



November 14, 2014

Mr. Robert C. Lauby
Associate Administrator for Safety
U.S. Department of Transportation
Federal Railroad Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Mr. Lauby,

1. Request for Limited Exemption from Hazardous Materials by Rail Regulations

By this letter, the Alaska Railroad Corporation (ARRC) requests a limited exemption from the requirements of **49 C.F.R. § 174.63(a)**. The ARRC seeks approval to transport, in commerce, portable tanks containing a hazardous material in container-on-flatcar (COFC) service, which is not currently authorized by the above listed section.

Specifically, the ARRC would like to transport Liquefied Natural Gas (LNG) in portable tanks. LNG would be shipped according to 49 C.F.R. § 172.101 as **Methane, refrigerated liquid, 2.1 UN1972**. The LNG would be packaged according to the special provisions, column seven of the hazardous materials table, found in 49 C.F.R § 172.102. The special provisions listed are T75 and TP5.

Instruction TP75 authorizes the applicable refrigerated liquids to be transported in portable tanks in accordance with the requirements of 49 CFR 178.277; Requirements for the design, construction, inspection and testing of portable tanks intended for the transportation of refrigerated liquefied gases. These tanks are commonly referred to as T75 or IMO7 tanks and are usually used to transport refrigerated or cryogenic liquids.

Instruction TP5 references safety relief devices, fill rates and outage location, which will all be taken into account with a T75 tank.

2. The Problem

The Alaska Railroad serves the State of Alaska with approximately 611 miles of track and siding that extend from the southern port town of Seward, Alaska, to the northern terminus at Fairbanks, Alaska. Unlike most Lower 48 railroads, the Alaska Railroad is state-owned and operates under a statutory mandate to "provide safe, efficient, and economical transportation to meet the overall needs of the state" and its citizens. Alaska Statutes 42.40.100.

Also unlike most locations in the Lower 48, the road system in Alaska is, at best, limited. In the 663,267 square-mile area of the state, there are only 4 limited roads on the interstate highway system, for a total of only 1081 miles. In addition to being limited in mileage, the road system presents the further challenges of icy conditions and limited to no daylight for safe driving. Thus, the Alaska Railroad serves as a major transportation link among the more populated areas of the state, the *only* transportation provider for some remote areas, and a critical source of freight and other goods for areas that are not served by roads at all.

The City of Fairbanks, the state's second largest city, is the most populated area in a geographic area known as "the Interior." This area is bordered to the north and west by Eskimo settlements, to the east by Canada, and to the south by the Alaska Mountain Range. This Interior communities depend largely on fuel oil #1 (more expensive than fuel oil #2, which can be used in warmer areas like the Lower 48) for space heating and power generation. In recent years, the cost of fuel oil #1 has risen to such a degree that residents of the area are paying as much for fuel oil as they are for their mortgages. The situation is even worse in small villages, where fuel must be brought in by barge or by air. A university study of the fuel oil problem revealed that rural families are spending nearly half of their disposable income on energy.

The fuel oil crisis is not the only problem facing the Interior. A portion of the area, including the City of Fairbanks and the City of North Pole, has been designated by the Alaska Department of Environmental Conservation as a PM2.5 non-attainment area. One of the leading contributors to the pollution problem is the residents' use of wood-burning stoves to heat their homes in lieu of using the more expensive fuel oil.

3. The Solution

LNG has been identified as part of the solution for all of Interior Alaska, and the Alaska Railroad is in the position, with the exemption being requested herein, to facilitate that solution. The railroad provides **service from three ports** that all receive freight and are all capable of handling Intermodal containers. It is anticipated that initially the intermodal containers would come into one of these ports and then be loaded onto flatcars (COFC service) and delivered to Fairbanks. In Fairbanks, the portable containers will be delivered to the end user either by rail or loaded onto trailers for truck delivery.

It is also expected that within the next year or so, a **liquefaction plant** will be built near the port of Anchorage for the natural gas coming out of Cook Inlet (the waterway extending from the Gulf of Alaska to Anchorage). It is anticipated that by late 2016, there will be a need for **two trains a week**, each train consisting of **60 to 70 portable tanks of LNG**. The portable tanks will have an 11,000 gallon capacity and will be carried **one per 53' flatcar or two per 89' flatcar**. There will be no double stacking of LNG containers.

In short, the logistics of moving a lot of gas, without pipelines and with an ill-equipped road system, is daunting. The safety record of all railroads, including the Alaska Railroad, clearly shows that shipping LNG by rail is both safe and reliable. The Alaska Railroad therefore respectfully request that it be granted an exemption from 49 C.F.R. § 174.63 so that it may address the energy and pollution problems of the state and transport LNG in portable tanks.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink that reads "Doug Engebretson". The signature is written in a cursive style with a long horizontal line extending from the end of the name.

Doug Engebretson
Chief Operating Officer
Alaska Railroad Corporation