

CASE STUDY

Sunbridge employs a simple and proven solution at its CNG fueling facility and client sites to ensure greater safety and peace of mind.

OVERVIEW

Compressed Natural Gas (CNG) is a clean and affordable fuel alternative that can help oil and gas producers reduce costs, lower emissions, and meet ESG initiatives. When not handled properly, however, it presents a potential hazard that can threaten the safety of people and property.

As one of the largest and fastest growing providers of CNG to Permian producers, **Sunbridge Energy Services** recognizes the benefits of CNG as well as the risks associated with handling the diesel fuel alternative.



THE CHALLENGE

CNG is created when natural gas – the same gas used to heat homes or cook on a stove top – is compressed to less than one percent its normal volume. It is stored and distributed at a pressure of 2,900 to 4,000 psi in airtight cylinders that are transported to producers via a “virtual pipeline” of specially-designed trailers.

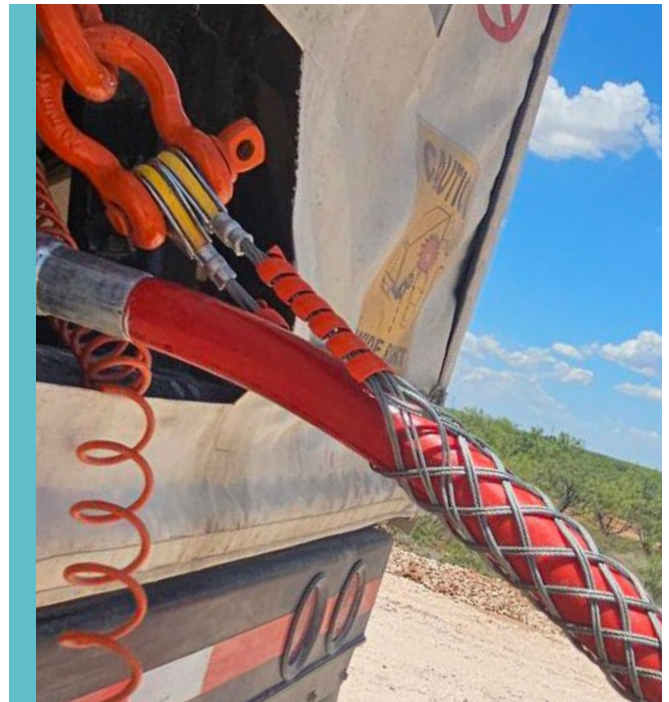
CNG fueling facilities use hoses to load the pressurized gas into the cylinders. A high-pressure hose failure can be extremely dangerous – the magnitude of force involved causes the heavy hoses to whip erratically, making them hazardous and difficult to control. Not only can a hose failure be a serious safety threat to workers, but damage to equipment or a resulting leak can also lead to downtime, expensive cleanup and repairs, and reputational harm.

THE SOLUTION

With an advanced 25 MMcf/day capacity gas compression facility connected to the Northern Natural trunk line and strategically located just outside of Midland, Sunbridge is uniquely positioned to provide reliable and on-time delivery of CNG throughout the Permian Basin. But capacity and location were not the only considerations for Sunbridge when engineering its state-of-the-art CNG fueling facility. Safety was also a paramount concern.

To mitigate the risk of injury from a high-pressure hose incident, Sunbridge installed a whip stop restraint system, called a “whip sock,” to each of its hoses. If a hose becomes separated, the whip sock helps stabilize it and prevent whip checks – a hose whipping uncontrollably – until an operator can safely release the hose’s pressure. And unlike other whip check devices that can be difficult to install and create pinch points, the whip sock is quick and easy to install.

By using whip socks on all its high-pressure equipment and hoses, Sunbridge prevents the likelihood of whip checks during an incident, and thus minimizes the risk of injury to workers, damage to equipment, and the potential for collateral harm to people and property.



“At Sunbridge, we strive to create the safest work environment possible for our employees, customers, and community. Proactively installing whip socks on our hoses is just one example of how we approach our everyday operations with an acute attention to best safety practices.”

Wilse Dimino,
President & COO, Sunbridge