## Johan Yugar

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Good afternoon. My name is Johan Yugar. I am a fellow of the community solutions program of the U.S. State Department, and I am here on behalf of the Lands Council. Dilbit needs special regulations, diluted bitumen commonly known as dilbit is already moving through Washington state by vessel, train, and pipelines. And the protections and regulations are not suited to deal with the change increase of these kinds of oil.

Diluted bitumen has unique properties widely different from those of other kinds of crude oil. Those properties affect greatly the behavior of diluted bitumen in the case of a spill. These differences in behavior make many of the contingency plans generally designed for other crude oils insufficient to effectively mitigate the damages derived from a spill of dilbit. The chemical and physical changes that diluted bitumen and their cause during the water are of great importance and their understanding of these changes is still very limited.

As stated in the study spills of diluted bitumen from pipelines, a comparative study of environmental fate, effects, and response published by the National Academy of Sciences, engineering, and medicine in 2016, I quote, "a more comprehensive and focused approach to diluted bitumen across the industry and the relevant federal and state agencies is necessary to improve preparedness for spills of diluted bitumen and to [indiscernible] more effective clean up and mitigation measures when these spills occur.

We need more transparency. The recommendations of the previously cited study state importance of having complete information readily available and as much as possible publicly accessible. We subscribe some of these recommendations. First, require the plan to identify all of the transported crude oils using industry-standard names such as cold lake blend. And to include safety data sheets for each of the named crude oils. Both the plans and the associated safety data sheet should include the spill relevant properties and considerations.

Second, require that plans adequately describe the areas more sensitive to the effects of a diluted bitumen spill. Including the water bodies potentially at risk. Third, require that plans describe in sufficient detail response activities and resources to mitigate the impact of the spills of diluted bitumen including capabilities for detection, containment, and recovery of submerged and sunken oils.

The methodology for elevating a spill response capacity should be replaced. A very significant problem with this rule update is that Ecology has not updated the methodology used to evaluate the ability of contingency plan holders to respond to another spill. Effective daily recovery capacity or EDRC is a measure of a skimmer's ability to recover oil in open water. It does not include real-world limitations such as visibility, sea state, storage, et cetera. EDRC is an outdated tool and should be no longer used as predictor of the oil spill recovery capacity of the required plans.

There are several alternatives which offer a better and more effective approach to estimate the oil spills recovery capacity of the plans. Notably, as stated in August 2016 press statement from the Bureau of State and Environmental Enforcement considers the estimated recovery system potential calculator as a system-based approach that is a significant improvement over the existing effective daily recovery capacity.

We command ecology to use this rule update to implement these or some other state of the art methodology. We ask that the update to the wildlife response section address the full branch of wildlife response actions including, but not limited to, reconnaissance, deterrence, preemptive capture and relocation, recovery, stabilization, and rehabilitation, and the immediate removal of oil carcasses.

The rule update should clearly state the mechanisms that the wildlife response service providers will use to coordinate with the state, federal, tribal, and other response partners. Thanks.