# Canadian Explosives Industry Association Association Canadienne de l'Industrie des Explosifs

# CEAEC TRANSPORTATION COMMITTEE

November 09th, 2023

#### **CLASS 1 EXP & MARINE BARGING**

Current industry practice as it relates to small ports & wharfs are not aligned with ER 2013

#### Transportation by vessel

- 203.1 (1) Subject to subsection (3), no person shall, at a wharf or port facility, load onto or unload from a vessel packaged goods that contain 25 kg or more of explosives unless
  - (a) the quantity of explosives does not exceed 20 000 kg and the explosives are loaded or unloaded by driving a single vehicle directly aboard a roll-on, roll-off cargo vessel immediately before departing, or driving it ashore immediately after arrival, on a last-on, first-off basis; or
  - (b) a quantified risk assessment that meets the requirements of subsection (5) has been conducted on the wharf or port facility where explosives of the types in question will be loaded or unloaded and an inspector has determined that the quantity of explosives to be loaded or unloaded does not exceed the maximum quantity permitted for each type of explosive and hazard category in the assessment report and the safety measures set out in the report are complied with.

#### Areas of concern

- Smaller wharfs and ports possibly operating without QRA / not aligning with Ro / Ro requirements.
- NEQ observance, Multiple Distributors/Customers per sailing.
- Deck Loading with various types of containers or sometimes without any containers, (open on deck).

#### Recommendations

 Regulations are needed to better address practice of Deck Loading w/o MoC and where no possibility of Ro / Ro exists.

### **Emergency Response Equipment**

Residue Last Contained Exemption







Current ER 2013 regulations require that emergency response equipment (Pumps & Hoses) with residue last contained be transported back to site via delivery truck, (fully enclosed / fire resistant), ER 2013 Part 9 191 (1) (a)

# Emergency Response Equipment Residue Last Contained Exemption

#### Towed vehicle

- (3) A carrier of explosives must not transport explosives in a towed vehicle unless
  - (a) the explosives are in a semi-trailer attached to a truck tractor or in a fifth-wheel trailer; or
  - **(b)** the explosives are in a trailer that is part of a road train travelling over ice roads and the Minister has determined that precautions minimizing the likelihood of an ignition have been taken.
  - (c) Emergency Response Equipment with Residue Last Contained not to exceeding 25Kg NEQ



## EV Prime Movers...on the horizon!

Model	Range miles (mi)	Charging Time minutes (mn)	Battery Capacity kilowatt hour (kWh)
Kenworth T680E	150 mi	125mn (80%)	396 kWh
Peterbilt 579EV	150 mi	120mn (90%)	400 kWh
Freightliner eCascadia	150-230 mi	90mn (80%)	291 - 438 kWh
Volvo VNR Electric	275 mi	90mn (80%)	565 kWh
Nikola Tre BEV	330 mi	160mn (80%)	733 kWh
Tesla Semi	500 mi	30mn (70%)	500 - 1,000 kWh

Major fleets have committed to transitioning at least 30% of their new heavy-duty truck purchases to be zero-emission vehicles, including electric models, by 2030.

All figures are courtesy of the manufacturers

The trucking industry is a critical part of the economy, transporting 71.6 percent of U.S. goods totaling \$10.4 trillion. But trucks are also a significant source of pollution, having emitted seven percent of U.S. greenhouse gas (GHG) emissions in 2020. Electric trucks can reduce GHG emissions while also providing other benefits, including better safety and improved public health. Major fleets have committed to transitioning at least 30% of their new heavy-duty truck purchases to be zero-emission vehicles, including electric models, by 2030. But many companies are daunted by the extra upfront cost of electric trucks, as well as challenges like the limited availability of chargers. The *Inflation Reduction Act* (IRA) and *Infrastructure Investment and Jobs Act* (IIJA) will help address these challenges, and bring forward the cost parity of electric and diesel trucks. The benefits of electric trucks, increased availability of more makes and models, investments in charging infrastructure, the rapid improvement of the upfront and long-term economics, and policy incentives all point to a near-term boom in their adoption. This fact sheet will focus on electric semi-trucks, although many of its findings apply to electric trucks in general.

# Questions?