

World Leader In Marine Alternative Fuel Use!

JAXPORT

*Northeast Florida's Economic
Engine and Southeast Gateway*



AAPA Regional Roundtable on Energy

**September 14, 2016
Vancouver, B.C.**

What is LNG?

LNG is Liquefied Natural Gas, the same natural gas safely used in homes and businesses for more than 100 years, but stored as a liquid.

Natural gas becomes LNG when cooled to -260°F. At this point, the natural gas condenses into a clear, non-flammable, non-corrosive liquid occupying 1/600 of the space of natural gas at atmospheric pressure.

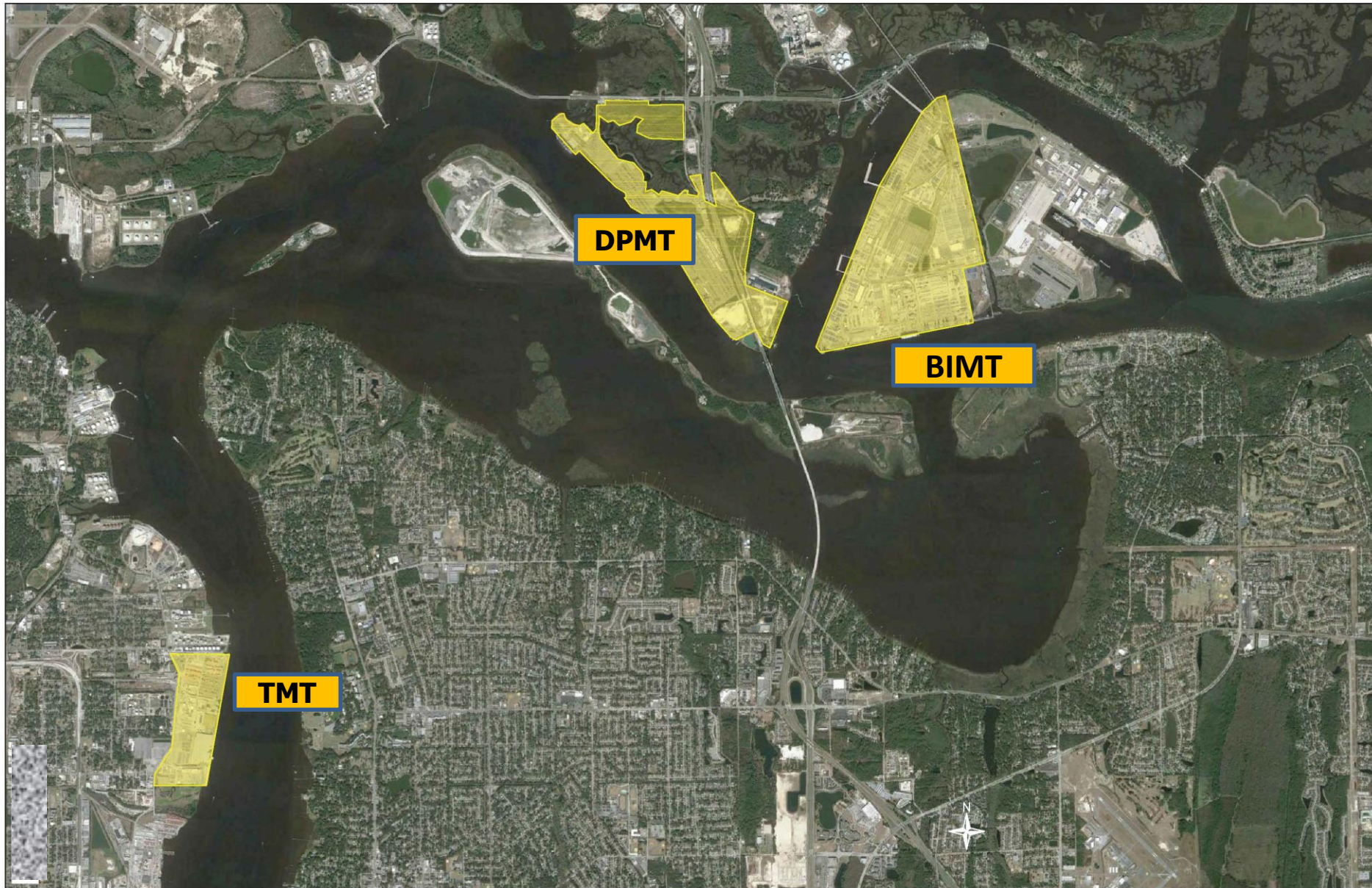
LNG when warmed above -260°F at atmospheric pressure returns to a gas.

LNG is stored at very low pressure (~ 0 – 200 psi).

LNG FACTS

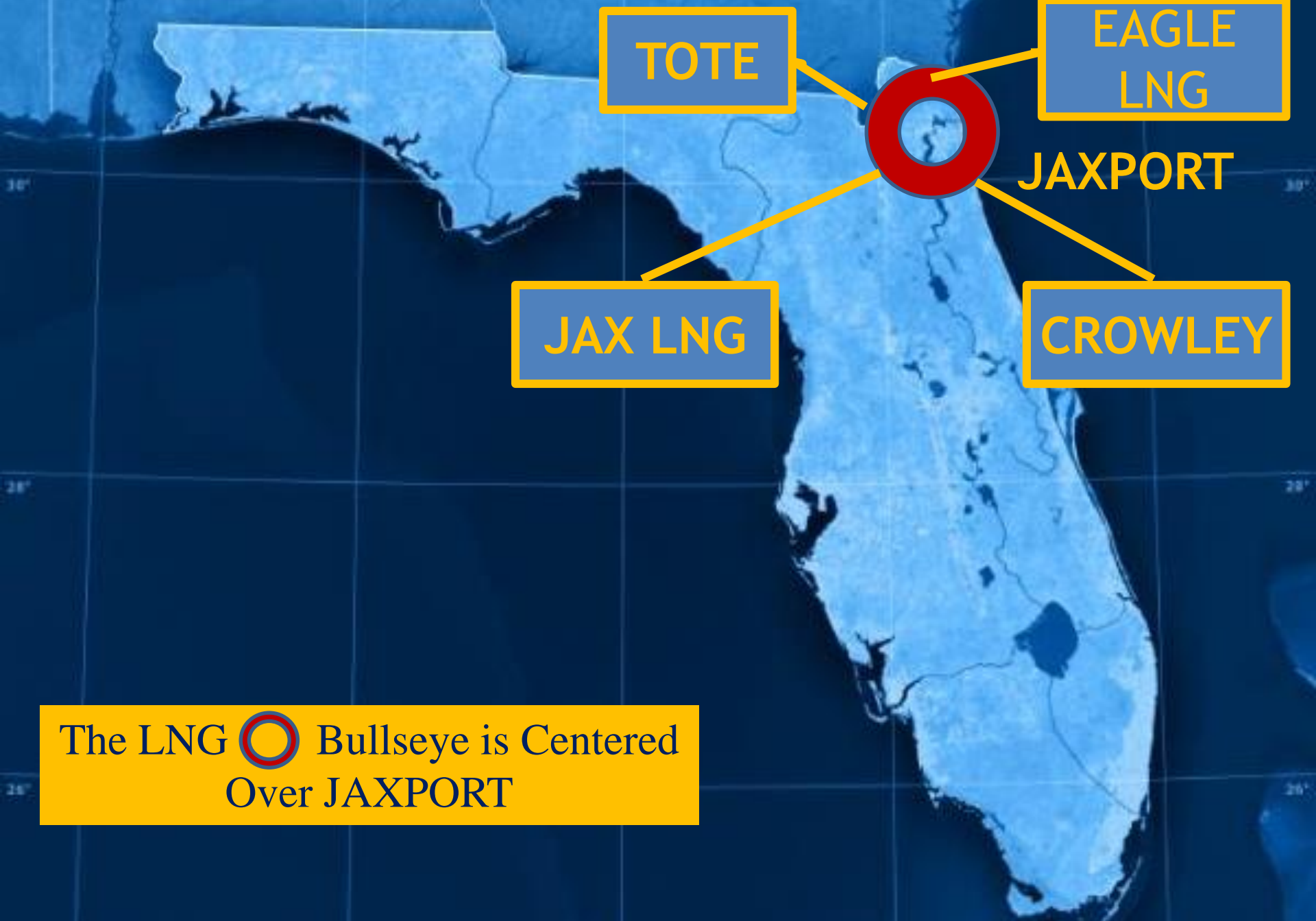
- **LNG is not explosive or flammable**
- **LNG is not corrosive**
- **LNG will not mix with water (it floats)**
- **If LNG is spilled, it quickly vaporizes and rises into the air**
- **There is no residue after a LNG spill on water or soil**
- **LNG is odorless, colorless and non-toxic**

JAXPORT FACILITIES



NORTH AMERICAN EMISSION CONTROL AREA (ECA)





TOTE

EAGLE
LNG

JAXPORT

JAX LNG

CROWLEY

The LNG  Bullseye is Centered
Over JAXPORT

LNG POWERED VESSELS - TOTE MARITIME

Tote Maritimes' *Isla Bella*'s Launch on April 18, 2015

Tote Press Release:

Our Marlin-class vessels will be the most advanced, environmentally responsible vessels of their kind – reducing vessel sulfur emissions by 97 percent while providing safe, reliable cargo deliveries that keep communities moving. This investment demonstrates our commitment to the people of Puerto Rico and our environment. These vessels mark a new age of shipping, using the best technology in the world.

TOTE LAUNCHES *PERLA DEL CARIBE*, SECOND MARLIN CLASS SHIP August 29, 2015

Tote Press Release:

TOTE launches second LNG powered containership, August 29, 2015 at General Dynamics NASSCO in San Diego.



Keel Laid for Crowley's First LNG-Powered Ship



LNG BUNKER VESSEL - JAX LNG

Tote Press Release:

IRVINE, CA, U.S.A.: WesPac Midstream LLC (WesPac), a leading provider of energy infrastructure and liquefied natural gas (LNG) solutions, and its affiliate Clean Marine Energy LLC (CME), the global facilitator of tailored solutions for Emission Control Area (ECA) compliance, announced today a construction contract with Conrad Orange Shipyard, Inc., a division of Conrad Shipyard, LLC, to build the first dedicated LNG bunker barge for the marine market in North America. This barge will be a critical supply chain component in ongoing efforts around the world to reduce the environmental impact of maritime activity through the conversion of ships to LNG.

The first 2,200 cubic meter (cbm) barge is expected to be delivered in early 2016 and planned to initially be deployed in Tacoma, Washington, to service ship owner Totem Ocean Trailer Express's (Totem Ocean) "Orca class" RO/RO vessels, in addition to other LNG-powered vessels. Subsequently the barge will be relocated to Jacksonville, Florida to serve TOTE's (parent company to Totem Ocean) new build "Marlin class" container vessels and other LNG-powered vessels in the Port of Jacksonville.



LNG SHIPPING - CROWLEY MARITIME



Crowley for Coke in the Caribbean
March 12, 2014 in *LNG, Marine* by Rich Piellisch

Two Bottling Plants to Get LNG from Florida

Crowley's Carib Energy unit has disclosed a multi-year contract to supply containerized, U.S.-sourced liquefied natural gas to its first industrial customer, Coca-Cola in Puerto Rico. Crowley Carib will ship LNG from Jacksonville to Puerto Rico using 10,000 gallon intermodal ISO containers.



JAXPORT & LNG TERMINALS



EAGLE LNG

JAX LNG



BLOUNT ISLAND MARINE TERMINAL

DAMES POINT MARINE TERMINAL

TALLEYRAND MARINE TERMINAL

Atlantic Ocean

CECIL
COMMERCE
CENTER

**EAGLE
LNG**



EAGLE LNG PROJECT



EAGLE
LNG PARTNERS

- 1 Vessel Loading Dock
- 2 Tanker & ISO Loading

- 3 Storage Tank
- 4 1st of 3 Trains

THANK YOU FOR YOUR TIME!

