# Depart,emt of Ecology

The undersigned are profoundly concerned with the threat inherent in oil transport by rail, vessel and pipeline in Washington state. These risks are abundantly clear when considering recent oil train derailments and explosions in the U.S. and Canada: Lac-Megantic, Quebec, where 47 died in 2013; Aliceville, Alabama (2013); Casselton, North Dakota (2013); Plaster Rock, New Brunswick (2014); Philadelphia, Pennsylvania (2014); Lynchburg, Virginia (2014); Timms, Ontario (2015); Mount Carbon, West Virginia (2015); Galena, Illinois (2015); Gogama, Ontario (2015); Heimdal, North Dakota (2015); Culbertson, Montana (2015); Watertown, Wisconsin (2015); Mosier, Oregon (2016); and Palo Alto County, Iowa (March 8th, 2017) are recent incidents whose frequency highlights the gravity of this issue. Union Pacific suffered a derailment of 11 cars just two weeks ago, on March 15th, 2017, in Lake Forest, Illinois – though no hazardous materials were found leaking in any cars.1

A fire or explosion from a tank car could substantially endanger public safety and health, as well as the environment, particularly if one were to occur near schools, hospitals, or other community structures, or near densely populated locations. A spill would also have devastating and potentially permanent impacts to waterways. From shutting down drinking water intakes, damaging sensitive habitats and harming wildlife such as birds, game, fish, shellfish and other aquatic life (including local endangered species), to turning wetlands into toxic sites, a spill could be catastrophic. Any train derailment in Washington poses risks to the quality of life and livelihoods of the communities living in close proximity to railways and rail facilities. The best contingency plan is prevention, and the C-Plan should be scrutinized accordingly.

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RESOURCES FOR SUSTAINABLE COMMUNITIES

Citizens for a Healthy Bay


Eli Lieberman
Contingency Plan Compliance Specialist
Spill Prevention Preparedness and Response Program
Washington State Department of Ecology
PO Box 47600
Olympia, WA 98504-7600
Eli.Lieberman@ecy.wa.gov

March 27, 2017

Re: Comment on Union Pacific Railroad Company's Draft Oil Spill Contingency Plan:

Dear Mr. Lieberman:

The undersigned are a collection of organizations that work on environmental issues that impact Puget Sound watershed, the state of Washington, and Oregon. Our work protects Washington's coastline; the marine environment of the Puget Sound watershed; the Columbia River; inland waters, lands and

wildlife; and the health and safety of our members and communities. We are committed to stopping water pollution at the source and share concerns regarding oil transportation in our regions. We appreciate the opportunity to comment on UP's Draft Contingency Plan ("C-Plan" or "the plan").

The undersigned are profoundly concerned with the threat inherent in oil transport by rail, vessel and pipeline in Washington state. These risks are abundantly clear when considering recent oil train derailments and explosions in the U.S. and Canada: Lac-Megantic, Quebec, where 47 died in 2013; Aliceville, Alabama (2013); Casselton, North Dakota (2013); Plaster Rock, New Brunswick (2014); Philadelphia, Pennsylvania (2014); Lynchburg, Virginia (2014); Timms, Ontario (2015); Mount Carbon, West Virginia (2015); Galena, Illinois (2015); Gogama, Ontario (2015); Heimdal, North Dakota (2015); Culbertson, Montana (2015); Watertown, Wisconsin (2015); Mosier, Oregon (2016); and Palo Alto County, Iowa (March 8th, 2017) are recent incidents whose frequency highlights the gravity of this issue. Union Pacific suffered a derailment of 11 cars just two weeks ago, on March 15th, 2017, in Lake Forest, Illinois – though no hazardous materials were found leaking in any cars.[1]

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UP's C-Plan does not demonstrate an adequate level of preparedness to respond to the maximum extent practicable to a worst-case scenario (WCS"), including the capability to promptly and properly remove oil and to minimize environmental damage. UP attempts to dilute the meaning of "worst-case scenario", a result that could lead to an un- or under-prepared response effort. We urge the Washington State Department of Ecology ("Ecology") to require the plan to be updated and strengthened before approval. Our concerns about the plan and our suggestions for improvement are detailed below.

A. Public Disclosure:

If Ecology found no material in the C-Plan that is exempt from disclosure under state or federal law, why is the C-Plan redacted? This complete unredacted version should be made available to the public as well as to Union Pacific employees for reference during an emergency. The redacted material includes Appendices E-1 through E-13. These appendices are described as "superfluous maps" on the cover page to the C-Plan, but on page iv they are described as "maps, table, and sensitive area descriptions outside established GRP coverage areas." How and why was it determined that these maps and tables are superfluous? As described Appendices E-1 through E-13 contain information that is necessary for a complete review of the C-Plan and essential for its implementation. Should Ecology decide not to reveal

[1] Duaa Eldeib, "*Tankers that derailed in Lake Forest carried hazardous material*: *officials.*" Chicago Tribune, published March 15th, 2017. Available online at: http://www.chicagotribune.com/suburbs/lake-forest/news/ct-six-freight-cars-derail-in-lake-forest-no-injuries-reported-20170315-story.html, last Accessed March 20th, 2017.

the redacted names and contact information described in the cover page, Appendices E-1 through E-13 should be made available.

B. Section 2.3: Worst-Case Spill Volume

Section 2.3 of the C-Plan defines Union Pacific's worst case spill volume as 10,234 barrels – a number calculated by estimating that only 2.78 tank cars per every 20 are likely to derail and puncture. This estimation is based entirely off of an Advanced Notice of Proposed Rulemaking for PHMSA published on July 29, 2016. Use of this calculation violates WAC 173-186, has no grounding in law, nor has Union Pacific presented any factual support or data suggesting that use of this estimation is appropriate. It is not clear whether PHMSA ever actually adopted that calculation. This figure represents less than 5% of Union Pacific's total carrying capacity.[2]

Washington Administrative Code defines a "worst case spill" for railroads as: "a spill that includes ***the entire fuel capacity of the locomotive and the entire cargo capacity of the largest number of cargo rail cars carried by the railroad***, ***based on seven hundred fourteen barrels per tank car***, complicated by adverse weather conditions unless ecology determines that a larger or smaller volume is more appropriate given a particular facility's site characteristics and storage, unique operations, industry spill history and transfer capacity."[3] [Emphasis added]. This definition is consistent with the federal Oil Spill Prevention and Response Plan regulations, which define worst-case discharge as: "the largest foreseeable discharge in adverse weather conditions," as defined at 33 U.S.C. 1321(a)(24). ***The largest foreseeable discharge from a motor vehicle or rail car is the capacity of the cargo container.*** The term "maximum potential discharge," used in § 130.31(a), is synonymous with "worst-case discharge.[4] [Emphasis added].

As referenced above, Washington law defines worst case spill as "a spill that includes the entire fuel capacity of the locomotive and the entire cargo capacity of the largest number of cargo rail cars carried by the railroad, based on seven hundred fourteen barrels per tank car, complicated by adverse weather conditions *unless ecology determines that a larger or smaller volume is more appropriate given a particular facility's site characteristics and storage, unique operations, industry spill history and transfer capacity*." As such, Union Pacific must revisit the drawing board and calculate a true worst case spill scenario: entire fuel capacity of the locomotive + entire cargo capacity of the largest number of cargo rails carried by the railroad, based on 1714 barrels per tank car, complicated by adverse weather conditions – that is, worsened due to wind, rain, flooding, or other natural events.

If Union Pacific wishes Ecology to authorize a deviation from this standard, it must show that a deviation is merited based on its unique operations, industry spill history and transfer capacity. It uses ***714*** as the volume of oil per tank car in barrels, when state statute uses a baseline of ***1714*** barrels of oil per tank car – has Union Pacific provided support for use of this low figure?

To the contrary, Union Pacific's Mosier derailment which occurred on June 3rd, 2016, exemplifies the need for more strict standards for this rail line. As a result of its investigation, the Federal Railroad Administration "made the preliminary determination that Union Pacific's failure to maintain its track

[2] Based on 238 barrel capacity for 2 locomotives + (1714 barrels per tank x 100 tank cars) = 171,638 total capacity in barrels.
[3] RCW 173-186-040
[4] 49 C.F.R. 130.5

and track equipment resulted in the derailment." [5] Union Pacific appears to have been the highest fined railroad company in terms of safety and hazmat defects and violations in 2015.[6]

In sum, by law, "each plan ***shall*** state the size of the worst case spill volume. If oil handling operations vary on different rail routes, more than one worst case spill volume may be submitted to ecology for consideration."[7] [Emphasis added]. Union Pacific must be properly equipped with the equipment and personnel necessary to address oil spills and damage caused by its trains. To be properly equipped, we must have an accurate picture of the worst-case scenario – that is, total cargo loss. Union Pacific cannot avoid the legal requirement that it clearly articulate the worst case spill volume based off of total cargo loss, and if a deviation from this standard is requested, though Union Pacific may present an additional calculation, it must be based on operations specific considerations supported by data.

C. Section 3.1 Incident Management Planning Process and Job Descriptions

For all intents and purposes, the C-Plan fails to include an Incident Management Planning Process or Job Descriptions. Instead it states that "in an emergency response, UPRR will use the Incident Command System (ICS) for oil spill response management as outlined in the NWACP Section 2100." From FEMA's website describing this tool, "the ICS is a management system designed to enable effective and efficient domestic incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to enable effective and efficient domestic incident management."[8] Union Pacific has not adapted this plan to its business nor incorporated the plan into its C-Plan in any way shape or form. The C-Plan does not even include a link to this resource. How could Union Pacific employees use this C-Plan to handle an emergency when it does not include a proper ICS? The C-Plan should be rejected as written and returned to Union Pacific for proper incorporation of an Incident Management Planning Process that actually includes job descriptions for real jobs for the real people who will implement said Plan.

D. Sections 3.2 and 3.3 – Emergency Rail Road Coordinator (Qualified Individual ("QI")) and Spill Management Team

We are highly concerned that Appendix C of the document, on page 36 of the pdf version of the entire C-Plan, states that "the first company employee on the scene will function as the Qualified Individual (QI). This is unacceptable. The QI(s) must be identifiable individual(s) who are appropriately "qualified" – trained and competent - to properly assess and address an oil emergency spill. Ideally the QI should be an expert in oil train operations and/or spills.

The undersigned also share concern with the alternative definition of "QI" found in Section 3.2 of the C-Plan. Section 3.2 identifies two Emergency Railroad Coordinators as Qualified Individuals. Neither are stationed in Washington State. One QI is in Portland, Oregon, and one is in Salt Lake City, Utah. Their

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[5] Federal Railroad Administration, "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," p. 4. June 23, 2016. Available online at: https://gorgefriends.org/assets/images/issues/2016_06_03_Preliminary_Factual_Findings_Report_Mosier_Union_Pacific_FINAL.pdf , last accessed March 27th, 2017.

[6] William P. Diven, "U.S. railroads fined millions of dollars in 2015," June 15, 2016. Available online at: http://trn.trains.com/news/news-wire/2016/06/15-fra-fines-up-et-al. Last accessed March 27th, 2017.

[7] WAC 173-186-220 (3)(b)

[8] https://training.fema.gov/emiweb/is/icsresource/assets/reviewmaterials.pdf

names and contact information have been redacted. The QI is responsible for four tasks listed on page 4 of the C-Plan, including the "identification of the character, source, amount, and extent of the release and other necessary items needed for notification." We are not confident in the ability of an out-of-state QI to effectively perform these duties from outside of Washington, nor are we confident that the QI could physically travel to the site of a spill in Washington quickly as necessitated by an emergency. Ideally, QI's should be located in Spokane and Seattle. We are also concerned that the identity of the QI's has been redacted. How can we confirm that these individuals are qualified and competent to act as QI's without this information?

The Qualified Individual is also responsible for assigning an incident commander (C-Plan p. 4). Union Pacific has stated a "commitment to having an incident commander in the state within 6 hours after notification of a spill."[9] Section 3.3 of the C-Plan, Spill Management Team, contains no identifiable information about the primary and alternate incident commander. The chart comprising section 3.3 is entirely redacted, or "TBD," or n/a, or a role delegated to the Center for Toxicological and Environmental Health. This is unacceptable. Why haven't these individuals been identified and when will they be? Their names must be included in this plan. Who and where is the incident commander? How will the QI know whom to contact – the QI is responsible for notification but there are missing names on this chart. Why are certain alternates deemed "not applicable?" Each role should have an alternate as well as a primary in the event that a primary contact is unavailable during an emergency. A primary contact could call out sick, go on vacation, leave their job prior to the C-Plan being updated, or be absent for any other number of reasons necessitating a backup. For quality assurance purposes, both primary and secondary individuals must be identified and their names and contact information should be made public to ensure that the individuals are appropriately qualified.

E. Section 3.5 Incident Command Post

By law, a railroad contingency plan "***shall*** identify potential initial command post locations."[10] [Emphasis added]. Washington law also requires that the C-Plan "identify a primary and alternate incident commander's representative that can form unified command at the initial command post, and if located out-of-state, a primary and alternate incident commander that could arrive at the initial command post within six hours."[11] Union Pacific has failed to identify any potential initial command posts thus the C-Plan should be rejected as incomplete. Union Pacific must identify specific locations that are available for use as an initial command post, which should be strategically positioned near Union Pacific's rail lines so that responders can immediately respond to emergency situations and implement the C-Plan, taking no longer than the timeframes specified in WAC 173-186 et. seq. to arrive at the scene and bring the necessary amounts of clean-up equipment to the scene.

F. Section 4.1 Initial Response Actions

In entirety, this section reads:

> Appendix C presents the Hazardous Materials Emergency Response Plan (UPRR 2009). Field documents are presented in Appendix D. The Notification Process provides time critical information for the initial emergency phase of a spill or a substantial threat of a

[9] See the binding agreement at page ii of the C-Plan.
[10] WAC 173-186-220 (3)(b)(o)
[11] 173-186-220 (3)(h)(v)

spill. This includes spill detection and assessment procedures, notification procedures, and documentation procedures.

Union Pacific's Hazardous Materials Emergency Response Plan (HMERP) from 2009 is insufficient as a guide for initial response actions to oil spills pursuant to Washington law.

The HMERP states that it was designed to "be consistent with the emergency response plan provisions set forth by the Occupational Safety and Health Administration (OSHA) under 29 C.F.R. 1910.120(q)."[12] While the HMERP may create a good jumping off point for Union Pacific to craft a proper oil spill response plan, the HMERP was created for different purposes and is an ill-fitting replacement for an oil spill initial response plan. The scope of the HMERP applies to "non-incidental releases" only, and a "response to an "incidental" release of hazardous materials which can be absorbed, neutralized, or otherwise controlled at the time of the release by employees in the immediate release area, or by maintenance personnel, ***is not considered an emergency response within the scope of this HMERP*** (or the OSHA standard requiring the development of this HMERP)."[13] [Emphasis added]. The C-Plan must be crafted to address all oil spills and must include the appropriate provisions specific to oil spill cleanup in our state. For example, section G, Decontamination, reads: "the HAZMAT Incident Commander shall determine and instruct emergency response personnel on appropriate decontamination methods relevant to a particular chemical hazard." The "appropriate decontamination methods" are what Union Pacific actually needs to set forth in the C-Plan, and the methods must address oil spill cleanup. Union Pacific needs to outline the precise actions it will take, the amounts of equipment it has stockpiled and where, and how quickly they will be bringing this equipment along with the appropriate response personnel, to cleanup a spill. Where is this information in the C-Plan? We ask that Ecology work with Union Pacific to craft a response plan consistent with the requirements of WAC 173-186 et. seq.

Appendix D, Spill Assessment, Information, and Notification Reporting Forms, should include checklists that are appropriately prioritized in the order that items are to be performed. As with Appendix C, the forms in Appendix D indicate that these documents were created for another purpose: "to meet the requirements of the Hazardous Waste Operations and Emergency Response regulation (Title 29, Code of Federal Regulations, Part 1910.120)" – not to meet Washington oil spill response code, WAC 173-186 et.seq..

G. <u>Section 4.2 and 4.3: Notification Procedures and Spill Assessment and Tracking</u>

Section 4.2 states that "A list of government agencies and spill response contractors to be notified is included as Appendix C." All of the individuals to be notified should be included in a full tree or flow chart, either in section 4.2 or in Appendix C, not in two places. Furthermore, Appendix C appears incomplete. The narrative notification procedures on page 6 of the C-Plan are a better start. We also feel that the list outlined on pages 6 and 7 of the C-Plan could be improved by including information such as: how many crew are on the train, is there a fire in the cars, how many cars on fire, and how many cars derailed.

We also note that the C-Plan lacks adequate public notification and update procedures. If a spill involves a fire or explosion, a spill into a sensitive environmental area, or a spill into any waterbody, there should

[12] C-Plan Appendix C page 1.
[13] C-Plan Appendix C page 4.

be public notice and opportunity for comment such as at public meetings in the geographical area of the spill to keep local agencies and stakeholders apprised of potential dangers and cleanup progress.

Union Pacific has failed to identify that technology it will use as "tracking equipment." This information should be included in the C-Plan. The undersigned suggest that Union Pacific utilize a drone if possible as this technology can more thoroughly and quickly track and monitor a spill than a person on foot in an emergency situation when minutes count. Drones are also easy to use and can be kept on a train.

H. Section 4.3.5: Air Monitoring

The undersigned share concerns that relying on initial air monitoring by the local emergency response personnel is neither appropriate nor sufficient in the event of a derailment, especially if a fire is involved. Not only may local emergency response personnel be involved with keeping the public safe during a derailment, they also have other situations that they may have to respond to. Ultimately Ecology or EPA should be called in to monitor air quality or to supervise Union Pacific employees or contractors responsible for monitoring air quality.

Monitoring and cleanup efforts, including air quality monitoring spill response efforts, must be overseen by Ecology, EPA, and/or another appropriate regulatory agency as required. Union Pacific should not be in charge of environmental monitoring of spill impacts caused by their trains. Ultimate decision-making and oversight should lie with the proper agency, not the polluter.

The undersigned are also concerned that air monitoring equipment, locations and maintenance are listed as varied in the C-Plan. This is not acceptable. There are too many lives at stake and this kind of equipment needs to be available in Spokane, Seattle, Tacoma and the Vancouver area. There is a serious lack of information available in the C-Plan for the undersigned, or for Ecology, to assess the adequacy of the plan in regard to the amounts of equipment available, the types of equipment available, the authority responsible for maintenance of the equipment and for ensuring its prompt delivery to a spill location, and the timeframe within which the equipment will be brought to address a spill.

If a fire occurs with a derailment or spill, air monitoring has to happen very quickly and the public should be notified quickly. Fire from a derailment is not even mentioned in this plan and it should be specifically addressed. Because of the Mosier, OR derailment and fire, citizens in Washington state are particularly aware of derailments of this type. In particular, at –risk populations, which often live near the tracks, need to be notified immediately. Many vulnerable citizens may not be mobile. How will UP deal with those kinds of housing situations if a derailment occurs near one of them? It's likely residents will hear or see the derailment and be very concerned. A map of vulnerable population locations should be available to the train conductors or engineers.

Additionally, a better description of how evacuation zones are established and how shelter-in-place criteria are established should be included in the C-Plan. We understand that situations are unique, but the C-Plan is extremely vague for lay people who may want to know what Union Pacific plans to do in a derailment in an urban area. By what method, and how soon, will citizens be informed by Union Pacific or other parties that a derailment occurred, that there is a fire, that monitoring is taking place, and the dangers entailed after a derailment involving a fire? These details should be clear, concise and comprehensible in the C-Plan.

I. Section 4.3.6 and 4.4 Groundwater and Resource Protection

The C-Plan's groundwater protection provisions are lacking if not almost entirely absent. Has Union Pacific retained Arcadis and CH2M Hill? How quickly will they be contacted in the event of an oil spill and under what circumstances? How quickly will they arrive on site to perform testing, and how frequently will this testing be performed?

Likewise, while the C-Plan references the Northwest Area Contingency Plan (NWACP) for its resource protection provisions, it does not appear that Union Pacific actually incorporated these guidelines and checklists into the C-Plan. For example, the C-Plan references section 9408 of the NWACP, the Resources at Risk Response Tools. The first item on this checklist reads: "Environmental Unit Leader (EUL) assigns the work group to complete the 232 form. RP should consider having representation on this work group." Who is Union Pacific's RP, and who is their EUL? There are 11 bullets listing resources, habitats, species and protected areas under this section. Union Pacific should clearly articulate how it will assess and protect each listed item in the event of a spill, and if by reference to an external source such as the NWACP, these external sources must be fully integrated into the entire C-Plan by identification of the personnel, resources, and other details listed in the external resources that are integral to its implementation.

J. Planning Deficiencies

The various "planning" sections found in the C-Plan do not actually articulate a clear plan of action to take in the event of a spill. This can be seen in each section addressing the "plans" required by law. For example, regarding sensitive resources: we appreciate that Union Pacific has incorporated live links to the GRP's in the C-Plan for quick reference in order to protect sensitive resources, however, these links are not current and/or functional. We further note that Appendix E, Sensitive Area Descriptions, does not reference the GRPs as resources that the planning team will consult during spill assessment. The C-Plan must contain functional content or links to a functional plan describing the course of action to be taken to protect sensitive areas in the event of a spill.

The Equipment list in section 4.5 is also insufficient: the type and quantity of equipment cannot be found in the entire C-Plan. In order to evaluate if Union Pacific is adequately equipped to address and clean up a worst case spill, the types and quantities of cleanup equipment should be included for each location. The number of personnel that can be available on the site of a spill, and within what timeframe, should also be included. WAC 173-186-310(3) states that "All rail plan holders shall demonstrate access to the equipment in the table below within the time frames identified based on the areas rail plan holders operate." Union Pacific has failed to demonstrate such access.

Regarding In Situ burning, Puget Sound Clean Air Authority and the Spokane Regional Clean Air authority do not allow In Situ burning. The Tacoma Rail Link plan clearly states this in their plan when they talk about in situ burning. How is UP going to deal with in situ burning with the local clean air authorities if they determine it's needed. How will they protect the public? How will they notify the public if in situ burning happens?

Finally, the C-Plan should also outline how its contractors will handle shoreline damage assessment and cleanup in the event of a spill. As written, this section is woefully insufficient. While contracted cleanup companies are identified, the protocols and procedures they will follow must also be identified.

K. Section 5.1: Drills

We are aware that some tabletop exercises have already occurred in the state, but it is unclear in the contingency plan if the exercises have informed the plan. This would be helpful to demonstrate in the plan. What about a severe nature event that would impact contingency planning? For example, a wild fire may not allow trains to move along tracks and could become a sitting hazard if oil is part of its cargo. Wildfires may block access to obtaining needed equipment and perhaps that should be a part of training and procedures if proper equipment can't be obtained. This is of great concern in our hot, dry, inland summer climates and will only worsen as an effect of climate change. Water-logged soils are also a substantial hazard.

The partial derailment of a UP grain train near Bonners Ferry, ID in Feb. 2017 is an excellent example of a situation that is remote and hard to access and has severe weather conditions. Rain and snow-drenched soils destabilized the rails and approximately 4 cars fell 100 feet down an embankment. The derailment was close to a dam. What if that had been oil? It would have been extremely difficult to clean up, if at all, within 24 hours.

L. 5.2: Training

The training protocols listed in section 5.2 indicate that only 8 personnel in top positions will be trained on emergency response protocols, and the training is only required 1 time. This is unacceptable. All Union Pacific personnel – including employees and contractors - who work on or who are involved with the running of trains that carry oil should be trained on the C-Plan and all other emergency spill response materials ***annually.*** Personnel changes and memories fade. C-Plans are required to be updated. Trainings should therefore occur annually and should be required of all employees who work on or who are involved with the running of trains that carry oil. Trainings should include classes and written tests in addition to live emergency drills. The incident command and qualified individual positions should receive more thorough training and be held to higher standards, including the responsibility to read and be tested upon the relevant planning and response materials on a regular basis.

M. General Comments:

1. Ease of Use and Accessibility

The C-Plan is meant to be used during an emergency. As written, it references many external documents and includes many internal citations that aren't digitally linked. The C-Plan should be revised to make it easier and faster to use and to find referenced sections and content. References in the C-Plan to other sections of the C-Plan should be live links. Links to individual external documents should be provided for ease of access as well.

2. Reduced train speeds

Reduced speed limits help to both prevent accidents and mitigate crude-by-rail risks. Prevention is a critical part of preparedness. The 2014 Washington State Marine and Rail Oil Transportation Study repeatedly states that prevention is the best safety measure: "derailment prevention is the key to protecting the public and the environment in regards to rail operations." (p. 91) Therefore, we would

like to see Union Pacific voluntarily reduce train speeds to lower than 35 mph for populations over 100,000, because populations are particularly vulnerable in these high-density areas – not only in terms of numbers of people, but often in terms of race, ethnicity and income. After the derailment in Mosier, Oregon, Union Pacific was required to comply with temporary speed restrictions along Union Pacific's Portland Subdivision, including a 10 mph speed restriction in Mosier.[14] A 10 mph speed limit is also appropriate where Union Pacific rail lines pass closely by communities or through communities with populations over 100,000.

In Seattle, parts of the downtown area and areas along Puget Sound are prone to landslides, and some bridges and tracks are in poor condition (see Appendix A). The train that derailed in Seattle on July 24, 2014 was going very slowly, less than five mph. If it had gone faster, the derailment could have been worse. In Spokane, derailment risk is exacerbated by the elevated tracks, which are at about fourteen feet at the bottom of bridges – this would complicate how first responders and Union Pacific react, due to collateral damage from falling bridge infrastructure and the capacity to respond to a fire in tank cars. Compounding this significant risk for certain urban areas is the particular threat of Bakken oil. In the Northwest Area Contingency Plan ("NWACP") (section 2000-7), Bakken oil is specifically noted to be dangerous and a Bakken oil fire is to be handled with extreme caution. Further, it's the single largest risk to responder and public health.

While the various track monitoring devices and personal track inspections by Union Pacific personnel are important, reducing speeds in vulnerable areas is critical for prevention measures. Reducing train speeds in vulnerable areas could significantly reduce injury and destruction, particularly from Bakken oil; and we therefore urge Union Pacific to take this precautionary measure.

3. <u>Information Missing</u>

The C-Plan is missing or inadequately covers the following information required by Washington code. The C-Plan should be rejected as incomplete until it is updated to adequately address these issues:

a. Each plan shall list all oil cargo transported, including region of origin, oil types, physical properties, and health and safety hazards of the oil cargo. A safety data sheet (SDS) or equivalent information may satisfy some of these requirements; the plan shall identify where the SDS or equivalent is kept for emergency response use.[15]

b. An organizational diagram depicting the chain of command for the spill management team for a worst case spill.[16]

c. A detailed description of the planning process and job description for each spill management position[17]

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[14] "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," p. 4. June 23, 2016. Available online at:
https://gorgefriends.org/assets/images/issues/2016_06_03_Preliminary_Factual_Findings_Report_Mosier_Union_Pacific_FINAL.pdf, last accessed March 27th, 2017.

[15] 173-186-220(f)

[16] 173-186-220(h)(i)

[17] 173-186-220(h)(iii)

d. Each plan shall contain the procedures to track and account for the entire volume of oil recovered and oily wastes generated and disposed of during spills. The responsible party shall provide waste disposal records to ecology upon request.[18]

e. Each plan shall state how an oil spill will be assessed for determining product type, potential spill volume, and environmental conditions including tides, currents, weather, river speed and initial trajectory as well as a safety assessment including air monitoring.[19]

f. The plan shall contain a checklist that identifies significant steps used to respond to a spill, listed in a logical progression of response activities.[20]

g. A field document that contains: (a) Procedures to detect, assess and document the presence and size of a spill; (b) Spill notification procedures; and (c) The checklist that identifies significant steps used to respond to a spill, listed in a logical progression of response activities.[21]

N. Summary:

Prevention is our best and most cost-effective strategy for mitigating risk from an oil-by-rail spill. So long as oil is transported by rail through our communities, we must take the necessary precautions in advance by requiring Union Pacific and other railroads to implement adequate Contingency Plans in the event of a derailment or spill. We must ensure the safest possible transport of oil through our communities and natural spaces by preparing to respond to the maximum extent practicable to a worst case spill – that is, to the entire cargo contents. These serious concerns merit rejection of Union Pacific's C-Plan as written.

Sincerely,

Alyssa Barton
Policy Analyst and Executive Coordinator
Puget Soundkeeper Alliance

Laura Ackerman
The Lands Council

Regna Merrit
Healthy Climate Program Director
Oregon Physicians for Social Responsibility

[18] 173-186-220(j)
[19] 173-186-220(k)
[20] 173-186-220(k)(ii)
[21] 173-186-230(2)

Alex Ramel
Field Director
Stand.earth

Eddy Ury
Clean Energy Program: Interim Manager
RE Sources for Sustainable Communities

Melissa Malott
Executive Director
Citizens for a Healthy Bay

Sierra Club