



August 9, 2019

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Re: U.S. Oil Refining Co (USOR) National Pollutant Discharge Elimination System (NPDES) Permit

Dear Mr. Gould,

Thank you for providing the opportunity to review and comment on the USOR NPDES Permit, hereinafter referred to as the "Permit". These comments are submitted on behalf of the ten undersigned organizations, collectively, "Commenters."

### Background

USOR, situated within the Commencement Bay/Nearshore Tidelands Superfund site, is the largest producer of refined petroleum products in Pierce County, and is capable of processing 42,000 barrels of crude oil per day.<sup>1</sup> In addition to dock facilities on the Blair Waterway, it has pipelines that connect the dock with the refining facility and a pipeline to Joint Base Lewis-McChord (JBLM). USOR receives crude oil by train as well as by tank vessel via the Blair Waterway. Because USOR discharges wastewater and stormwater into the Blair Waterway, the Lincoln Avenue Ditch, and the Erdahl Ditch, it is required to obtain a NPDES permit from the Department of Ecology (Ecology), which is reviewed and updated every five years. A number of toxic pollutants have been found in USOR's wastewater, including "ammonia, antimony, arsenic, cadmium, chloroform, chromium, copper, mercury, nickel, phenol, selenium, sulfide, thallium, toluene, and zinc," while USOR's stormwater has the potential to carry toxic heavy metals, oil, and grease, among others.<sup>1</sup>

### Proposed Permit Requirements

The Permit factsheet states, "The proposed permit does not include acute or chronic WET [whole effluent toxicity] limits. Since the last WET testing was performed in 2012, USOR must retest the effluent at Outfall 001A in the first year of the permit to provide updated data. USOR must also retest the effluent at Outfall 001A before submitting an application for permit renewal."<sup>1</sup> Because no WET limits have been set in the Permit, Ecology is giving USOR the opportunity to exceed WET limits for up to five years, without any sequential exceedance constituting a permit violation. This stipulation is in direct opposition of WA Court of Appeals Case No. 45609-5-II which found that, "A single failed WET test, not deemed anomalous by the Department, shows that the permittee has discharged toxic substances in violation of federal and state law, including state water quality standards. NPDES permits must be consistent with applicable state and federal law and must implement water quality standards set by state or federal statutes and regulations."<sup>2</sup> *Commenters request justification of Ecology's preliminary decision to issue this permit without WET testing limits as required by state and federal law?*

The Permit requires USOR to “evaluate whether current best management practices for stormwater meet AKART [all known, available, and reasonable methods of prevention, control, and treatment] .... [and] to prepare and submit an AKART Analysis and Engineering Report.”<sup>1</sup> This excerpt implies, and was confirmed by communication with Ecology, that USOR’s stormwater treatment is not *currently* meeting AKART standards.<sup>3</sup> Furthermore, “Ecology determined that the stormwater discharges at Outfalls 001B, 002, 004, 005, and 006 may contain chemicals of concern for human health.... However, .... deriving numeric effluent limits for human health criteria [for stormwater discharges] is infeasible.”<sup>1</sup> In our communication with Ecology, it was stated that AKART would “take care” of the chemicals of concern for human health in these discharges.<sup>3</sup> Given that USOR’s stormwater is not currently meeting AKART, this permit is clearly not protective of human health. Additionally, Ecology is violating RCW 90.48.520 by issuing a permit *before* it has confirmed that USOR is meeting AKART standards. ***Commenters request justification of Ecology’s preliminary issuance of the Permit before requirements as outlined in the RCW have been met.***

USOR is required to visually inspect their stormwater discharges for oil and grease at six of their seven outfalls.<sup>1</sup> The benchmark indicator for oil and grease pollution is either a “yes” or “no.”<sup>3</sup> Visual inspections are not objective, repeatable, or comparable, and therefore not an adequate means for detecting oil and gas leaks or spills, especially for a facility like USOR that handles Canadian tar sands crude oil, which can submerge and sink when discharged to water and, once spilled into the water is nearly impossible to recover. ***Has this method of inspection ever been effective in detecting an oil or gas leak? In other words, has an inspection of this kind ever produced a “yes” result which led USOR to investigate and resolve the source of an oil or gas leak?*** We understand this protocol follows the Industrial Stormwater General Permit guidance, but find it to be inadequate for the early detection of spills and leaks needed at oil refineries, such as USOR. ***Commenters recommend implementing a numerical limit standard for oil and gas at these six outfalls, similar to Outfall 001A.***

The Permit factsheet states, “Ecology determined that there is a potential to exceed the arsenic human health criteria at Outfall 001A. This permit requires continued monitoring for total recoverable arsenic and stormwater BMPs for source control and pollutant minimization.”<sup>1</sup> ***What specific BMPs will be developed to control arsenic discharges? What is the timeline for installation of these BMPs? Commenters recommend the answers to these queries be included in the Permit.***

The Permit factsheet states, “Ecology does not have sufficient information on the stormwater discharge at Outfall 003 to determine compliance with the groundwater quality standards.”<sup>1</sup> ***Commenters recommend that in the absence of information, Ecology take the conservative approach and set either groundwater quality benchmark standards or water quality limits for Outfall 003.***

The Permit factsheet states, “The proposed permit requires USOR to sample polychlorinated biphenyls (PCBs) at Outfall 001A once during the permit cycle with the permit application submittal.”<sup>1</sup> ***Commenters request justification for one-time PCB monitoring versus continuous PCB monitoring.***

As stated in the Permit factsheet, “Ecology removed COD [chemical oxygen demand] and water hardness from stormwater Outfalls 001B, 002, 004, 005, and 006 monitoring because there are no surface water quality standards for these parameters.”<sup>1</sup> ***Commenters maintain that just because there is no water quality standard for these parameters does not mean these pollutants are not a concern, and request monitoring protocols for both COD and water hardness be incorporated back into the Permit.***

Ecology is requiring USOR to “collect at least 10 samples each for copper and zinc for the dissolved fraction in the Blair Waterway.”<sup>1</sup> ***In addition to proper collection siting, Commenters request the sampling protocol specify a collection schedule that includes post-storm event sampling.***

### Suitability of Permit Data

The permit fact sheet states, “EPA concluded that there is little evidence that PAHs are present in refinery wastewater discharges in concentrations above the detection limit. They also concluded that the concentration of metals being discharged by refineries is at or very near treatable levels, leaving little to no opportunity to reduce

metals discharges through conventional end-of-pipe treatment.”<sup>1</sup> This EPA decision dates back to 2004. In the 15 years since this decision was made, new detection and monitoring technologies have been developed, and it is short-sighted to assume the conclusions made in 2004 remain pertinent, and protective of water quality, today.

***Commenters request a monitoring protocol for PAHs be developed and implemented into the Permit, in order to more fully understand the impacts oil refineries have on PAH discharges.***

The permit fact sheet states, “Ecology obtained ambient data at critical conditions in the vicinity of the outfall from the Mixing Zone Evaluation for U.S. Oil’s Discharge to Blair Waterway report submitted in May 2000.” This data was used to inform Ecology’s critical acute and chronic dilution factors.<sup>1</sup> Again, it is short-sighted of Ecology to assume the data collected almost 20 years ago can still inform a protective water quality permit today. ***Commenters request justification for how this 20-year old data is still appropriate to use in models that inform the limits set forth in the Permit.***

The permit fact sheet states, “Ecology determined that ammonia, antimony, arsenic, cadmium, chloroform, chromium, copper, mercury, nickel, phenol, selenium, sulfide, thallium, toluene, and zinc at Outfall 001A pose no reasonable potential to exceed the water quality criteria at the critical condition using procedures given in EPA, 1991....”<sup>1</sup> Again, Ecology is relying on protocols that are almost 30 years old. ***Has Ecology retested USOR’s discharges to determine if these toxic pollutants pose a threat to water quality using more-recent methods? Commenters request justification for how this 30-year old methodology is still suitable for informing the limits set in this Permit.***

### General Comments

Ecology determined the Lincoln Avenue and Erdahl Ditches, two of the receiving bodies of water for USOR, are waterways with wildlife habitat that require protection from harmful discharges. In 2002, Ecology developed a compliance schedule for USOR to construct alternative discharge routes to the Blair Waterway, in an effort to protect these sites. ***Has USOR complied with this permit requirement? It is unclear from both the fact sheet and the Permit whether or not this requirement has been met.***

***Commenters request the following language be added to the “Description of the Receiving Water” section of the Permit fact sheet.*** As is, this description makes no mention of the Puyallup Tribe of Indians. The Blair Waterway is within the Puyallup Tribe’s reservation and lands covered by the 1988 Puyallup Land Claims Settlement. Commencement Bay and the Puyallup River watershed contain fish and marine mammal species listed under the Endangered Species Act (ESA), as well as designated critical habitat and Essential Fish Habitat under the Magnuson-Stevens Fishery Conservation and Management Act. These areas also provide juvenile and adult habitat for salmonids and their prey resources. Wapato Creek, which drains into the Blair, is also a salmon-bearing body of water, hosting runs of coho salmon, chum salmon, and steelhead. In addition to being federally protected, these species and habitats are culturally important to the Puyallup, Nisqually, Squaxin Island, and Muckleshoot Tribes, and other Coast Salish peoples.<sup>4, 5, 6, 7</sup>

Lastly, Par Pacific Holdings acquired USOR in 2018 and has made clear their intentions to expand the facility’s crude oil processing and export capabilities.<sup>8</sup> USOR currently accepts Canadian tar sands crude oil, which can submerge and sink when discharged to water, making it nearly impossible to recover. Any changes in operation at USOR that result in the transport of crude and/or refined products between USOR and Par Pacific’s refineries in Hawaii will only further endanger both human and aquatic life in and around Commencement Bay, and any expansion would further endanger USOR’s rail tank vessel transport routes. ***How will Ecology fulfill its mission to protect, preserve, and enhance Washington’s land, air, and water for current and future generations if and/or when Par Pacific begins its plans for expansion and/or changes in operations at USOR? Commenters request a detailed response on how Ecology will address any changes in operations and/or expansions at USOR, including how Ecology will re-evaluate USOR’s potential to exceed water quality standards and how Ecology will modify USOR’s NPDES permit accordingly. Commenters also request Ecology not approve the 170 bbls/day feedstock increase as requested by USOR, until it is clear what Par Pacific’s intentions for this facility are, and how those plans will impact water quality.***

Please contact Erin Dilworth at [edilworth@healthybay.org](mailto:edilworth@healthybay.org) or 253-383-2429 if there are questions regarding our comments. Thank you for the opportunity to provide feedback on the USOR NPDES Permit.

Sincerely,



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**Stephanie Buffum**  
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1. Washington Department of Ecology. (2019). *Fact Sheet for NPDES Permit WA0001783 U.S. Oil & Refining Co.* Author.
2. Puget Soundkeeper Alliance; Re Sources for Sustainable Communities; and Friends of the Earth v. State of Washington, Pollution Control Hearings Board; and Department of Ecology. 2015. Wash App. Div. II No. 45609-5-II.
3. Gould. G. (July 26, 2019). Phone interview.
4. Ridolfi. (2008). Year 7 (2008) Monitoring Report for Commencement Bay Habitat Restoration Sites. Prepared for the Commencement Bay Natural Resource Damage Assessment and Restoration Trustees.
5. Pierce County Lead Entity. 2018. Salmon Habitat Protection and Restoration Strategy for Puyallup and Chambers Watersheds. Author.
6. Washington Department of Fish and Wildlife. (n.d.). Spawning Location Map. Accessed on February 16, 2019 from [https://wdfw.wa.gov/conservation/research/projects/marine\\_beach\\_spawning/](https://wdfw.wa.gov/conservation/research/projects/marine_beach_spawning/)
7. Washington Department of Fish and Wildlife. (n.d.) SalmonScape. Accessed on February 16, 2019 from <http://apps.wdfw.wa.gov/salmonscape/map.html>
8. Par Pacific. (2018). *Washington Refinery Acquisition*. November 2018. [https://www.healthybay.org/wp-content/uploads/2019/08/Par\\_Pacific\\_purchases\\_US\\_Oil\\_November2018Presentation.pdf](https://www.healthybay.org/wp-content/uploads/2019/08/Par_Pacific_purchases_US_Oil_November2018Presentation.pdf)