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RE: Request for Withdrawal of MDNS's, PDS Nos. SEP 2012-00059 and SEP2013-00005.

Dear Messrs. Schroeder and Louws:

The undersigned represent three organizations. Protect Whatcom is a local grassroots organization whose members are residents of Whatcom County, dedicated to informing the public about the impacts of fossil fuel proposals—particularly the Gateway Pacific Coal Terminal – on our county's human health, environment, and economy. Safeguard the South Fork is a local grassroots organization whose members are Whatcom County citizens dedicated to preserving the quality of life and economic base of agricultural lands and communities in Whatcom County. As Whatcom County-based groups, we have allied with Friends of the Earth, a national environmental organization the focus of which in the Pacific Northwest is protection of the Salish Sea. We are joined by the League of Women Voters of Bellingham/Whatcom County, a nonpartisan political membership organization whose mission includes engaging our community in promoting positive solutions to public policy issues through education and advocacy, and seeking solutions in the public interest on key community issues at the local and state levels of government."

Together, we request that you withdraw the mitigated determinations of nonsignificance (MDNS) issued in your actions numbered SEP2012-00059 and SEP2013-00005, in accordance with WAC 197-11-390(2)(c)¹ and 197-11-340(3)(a)(ii),² and review the applicants' SEPA checklists and applications to determine whether 197-11-340(3)(a)(iii)³ applies. The proposals to which this request applies are:

- BP West Coast Products, LLC, Cherry Point; Whatcom County PDS No. SEP2012-00059;⁴ MDNS dated October 18, 2012, for a rail logistics project to receive up to one train per day of crude from the N.Dak. Bakken shale beds; and

- Phillips 66 Co. Ferndale Refinery, Cherry Point; Whatcom County PDS No. SEP2013-00005;⁵ MDNS dated April 29, 2013, for a rail logistics project to receive up to one train every other day of crude from the N.Dak. Bakken shale beds.

By copy of this letter we are asking the Washington Department of Ecology to review this matter and any state action. Based on WAC 197-11-340(3)(a)(iii), we ask that your agencies withdraw the MDNS's because of significant new information and a lack of material disclosure in the SEPA checklists supporting the threshold determinations.

The Proposals

BP and Phillips 66 both proposed crude by rail (CBR) unloading facilities to receive Bakken crude from North Dakota. BP's MDNS states they will receive one unit train per day; Phillips 66's MDNS states they will receive one unit train every other day. Combined, the proposals would receive 10.5 unit trains per week. As a threshold matter, we note the following:

- Crude tanker cars carry an average of 650 barrels (bbl) of oil⁶
- A typical crude unit train has 110 tanker cars⁷ holding a total of 71,500 bbl
- 10.5 unit trains would carry 750,750 bbl/week; 274.0 mil. bbl/annum
- A barrel of crude is 42 US gallons (159 litres), so totals are 3.0 mil gal./unit train (11.4 mil. litres); 31.5 mil. gal./week (119.4 mil. litres); 1638.0 mil. gal./year (6.2 bil. litres).
- In short tons, each train equals 12,012 tons; 10.5 trains = 126,126 tons/week; 6.6 mil. tons/year.
- As discussed below, there are currently roughly 130 mil. tons of freight moving on Washington's rails annually, so 6.6 mil. tons is roughly equivalent to **5% of all freight currently on Washington's rails.**

New Information

Since Whatcom County granted MDNS's to BP Cherry Point and Phillips 66 Ferndale ("the refineries"), much new information has come to light. As discussed below, the movement of Bakken crude is so dangerous, it poses a risk that even if it is slight, has the potential to have an enormous impact on public safety and the environment. In addition, we now realize our refineries' proposals are two of nearly 20 fossil fuel transportation proposals in the region the cumulative effect of which poses major challenges for Washington's rail infrastructure and, ultimately, the state's economy. The danger and significant adverse impacts of transporting Bakken crude, along with the cumulative effect of nearly 20 proposals which could **add more fossil fuel freight to the rails than all freight now moving through the state**, militate for reconsideration of the MDNS's and require conducting full environmental impact statements (EIS's) for the two proposals. But the threshold issue addresses the most significant omission from the permit application and the SEPA checklist: the real possibility the refineries would act as terminals, passing through unrefined crude for tanker transport to domestic and/or foreign end users, thus increasing tanker traffic in the Salish Sea and other waters.

I. New Information: Alaska Crude Supply Will Increase

Both BP and Phillips 66 predicated need for rail infrastructure to ship Bakken crude by rail on declining Alaska crude production. However, since the applications were filed Alaska passed the More Alaska Production Act,⁸ overturning a progressive tax on crude production. Conoco Phillips and BP are the first and second largest producers of Alaskan crude, and industry analysts now predict not only that production will increase by 90,000 barrels per day, but that the Alaskan crude will be exported to Asian markets if and when refineries receive Bakken crude for production.

Related to this are the recent calls by the American Petroleum Institute and U.S. Chamber of Commerce for the U.S. to lift the ban on export of U.S. crude.⁹ The current ban is a rule overwhelmed by exceptions, which currently include crude from Alaska's Cook Inlet and any crude moving through the Trans-Alaskan Pipeline.

Since BP and Phillips 66 filed their permit applications, the changing reality of domestic crude production and pressure to export to Asia have rendered the purpose and needs statements of those local applications obsolete. The reality is the Cherry Point refineries don't need Bakken crude to replace dwindling supply or dependence on domestic crude but, rather, as another revenue stream. There may be nothing wrong with that, but it is not the information on which the county reached its threshold determinations of nonsignificance. The local refineries do not operate in vacuums; their operations are part of corporate objectives with implications elsewhere in the nation and around the globe. Those implications are indirect impacts of the local proposals which should be considered in an Environmental Impact Statement.

II. New Information: BP is Already Exporting Unrefined Crude

Both BP and Phillips 66 predicated their rail infrastructure permit applications on the assumption any Bakken crude received would offset crude now imported via tanker, and refining capacity would not increase. If that were true, and if the refineries did not act as terminals, passing through unrefined crude for transfer to end users in the U.S. and abroad, vessel traffic at the refineries' piers would presumably decrease, militating against the need for a vessel traffic risk assessment. If, however, the refineries were to act as terminals for unrefined crude – in addition to refined product – a vessel traffic risk assessment would be required to determine if a net increase in vessel traffic could be anticipated, what risk that presents for collisions, allisions, and groundings potentially resulting in spills, and the environmental consequences associated with such risk.

BP is, in fact, passing through crude. Fred Felleman, as part of the settlement in the Ninth Circuit Court of Appeals case, *Ocean Advocates v. United States Army Corps of Engineers*,¹⁰ receives quarterly reports documenting when vessels calling at BP fail to preboom. Included in the information received for the third quarter of 2013 is information documented in Table 1, which includes an entry for September 22, 2013, for a tanker with Cold Lake Crude. Cold Lake is in Alberta; this crude is, therefore, *received* by the terminal via the Transmountain/Puget Sound Pipeline, *not* by tanker. The vessel entry therefore indicates Canadian tar sands being loaded *on* a tanker.

The degree to which this type of practice will increase in the future is uncertain, but demonstrates that the premise for the MDNS – that all Bakken crude received would be refined and not passed through – may be wrong. The impact on maritime safety and oil spill risk associated with increased crude exports for each refinery seeking rail facilities therefore needs to be conducted as part of an EIS.

Table 1. BP Cherry Point Refinery Booming Report¹¹
Reporting Period: July - September 2013

Date of Initiation of Transfer	Vessel Name	Product(s) Loaded/ Unloaded	Wind Speed (kts) / Direction	Wave Height (ft)	Current Velocity (kts)	Visibility < 1000 ft Y/N	Reason for Not Booming
9/21	REDPazflor	Crude	15 SE	5	0	N	Wave heights above safe and effective booming thresholds
9/22	50-3Cold Lake	Crude	17	3	0.6	N	Small craft advisory in effect
9/28	Princimar CourageArab	Lt crude	15 SE	3	1	N	Gale warning in effect
9/29	RedPazflor	Crude	50	9	1	N	Gale warning in effect

III. New Information: Crude is a hazardous material.

In November 2013 (13 months after the BP MDNS and 7 months after the Phillips 66 MDNS), the federal government issued an advisory, re-emphasizing that crude oil is in the class of most hazardous materials transported by rail:

[W]e are emphasizing key definitions and information from 49 CFR 173.120 and 173.121 regarding the proper classification and packing group assignment for petroleum crude oil, namely: The definitions of flash point, flammable liquid, combustible liquid and packing group. We are also emphasizing the following applicable shipping names and packing groups as they pertain to the transportation of petroleum products:

i. *Crude oil*. Petroleum crude oil, UN 1267, is specifically listed in the Hazardous Materials Table (49 CFR 172.101) as a Class 3 material, in Packing Groups I, II, or III.

ii. *Sour crude*. Petroleum sour crude, oil, flammable, toxic, UN 3494, is specifically listed in the Hazardous Materials Table (49 CFR 172.101) as a Class 3 material, in Packing Groups I, II, or III.¹²

“Sour crude” is that which contains higher than acceptable levels of hydrogen sulfate, rendering the crude particularly susceptible to combustion. Bakken crude is generally classified as “sweet,” or low in sulfur content,¹³ but increasingly the fracked crude is found to contain hydrogen sulfate,¹⁴ making it *particularly* hazardous.

IV. New Information: Bakken crude is particularly hazardous.

The North Dakota Bakken crude formation¹⁵ requires drilling using hydraulic fracturing, or “fracking.”¹⁶ As described in a heavily researched entry in Wikipedia, that technique involves mixing

water with sand and chemicals and acids, including hydrochloric acid, which are injected to facilitate extraction. The Society for Petroleum Engineers links the “souring” of Bakken crude to fracking techniques, and describes consequences such as “health and environmental risks, corrosion of wellbore, added expense with regard to materials handling and pipeline equipment, and additional refinement requirements.”¹⁷ These fracking materials are not extracted, so Bakken crude contains fracking water and chemicals when shipped. Recently, detected hydrogen sulfate levels have induced pipeline companies to reject Bakken crude as too “sour” to be safe for handling or transport.¹⁸

After the first of numerous incidents involving crude explosions during rail transport, described below, the Federal Railroad Administration (FRA) addressed the need to properly maintain and retrofit tanker cars in a July 2013 letter to the American Petroleum Institute (API).¹⁹ At issue was inadequate testing and classification of shipped crude, properly identifying “flash point, corrosivity, specific gravity at loading and reference temperatures, and the presence and concentration of specific compounds such as sulfur.”

Classification determines whether tanker cars need retrofits such as liners to protect against corrosion, and determination of proper loading levels. The FRA noted that lack of compliance results in valve deterioration and overloading causing leakage, loss of shell integrity, and, ultimately, greater risk of explosion. That agency informed the industry it would start testing cars to compare actual loads to classification reported, and determine if proper packaging was being used. The testing would be to determine only the degree to which the industry was complying, however; ***the federal government did not then, nor has it since announced, any plans to police crude by rail shipments and stop the transport of mislabeled crude in the wrong class of tankers.*** Further, as discussed below, due to lack of feasibility, it is highly unlikely federal regulators will institute requirements that immediately address safe transport of this highly volatile crude, requiring regulators at the state and local level to carefully review project applications and tailor mitigations to reduce risk to public health and safety.

V. New Information: Typical crude rail tanker cars are particularly dangerous.

In a 2012 letter, Deborah Hersman, Chairman of the National Transportation Safety Board (NTSB), wrote that 69% of rail tank cars used for crude transport are DOT-111 type, which have “a high incidence of tank failure during accidents,” noting:

The fact that DOT-111 general service tank cars experience more serious damage in accidents than pressure tank cars, such as DOT-105 or the DOT-112 cars, can be attributed to the fact that pressure tank cars have thicker shells and heads. The pressure cars are also usually equipped with metal jackets, head shields, and strong protective housings for top fittings. They do not have bottom outlet valves, which have been proven to be prone to failure in derailment accidents.²⁰

DOT-111 design inadequacies make them more susceptible to rupture, and their poorly designed valves are subject to failure, resulting in leakage.²¹

Under 2011 rules passed by the American Association of Railroads (AAR), *new* DOT-111 cars will be required to have “a thicker shell, head protection, top fittings protection, and relief valves with a greater flow capacity” to reduce the risk of leaks, explosions, and fires after derailment.²² However, the AAR expressly did not require retrofits, much less replacement of existing tankers of inferior design, citing cost concerns.²³ The NTSB finds phasing in to be inadequate, citing the existence of 62,000 cars in the U.S. inventory, length of service life of the cars, and loss of safety benefits when unit trains combine old and new tank cars.²⁴

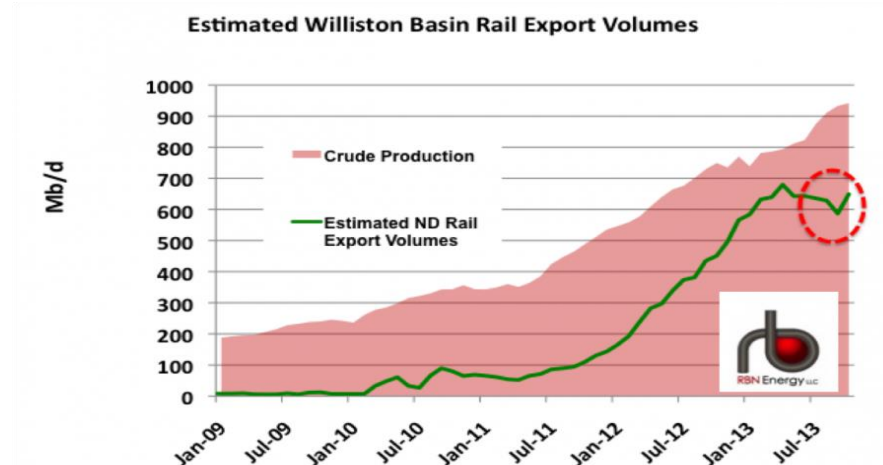
On August 13, 2013, in response to the catastrophic Lac-Megantic, Quebec, incident described below, Congressman Charles Schumer called on the FRA to order an immediate phase out of the DOT-111 for transport of hazardous materials.²⁵ Instead, the Pipeline and Hazardous Materials Safety Administration (PHMSA) issued a safety alert on Thursday, January 9, 2014, to warn the public that Bakken crude “may be more flammable than traditional heavy crude.” The Agency also issued the alert to remind railroads they are required to properly label crude tanker cars to identify properly the level of volatility, and announced it will conduct new testing to determine the gas content, corrosivity, toxicity and flammability of Bakken crude, stating,

The results of this expanded testing will further inform shippers and carriers about how to ensure that the materials are known and are properly described, classified, and characterized when being shipped. In addition, understanding any unique hazards of the materials will enable offerors, carriers, first responders, as well as PHMSA and FRA to identify any appropriate mitigating measures that need to be taken to ensure the continued safe transportation of these materials.²⁶

According to industry analyst RBN Energy, LLC, in a report released January 14, 2014,²⁷ it is highly doubtful new rules issued by the FRA will outright ban the use of pre-2011 DOT-111 tanker cars, or even order their immediate retrofit, because it is not possible for the industry to respond immediately. According to RBN:

The cost of retrofitting existing rail tank cars varies by design but has been estimated by tank car manufacturer National Steel Car at between \$20,000 and \$40,000 each (November 2013 Industry Presentation). Regardless of cost, the rail tank car industry lacks available capacity to carry out such retrofitting. The backlog of new orders for rail cars in 3Q 2013 was 61,000 of which 49,000 were tank cars (source: Railway Supply Institute). That backlog is expected to take 4 years to clear, leaving little capacity for retrofitting work. Smaller tank car repair shops also have limited capacity to do retrofitting work. ... [T]he impact in North Dakota if all rail shippers stopped using DOT 111A rail tank cars built before 2011 would be to throw Bakken crude oil transportation into chaos.

As illustrated by RBN in their chart, since July 2011, rail shipments of Bakken crude increased from less than 100 mil. bbl/day to over 650 mil. bbl/day by October 2013. They conclude that “if rail is removed from the equation, there is no way existing crude production can be transported to market.” In short, we should not expect pre-2011 DOT-111 tank cars to disappear or even all get retrofitted any time soon.



New and/or retrofitted tank cars would not prevent derailments, of course, and any car hull will breach under enough impact, and valves fail when not properly inspected, regardless of their design. In short, federal response will not only be slow, but it will not resolve all safety issues of crude transport, requiring state and local agencies to consider proposals for crude-by-rail projects to determine what mitigations may legally be required of proponents to reduce risk and bear responsibility for incidents when they occur.

VI. New Information: Cumulative Fossil Fuel Proposals in the Region Would Overwhelm Washington Infrastructure.

Table 2 lists known terminal and refinery construction or rail expansion projects for coal and crude in Oregon, Washington, and British Columbia. Support for the data is located online at <http://protectwhatcom.files.wordpress.com/2013/09/website-table-t1-10-17-131.pdf>. An info graphic presents a visualization of the data and can be viewed online at <http://protectwhatcom.files.wordpress.com/2013/10/gatewaytoextinctioncarrie10-14-13.pdf/>.

Table 2 ²⁸				
FOSSIL FUEL TERMINALS AND REFINERIES, PROPOSED FOR CONSTRUCTION OR EXPANSION				
Terminal or Refinery/Location (North to South)		Proposed Vol. (bpd ²⁹ or mmta ³⁰)	Possible Add'l Unit Trains/Day (one way)	Possible Add'l Vessels/Annum ³¹ (one way)
Puget Sound				
1	Westridge Marine Terminal, Burnaby, BC	590,000 bpd	n.a.	348
2	Ridley Terminals, Prince Rupert, BC	13 mmta	2	n.a.
3	Neptune Terminals, Vancouver, BC	6 mmta	1	52
4	Fraser-Surrey, Vancouver, BC	8 mmta	1.3	40
5	Westshore Terminal, Vancouver, BC	6 mmta	1	104
6	Gateway Pacific Terminal (coal), Ferndale, WA	48 mmta	9	487
7	BP Cherry Point Refinery, Blaine, WA	71,500 bpd	1	33
8	Phillips 66 Refinery, Ferndale, WA	35,750 bpd	0.5	17
9	Tesoro Refinery, Anacortes, WA	50,000 bpd	1	36
10	Shell Refinery, Anacortes, WA	61,286 bpd	1	45

11	U.S. Oil & Refining Co., Tacoma, WA	40,000 bpd	0.6	29
12	Targa Sound Terminal, Tacoma, WA	30,000 bpd	0.4	22
Total Possible Additional Vessels in the Puget Sound (2012 traffic: 6272)³²				1213
Grays Harbor, Hoquiam, WA ³³				
13	Imperium Bulk Liquid Terminal, T1	68,250 bpd	1	200
14	Westway Terminal Co., T1	28,692 bpd	0.4	60
15	Grays Harbor Rail Terminal, T-3	50,000 bpd	0.7	54
Total Possible Additional Vessels in Grays Harbor (2012 traffic: 82)				314
Columbia River ³⁴				
16	Oregon LNG, Warrenton, OR	9 mmta	n.a.	125
16	Millennium Bulk Logistics (coal), Longview	44 mmta	7.4	850
17a	Port of Morrow, Boardman, OR (coal)	8 mmta	1	624 barge tows
17b	Port Westward, Clatskanie, OR	See 17a	n.a.	156
18	Tesoro Savage Vancouver Energy Distribution Terminal, Vancouver	360,000 bpd	4	386
19	Columbia Pacific Bio-Refinery, Port of St. Helens, Port Westward Industrial Park, Clatskanie, OR	28,600 bpd	0.4	31
Total Possible Additional Vessels on the Columbia River (2012 traffic: 1490)³⁵				2172
Total Possible Additional Trains (one way)			34.2	

On September 30, 2013, the Washington Department of Transportation (WSDOT) released its 2013 Draft State Rail Plan³⁶ ("Rail Plan") for review and public comment. According to WSDOT, by 2035, volume on the Washington rails could increase to 260 million tons per year, "more than double" the 2010 volume.³⁷ Presumably, then, in 2013 there were roughly 130 million tons of all freight on the rails. Over half of that freight is bulk goods from out-of-state, most of which is bound for our ports,³⁸ a major employer and economic driver for our state. The Port of Seattle, for example, estimates it could add 100,000 jobs in the next 25 years based on long-range forecasts of demand for capacity at its container terminals.³⁹ It is therefore hugely relevant that our rails are at over 85% capacity, as described by the Rail Plan.

Together, all proposals described in Table 2 could result in 35 loaded trains per day passing through Spokane. If those trains average 1.5 miles in length, there would be a total of over 100 miles going and coming. This only accounts for Powder River Basin coal and North Dakota crude oil traveling to terminals proposed for construction or expansion on the Columbia River and in the Salish Sea; it does not account for the fact that Alberta tar sands may be shipped to and/or through the state via rail. In addition, the Washington Department of Transportation (WADOT) calculates, based on best available statistical analysis, other freight on Washington rails will increase by a compound rate of 3.4 percent per year.⁴⁰

If all crude-by-rail (CBR) terminal proposals come on line, they would add at least 53 million tons of North Dakota crude to the rails, assuming the refineries are accurately reporting the number of trains they expect to receive. WSDOT reports the BNSF Pasco-Spokane subdivision currently operates at 87% capacity,⁴¹ so regardless of what percentage of total freight currently uses that line, the Bakken shale crude – all of which would move on the Pasco-Spokane subdivision – would overwhelm rail capacity there. The same would pertain to all other subdivisions traversed by CBR,

from Pasco to the Columbia River Gorge, and up the coast to Grays Harbor, Tacoma, and the refineries in Skagit and Whatcom Counties. Because all rail expansion previously deemed necessary by 2035 must come on line immediately as rail-dependent proposals come on line, WSDOT recommends the state “take an active leadership role to build on existing multistate coalitions to address rail system and corridor needs across the Northwest.”⁴² Specifically, it recommends collaboration with Oregon, Idaho, California, and British Columbia regarding “corridor-level improvement opportunities.”

Why the New Information is “Significant”

In the past 18 months, not only has new information emerged about the hazards of Bakken crude transport, that and previously known facts have entered the public’s consciousness because of the enormity of the results of incidents involving crude transport by rail. Five events in rapid succession, described below, catapulted the transportation risks into national headlines and political discussions. What is receiving less attention is the fact that during that same time, multiple crude-by-rail proposals emerged. Prior to BP’s permit application, the Tesoro refinery in Skagit County was the only permitted CBR activity in the state. Today there are four proposals in Whatcom in Skagit County, two in Tacoma, three in Grays Harbor, and two on the Columbia River, permitted or in some stage of permitting *just* to receive crude by rail. Combined with other fossil fuel proposals, the combined rail and vessel traffic impacts are staggering. We begin, again, by considering implications for vessel traffic.

I. Significance: New Information About Potential Vessel Traffic

Vessel traffic poses a significant risk to the Salish Sea and other water bodies. The Ninth Circuit, in the *Ocean Advocates* case discussed above, held that it was erroneous for the Corps to reach a determination that vessel traffic posed no significant risk to the aquatic environment based solely on the applicant’s statement that traffic would decrease, resulting in lower risk. In the extant cases, we now know that, in fact, there is some amount of crude-to-tanker transfer occurring locally, and receipt of Bakken crude here may increase export of Alaskan crude to Asian markets, increasing vessel traffic in those waters.

We note that any crude transfers at the local refineries to vessels could be from Alberta tar sands crude and/or Bakken crude if and when received, and either could be bound for domestic or foreign end users. Incident risk is the same regardless of scenario, but to the extent outbound unrefined crude is destined for west coast domestic end users, traffic would be greater than were the crude bound for foreign markets due to method of transport. Super tankers are increasingly the preferred mode of transport to foreign markets; in the Puget Sound and up and down the coast to destinations as far away as Southern California, it is more common for shippers to use articulated tug-barge combinations. Because the barges carry less product than the larger tankers, there are more used to move an equivalent volume.

The Puget Sound Harbor Safety Committee commissioned the completion of a Vessel Traffic Risk Assessment (VTRA) by members of the George Washington University Department of Engineering⁴³ to study various scenarios of traffic and risk in the Puget Sound. That study could and should be expanded to include new information discussed above, and to assess risk based on various scenarios.

II. Significance: New Information About Crude-by-rail Risk

According to SEPA, “[a]n impact may be significant if its chance of occurrence is not great, but the resulting environmental impact would be severe if it occurred.”⁴⁴ Here in Whatcom County, the Cherry Point refineries proposed rail infrastructure projects to facilitate the transport of Bakken crude from North Dakota, via approximately 10 trains per week, to replace crude previously received by tanker vessels from Alaska and foreign sources. Since the granting of the MDNS’s, there have been five major derailments of crude trains in North America, four of which resulted in explosions and fires causing loss of life and enormous property loss and environmental cleanup costs, and one of which threatened a major metropolitan area:

- July 6, 2013, Lac-Megantic, Quebec, Canada. A runaway train carrying Bakken crude derailed, exploded, and burned down 30 buildings or roughly one-half of the downtown area, killing 47 in the 1-km (0.62 mi.) blast radius and requiring the evacuation of 2000 people.⁴⁵ Current estimates are the train spilled nearly 6 mil. liters of crude due to breaches of 63 of the 72 cars.⁴⁶ Rail service was interrupted for six months and when resumed on December 16, 2013, limited to shipments of dry goods; hazardous and combustible materials such as crude are banned on that line.⁴⁷



Image 1.

Ground view of Lac-Megantic crude train explosion.

Source: Radio-Canada via The Blaze.⁴⁸

- November 8, 2013, near Aliceville, Alabama. A train carrying Bakken crude derailed, resulting in a fire responders allowed to burn out, and releasing large amounts of oil into the marsh where the derailment occurred.⁴⁹



Image 2.

Crude spill resulting from derailment near Aliceville, Alabama.

Source: John Wathen, Hurricane Creekkeeper, via AllAlabama.com.⁵⁰

- December 30, 2013, Casselton, North Dakota. A train carrying Bakken crude collided with a freight train carrying soybeans, resulting in a fire that forced evacuation of the town.⁵¹
- January 8, 2014, Plaster Rock, New Brunswick. A train carrying Bakken crude and butane derailed outside the town, forcing evacuation of 150 people from homes within a 2-km (1.24 mi.) radius of the crash site for four days, and a call to avoid drinking well water until it can be tested, resulting in federal authorities requiring carriers to notify towns when hazardous substances will be railed through their jurisdictions.⁵²
- January 20, 2014, Philadelphia, Pennsylvania. A train carrying Bakken crude partially derailed on a 100-year-old bridge over the Schuylkill River in the heart of the city.⁵³

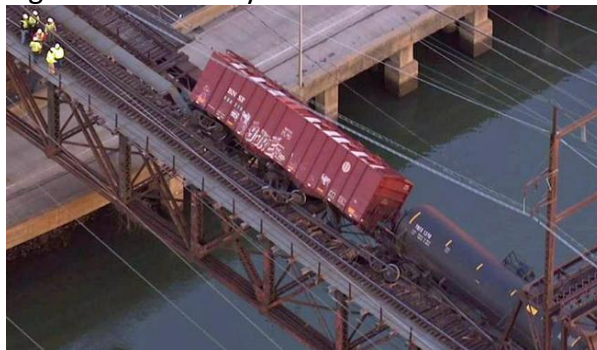


Image 3.

Derailed crude tanker cars teetering over the Schuylkill River.

Source: NBC Chicago/Sky Force⁵⁴

Image 4 illustrates that crude train derailments result in fires that can literally “be seen from space.” At the time BP and Phillips 66 applied for permits to expand rail infrastructure to receive Bakken crude, several things were generally unknown: a) the extreme danger posed by Bakken crude transport due to its higher-than-usual volatility, and the inadequate design of the DOT-111 cars to transport Class III materials; b) the degree to which domestic refining would shift from imports to domestic supply from the mid-continent; c) the fact that Canadian tar sand production would overwhelm pipeline reach and capacity, resulting in CBR shipments from Alberta to the U.S.;⁵⁵ and the staggering total of fossil proposals in the region that would add to rail traffic. Table 2 identifies over 10 proposals in the region to receive crude by rail (CBR) from North Dakota at coastal terminals

and refineries, totaling 53 million tons per annum,⁵⁶ without accounting for future Canadian tar sands shipments to U.S. west coast destinations. If approved, the crude proposals in the table would add 41% of the current freight volume of 130 mil. tons/annum to Washington's rails of a hazardous substance that is highly volatile and explosive.

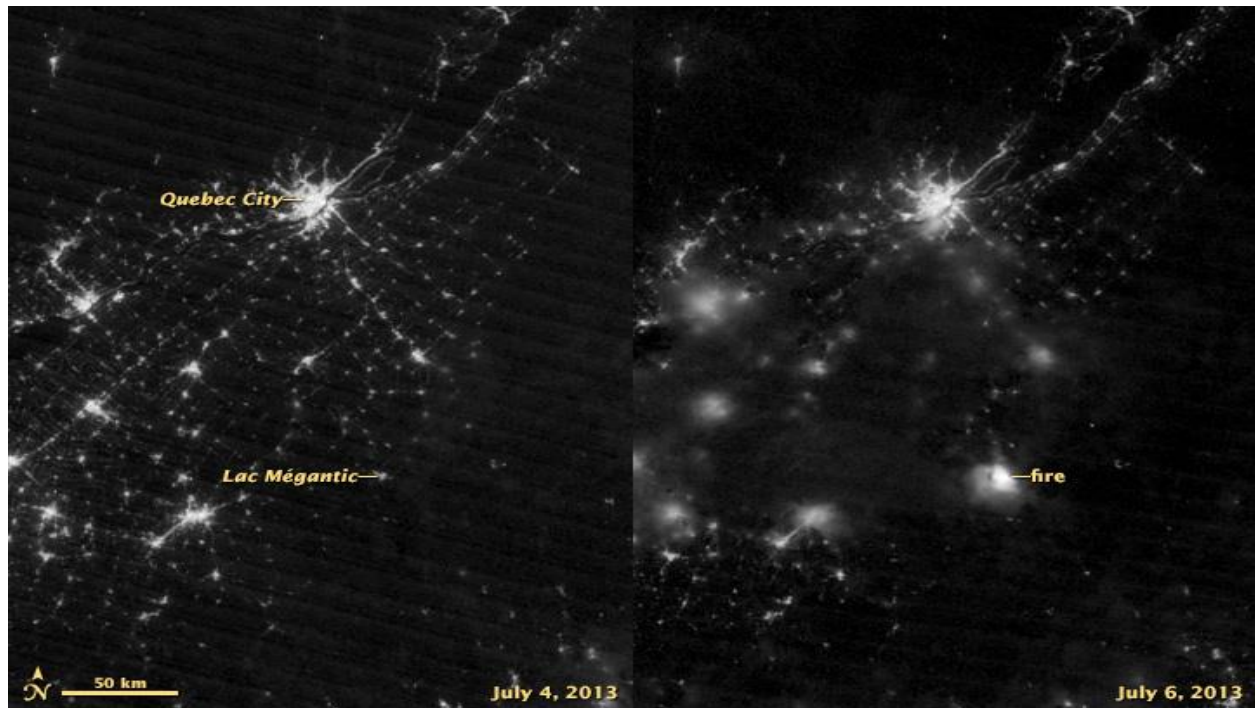


Image 4.

Aerial image of Lac-Mégantic fire as recorded by Visible Infrared Imaging Radiometer Suite (VIIRS) on the Suomi NPP satellite. Source: NASA Earth Observatory.⁵⁷

Agencies in Lac-Mégantic now know some of the 6 mil. liters of spilled crude reached their river and lake through the sewer system.⁵⁸ Estimates are that costs associated with loss of life and property, personal injury, and environmental cleanup will measure in the billions of dollars, far in excess of the \$250 mil. insurance coverage the rail carrier had.⁵⁹ That carrier almost immediately filed for bankruptcy, and according to a recent Wall Street Journal article, a significant incident would bankrupt *any* carrier, because the limit of available insurance in North America is \$1.5 billion.⁶⁰ That has left governmental agencies in Canada scrambling to do the cleanup and bear the cost, and everyone wondering who will pay for uninsured losses to life, limb, and property.⁶¹ While Whatcom County cannot solve all the problems with rail transport of dangerous substances, it can condition its permits on refineries posting bonds in an amount significant enough to ameliorate at least some of the potential economic risk to the public.

BP states they will lease 400 new DOT-111 cars meeting the new safety standards,⁶² but they do not say when the cars will be available and, as discussed above, there is currently a 4-year backlog for new cars. Further, according to their permit application, the six unit trains per week they expect to receive will average over 100 cars per train, which means the new cars will only transport *some* of their crude, and as described above, if the new cars are mixed with old cars on unit trains, safety

benefits are lost, and there are no assurances that will not occur. Finally, to the best of our knowledge, Phillips 66 has made no provisions to lease new cars.

III. New Information on Cumulative Rail Impacts on Infrastructure and Communities

SEPA requires jurisdictions to consider direct, indirect,⁶³ and cumulative⁶⁴ impacts wherever they occur,⁶⁵ over the entire life of a proposal,⁶⁶ including impacts on growth and the proposal's "likelihood [to] serve as a precedent for future actions...."⁶⁷ As described by the Washington Shoreline Hearings Board, "When making the threshold determination, WAC 197-11-330(3) requires that agencies take into account that '[s]everal marginal impacts when considered together may result in a significant adverse impact' and that '[a] proposal may to a significant degree ... [e]stablish a precedent for future actions with significant effects.'"⁶⁸

Whatcom County is already keenly aware that rail communities along the coast, the Columbia River, and back to the Powder River Basin have grave concerns about impacts on their communities' health, environment, traffic, and economies if a coal terminal were built at Cherry Point, because of the large number of trains required to deliver 48 mmta to that facility. Co-lead permitting agencies, including Whatcom County PDS, received over 12,000 unique substantive comments addressing those and other issues during scoping for the Gateway Pacific Terminal (GPT) environmental impact statement (EIS).⁶⁹

Crude trains from the Bakken shale beds of North Dakota must follow similar routes, as explained in the Rail Plan⁷⁰ and illustrated in the info graphic.⁷¹ It is obvious in hindsight the Surface Transportation Board and the Federal Railroad Administration should have been co-leads with agencies from the beginning of the MAP Team deliberations for the Gateway Pacific Terminal. It was always the case that rail impacts on communities from the terminal to the mines should be scoped programmatically with all other known and reasonably foreseeable future impacts.

As described above, WSDOT now says a regional approach to rail planning, from California to Canada, must occur immediately because once our infrastructure reaches capacity, which will happen soon if even some of the 20 proposals in Table 2 come on line, WSDOT assumes BNSF will use rate manipulation to control access to the rails, with some quantity of Washington and out-of-state freight products bound for our container ports necessarily defaulting to our highways. Further, if *any* crude received from North Dakota were exported in its raw rather than refined state, other jurisdictional elements apply. Locally, we are facing 16.3 additional trains per day **each** way, or 32 total, if all proposals in Whatcom County and British Columbia were completed. The Rail Plan describes a bottleneck north of Bellingham requiring a new siding which would extend into Boulevard Park where the city has made major investment in shoreline restoration and is about to spend millions for a guarded crossing. Throughout the region we will need grade changes and quiet zones to address traffic impacts, and we should know how rail impacts will effect population trends – who will buy and who will move where given the impacts and risks? Who will want a home a stone's throw from crude trains now that we know one incident would have a 1-mile blast radius?

Finally, it is not completely clear the refineries are not and will not act as terminals, transferring domestic crude in its unrefined state to tankers for export. This may trigger the need for

EFSEC to assert jurisdiction over elements of the permits. At the least, a cumulative vessel traffic risk assessment must consider whether BP, in particular, because of their newly-constructed second pier, may add significantly to vessel traffic in the Salish Sea and Puget Sound.

Conclusion

The County did not have relevant information when it considered the SEPA checklists and conducted its threshold determinations for BP and Phillips 66. We now have “significant new information” indicating the proposals present our communities and the state with unacceptable risk of catastrophic impacts on the land and to our waters. We now know the inherent problems with the DOT-111 tank cars were known when both applications were submitted, and that information was not made available to the county when it reached its determinations of nonsignificance. Further, we now know that most of the underlying premises in the permit applications – that Bakken crude by rail would replace dwindling Alaskan supplies, and vessel traffic would decrease – was not true or is no longer true, and we don’t know what the full implications are for risk of vessel incidents here and in other waters.

The federal government’s response to the risk posed by rail tanker cars – advising and monitoring for reporting on compliance with labeling – is wholly inadequate and will do nothing to prevent an incident. Any mitigations the federal government may adopt for national implementation will not be tailored to address specific harms that will occur in our county, or our state, when federal rules or guidelines are inadequate. However, there is *no* agency currently considering the potential vessel traffic changes based on now-known plans for crude extraction in Alaska, pipeline expansion to our county, and other factors. If the county lacks the expertise or jurisdiction to fully assess the risks or to enforce reasonable mitigations, then it should associate state and federal agencies as co-leads or, at the very least, advisors, to assess risks and appropriate responses. WS DOT, EFSEC, Ecology, and the Federal Railroad Administration are but some of the agencies which should be involved in decisions regarding permitting an activity that could have such a profound impact on lives, and the environment.

Further, because of the cumulative rail impact on communities and economies of our rail system as it approaches full capacity, the state and federal governments should be involved in addressing how any trade commerce will occur at all if we essentially dedicate our rail lines to fossil fuels. We have 130 mmta all freight on the rails now and are at over 85% capacity. Fossil fuel proposals would add over 150 mmta coal and crude to the rails. ***If weight is equivalent to capacity, the proposals require all the existing rail capacity Washington currently has, which has enormous implications for inter- and intrastate commerce in all other freight. At the very least, they contribute enormously to wear and tear, and increase the risk of derailment of freight or passenger trains.***

The public, the tribes, and other agencies should be involved in decisions with the potential for such significant impacts. We therefore request, in accordance with WAC 197-11-390(2)(c), 340(3)(a)(ii), and 340(3)(a)(iii), that the County withdraw its MDNS’s granted BP and Phillips 66 for their rail infrastructure projects, make a determination of significance, and conduct a full environmental review in which the tribes, the public, and agencies with the relevant expertise in

regional infrastructure planning, as well as transportation of hazardous materials, emergency response, hazmat cleanup, and vessel risk and response, may provide input on mitigations and alternatives that should be considered. If the county determines it lacks jurisdiction to address probable necessary mitigations, it should seek to associate agencies at the state and federal level with the expertise and jurisdiction it lacks.

Thank you very much for your consideration. Please accept electronic signatures as you would originals.

Sincerely,

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¹ “The responsible official's threshold determination ... [s]hall not apply when withdrawn by the responsible official under WAC 197-11-340....”

² “The lead agency shall withdraw a DNS if ... [t]here is significant new information indicating, or on, a proposal's probable significant adverse environmental impacts”

³ “The lead agency shall withdraw a DNS if ... [t]he DNS was procured by ... lack of material disclosure; if such DNS resulted from the actions of an applicant, any subsequent environmental checklist on the proposal shall be prepared directly by the lead agency or its consultant at the expense of the applicant.”

⁴ <http://whatcomcounty.us/pds/plan/sepa/pdf/sep2012-00059-sepa-packet-mdns-20121018-part1.pdf>; <http://whatcomcounty.us/pds/plan/sepa/pdf/sep2012-00059-sepa-packet-mdns-20121018-part2.pdf>; linked from <https://www.whatcomcounty.us/pds/plan/sepa/2012-quarter4.jsp>.

⁵ <http://whatcomcounty.us/pds/plan/sepa/pdf/sep2013-00005-sepa-packet-mdns-20130429.pdf>, linked from <https://www.whatcomcounty.us/pds/plan/sepa/2013-quarter2.jsp>.

⁶ See Ass'n of American Railroads, *Just the Facts – Railroads Safely Move Hazardous Materials, Including Crude Oil*, located online 8/30/13, at <http://www.portofgraysharbor.com/downloads/crude-by-rail/Facts-on-Hazmat-and-Crude-Oil-Safety.pdf>.

⁷ *Id.*

⁸ Lynn Doan, “BP to Conoco Seek Alaskan Oil Comeback as Palin Tax Dies: Energy,” Bloomberg, Jan. 7, 2014, <http://www.bloomberg.com/news/2014-01-08/bp-to-conoco-seek-alaskan-oil-comeback-as-palin-tax-dies-energy.html>.

⁹ Brad Plumer, “U.S. oil exports have been banned for 40 years. Is it time for that to change?” The Washington Post Wonkblog, Jan. 8, 2013, <http://www.washingtonpost.com/blogs/wonkblog/wp/2014/01/08/u-s-oil-exports-have-been-banned-for-40-years-is-it-time-for-that-to-change/>.

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¹¹ These documents are in Fred Felleman's possession and available upon request.

¹² 78 FR 69745, “Safety and Security Plans for Class 3 Hazardous Materials Transported by Rail,” Notice of Safety Advisory, Pipeline and Hazardous Materials Safety Administration and the Federal Railroad Administration, Nov. 20, 2013, <https://www.federalregister.gov/articles/2013/11/20/2013-27785/safety-and-security-plans-for-class-3-hazardous-materials-transported-by-rail>.

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¹⁵ http://en.wikipedia.org/wiki/Bakken_crude.

¹⁶ This comment incorporates by reference the Wikipedia.org entry for “Hydraulic fracturing.” http://en.wikipedia.org/wiki/Fracking#cite_note-onepetro-182.

¹⁷ Yevhen I. Holubnyak, et al., “Understanding the Souring at Bakken Oil Reservoirs,” conference paper presented to SPE International Symposium on Oilfield Chemistry, April 11-13, 2011, <http://www.onepetro.org/mslib/servlet/onepetropreview?id=SPE-141434-MS>.

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¹⁹ Letter from Thomas J. Herrmann, Acting Director, Office of Safety Assurance and Compliance, Federal Railroad Administration, to Jack Gerard, American Petroleum Institute (July 29, 2013), <http://www.fra.dot.gov/eLib/details/L04717>.

²⁰ Letter from Deborah A.P. Hersman, Chairman, National Transportation Safety Board, to Cynthia L. Quarterman, Administrator, Pipeline and Hazardous Materials, Safety Administration (March 2, 2012), <http://www.ntsb.gov/doclib/reclatters/2012/R-12-005-008.pdf>.

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- ²⁷ Sandy Fielden, "Could New Tank Car Rules Derail the Bakken Crude Boom?" RBN Energy, LLC, Jan. 14, 2014, <https://rbnenergy.com/could-new-tank-car-rules-derail-the-bakken-crude-boom>.
- ²⁸ Compiled by Protect Whatcom. Table updated as of October 17, 2013. Numbers on info graphics are based on known information at the time of printing, and may not be consistent with this table.
- ²⁹ "BPD" is barrels per day. A barrel of crude is 42 U.S. gallons or 158.9873 litres.
- In some cases, volume is extrapolated from train numbers. We assumed 110 rail cars/train, each carrying an average of 650 bbl (range is 600-700 bbl), for a total of 71,500 bbl/train unit. See Ass'n of American Railroads, *Just the Facts – Railroads Safely Move Hazardous Materials, Including Crude Oil*, located online 8/30/13, at <http://www.portofgraysharbor.com/downloads/crude-by-rail/Facts-on-Hazmat-and-Crude-Oil-Safety.pdf>.
- ³⁰ Mmta = metric tonnes per annum. A metric tonne is approximately 1.1 short tons.
- ³¹ Vessels are bulkers of the Panamax or Cape class; tankers of the Panamax class; and LNG (liquid natural gas) carriers of equivalent size as Panamax tankers and bulkers. Not counted are bunker barges which will fuel vessels at dock. For every two large vessels, estimate one bunker barge transit. Source: *Minutes, Combined Meeting, Steering Committee of the Puget Sound Harbor Safety Committee and Puget Sound Partnership Oil Spill Work Group, Vessel Traffic Risk Assessment (VTRA), Draft Estimates, Notes and Decisions on Future Scenarios*, May 2, 2013 (rev. 5/7) (hereafter "5/13 PSP VTRA Est."), located online Oct. 15, 2013, at http://www.psp.wa.gov/downloads/OILSPILL/VTRA_SC_Decisions5_2_13Final.pdf.
- Unless otherwise specified, the following assumptions were made:
- Crude received will leave terminals and refineries in its unrefined state, by vessel and not by rail or the Olympic pipeline;
 - Crude volume received is roughly equivalent to volume of refined product. In fact, volume of refined product is actually slightly higher. Source: telephone conversation with Julie Harris, Refinery Operations, US DOE EIA, 2032-586-6281. See *Petroleum & Other Liquids, Data, Refinery Yields*, US Energy Information Administration, http://www.eia.gov/dnav/pet/pet_pnp_pct_dc_nus_pct_m.htm.
 - At Tacoma, Grays Harbor, and Columbia River terminals, crude will leave by some combination of (a) oil tankers with a maximum draft of 40' and capacity of 340,000 bbl; and (b) articulated tug/barge combo, with an 85,000 bbl-capacity barge (they range from 55-150,000 bbl). Vessel estimates in the table represent only tankers of the largest class, and not barges, unless other source information is cited.
- ³² VEAT 2012 Vessel Entries And Transits for Washington Waters. Washington State Department of Ecology Spill Prevention, Preparedness and Response Program P.O. Box 47600 Olympia, WA 98504-7600. WDOE Publication 13-08-001, March 2013, available online as of Oct. 17, 2013, at <https://fortress.wa.gov/ecy/publications/SummaryPages/1308001.html>.

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- 34 Other possible proposals include:
- NuStar Energy, Tacoma or Vancouver. *New Traffic Patterns Emerge to Supply Crude Oil to West Coast Refiners*, EIA, Aug. 14, 2013, located online 9/2/13, at <http://www.eia.gov/oog/info/twip/twiparch/2013/130814/twippprint.html> (“[M]erchant terminal operators, such as ... NuStar Energy ... are also investing in new rail-to-barge and rail unloading facilities.”) NuStar has three terminals, one in Tacoma and two in Vancouver. <http://www.nustarenergy.com>.
 - Paramount Terminal, Portland, OR. The Wash. Dept. of Ecology lists this proposal on their *Energy Movement Evolution* map. <http://static.squarespace.com/static/50538902e4b06a8cd25aff1b/t/51a95db6e4b0c88fb1ffbae4/1370054070258/Ecology%20Map%20oilmovementjan713.pdf>. Possible proponent: Paramount Petroleum Corp.
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- 41 See <http://www.wsdot.wa.gov/Rail/StateRailPlan>.
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- 44 WAC 197-11-194(2).
- 45 Les Perraux, “Lac-Mégantic has a reluctant rebirth as first trains roll through town,” *The Globe and Mail*, November 18, 2013, <http://www.theglobeandmail.com/news/national/trains-roll-again-through-lac-megantic-first-since-deadly-derailment/article16027596/>; see also Wikipedia entry, http://en.wikipedia.org/wiki/Lac-M%C3%A9gantic_derailment.
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- ⁶⁵ “In assessing the significance of an impact, a lead agency shall not limit its consideration of a proposal’s impacts only to those aspects within its jurisdiction, including local or state boundaries (see WAC 197-11-330(3) also).” WAC 197.11.060(4)(b).
- ⁶⁶ “Agencies shall carefully consider the range of probable impacts, including short-term and long-term effects. Impacts shall include those that are likely to arise or exist over the lifetime of a proposal or, depending on the particular proposal, longer.” WAC 197.11.060(4)(c).
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