## LNG BUNKERING

## LNG Bunkering Safety

- Trained personnel both onboard customer vessel and supplier vessel
- Checklists/Procedure specific to bunkering operations
- Job Safety Environment
  Analysis (JSEA) completed
- Declaration of Inspection –
  Mutually agreed and signed
- Common communication channel
- Emergency Response
  Procedures mutally agreed

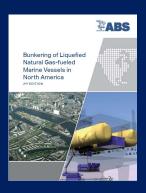
Ongoing USCG engagements and collaboration to continuously ensure safe operations

## References













(Articulated Tug/Barge) moored alongside outboard side of Cruise Ship after Cruise Ship is safely docked and secured

STS (Ship to Ship Transfer) - ATB

- LNG trained personnel and specific procedures for transfer operations agreed and compliant with regulations
- Specialized Hose Transfer system LNG transferred from Barge to Ship through 6" diameter cryogenic flexible hose w/ emergency release couplings
- Advanced safeguards safety system and devices for monitoring and control of transfer with communication capability between Ship and Barge

## Q-LNG 4000

The LNG bunker barge is specially designed for its purpose and will exceed the industry standards and regulations that assure the design and ensure the safe transport and transfer of the fuel to the customer.

- US Owned and Operated ATB
- Under construction in US shipyard
- Designed and Constructed within regulatory requirements as defined in 46 CFR Subchapter
   D and 46 Subchapter O, IGC Code, ABS and associated international standards and quidelines
- LNG containment in 4x999m3 Type C tanks
- High Manueverability using Twin Azimuthing
  Drives and Bow thruster DP capable



