Compressed Natural Gas Tank Explosion in Los Angeles

Summary by Kennerly Digges, ASRI

NTSB Summary of the CNG Explosion Event

On Thursday, February 15, 2024, about 6:42 a.m. pacific standard time, a 2020 Freightliner Cascadia compressed natural gas (CNG)-powered truck-tractor, operated by Heavy Load Transfer, was traveling south on Alameda Street in Wilmington, Los Angeles County, California.

The truck's fuel storage system consisted of two horizontally mounted 3600-psi Type 4 CNG tanks with each tank located outboard of the vehicle chassis.

The driver noticed sparks coming from inside the cab, near the bottom of the passenger-side seat, and stopped the truck in a paved gore area at the intersection with Henry Ford Avenue. The driver then exited the truck and called 911.

NTSB Summary of the CNG Explosion Event

The truck was fully engulfed in fire before fire department personnel arrived, and the firefighters were not aware that the truck was CNG-powered.

During the course of firefighting, the driver's-side tank exploded, injuring nine firefighters.

The firefighters were transported to a nearby hospital for injuries ranging from minor to severe.

Case still under investigation by NTSB

LAFD Firefighters Lawsuit after CNG Truck Explodes in Los Angeles

Lawsuit Reported on June 20 2024:

The lawsuit alleges that the defendants (the makers of the compressed natural gas tank and fuel system) negligently designed, manufactured and sold a defective CNG fuel system.

“It is unacceptably dangerous that a truck running on compressed natural gas can fail like this, exploding in the middle of a city street like a bomb as opposed to releasing pressure safely,” said lead counsel Matthew McNicholas of McNicholas & McNicholas, LLP.

“This would not have occurred had the product not had hidden defects preventing the safe release of pressure.”

Earlier Research on Fireworthiness of High-Pressure Fuel Tanks

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- Weyandt, N., “Analysis of Induced Catastrophic Failure of a 5000 psig Type IV Hydrogen Cylinder,” SwRI, Report 01.0639.01.001, February 2005. Available at: www.mvfri.org
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