

- “Key Routes,” which are lengths of track on which either (i) 10,000 car loads or more of hazardous materials or (ii) 4,000 car loadings of flammable gas (such as LNG) will travel over a one-year period and are subject to additional inspection and equipment requirements;
- Separation distance requirements relating to the spacing of loading and operations, loaded tank cars, and other storage tanks at rail facilities; and
- Community awareness and preparations for emergency planning/incident response actions.

**Other Safety Control Measures:**

Each DOT Specification 113C120W must have:

- Pressure relief devices set to discharge at 75 pounds per square inch gauge (psig);
- A maximum permitted filling density (percent by weight) of 32.5%
- A design service temperature of -162 °C (-260 °F); and
- A maximum pressure when offered for transportation not to exceed 15 psig

Transport by rail would utilize existing rail infrastructure and implement existing requirements in the HMR for flammable cryogenic liquids. The railroads that ETS would use for transportation are currently subject to the restrictions that have safely moved cryogenic flammable materials for decades, including 49 C.F.R. § 173.319, which is applicable to the transport of cryogenic liquids in tank cars, and AAR Circular OT-55Q, which sets forth operational requirements for hazardous materials including cryogenic flammable liquids.<sup>6</sup> It is also important to note that the proposed special permit does not waive any safety regulations. Instead, the special permit would allow LNG to be transported in the already-approved DOT-113C120W tank car and authorized for use with other cryogenic materials. Any applicable requirements within the HMR, including 49 C.F.R. § 173.319, would apply to the transportation that would take place under the proposed special permit.

**(2) No action alternative:** Deny ETS’s special permit application for transporting LNG in DOT-113C120W tank cars and continue limiting transport of LNG to the packagings currently authorized by the HMR, including cargo tanks via highway and ISO tanks via rail and highway.

If the special permit is denied, ETS will continue to transport LNG by DOT specification MC-338 cargo tanks or UN ISO portable tanks.

The baseline case for transportation of LNG to be considered is approximately 1200 MC-338 cargo tanks per day using local and state roadways as well as the National Highway System. By issuing the special permit to approve the DOT-113C120W tank cars for transporting LNG by rail, ETS would have the option to transport LNG in DOT-113C120W tank cars.

---

<sup>6</sup> Fronczak, Robert E. Robert E. Fronczak to Record Center Pipeline and Hazardous Materials Safety Administration Department of Transportation, 2017. Letter. *Re: Special Permit Application Number 20534-N*. October 13, 2017.