

## FRIENDS OF THE COLUMBIA GORGE SUBMITTED VIA EMAIL

April 7, 2017

House Committee on Energy and Environment 900 Court St. NE Salem, OR 97301 hee.exhibits@oregonlegislature.gov

#### Re: Friends of the Columbia Gorge Comments in Support of HB 3343 and the -1 Amendments – the Oregon Climate Test

Dear Chair Helm and members of the committee:

Friends of the Columbia Gorge ("Friends") submits the following comments in support of HB 3343 and the -1 amendments – the Oregon Climate Test. Friends is a non-profit organization with approximately 6,000 members dedicated to protecting and enhancing the resources of the Columbia River Gorge. Friends' membership lives, works, and recreates in the Columbia River Gorge.

Oregon communities are in the crosshairs of crude oil trains. The threat was illustrated last June when an oil train in Mosier derailed and spilled oil into the Columbia River, causing a large fire near homes and an elementary school. Since 2015 when Congress lifted the crude oil export ban, there has been a great interest in siting fossil fuel terminals on the West Coast for export to Asian markets. There is no pipeline capacity to the Pacific Northwest for oil so it must be shipped by rail. The only routes to Oregon and Washington that will accommodate full oil and coal trains from points east travel through the Columbia River Gorge National Scenic Area ("Scenic Area" or "Gorge"). As a result, Friends has fought hard against oil and coal terminal proposals in Oregon and Washington. Fortunately, the lion's share of terminals have been proposed in Washington where there is comprehensive environmental review for fossil fuel terminals. However, Oregon is a soft target (see the attached graphic). Oregon has the weakest laws on the west coast related to oil trains and fossil fuel terminals. In the Mosier derailment, oil spill, and fire, Oregon had to rely heavily on the Washington Department of Ecology for assistance. Both California and Washington have state environment policy acts that require comprehensive environmental review of coal and oil terminals. Due to our lax laws, as soon as the price of oil rebounds, Oregonians can expect to see more proposals for coal and oil export terminals.

### I. Oil Trains and the Mosier Derailment

Of course, the elephant in the room is the Union Pacific Railroad Company ("Union Pacific") derailment in Mosier. On June 3, 2016, a Union Pacific train carrying highly flammable Bakken crude oil derailed in the community of Mosier.<sup>1</sup> When Bakken crude oil trains derail they inevitably break open, leak, and ignite. That is exactly what happened in Mosier even though reinforced railroad cars were in use. As a result of the derailment, one tank car was punctured, the volatile oil ignited, and three additional tank cars caught on fire.<sup>2</sup> The Federal Railroad Administration (FRA) determined on June 23, 2016 that "Union Pacific's failure to maintain its track and track equipment resulted in the derailment."<sup>3</sup>



Explosive fire in Mosier caused by a Bakken crude oil train derailment. The large white building is the Mosier K-12 school that was filled with children at the time of the crash. The building would have been "incinerated" if the normally prevailing winds were blowing on that day according to Mosier Fire Chief Ron Appleton. Photo by Paloma Ayala.

<sup>&</sup>lt;sup>1</sup> Federal Railroad Administration, PRELIMINARY FACTUAL FINDINGS REPORT, Derailment of Union Pacific's Unit Crude Oil Train ONETU 02 Transporting Bakken Crude Oil for U.S. Oil, Mosier, Oregon (June 23, 2016).

 $<sup>^{2}</sup>$  *Id.* 

<sup>&</sup>lt;sup>3</sup> Id.

Oil trains, being heavier and carrying a commodity that tends to slosh around when the train speeds up or slows down, tend to have greater than average accident incidence.<sup>4</sup> Their weight also can damage tracks.<sup>5</sup> Oil trains are trouble on even the best maintained tracks. However, maintenance of railroad tracks on oil train routes is notoriously bad (see attached article from KGW).<sup>6</sup> "Government inspections of railroads that haul volatile crude oil across the United States have uncovered almost 24,000 safety defects, including problems similar to those blamed in derailments that triggered massive fires or oil spills in Oregon, Virginia, Montana and elsewhere, according to data obtained by The Associated Press."<sup>7</sup> Violation recommendations are issued only for the worst safety violations.<sup>8</sup> Union Pacific, which continues to haul crude oil through the Scenic Area even after the Mosier catastrophe, "received most of the violation recommendations issued under the targeted inspection program, with more than 800."<sup>9</sup> Oregon simply cannot afford an increase in oil train traffic due to a new oil terminal. HB 3343-1 would put Oregon on a more level playing field with our neighbors to the North and South and prevent our state from being a magnet for these proposals.

#### II. Impacts of Coal Trains

If a coal terminal was approved in Oregon then coal trains coming from the Powder River Basin, Utah, and Southern Wyoming would likely share the tracks with oil trains through the scenic area. The U.S. Surface Transportation Board declared that coal is a "pernicious ballast foulant" that destabilizes railroad tracks and leads to more accidents.<sup>10</sup> At least one railroad "has determined that coal dust poses a serious threat to the stability of the track structure and the operational integrity of" its railroad network.<sup>11</sup>

Coal dust that is emitted from train cars gets into the rock ballast that supports the railroad ties, making the track unstable and more susceptible to damage. In fact, the Burlington Northern Santa Fe railroad has attributed derailments to ballast contaminated with coal dust.<sup>12</sup> Additionally, coal trains are heavy and result in more damage to tracks. As illustrated by the derailment in Mosier, damaged tracks can result in derailments of oil trains. Coal trains mean even more train safety woes for Oregon. Oregon's inadequate laws ensure that, as coal becomes a national priority, any coal terminals that are proposed on the West Coast will be proposed in Oregon. We urge you to pass HB 3343-1 to improve scrutiny of these proposals.

<sup>&</sup>lt;sup>4</sup> "Petroleum crude oil unit trains with heavily loaded tank cars will tend to impart higher-thanusual forces to the track infrastructure during their operation. These higher forces expose any weaknesses that may be present in the track structure, making the track more susceptible to failure." Transportation Safety Board of Canada, RAIL SAFETY ADVISORY LETTER – 04/15, *available at* http://www.tsb.gc.ca/eng/medias-media/sur-safe/letter/rail/2015/r15h0021/r15h0021-617-04-15.asp

<sup>&</sup>lt;sup>5</sup> Id.

<sup>&</sup>lt;sup>6</sup> http://www.kgw.com/news/local/inspectors-find-24k-defects-in-oil-train-tracks-nationwide/428823752

<sup>&</sup>lt;sup>7</sup> Id.

<sup>&</sup>lt;sup>8</sup> Id.

<sup>&</sup>lt;sup>9</sup> Id.

 $<sup>^{10}</sup> See \ http://www.troutmansandersenergyreport.com/wp-content/uploads/2011/03/Coal-Dust.pdf$ 

<sup>&</sup>lt;sup>11</sup> Available at http://www.bnsf.com/customers/what-can-i-ship/coal/coal-dust.html.

<sup>&</sup>lt;sup>12</sup> See Decision, March 3, 2011, Arkansas Electric Cooperative Association—Petition for Declaratory Order, Surface Transportation Board, Docket No. FD 35305, at 7.

Increased coal train traffic would also cause an increase in dangerous air pollution in Oregon including fugitive emissions of coal dust and diesel emissions from trains. The Columbia River Gorge National Scenic Area is already severely impaired by air pollution, especially particulate pollution. Particulate matter pollution threatens human health and welfare. In fact, when reviewing the National Ambient Air Quality Standards for PM2.5, the EPA found that there is no level of particulate matter pollution causes a variety of adverse health effects. According to the EPA, fine particulate matter pollution causes a variety of adverse health effects, including premature death, heart attacks, strokes, birth defects, and asthma attacks.<sup>13</sup> Even low levels of PM2.5 can cause low birth weights, damage lung function, and increase risks of heart attack and premature death. Studies reviewed by EPA revealed a linear or almost linear relationship between diseases like cancer and the amount of fine particulate matter in the ambient air.<sup>14</sup> Consequently, particulate matter contamination has adverse health effects at any concentration.



Photo of an open-top coal train emitting large quantities of coal dust at Columbia Hills State Park in the Columbia River Gorge National Scenic Area. Photo taken on May 22, 2015 five months after the Pasco re-spray facility became operational. Provided by Friends of the Columbia Gorge.

Open-top coal trains lose huge volumes of coal dust and debris during transportation. Even after a facility designed to coat coal with sticky surfactants opened in Pasco, Washington, the picture

<sup>&</sup>lt;sup>13</sup> 71 Fed. Reg. 2620, 2627–36 (Jan. 17, 2006). <sup>14</sup> *Id*.

above demonstrates the occurrence of a massive coal dust emission from a coal train in the Gorge. According to Burlington Northern Santa Fe studies, between 500 lbs. and 2000 lbs. of coal can be lost in the form of dust from each rail car.<sup>15</sup> In other studies, as much as three percent of the coal in each car (around 3600 pounds per car) can be lost in the form of dust. A study of a West Virginia rail line found that one pound of coal per car per mile is lost from coal trains.<sup>16</sup> At this rate, one coal train with 120 cars traveling 85 miles through the Columbia River Gorge National Scenic Area could lose just over 10,000 pounds of coal in the Gorge. The increase in the number of trains that would travel through Oregon as a result of a coal terminal would have a direct adverse effect on the health of Oregonians.

### III. HB 3343 with the -1 Amendments

Oregon is far behind California and Washington in oversight of oil-by-rail and in scrutiny of new fossil fuel infrastructure. The passage of HB 3343 with the -1 amendments along with HB 2131 and HB 3344 with its -1 amendments would effectively make Oregon a peer with its neighbors. While HB 3343 with the -1 amendments would not catch Oregon up to its neighbors on its own, it would be an important step in the right direction. Therefore, Friends supports HB 3343 and asks that you adopt the -1 amendments and move the bill to the floor.

Thank you for the opportunity to testify.

Sincerely,

Steven D. McCoy Staff Attorney

<sup>&</sup>lt;sup>15</sup> See Hearing, July 29, 2010, Arkansas Electric Cooperative Association—Petition for Declaratory Order, Surface Transportation Board, Docket No. FD 35305, at 42: 5-13.

<sup>&</sup>lt;sup>16</sup> Simpson Weather Associates 1993. Norfolk southern rail emission study: consulting report prepared for Norfolk Southern Corporation. Charlottesville, VA.

# Oregon: Weakest Oil Train and Terminal Laws on the West Coast

Prepared by Friends of the Columbia Gorge, For more information call Michael Lang, (971) 634-2030

LAW	OR	WA	CA
<b>Oversight of Railroad Emergency Response</b>	NO	YES	YES
Fees On Oil Trains For Emergency Response	NO	YES	YES
Railroad Ability To Pay For Worst-Case Spill	NO	YES	YES
24-Hour Notice Required For Oil Trains	NO	YES	NO
<b>Comprehensive Environmental Review for</b> <b>Terminals</b>	NO	YES	YES
State Land Leases Required For Terminals	NO	YES	YES

## Inspectors find 24K defects in oil train tracks nationwide

**AP, KGW** 10:20 AM. PDT April 05, 2017



BILLINGS, Mont. (AP) - Government inspections of railroads that haul volatile crude oil across the United States have uncovered almost 24,000 safety defects, including problems similar to those blamed in derailments that triggered massive fires or oil spills <u>in Oregon,</u> (<u>http://www.kgw.com/news/local/oil-train-derails-inmosier/230529172)</u>Virginia, Montana and elsewhere, according to data obtained by The Associated Press.

File: Feds blame Union Pacific for Gorge oil train derailment, spill (http://www.kgw.com/news/local/railroad-blamed-for-fiery-oil-trainderailment/253716914)

Raw video: <u>Smoke, flames pour up from Gorge oil train derailment</u> (https://youtu.be/ZXmdZxdh2Ow)

Photos: <u>Train derailment</u>, fire in the Gorge (http://www.kgw.com/news/photos-trainderailment-in-the-gorge/230445267)

The safety defects were discovered during targeted federal inspections on almost 58,000 miles of oil train routes in 44 states. The inspection program began two years ago following a string of oil train accidents across North America, including a 2013 derailment in Lac-Megantic, Quebec, that killed 47 people.

Federal regulators said the inspections resulted in 1,118 violation recommendations, prompting railroads to become more responsive to concerns raised by track inspectors and to improve safety.

Problems identified by federal inspectors included worn rails and other equipment; bolts meant to hold tracks in place that were broken, loosened or missing; and cracks in steel bars joining sections of track. They also noted failures by railroads to quickly fix problems identified through inspections.



Such issues are not uncommon across the nation's 140,000-mile freight rail network. But they've received heightened attention after rail shipments of crude oil increased and the number of major derailments spiked following a surge in domestic energy production.

A violation recommendation occurs when an inspector finds something serious enough to warrant a potential penalty, or a railroad fails to address a defect that's been found. Federal officials declined to say how many penalties had been issued under the crude-by-rail inspection program.

A former senior official at the Federal Railroad Administration, Steven Ditmeyer, reviewed the inspection data obtained by the AP. He said it reinforces the need for railroads to stay on top of regular maintenance for their sprawling networks of track.

Many of the defects found by inspectors posed serious safety issues, Ditmeyer said, adding that it can be difficult for railroads to know when a seemingly small problem will result in a derailment.

"All of this is a call for continued vigilance," said Ditmeyer, who directed the railroad administration's Office of Research and Development for eight years. "One defect or one violation of the right kind can cause a derailment. These statistics give a good indication of the track quality, but most (defects) won't cause a derailment."

Some safety gaps found by inspectors bear similarities to the circumstances surrounding prior accidents.

In Lynchburg, Virginia, cracks in the track that went unrepaired led to a CSX Transportation oil train coming off the rails and exploding along the James River in 2014. In Culbertson, Montana, a 2015 accident that spilled 27,000 gallons of oil from a BNSF Railway train was blamed on defective or missing fasteners used to hold the tracks in place. And in Mosier, Oregon, broken rail bolts were blamed in a Union Pacific oil train derailment and fire last year.

The rail industry views safety defects as warnings from regulators that action is necessary, said Association of American Railroads spokeswoman Jessica Kahanek. She said violations are a better indicator of safety problems because not all defects pose an immediate risk. Hundreds of the violation recommendations on oil train routes were "paperwork-related," Kahanek said, such as railroads not providing required forms to government inspectors.



6. Top local news stories of 2016. An oil train derailed near Mosier spilling oil and raising fears about public safety in the Columbia River Gorge (KGW) (Photo: Columbia Riverkeeper)

Omaha, Nebraska-based Union Pacific received most of the violation recommendations issued under the targeted inspection program, with more than 800. A breakdown for violations involving other railroads was not available. Union Pacific agreed to increase its inspection frequencies following the Mosier derailment under an agreement with federal regulators who said the railroad's inspection program was too lax.

Union Pacific spokeswoman Calli Hite said the railroad shares the Federal Railroad Administration's dedication to safety and safety compliance.

"Union Pacific has always paid close attention to track conditions and inspections," Hite said.

Most violations were found in the months after the inspection program began in January 2015 in the U.S. Southwest, where officials said Union Pacific runs a majority of the oil trains. In many cases, violation recommendations came after the railroad did not respond quickly enough to problems found by inspectors, said Marc Willis, a spokesman for the railroad administration.

Subsequent inspections turned up thousands of additional safety problems but far fewer recommendations for violations.

That was because the high number of violation recommendations for Union Pacific sent a message to the entire industry to quickly address any issue raised by inspectors, officials said.

"Railroads are paying closer attention," Willis said, adding that derailments have fallen 10 percent since the inspection program began. "Although many minor defects still are being identified ... both FRA and railroad inspectors are finding fewer serious conditions, resulting in significant safety improvements."

It's uncertain whether the targeted inspection program for oil trains will continue under the Trump administration, he said.

Since 2006, the United States and Canada have seen at least 27 oil train accidents involving a fire, derailment or significant fuel spill. Besides the targeted inspection program, U.S. and Canadian officials have responded with more stringent construction standards for tens of thousands of tank cars that haul oil and other flammable liquids.

The amount of oil moving by rail peaked in 2014 then dropped after crude prices collapsed. Major railroads reported moving more than 43,000 carloads of crude in the fourth quarter of 2016, down almost 50 percent from a year earlier, according to the railroad association.

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