

INTERNATIONAL ASSOCIATION OF FIRE FIGHTERS



LNG Transportation by Rail

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IAFF Opposed Bulk LNG Transport by Rail

- Significant Expansion Ratio
- Massive Evacuation Requirements
 - ½ Mile downwind for a tank rupture
 - 1 mile in all directions for LNG tank fire
- Lack of performance records for DOT-113 tank cars with flammable cryogenic gas



IAFF Opposed Bulk LNG Transport by Rail

- IAFF suggested:
 - Limit train size
 - Set safe train speeds
 - Prohibit mixed hazardous materials in a train with LNG
 - Designate acceptable routes of travel
 - Movement data must exist before a decision can be made on acceptable risk



IAFF is Developing LNG Training

- Online training
- Module added to existing courses
- Stand-alone 8-hour refresher
- Expected to take about a year to develop



Anticipated Issues

- Most incidents will happen in remote, rural areas
 - Limited response resources
 - Limited access to HazMat response resources
 - Potentially from a regional or statewide team
- Fewer incidents in urban and suburban areas
 - Evacuation from a leak or fire could easily overwhelm response resources
- Unknown commodity
 - Difficult to develop response objectives



LPG Incident in Iowa

- 18,000-gallon LPG tank on fire
- Exposed structures igniting
- Firefighters attempted to cool the structures
- BLEVE resulted killing 2 fire fighters and injuring 7 others
- Members had very limited training in response to LPG tank fires and responding to a potential BLEVE



LNG Fire Video



Needs

- Training
 - Minimum of HazMat Operations
 - Additional LNG response training
- Funding be provided to national organizations like the IAFF to develop and deliver training
- Increase HMEP funding to ensure training is available to affected jurisdictions
- Training to address response to LNG incidents during loading and unloading
- Funding for equipment



Takeaways

- Further testing on rail cars
- Full-scale testing of LNG pool fires
- Funding to develop and deliver training for fire fighters responding to tank car incidents
- Develop training for LNG incidents during loading and unloading operations
- Funding for equipment and materials for emergency response

