

**GUEST COLUMN**

# Producing a safer workplace

BY JIM SIERRA

When working with heavy equipment and moving machinery in a job that requires intensive manual labor, you must have comprehensive safety plans to protect your workers.

The oil and gas industry covers several hundred thousand miles of pipelines that move across the United States and Canada — a production requiring a high number of jobs and major output ability. As of Jan. 15, there were 1,248 active rotary rigs in the United States, according to Baker Hughes, an oilfield services company.

Active rig numbers and worker numbers fluctuate often due to constant change in industry demand.

Oil and gas workers have an occupational fatality rate eight times higher than the rate for all United States' employees, according to the Centers for Disease Control and Prevention (CDC). High volumes of workers coupled with long hours, often 12 hours on and 12 hours off for two-week periods, test workers' resilience. Often, these long hours are extended to cover gaps in shift changes or no-shows, forcing workers to go beyond their regulated hours and increasing fatigue.

Fatigue, rushed work and lack of experience are often contributors to workplace accidents in oil and gas production and service. Below are tips to prevent the three most commonly reported

accidents for oil and gas production and service workers, along with general safety tips for on- and off-site production.

Driving can be dangerous because it depends on your awareness and awareness of those sharing the road with you. Add extraneous circumstances, such as lack of sleep or a heavy load on a trailer, and the probability of an accident increases:

>> Drivers and passengers must wear seatbelts, even if they are driving a short distance from the drill site to their accommodations.

>> Drivers should check trailer loads before and throughout the trip to ensure that everything is secure and stable.

>> Encourage workers to get enough rest before transporting pipes or other machinery.

>> Ensure drivers receive proper breaks when they are working long hours so they stay mentally sharp while traveling.

>> Promote situational awareness. Drivers should be aware of road conditions, length of travel and weather forecasts.

Those who work in the oil and gas industry are surrounded by hazardous materials, some that are highly flammable and others that are silent threats:

>> Routinely review fire safety procedures with workers to refresh and re-educate.

>> Monitor all production and drilling systems for leaks.

>> Monitor hydrogen sulfide, or sour gas, levels as it is odor-

less, colorless and extremely toxic, even at low levels.

>> Educate workers on the warning signs of overexposure to hazardous gases.

>> Promote situational awareness. If workers see components conducive to a fire, they may be able to prevent it.

To someone unfamiliar with oil and gas equipment, the machinery can be intimidating. To most workers in the industry, however, these machines and tools are part of their daily routine and non-threatening. But no one should ever take the power of these machines for granted:

>> Make sure workers do not wear loose clothing that could become tangled in moving parts.

>> Keep machinery updated with the latest safeguards.

>> Replace older equipment as soon as possible to avoid rusted and broken parts.

In addition to these tips, be aware of new hires' education of safety practices. An Occupational Employment Statistics study from 2003 to 2007 found that workers who were employed for less than one year made up one-fourth of oil and gas production fatalities. Make sure new workers understand all standard safety practices and procedures.

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