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February 6, 2015

Mr. Karl Alexy
Staff Director, Hazardous Materials Division
Federal Railroad Administration
1200 New Jersey Avenue, S.E.
Washington, DC 20590

Re: Alaska Railroad Corporation Request for Permission to Transport LNG in ISO-Tankers

Dear Mr. Alexy:

On November 13, 2014, the Alaska Railroad Corporation (ARRC) submitted a request to the Federal Railroad Administration (FRA) for permission to transport liquid natural gas (LNG) in ISO-tankers on flatcars along the ARRC's rail line. On December 9, 2014, Ms. Ann Courtney, the ARRC's Deputy General Counsel, Mr. Matt Kelzenberg, Manager, Environmental Operations, and I (Chief Operating Officer) spoke with you by telephone regarding the information that you would need from the ARRC in order to process our request. This letter responds to the guidance you provided us during that conversation.

1. Background

The ARRC's November 13 request contains most of the factual background that supports our request, so the facts will not be repeated in depth here. The important points to bear in mind are:

- The ARRC is a public corporation that is owned by the State of Alaska and operates under a statutory mandate to provide safe, efficient, and economical transportation to meet the overall needs of the state and its citizens;
- The State of Alaska is a geographically massive area with many remote towns and villages that are not well served by the state's limited road system, making rail the only affordable option for the movement of goods to many areas;
- In the northern parts of the state (Fairbanks and the Interior villages), residents must rely on extremely expensive fuel oil for heating and power generation, leaving many of them spending more to heat their homes than to own them;
- Residents who cannot afford expensive fuel oil resort to burning wood to heat their homes, which has led to a significant air quality problem in the region; and
- The ARRC's ability to move LNG in ISO-tankers along its line will further the ARRC's statutory mandate and its corporate mission, and address the quality of living and health concerns of the state's more northern residents.

2. Shipping and Securement

LNG will be shipped according to 49 C.F.R. § 172.101 as **Methane, refrigerated liquid, 2.1 UN2972.** The LNG will 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 T75 authorizes the applicable refrigerated liquids to be transported in portable tanks in accordance with the requirements of 49 C.F.R. § 178.277; Requirements for the design, construction, inspection and testing of portable tanks intended for the transportation of refrigerated liquefied gasses. These portable tanks are commonly referred to as T75 or IM07 tanks and are commonly used to transport refrigerated or cryogenic liquids via highway trailer.

The T75 or IM07 tanks containing LNG will be attached to flat cars using Interbox connectors (IBC) that meet AAR specification M-952. The IBCs will be connected with CTC2000-L-C twistlock connectors, manufactured by Peck and Hale, West Sayville, New York or with automatic twistlocks manufactured by Holland LP, Part # 68830. A copy of the Twistlocks' cutsheets is attached hereto as Attachment "A." All of the equipment to be used in the storing and securing of portable tanks of LNG are industry standard and meet AAR standards. There will be one portable tank per 53' flatcar or two per 89' flatcar.

3. The Shipping Route[1/]

Potential routes of travel for portable tanks of LNG include the ARRC mainline from the southern terminus at the port town of Seward, AK (MP 0.0) to the northern terminus at Fairbanks, AK (MP 470.3). A map of the ARRC's mainline is attached for your convenience as Attachment "B." These potential routes include approximately 470 miles of mainline track. The mainline track and indeed the sidings, from Seward to Fairbanks, have been studied and scrutinized from a safety/emergency response perspective, as will be discussed below in the discussion of the ARRC's Passenger Train Emergency Preparedness Plan (PTEPP) and Oil Discharge Prevention and Contingency Plan (C-Plan).

As you and I discussed in our email correspondence of December 19, 2014, the ARRC is currently constructing an additional segment of mainline track known as the Point Mackenzie Rail Extension. The extension is 32 miles long and connects the port at Point McKenzie and the ARRC mainline at Milepost 174. It is possible that the ARRC may one day wish to move LNG in ISO tankers on that route as well. We bring that to your attention for information only, and fully understand that an amendment to this letter seeking formal approval to move LNG on that line will be necessary before we may do so.

4. Volume of hazardous material to be transported

The current business model for hauling LNG is expected to require two trains per week, with each train consisting of 60 to 70 portable tanks of LNG, or 30 to 70 flat cars.

[1/] The ARRC's presentation of information in this request for approval is guided by the factors set forth in Appendix D to 49 C.F.R. Part 172.

The ARRC is both experienced and proficient at hauling and handling hazardous materials. In fact, in 2014, approximately 20% of the freight moved by ARRC consisted of hazardous materials. The FRA Hazardous Materials Division has inspected ARRC's operations every year for the last 10 years. The inspections have included operations along the entire rail belt and a notice of violation (N.O.V.) has never been written to ARRC for the handling of hazardous materials.

5. Rail Traffic Density

The ARRC'S rail traffic density varies quite a bit by segment. The busiest segment centers around Anchorage, the state's largest city, and continues north for 40 miles. The rail traffic densities for all segments of the ARRC are presented below:

Mile Posts	Station Name	Million Gross Ton Miles (MGT)
0.0 to 64.2	Seward to Portage	1.8
64.2 to 114.3	Portage to Anchorage	3.3
114.3 to 150.7	Anchorage to Matanuska	9.2
150.7 to 358.7	Matanuska to Healy	6.9
358.7 to 411.7	Healy to Nenana	7.2
411.7 to 470.3	Nenana to Fairbanks	5.5

6. Trip length for route

The maximum trip length would be from ARRC's southern-most terminus at Seward, AK, to the northern-most terminus at Fairbanks, AK, which is 470 miles. The trip length from Anchorage to Fairbanks, the state's two largest cities, is 355 miles.

7. Presence and characteristics of railroad facilities

A copy of ARRC Timetable No. 138, showing the ARRC's yards, sections, and facilities, is attached as Attachment "C."

8. Track type, class, and maintenance schedule

Track Types: Between Seward and Fairbanks, the ARRC has a mix of 115 lb. jointed rail, 115 lb. continuously welded rail and 141 lb. continuously welded rail. That rail is laid mainly on wooden ties. Through the Healy Canyon and on curves in excess of 6 degrees (north of Anchorage), the track is laid on concrete ties. A spreadsheet showing the location of the ARRC's concrete ties is attached as Attachment "D."

Track Class: The ARRC has Class 1, 2, 3, and 4 track.

All ARRC rail is inspected as follows:

- The ARRC conducts inspections under 49 C.F.R. § 213.233 twice a week on a year-round basis;

- The ARRC conducts a geometry/track strength automated inspection once a year, despite the fact that such an inspection is not required based on the annual tonnage operated on ARRC track; and

- The ARRC conducts geometry/track strength inspections as follows:

  The minimum FRA test frequency that applies to the ARRC is that found in 49 C.F.R. § 213.237(c), which states:

  > (c) Internal rail inspections on Class 4and 5 track, or Class 3 track with regularly-scheduled passenger trains or that is a hazardous materials route, shall not exceed a time interval of 370 days between inspections or a tonnage interval of 30 million gross tons (mgt) between inspections, whichever is shorter.

  The maximum service failure rate that applies to the ARRC is set forth in 49 C.F.R. § 213.237(a)(3), which states:

  > The service failure rates shall not exceed—....
  >
  > > (3) 0.08 service failure per year per mile of track for all Class 3, 4, and 5 track that carries regularly-scheduled passenger trains and is a hazardous materials route.

  The ARRC conducts internal rail inspections twice annually, and the service failure rates for 2013 and 2014 were 0.00.

It is important to note that, although the ARRC inspects its track based on FRA limits for the applicable track class, it maintains its track to one class higher (for example, ARRC Class 2 track is maintained to Class 3 limits). These heightened maintenance procedures, coupled with the ARRC's inspection procedures, have resulted in the ARRC's having an excellent track-related safety history. There have been no reportable mainline train derailments where track issues were found to be the primary contributor in the last 10 years.

The ARRC has spent millions of dollars in the last 10 years on improvements to make its line safer and more efficient. In that time, the ARRC has replaced 375 miles of jointed rail with continuous welded rail, installed 450,000 new ties, and surfaced 10,500,000 track feet.

9. Track grade and curvature

South of Anchorage, the track grade ranges from 0% to 3%, and the curvature varies from 0° to 14° 8′. North of Anchorage, the track grade ranges from 0% to 2%, and the curvature varies from 0° to 12° 31′. An ARRC Track Chart is attached as Attachment "E."

10. Presence or absence of signals and train control systems along the route ("dark" versus signaled territory)

The busiest segment on the Alaska Railroad is controlled by CTC. This control system controls 100 miles of track from Milepost 95 to Milepost 195. All other segments on the Alaska Railroad are operated as dark territory.

11. Presence or absence of wayside hazard detectors

The following information pertains to the different types of detectors on the Alaska Railroad. The type of detector determines the type of defect it detects. A map showing the locations of ARRC Defect Detectors is attached as Attachment "F."

General Information: Dragging equipment and/or defect detectors will notify train crew of any detected defect and/or dragging equipment via radio communication after the train has cleared the detector circuit.

Types of Detectors

- Type "A": Dragging Equipment Detector

Dragging equipment detectors detect any equipment dragging on top of ties. Always gives an after-train announcement, either announcement of dragging equipment, if detected, or announcement of detector status working if no defect detected.

- Type "B": Dragging Equipment/Hot Bearing Detector

Dragging equipment/hot bearing detectors detect any equipment dragging on top of the ties and/or any hot bearings (ambient temperature plus 180 degrees Fahrenheit or 120 degrees Fahrenheit temperature variance between ends of the same axle) and may detect any hot wheels (650 degrees Fahrenheit).

- Type "C": Dragging Equipment/Hot Bearing/Hot Wheel/High or Wide Clearance Detector

Dragging equipment/hot bearing/hot wheel/high or wide clearance detectors detect any equipment dragging on top of the ties and/or any hot bearings (ambient temperature plus 180 degrees Fahrenheit or 130 degrees Fahrenheit temperature variance between ends of the same axle) and/or any hot wheels (650 degrees Fahrenheit) and/or any high or wide clearances (19' 6" high and/or 13' 6" wide).

- Type "C": Equipped with Photo-optic Sensors

Unless otherwise instructed, Type C Detectors use photo-optic sensors to detect high or wide clearance defects. These wide clearance detection devices are located 6' 9" from the track center. When these photo-optic sensors indicate a high or wide load, detector will broadcast "High Load" or "Wide Load" followed by the location of the car in the train.

"Integrity Failure": Train crews receiving notification of High load or Wide load followed by "Integrity Failure" must stop and inspect their train. Inspect from the point of last reported defect until the end of train. If "Integrity Failure" is received and no location within the train is given, inspect the entire train.

Exceptions: Passenger trains, unit hoppers or unit tank trains receiving notification of high or wide load, or receiving a message which includes "Integrity Failure" may continue without inspection. For all other trains: If the only reported defect is a high or wide load within the locomotive consist and "Integrity Failure" was not received, train may continue without inspection.

- Type "C": Equipped with Trip Wires

When notified that trip wires have been installed at a Type C detector, the photo-optic sensors for wide load detection have been replaced with trip wires. When a trip wire is broken, the detector will broadcast, "Clearance Defect near axle (number) car number (number)". This message will broadcast four times, followed by, "Integrity Failure." Subsequent trains will receive "Integrity Failure" when the head of the train goes through the detector.

Trains receiving notification of "Clearance Defect" or "Integrity Failure" within a passenger, unit hopper or unit tank train may continue without inspection. All other trains receiving notification or "Clearance Defect" or "Integrity Failure" must be inspected on both sides from the point of the first defect to the rear of the train. If no point of defect is reported, the entire train must be inspected on both sides.

- Type "D": Dragging Equipment Detector

Dragging equipment detectors detect any equipment dragging on the top of ties. Only announce when defect is detected for trains. All Type "D" defect detector alarms are to be reported to the Train Dispatcher. When on track equipment of four (4) axles or less pass the detector, a message of "Detector Working" should be heard. If no message is broadcast then notify the Train Dispatcher, who will notify the Manager of Signals.

TRACKSIDE WARNING DEVICE TYPE AND LOCATION

Type "B" detectors with a "●" also have hot wheel detection.

MP	NAME	CHANNEL	A	B	C	D	REPLAY
14.3	Snow River	02				X	
18.4	Primrose	02		X			X
29.4	Moose Pass	04		●			X
42.2	Grandview	04	X				
63.0	Portage	04		●			X
75.0	Girdwood	04			X		X
88.7	Indian	04		X			
104.6	Ocean View	04		●			X
121.3	MP 121	04		●			X
128.0	MP 128	03				X	
145.5	Old Glenn	04		●			X
162.2	Pittman	04		●			X
182.7	Whites	04			X		X
206.2	Parks Hwy	04		●			X
223.5	McKinley	04		●			X
252.0	MP 252	02				X	
258.5	MP 258	02				X	
261.2	Gold Creek	04		X			X
270.4	MP 270	02				X	
276.0	MP 276	02				X	
281.1	Hurricane	04		●			X
286.5	MP 286	02				X	
290.5	Honolulu	04	X				
294.8	MP 294	02				X	
313.9	Summit	04		●			X
322.51	MP 322.51	02				X	
328.1	MP 328.1	02				X	

332.9	MP 332.9	02				X	
339.7	MP 339.7	02				X	
345.1	MP 345.1	02				X	
348.2	Denali Park	04		●			X
348.9	MP 348.9	02				X	
350.4	Cascade	04	X				
351.3	MP 351.3	02				X	
353.1	Moody	04	X				
353.51	MP 353.51	02				X	
353.9	MP 353.9	02				X	
355.0	MP 355	02				X	
356.4	Garner	04	X				
358.0	MP 358	02				X	
370.1	Ferry	04		●			X
395.2	Anderson	04			X		X
417.8	North Nenana	04		●			X
456.2	Dome	04		●			X
G 3.6	MP G 3.6	06				X	
J 1.2	1.2 X	04				X	

12. Number and types of grade crossings

There are 114 crossings on the ARRC line from Seward to Fairbanks. Eighty-six (86) of these are Public Crossings and twenty-eight (28) are Private Crossings. A spreadsheet showing the location of each crossing, the type of crossing and the crossing's I.D. Number is attached as Attachment "G."

The FRA Office of Safety Analysis, using The Web Accident Prediction System (WBAPS), publishes an Accident Prediction report for Public At-Grade Highway-Rail Crossings. This report lists the Accident Prediction Value (AVP) for any or all crossings on a railroad. ARRC's highest AVP for any intersection is 0.093341, the AVPs for the rest of the intersections drop considerably and consistently as you move down the list. A copy of the Accident Prediction Report for Public At-Grade Highway-Rail Crossings is attached as Attachment "H."

Another report generated by the WBAPS is the Ten Year Collision History at Public At-Grade Crossings on the Accident Prediction List. This report shows that the ARRC has sustained seven (7) mainline accidents in the past ten (10) years (one fatality and no other injuries). Attachment "I."

There has been a marked improvement in the number and severity of the at-grade crossing accidents on the Alaska Railroad. There has been an ongoing effort to make all crossings on the railroad safer and to separate the crossings with the highest AVPs. Indeed, many of the highest AVP crossings have been separated.

13. Single versus double track territory

The Alaska Railroad is operated in single track territory. In the most populated area of the line (Anchorage), the ARRC has the benefit of having two long controlled sidings: (1) the South Anchorage Coastal Siding (MP 105 to MP 110.7), and (2) the Elmendorf Siding (MP 117 to MP 121.3). See Attachment "E," pp. 22, 25.

14. Frequency and location of track turnouts

The Alaska Railroad has 150 turnouts from Seward to Fairbanks.

15. Proximity to iconic targets

The ARRC mainline bears no proximity to any iconic target. The only fixture that could reasonably be considered an iconic target in the State of Alaska would be the Trans-Alaska Pipeline, an 800-mile oil pipeline that starts in Prudhoe Bay, AK (650 miles north of Fairbanks and 250 miles north of the Arctic Circle) and stretches to Valdez, AK (115 air miles and 304 highway miles from Anchorage). The ARRC mainline and the Trans-Alaska Pipeline bear no proximity to each other.

16. Environmentally sensitive or significant areas

The ARRC line covers almost 500 linear miles of Alaska, with a wide range of receiving environments. In its Oil Discharge Prevention and Contingency Plan (C-Plan), a five-year plan approved by the Alaska Department of Environmental Conservation after an opportunity for public comment, (Attachment "J"), the ARRC has arranged those receiving environments into ten categories and assigned a relative "environmental sensitivity" rating for each category. Details of those categories and the rankings are included in Appendix M to the C-Plan.

Some areas in each receiving environment may be deemed "Environmentally Sensitive Areas" or "ESA's". ESA is a generic term that applies to an area that contains biological resources or habitat that could be significantly damaged if spilled oil reaches them. ESA's are typically associated with areas such as:

- Wetlands, marsh areas, streams;
- Spawning areas for anadromous fish and intertidal spawning, such as smelt; or
- Nesting and foraging habitat for birds and mammals

See generally Sections 1.6.9 and 3.10 of the C-Plan, as well as Appendices M and N to the C-Plan.

The State of Alaska Department of Fish & Game, Habitat and Restoration Division has developed an additional designation, the Most Environmentally Sensitive Areas (MESAs). There are two MESAs

along the ARRC line that could potentially be impacted by a spill from ARRC operations: (1) the Anchorage Flats and (2) the Palmer Hay Flats. These areas are so designated because of their waterfowl concentration, anadromous lakes and streams, seabird population, shorebird concentration, beluga whale population, and their designation as game and wildlife refuges. See Appendix G to the C-Plan.

In its C-Plan, the ARRC has considered each and every environmentally sensitive area along its line and developed a plan for protecting each area in the event of an oil spill. Although a train hauling LNG may not present the exact same issues as train carrying oil products, the processes for responding to emergencies involving both trains are the same and would be controlled by the same Incident Command System (ICS) discussed elsewhere in this document.

17. Population density along the route

The following table shows the populated areas along the Alaska Railroad route from the southern terminus at Seward, AK to the northern terminus at Fairbanks, AK.

COMMUNITY	MILEPOST	POPULATION
Seward	0.0	2487
Moose Pass	25.9	249
Whittier	F 0.0	229
Portage	64.0	Included in Anchorage
Girdwood	74.5	2694
Anchorage	114.3	301,134
Eklutna	141.8	54
Matanuska-Susitna Borough	150.7	96,074
Palmer	A 6.5	6085
Wasilla	159.8	8365
Talkeetna	226.7	861
Cantwell	319.5	196
Denali Borough	347.7	1793
Healy	358.1	1066
Ferry	371.2	32
Clear	392.9	Included in Denali Borough
Nenana	411.7	399
Fairbanks	470.3	32,204

As the table reveals, the population density along the Alaska Railroad route is very low. The most populated area is Anchorage, which is also where the Railroad's corporate headquarters and the main yard and shop areas are located.

ARRC's Planned Communications with Communities

The previously mentioned C-plan and the ARRC's Passenger Train Emergency Preparedness Plan (PTEPP), attached as Attachment "K," are made available to local responders along the entire length of

the rail belt. The plans require an emergency annual drill, which provides the ARRC with an opportunity to work closely with the local responders on a simulated emergency. The plans have, in fact, put the ARRC in the unique position of having a very amicable and cooperative relationship with the local emergency responders along the rail belt. Both the C-Plan and the PTEPP show ARRC's commitment to preparedness and safety. The plans provide an analysis of the risks associated with traveling along the ARRC rail belt and the risks and opportunities associated with responding to an incident along the rail belt.

Another opportunity for training and information sharing with local responders and Local Emergency Preparedness Committees (LEPC) is ARRC's participation in the Alaska Statewide HazMat Response Work Group (Work Group). The Work Group meets quarterly and provides a forum to talk with, plan and receive training from the statewide hazmat response community.

There is ample opportunity to provide training and information to the LEPC's and the local emergency responders when ARRC starts to haul LNG. ARRC has worked hard to develop relationships with stakeholders along the entire length of the rail belt, including LEPC's and local emergency responders. Sharing information and training concerning the movement of LNG will take place along the entire length of the rail belt.

18. Venues along the route (stations, events, places of congregation)

Along the ARRC mainline, there are seven (7) stations with depots or a formal passenger structure:

- Seward (MP 0.0)
- Girdwood (MP 74.5)
- Anchorage (MP 114.3)
- Ted Stevens Anchorage International Airport (MP J2.5)
- Talkeetna (MP 226.7)
- Denali Park (MP 347.7)
- Fairbanks (MP 470.3)

The ARRC has five (5) additional station stops that are more platform-like in nature:

- Spencer (MP 55.5)
- Palmer (MP A 4.3)
- Portage (MP 64.0)
- Whittier (MP F0.0)
- Wasilla (MP 159.8)

Although there are no regularly scheduled "events" that might present problems to the transportation of LNG, there are several locations that may be considered "places of congregation" during specific times of the year. From mid-May to mid-September of every year, the ARRC conducts its heaviest passenger services operations. During that time, as many as 600 passengers board or deboard trains 7 days a week at the following locations:

- Denali Park (MP 347.7)(serving the Denali National Park and Preserve)
- Whittier (MP F 0.0)(cruise ship operations)
- Seward (MP 0.0)(cruise ship operations)
- Anchorage (MP 114.3)(daily passenger operations and cruise ship operations)

Although the Ted Stevens Anchorage International Airport could also be considered a "place of congregation," that location station would not be on the route designated for the transport of LNG by the ARRC.

19. Emergency response capability along the route

Please see the ARRC's discussion of its C-Plan and PTEPP in Sections 16 and 17 above.

The ARRC has also an employee-led emergency response/incident command team. All members are trained in the standard ICS system, and the team has proven in drills over the years that it is fully capable of handling any emergency on the Alaska Railroad. A copy of the ARRC's Incident Management Handbook, Process, Organization and Language for Incident Response Management is attached as Attachment "L."

20. Areas of high consequence along the route, including high consequence targets as defined in § 172.820(c)

49 C.F.R. § 172.820(c) defines an area of high consequence as a "property, natural resource, location, area, or other target designated by the Secretary of Homeland Security that is a viable terrorist target of national significance, the attack of which by railroad could result in catastrophic loss of life, significant damage to national security or defense capabilities." There are no areas of high consequence along the route as defined by this regulation.

21. Presence of passenger traffic along route (shared track)

The ARRC operates passenger trains during both the winter and the summer seasons, with summer being the heavier passenger season. ARRC summer and winter passenger train schedules are attached hereto as Attachment "M."

22. Speed of train operations

The maximum ARRC train speed in CTC territory is 60 mph and 59 mph in dark territory. The average speed of all ARRC trains, however, is 31.53 mph.

23. Proximity to en-route storage or repair facilities

The ARRC maintains shops in Seward (MP 0), Anchorage (MP 114) and Fairbanks (MP 470).

Repair service at the Seward location takes place predominately during the summer season, when the ARRC operates a summer train between Seward and the Anchorage International Airport five

(5) days a week. There are one Carman and one Journeyman Mechanic stationed in Seward to perform inspection and repairs for this train in compliance with the regulations listed below.

Other work that may be performed in Seward is repair of cars that sustain an en-route defect that requires repair for safe movement and occasional open top pipe/freight loads inspections. Carmen are dispatched out of Anchorage to provide these services.

Both Anchorage and Fairbanks maintain and repair rolling stock equipment, freight cars, and passenger cars in compliance with FRA and AAR Rules and Regulations:

Part 215, Freight Car Standards
Part 221, End of Train Standards (EOT's)
Part 223, Reflectorization
Part 231, Safety Appliance Standards
Part 232, Brake System Safety Standards
Part 238, Passenger Safety Standards
AAR Rules and Regulations

ARRC freight car repair/maintenance is based on inspection, testing and measuring six (6) key components.

- Trucks
- Air Brakes and associated parts
- Car Body
- Couplers
- Draft Gears
- Wheels

Yard Field inspectors perform daily inspections in compliance with the above rules and regulations on all in-coming and out-going trains looking for any defects and/or component that may have a need for attention.

When a car comes into the shop for what is known as running repairs and/or maintenance, the car receives another AAR/FRA inspection and repairs are performed. During this inspection, it is the car inspector's duty to note any defect trends he may notice either verbally or in writing, and report his findings to his direct supervisor. The supervisor will monitor other like cars to determine if there is a need for a preventive maintenance project. All repairs made are tracked through the Express Yard Billing system and the ARRC's maintenance software program.

Passenger cars are inspected, maintained and repaired in compliance with FRA Part 238 Rules and Regulations and to Amtrak Maintenance Standards. Each car receives an interior and exterior inspection for every day it is in service. Any defects noted are repaired at that time.

The ARRC also complies with and performs the 184-day inspections, all of the Air Brake maintenance requirements, and the inspection/testing of crossbar, swing hanger and equalizer inspections. In addition to the wheel inspections performed on a daily inspection, weekly wheel

readings are taken and a report issued to monitor wheel wear/defects. This is conducted throughout the passenger season. Heating and Air Conditioning service/maintenance is performed on all passenger equipment every three years.

The ARRC maintains its locomotive fleet, and its one self-propelled DMU, to the applicable standards set forth in 49 C.F.R. Parts 229, 223, 224, 231, 232, and 238. The ARRC also follows industry best practices and maintains progressive overhaul schedules. ARRC internal forces and contractors (where applicable) perform all required regulatory daily and periodic inspections and perform heavy overhaul as required.

24. Known threats, including any non-public threat scenarios provided by the Department of Homeland Security or the Department of Transportation for carrier use in the development of the route assessment

There are no known threats provided by the Department of Homeland Security or Department of Transportation.

25. Measures in place to address apparent safety and security risks

Like many railroads, the ARRC has its own Police and Security Department. The department is headed by a Chief Special Agent, who reports directly to the ARRC's Vice President and General Counsel. There are two Special Agents who are based in Anchorage, but who are capable of patrolling the entire ARRC line when necessary. There is also a Special Agent who is based in Fairbanks and who patrols mostly the northern areas, but can also patrol the entire line. The remainder of the Anchorage office is staffed by a Manager, Port Security and Grants, and a Program Manager.

Within the last decade, the ARRC commissioned an entire Security Assessment Report, under which it operates today. The report consists of three parts. Part One is a Risk and Vulnerability Assessment, which completely analyses all of the ARRC's safety and security vulnerabilities. Part Two is a Hazardous Materials Vulnerabilities Assessment Report, which does the same thing for the ARRC's movement of hazardous materials by rail. Part Three is the Security Plan of Action, which guides the department in its efforts to ensure the security of the entire ARRC system.

By its very nature, the ARRC's Security Assessment Report is a confidential document, the release of which could jeopardize the ARRC's security. The report is therefore not being provided as an attachment to this document. Should the FRA need to review the document in order to process the ARRC's request, the ARRC would gladly work with the FRA to provide a confidential review of the document without releasing the document itself or converting the confidential document to a public document.

A document describing the main elements of the ARRC's Safety Management System is attached as Attachment "N."

26. Availability of practicable alternative routes

The ARRC mainline is currently the only freight rail line in the State of Alaska. Accordingly, there are no available practicable alternative routes.

27. Past incidents

There have been no major incidents involving hazardous materials in the past 16 years. The last major derailment was in 1999 and involved the derailment of an oil train.

28. Overall times in transit

The portable tanks of LNG would be in transit for less than 12 hours when traveling between Anchorage and Fairbanks. Transit time between Seward and Fairbanks would be approximately 16 hours, including a crew change.

29. Training and skill level of crews

All ARRC operating employees are required to participate in a robust safety training program. Employees who work with or around hazardous materials also receive hazardous material training. This hazardous materials training ranges from hazardous materials awareness to 40-hour HAZWOPER training. All levels of training include placard identification/awareness training and training on appropriate actions to take in an emergency response situation. All ARRC operating employees receive some job-specific and appropriate hazardous materials training.

The two largest groups of employees who work with and around hazardous materials are the Maintenance of Way (MOW) group and the Train and Enginemen (T&E) group. The annual training for these two groups is taught in-house and the hazardous materials training is taught as part of a larger curriculum. The training is presented along the entire rail belt, it is the forum for which any new procedures or concerns, including the shipping of LNG, will be presented. These training venues provide an excellent opportunity for any discussion concerning LNG. A sample class syllabus for a typical T&E group training class is attached hereto as Attachment "0."

All ARRC T&E employees serving in positions as conductors and/or locomotive engineers are required to be certified as set forth in 49 C.F.R. Parts 242 and 240, respectively.

30. Impact on rail network traffic and congestion

There will be no significant impact on network traffic and congestion.

31. Special Operating Practices for LNG Trains

The ARRC anticipates that it will operate trains carrying LNG in ISO tankers in the same manner, and under the same precautions, as it operates trains carrying similarly-classed hazardous materials (e.g., LPG). The trains will be operated in full compliance with 49 C.F.R. Parts 172 and 174 and any other

applicable regulations or operating practices. The ARRC will also conform to any other operating restrictions the FRA may impose as a result of this approval process.

CONCLUSION

The ARRC respectfully submits that, taken together, the above information, with its accompanying attachments, conclusively shows that the ARRC is fully capable of moving LNG in ISO Tankers safely and securely. Over the last decade, the ARRC has upgraded its infrastructure significantly, and, along with it, its safety record. The ARRC has also inspected and maintained its track to a level above that required by the FRA.

The ARRC is also fully prepared for any type of emergency that may occur along its mainline. We have analyzed our security and safety risks and our vulnerabilities and have prepared a Security Plan of Action to address any problems that may be presented. The ARRC also has a pervasive System Safety Management program. In addition, we have a C-Plan and a PTEPP that guide the ARRC, its neighbor communities, and first responders in all locations through spills and other emergencies that may befall the railroad. Finally, the ARRC has a fully trained and experienced team that makes up a skilled group of responders under an established and proven ICS system.

We trust this information is sufficient to allow you to make a decision regarding the ARRC's request to haul LNG in ISO-Tankers. If you have any questions or need any further information, please contact me directly at (b) (6) I will make sure that you receive whatever you need from the ARRC.

Very truly yours,

Douglas E. Engebretson 2/6/15

Doug Engebretson
Chief Operating Officer
Alaska Railroad Corporation

cc: Bill O'Leary, ARRC, President and Chief Executive Officer

ATTACHMENTS

Attachment "A" - Twistlocks' cutsheets

Attachment "B" - Map of the ARRC's mainline

Attachment "C" - ARRC Timetable No. 138

Attachment "D" - Spreadsheet showing location of concrete ties

Attachment "E" - ARRC's Track Chart

Attachment "F" - Map showing the locations of ARRC's defect detectors

Attachment "G" - Spreadsheet showing the location, type and I.D. Number of crossings

Attachment "H" - Accident Prediction Report for Public At-Grade Highway-Rail Crossings

Attachment "I" - Ten Year Collision History

Attachment "J" - Oil Discharge Prevention and Contingency Plan (C-Plan)

Attachment "K" - Passenger Train Emergency Preparedness Plan (PTEPP)

Attachment "L" - ARRC's Incident Management Handbook, Process, Organization and Language for Incident Response Management

Attachment "M" - ARRC's Summer and Winter Passenger Train Schedules

Attachment "N" - ARRC Safety Management System

Attachment "O" - Class Syllabus for Train & Engineman Group Training Class