Quinault Indian Nation

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June 22, 2015

Executive Director and Secretary
Washington Utilities and Transportation Commission
1300 S. Evergreen Park Drive S.W.
P.O. Box 47250
Olympia, WA 98504-7250

RE: Rulemaking to Consider Adoption of Rules Relating to Rail Safety (TR-151079)

Dear Mr. King:

Thank you for the opportunity to comment on the Washington Utilities and Transportation Commission's ("UTC") rulemaking process on rail safety. The basis of the Quinault Indian Nation's (QIN's) interest in rail safety stems from our federally-guaranteed treaty rights as a signatory to the Treaty of Olympia (1856) and interest in protecting those rights. The exercise of our reserved rights under that Treaty—fishing, shellfishing, hunting, and gathering—define us as Quinault people.

TREATY RIGHTS BACKGROUND

By Treaty, the QIN reserved the right of "taking fish, at all usual and accustomed fishing grounds and stations." The federal court confirmed those rights and established the tribes as co-managers of off-Reservation fisheries resources entitled to half of the harvestable number of fish returning to Washington waters. *United States v. Washington*, 384 F. Supp. 312 (W.D. Wash. 1974). Based on evidence provided, the court determined the usual and accustomed areas of the QIN include "the waters adjacent to their territory" and "Grays Harbor and those streams which empty into Grays Harbor." *Id.* at 374-375; see also *United States v. Washington*, 459 F.Supp. 1020, 1097 (W.D. Wash. 1978), *aff'd* 645 F.2d 749 (9th Cir.1981). The Chehalis River and all of its tributaries empty into Grays Harbor and are, thus, within the QIN's usual and accustomed fishing areas.

POTENTIAL IMPACTS TO TREATY RIGHTS FROM PROPOSED CRUDE OIL PROJECTS

There are currently three crude-by-rail facilities proposed within Grays Harbor, which, if built, would have significant negative impacts on QIN treaty resources. Because of the risks to QIN treaty rights and resources, the governing body of the QIN passed a resolution in 2014 opposing these facilities (ATTACHED). Assuming all three proposed projects at full build-out, the anticipated total of loaded and unloaded new crude-by-rail (CBR) unit trains attributable to the proposed projects yearly is 1,371; an average of 3.75 new CBR unit trains daily. On average, CBR unit trains are 100 cars long, and hold about 3,000,000 gallons of crude oil (DOE, 2015). The length of these unit trains is variable (depending on car type and dimensions), as is their speed.

According to the information provided by the three project proponents, the CBR trains will likely be carrying either Bakken crude from North Dakota or diluted bitumen from Alberta, Canada. Bakken crude oils are more volatile than most other domestic crude oils, and are more ignitable and flammable. Diluted bitumen crude oils are denser than Bakken crude oils.

When oil spills into water, its more volatile components evaporate, leaving less volatile, denser components. Oil density increases as water temperature decreases. As oil density increases, it is more prone to sink. When sinking oil adheres to suspended sediments or debris in the water column an oil-mineral aggregate (OMA) is formed. If the OMA is denser than the water, it will sink. OMAs are more likely to occur when the spilled oil is in fine droplets, where there is a high concentration of sediments in the water column (for example in the surf zone of a beach or around a vessel loading zone), and where the water is highly turbulent. OMAs can remain suspended in the water column, mix with sediment and settle on the substrate, or diffuse through a substrate, and can be ingested by fish or shellfish (DOE, 2015). Denser oils disperse more readily through the water column, and tend to spread faster on the water surface in the early stages of a spill than do less dense oils (DOE, 2015).

Denser oils are also more likely than less dense oils to form stable emulsions in the water (DOE, 2015) and adhere strongly to hard surfaces, making cleanup difficult. Emulsified oils are more likely to persist in the environment, and are often much more viscous than the parent oil. Emulsions can present a range of challenges and complications in spill response, such as needing to collect and store and large volume of an oil/water mix. The persistence of oil in the environment varies on many factors, including environmental conditions and other oil characteristics. Persistent oil fractions can adhere to and penetrate surfaces and substrates, causing serious ecological consequences. For example, highly persistent oil can adhere to feathers and fur, and shoreline and wetland communities, causing hypothermia, smothering and mechanical injury, and thus mortality (DOE, 2015). Persistent oil can also "interfere with the normal physical characteristics of substrates and sediments and make them inhabitable [sic]. Oil residues can also agglomerate with inorganic and organic particles or debris and become

ingestible" (DOE, 2015). DOE considers heavy and medium oils to be highly persistent in the environment (with an anticipated time of persistence five to ten years, or more). The use of containment booms and other oil spill response techniques on the Chehalis River are not likely to be effective due to swift currents and debris (O'Brien, 2013)

These CBR trains will make many crossings over rivers and streams within the QIN's treaty area. A spill at any of those could devastate fish populations and their habitats upon which the QIN rely to exercise their federally-protected treaty fishing rights.

ANSWERS TO UTC QUESTIONS

It is against the backdrop provided above that the QIN provides answers to the following three questions posed by the UTC

1) What is your definition of a reasonably likely worse-case spill of oil?
2) What is the reasonable per-barrel cleanup and damage cost of spilled oil?
3) What risk factors should the Commission consider in establishing safety standards at private crossings?

The answers to these questions are fundamentally qualitative and extremely variable depending on the nature of the accident and where the accident occurs. With that caveat, QIN provides the following:

1) What is your definition of a reasonably likely worse-case spill of oil?

The QIN believes that any oil spill that harms treaty resources is unacceptable. We urge the UTC to consider a worst-case spill scenario from a human health and safety perspective, as well as a scientifically-grounded biological perspective that considers harm to natural and treaty resources.

Trains carrying upwards of 1,000,000 gallons, up to 3.5 million gallons, are traveling through Washington State. A likely worst case spill would be the entire 120 carload unit train carrying crude oil spilling. As we saw in Lac-Megantic, where 1.6 million gallons of oil were spilled, this is not a theoretical risk.

The definition should include both explosion and spillage into waterways. The definition should take into account the timing of the spill, including during salmon migration, shellfish and crab lifecycles, and natural hazard events such as a landslide or earthquake; the location of the spill, including vulnerable waterways; and the amount and type of oil spilled, including crude oil from the Bakken region and the Alberta Tar Sands region.

2) *What is the reasonable per-barrel cleanup and damage cost of spilled oil?*

The answer to this question should be based on the likely actual clean-up costs, remuneration for lost fish and wildlife species, and cost of rehabilitation and/or restoration of harmed natural and treaty resources. When answering this question, we can look to the accidents that have occurred involving crude oil by rail (see the above list of large crude oil train derailments) and the official federal assessments through Pipeline and Hazardous Materials Safety Administration's (PHMSA) Final Regulatory Impact Analysis as a guide. However, both of these sources are inadequate. In the Lac Megantic disaster, for example, there are still lawsuits and cleanup costs being processed. We will not know the real cost of that accident until those are done. At this time, the City estimates that the accident contaminated 12.3 million gallons of sewer, lake, and ground water, that it will cost $2.7 billion to rebuild the village over the next decade, and that there may be additional $200 million in costs.[i] This doesn't take into account the cost to the town in terms of lost revenue and economic viability when such a disaster occurs.

The PHMA's Final Regulatory Impact Analysis[ii], is another source for information yet even in their own documents have acknowledged the shortcomings of their analysis. For example, the cost of **$15,456 per barrel** based on per gallons figures cited on pages 85-87 of the FRIA report:

> PHMSA conducted a review of the literature on crude oil and ethanol spill costs, available data from Federal Agency databases on hazardous liquid spill costs, and reports from rail carriers on individual spills, which substantiates an estimate of $200. The review found that damages could be as high as twice that amount for crude oil spills, and substantiates a cost for ethanol spills at $144 per gallon... For 2011-2015 the cost per gallon for pipeline incidents (dividing total gallons spilled into total costs for all incidents over this time period) produced an estimated cost of $211 per gallon for crude oil incidents, and the estimate for the spill volume category that matches the average historical crude oil and ethanol derailment (50,000 – 99,999) is $368 per gallon.[iii]

While on pages 89-91, PHMSA admits that these are low:

> PHMSA noted that at a cost of $200 per gallon released, this implies that the average crude oil and ethanol mainline derailment results in $16.7 million in total costs (including property damages, cleanup, remediation, emergency response, socioeconomic and lasting environmental damages but excluding deaths and injuries.

Looking at the Lac Megantic example, it looks more like **$78,750 per barrel**, based on both page 25 from the FRIA which found that the Lac-Megantic accident released 1.6 million gallons of crude oil, this is an estimate the per-barrel cost and independent estimates suggest that total costs will be at least $3 billion, which would work out to $1,875 per gallon or $78,750 per barrel.[iv]

None of these costs account for the cost of rehabilitating or restoring harmed natural and treaty resources. Likewise, none of these costs account for compensation for loss of a treaty fishing opportunity and other impacts to QIN interests, which could be substantial. For more information, please see the attached report "Economic Impacts of Crude Oil Transport on the Quinault Indian Nation and the Local Economy," April 2015, prepared by Resource Dimensions for the QIN.

3) *What risk factors should the Commission consider in establishing safety standards at private crossings?*

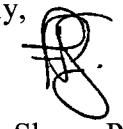
The QIN recommends the following risk factors be considered:

- Number of trains
- Amount of train traffic
- Amount of oil train traffic specifically
- Number of crossings (private and public)
- Types of oil being transported and associated risk of that oil to fish, wildlife and habitat
- Speeds used by trains
- Protection measures at the rail crossings (private and public)
- History of derailment along the track and crossings (private and public)
- Maintenance at the crossing (private and public)
- History of crashes at crossings (private and public)
- Location of crossing to waterbodies
- Location of crossing to community infrastructure like schools and health facilities
- Location of crossing to community infrastructure to homes
- Private crossing and proximity to bridges
- Type of rail cars being used
- Length of trains and weight of trains
- Miles of track within usual and accustomed fishing and hunting and gathering areas of treaty Indian tribes and the potential impacts to treaty resources

Treaties are the highest law of the land. Accordingly, we expect the UTC to respect and honor our rights and interests. It was in this spirit that QIN and the State of Washington committed to meaningful government-to-government consultation in the "Centennial Accord between the Federally Recognized Indian Tribes in Washington State and the State of Washington," August 4, 1989. The Accord was further memorialized in the "New Millenium Agreement" in 1999, by which we committed to: "Striving to coordinate and cooperate as we seek to enhance economic and infrastructure opportunities, protect natural resources and provide the educational opportunities and social and community services that meet the needs of all our citizens." We request you consider these commitments as a backdrop to your overall consideration of the

questions posed and in any rulemaking endeavor. Thank you for your consideration of the information provided by the QIN.

Sincerely,



Fawn R. Sharp, President
Quinault Indian Nation

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[i] Sightline Institute: http://daily.sightline.org/2014/12/18/what-do-oil-train-explosions-cost/

[ii] May 6, 2015, http://www.regulations.gov/#!documentDetail;D=PHMSA-2012-0082-3442.

[iii] May 6, 2015, http://www.regulations.gov/#!documentDetail;D=PHMSA-2012-0082-3442.

[iv] Sightline Institute: http://daily.sightline.org/2014/12/18/what-do-oil-train-explosions-cost/