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Tricia Miller, Permit Coordinator.
Washington State Department of Ecology, Northwest Regional Office
PO Box 330316
Shoreline, WA 98133-9716

January 29, 2024

RE: City of Everett Water Pollution Control Facility (NPDES Permit No. WA0024490) Public Comment

Dear Tricia Miller,

We are writing to request that the Department of Ecology (Ecology) take strong action to protect juvenile Chinook salmon from polybrominated diphenyl ethers (PBDEs) in wastewater effluent discharged near the Snohomish Estuary. PBDEs are a class of flame retardant that have been largely banned but are still discharged into our waterways by public water treatment facilities, along with other sources. Chinook salmon are listed as Threatened under the federal Endangered Species Act (ESA), are critical to satisfy Tribal Treaty rights, and are an essential food source for southern resident orca. Millions of dollars and years of effort have been invested to restore habitat in the Snohomish Estuary and ongoing pollution jeopardizes these investments.

In 2014, Long Live the Kings and Canada's Pacific Salmon Foundation launched the Salish Sea Marine Survival Project, an international research effort leading 60 organizations to understand why salmon are dying during their migration through Puget Sound, Strait of Georgia, and Strait of Juan de Fuca. The research, among other things, highlighted the lack of estuary habitat and high levels of contaminants in fish as factors compromising some Chinook populations. The initial and subsequent research from Washington Department of Fish and Wildlife (WDFW) indicated that PBDEs were appearing in harmful levels in juvenile Chinook in these estuarian environments and that wastewater was a likely pathway. PBDEs' harmful impact to juvenile Chinook likely contributes to their mortality. Unintentionally harming an ESA-listed species is an Incidental Take and may not be permissible.

The City of Everett (COE) has been highly responsive and cooperative, and they have demonstrated their dedication to protecting salmon through transparency and voluntary action. The Department of Ecology has also responded quickly and investigated the issue in more depth. Research from these parties has confirmed a PBDE "hotspot" near the City of Everett's "015 outfall" in the Snohomish estuary and that PBDEs are originating from COE's wastewater users and are subsequently being discharged into public waters by COE's Water Pollution Control Facility treated effluent.

The National Pollutant Discharge Elimination System (NPDES) Permit for COE's Water Pollution Control Facility is a critical tool to empower COE to protect the environment while still maintaining their fiduciary responsibility to ratepayers. We are happy to see that PBDEs are included as a consideration in the draft permit, but we urge the permit to be strengthened in the following ways.

Ensure a robust pretreatment program through specific requirements. Currently the draft permit looks to the highly capable COE Water Pollution Control Facility team to define a pretreatment program for PBDEs, but the COE team has conflicting objectives which may be at odds with a robust pretreatment program – COE’s fiduciary responsibly to the ratepayers. Permit mandates for a rigorous pretreatment program will focus COE on finding the most equitable and effective ways to protect the environment and will avoid putting the city in the position to choose between the protection of listed species or ratepayers. A rigorous pretreatment program would include the following elements:

- PBDE tests of each industrial users at least quarterly in the first year of permit issuance to assess baseline PBDE conditions. Complete subsequent quarterly PBDE testing of each industrial user with baseline testing results above background PBDE levels to assess the effectiveness of PBDE removal efforts.
- Ecology to evaluate all known, available, and reasonable methods of prevention, control, and treatment to address PBDE pollution.
- Require pollution reduction plans for industrial users with baseline testing results above background PBDE levels. Set timelines for reduction plans and measurable goals for PBDE reduction. Revisit plans at least annually to adaptively manage a strong response to PBDE reduction and approved by Ecology.
- Publish test results and specific sample sources to the public in a timely manner.

Use COE’s Water Pollution Control Facility to minimize PDBE discharge during the Chinook outmigration period (February-July with the peak in April and May). The draft permit follows conventional theory for pollution control – eliminate the source. However, PBDE pathways are characterized as distributed and numerous and the draft permit’s focus on an industrial pretreatment as the action to protect Threatened Chinook is not consistent with how PBDEs are understood to enter the wastewater system. These additional actions could make the permit measures to reduce the pollutant more consistent with known pathways:

- Formalize COE voluntary actions to minimize discharge from the Snohomish Estuary outfall during February-July and redirect to the Port Gardner outfall. To monitor this strategy, assess PBDEs near the Port Gardner outfall by sampling water, juvenile Chinook, biofilm, and Chinook prey. Discontinue redirecting effluent to Port Gardner if monitoring indicates that discharging at Port Gardner is similarly harmful to Chinook as compared to discharging in the estuary.
- Test sediment in the lagoons for PBDE contamination that may be contributing to PBDEs in wastewater effluent. Remove contaminated sediment if it appears to be substantially above background levels in comparable sediment.
- Test influent and effluent for PBDEs on a quarterly basis throughout the whole permit cycle. Test treatment systems (lagoon and trickling filter) and both outfalls separately.
- Set PBDE reduction goals through a pollution reduction plan that is updated annually and approved by Ecology.
- Test biosolids for PBDEs and inform biosolid users of the results.
- Publish test results and specific sample sources to the public in a timely manner.
- Use sampling methods that can establish PBDE removal efficiency so facility performance can be compared to other facilities.

Assess progress using ongoing Chinook sampling and analysis from WDFW and other descriptive measurements. The permit factsheet implies that PBDE contamination in juvenile salmon is the impetus for the PBDE influent monitoring and pretreatment program. WDFW's T-Bios team plans to continue monitoring juvenile Chinook for PBDEs during the permit period. Data from this research should be used as a gauge to assess the effectiveness of changes intended to reduce PBDE pollution. Additional measures of progress could include percent reduction of total PBDEs and reduction in total suspended solids.

Evaluate long-term capital improvements to reduce the impact multiple waste streams. PBDEs are not the only pollutant highlighted in the draft permit (PFAS and nutrients) and it is likely that the facility will face problems with other contaminants of emerging concern in the future. More advanced treatment options exist to better address multiple waste streams, including PBDEs. Ecology should support COE in completing an assessment over the 5-year permit period concerning the cost and benefits of other, more advanced treatment technologies and creating a plan to implement more advanced treatment.

Minimize costs associated with PBDE pollution being shouldered by the least able to pay. Actions to protect the environment have associated expenses that will most likely be passed onto the ratepayers. These rate increases can disproportionately impact lower-income users. This reality is compounded when in many cases this user segment contributes relatively less pollution. We would encourage COE, with Ecology's support, to pursue rate structures that are adjusted to address this circumstance and grant programs that may offset these expenses to users or directly to the facility. A pretreatment program that holds individual industrial users accountable for PBDE pollution will also help minimize these costs from being externalized to other users.

Lastly, we understand that the NPDES permit is not the only tool to prevent PBDE pollution. There is much more that can be done throughout levels of government, businesses, and the community. Long Live the Kings looks forward to working with all parties to pursue positive outcomes for salmon.

Sincerely,



Jacques White
Chief Executive Officer