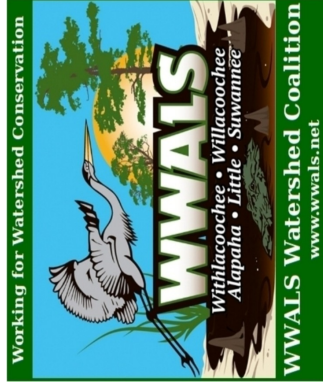


## WWALS Watershed Coalition

WWALS advocates for conservation and stewardship of the Withlacoochee, Willacochee, Alapaha, Little, and Suwannee River watersheds in south Georgia and north Florida through education, awareness, environmental monitoring, and citizen activities.

**Flyer contents by**  
Cecile Scofield,  
Member, WWALS  
Watershed Issues Committee



WHAT YOU  
NEED TO KNOW  
ABOUT

LIQUEFIED  
NATURAL  
GAS

"LNG"

LNG

OUR LIVES, OUR ENVIRONMENT

**WWALS**  
**Watershed Coalition**

Our members are the eyes and ears of the watershed, including issues that reach far beyond. Become a member today!

Contact  
[@suwanneeriverkeeper.org](mailto:@suwanneeriverkeeper.org)

WWALS Watershed  
[@gmail.com](mailto:@gmail.com)  
850-290-2350

[www.WWALS.net](http://www.WWALS.net)

# WHAT IS LIQUEFIED NATURAL GAS A/K/A LNG?

Natural Gas is delivered to an LNG facility via a Natural Gas Pipeline.

The gas is cooled to -259° Fahrenheit and becomes a cryogenic liquid known as "LNG."

Reducing volume of the gas into a liquid facilitates storage and transportation.

- Primary component is Methane
- 82.6 Cubic Feet of Natural Gas = 1 Gallon
- Occupies 1/600<sup>th</sup> volume of natural gas
- Has 600 times the energy of natural gas
- Extremely Flammable
- Easily ignited by heat, sparks or flames
- Will form explosive mixtures with air
- Vapors may travel to source of ignition and flash back
- Cylinders exposed to fire may vent and release flammable gas through pressure relief devices
- Containers may explode when heated
- Ruptured cylinders may rocket
- If concentration gas is high enough, may cause asphyxiation
- Contact with water may result in vigorous or violent boiling of product and extremely rapid vaporization
- Pressures may build to dangerous levels if liquid gas contacts water in closed containers

## SAFETY CONCERNS

### BREACH OF CONTAINMENT TANK

- **Flammable Vapor-Gas Cloud**
  1. LNG boils quickly and vaporizes
  2. Flammable Natural Gas Vapor/Air Mixture Cloud Forms
  3. High likelihood of ignition sources, e.g. electrical sparking
  4. Flash Fire
  5. Vapor cloud denser than ambient air and dispersed by prevailing winds
  6. Can explode if in an enclosed area
  7. Cannot migrate over abutting property lines\*

### ACCIDENTAL SPILL

- **Thermal Radiation (Heat) from Fire:**
  1. Large, bright flame formed above pool of vaporizing LNG
  2. Heat is approximately 60% greater than gasoline pool fire
  3. Poses significant hazard to nearby people and objects
  4. Cannot migrate over abutting property lines\*

## TRANSPORTATION OF LNG

Applications filed with Federal Railroad Administration for Permits to haul LNG:

- ALASKA RAILROAD
- UNION PACIFIC
- BNSF
- FLORIDA EAST COAST RAILWAY\*

*\*Sister company of Florida East Coast Industries, the Parent Company of AAF*

### LNG ISO Intermodal Containers:

- New, Untested Technology
- 40-Foot Intermodal Cryogenic Containers
- Giant Thermos Bottles
- Can be truck or rail-mounted
- Can hold 11,000 gallons of LNG
- Used to Transport by ship, rail, or over roads and highways

### Transporting LNG by Rail:

- Along same rail lines as high-speed passenger rail
- Increase for potential accidents
- Emergencies can exceed local response capabilities

*\*Unless property is under Governmental or other specified control.*