presence of the truck, the woman told NGW that she didn’t see the vehicle until it was too late. She plowed into it at 75 miles/hour.

After a witness extinguished the fire engulfing her own large passenger Chevy pickup truck and police pried apart the wreckage to free her, the woman was airlifted to a local hospital. The truck driver was fined for impeding traffic.

The woman has lived in or near the Permian for most of her life and has worked in the oil and gas industry for several years. The availability of good-paying jobs has allowed her to comfortably support herself and her children. But the collision with the truck left her with a fractured spine, shattered hip and anxiety. She can’t walk or return to her job.

“I want my life back, but it will never be the same,” she said. “It just makes me angry.”

Deon Daugherty, Houston