

# LNG Safety



Sophisticated alarms and multiple back-up safety systems, which include emergency shutdown (ESD) systems, are core components of the Cameron LNG facility.

## **Safety is a top priority at Cameron LNG.**

The liquefied natural gas (LNG) terminal meets and, in some cases, exceeds industry safety requirements.

LNG terminals worldwide have an exemplary safety record due to advanced technology, well-trained professionals, a thorough understanding of LNG risks, robust safety systems and procedures, and rigidly adhered-to standards, codes and regulations. No serious accidents involving an LNG import terminal have occurred in the U.S. in over 30 years.

## **LNG Safety**

Contrary to some misconceptions, LNG is not stored under pressure. According to the U.S. Federal Energy Regulatory Commission, "Although a large amount of energy is easily stored in LNG, it cannot be released rapidly enough to cause the overpressures associated with an explosion.



LNG vapors (methane) mixed with air are not explosive in an unconfined environment."

## **LNG Transportation**

Transportation of LNG via ship has a long record of safe operation. In LNG's more than 50-year shipping history, LNG ships have traveled more than 150 million miles without a major incident. There have been no collisions, fires, explosions or hull failures resulting in a loss of containment for LNG ships in ports or at sea. Only eight LNG incidents have occurred worldwide and none of those led to a loss of life or a breach of the vessels' cargo-containment systems.

## **Facility Safety Systems**

Sophisticated alarms and multiple back-up safety systems, which include emergency shutdown (ESD) systems, are core components of the Cameron LNG facility. The ESD systems can

In LNG's more than 50-year shipping history, LNG ships have traveled more than 150 million miles without a major incident.

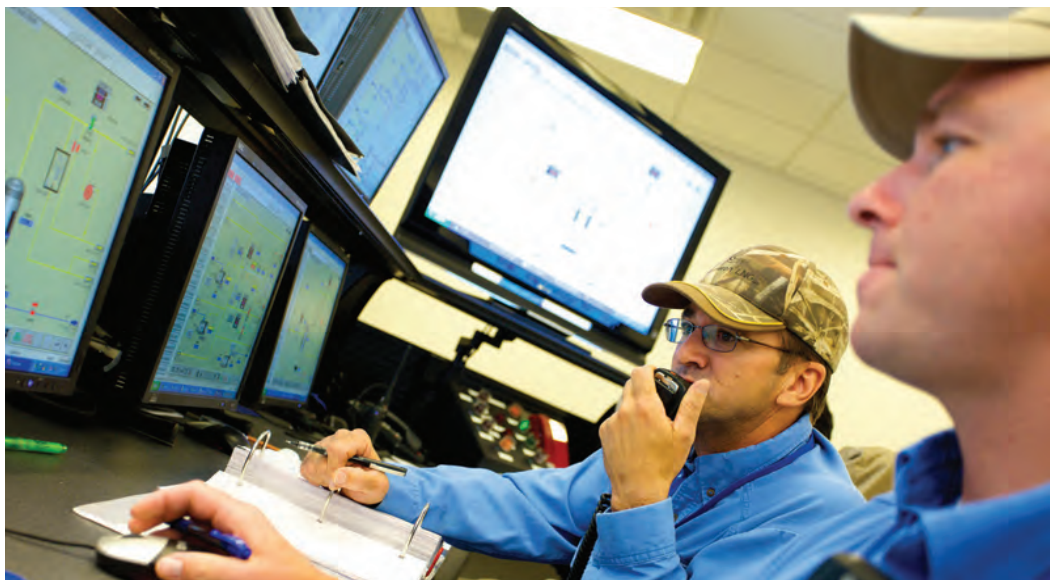
identify problems and shut-down operations, limiting the amount of LNG that could be released. These systems are linked to automatic gas, liquid and fire detection equipment. There are also detectors to check LNG levels and vapor pressures within storage tanks and closed-circuit television equipment for monitoring all critical locations of the LNG facility.

LNG terminal safety systems combined with special operating procedures, training and equipment maintenance minimize the risk of an accident.

### LNG Storage Tanks

The three storage tanks at Cameron LNG were constructed according to U.S. regulatory requirements. The structures were constructed using a full-containment, engineering design that provides two levels of safety protection. Within the full-containment storage tank, LNG is housed in a container with extremely efficient insulation between the walls that is analogous to a thermos bottle. The container is encased inside a second container comprised of pre-stressed concrete.

The full-containment tanks have double walls – an inner wall of 9 percent nickel steel surrounded by a wall of concrete, three feet thick. Should the inner steel wall fail, the outer concrete tank would contain the LNG.



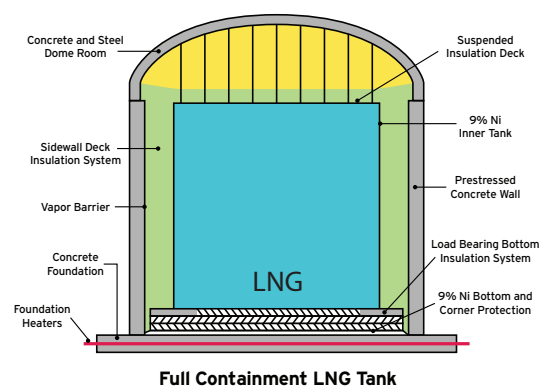
### Government Oversight & Facility standards

The LNG industry's requirements are established by the International Maritime Organization, Federal Energy Regulatory Commission, Department of Transportation, and the U.S. Coast Guard. Cameron LNG also works closely with the Department of Homeland Security to ensure that operations are safe and secure.

Industry and government standards set specifications for, among other things, concrete and steel used in construction, valves, pumps, tanks, compressors, refrigeration piping, tank insulation, firefighting equipment and protection against seismic activity.

### LNG Safety Questions?

If you have any questions about LNG safety at Cameron LNG, please don't hesitate to send us an e-mail at [info@cameronlng.com](mailto:info@cameronlng.com).



The three storage tanks at Cameron LNG were constructed using a full-containment, engineering design that provides two levels of safety protection.

Cameron LNG  
2925 Briarpark Drive, Suite 1000  
Houston, Texas 77042

Tel: 1-832-783-5500  
Media: 1-844-239-9072  
[info@CameronLNG.com](mailto:info@CameronLNG.com)  
[www.CameronLNG.com](http://www.CameronLNG.com)

