City of Tacoma **City Council Action Memorandum**

TO: Elizabeth A. Pauli, City Manager
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DS GMS
COPY: City Council and City Clerk
SUBJECT: Resolution – Interagency Agreement with Washington State Department of Ecology to Develop Laboratory Method for 6PPDQ in Stormwater Sediments – July 9, 2024
DATE: June 13, 2024

SUMMARY AND PURPOSE:

A resolution authorizing the execution of an interagency agreement with the Washington State Department of Ecology, in the amount of $69,440; accepting and depositing said sum into the ES Stormwater Fund 4301, to develop laboratory procedure to evaluate 6PPDQ in stormwater sediments through June 30, 2025.

BACKGROUND:

Persistent, bio accumulative, and toxic compounds are hazardous to human and environmental health and several higher profile chemicals have not been previously characterized in municipal stormwater systems in Western Washington. Environmental Services (ES) has decades of experience sampling and analyzing for toxic compound from stormwater and storm sediments. 6PPD-quinone (6PPDQ) was identified by the University of Washington Tacoma (UWT) in December 2020 as an abundant compound in stormwater. 6PPDQ comes from preservative used in rubber, particularly vehicle tires, and is incredibly toxic to coho salmon and other Washington endangered and threatened fish in the Puget Sound. The Washington State Legislature has funded the Department of Ecology (Ecology) to identify use of these rubber preservatives in other consumer products that may find their way into wastewater and stormwater. Environmental Protection Agency and Ecology are actively pursuing regulation of these chemicals in stormwater discharge permits as well as scientific and engineering studies to better understand fate, transport, and treatment.

ES staff and its laboratory is in partnership with UWT and their work with National Oceanic and Atmospheric Administration (NOAA), several Washington Tribes, and Washington State University Puyallup. This award will support the ES laboratory in development of a methods to measure 6PPDQ at the Center for Urban Waters building. Laboratory capacity to measure this chemical will benefit active ES monitoring studies of Tacoma's stormwater.

COMMUNITY ENGAGEMENT/ CUSTOMER RESEARCH:

This interagency agreement provides funding to develop these skills in our ES laboratory which will prepare them for conducting our own compliance sampling in the future, and findings will be incorporated into several of Tacoma's stormwater planning strategies for stormwater management which both have their own topical and public meetings. Our lab will be among the first in the region to do have this capacity.

2025 STRATEGIC PRIORITIES:

Equity and Accessibility:

By definition, a 'toxic' contaminant harms humans and wildlife such as orcas and salmon either directly or indirectly by accumulating or impacting Tribal and City resident food sources and environmental wellbeing. In Tacoma the abundance of some toxic contaminants such as metals and PCBs are well understood, but the concentration of new CEC such as 6PPDQ, tire-wear particles, and other microplastics are not well studied anywhere in Western Washington. This interagency agreement to measure the toxic compound 6PPDQ in storm sediments supports the following strategic policy goals:

- Strengthen and support a safe city with healthy residents.
- Ensure all Tacoma residents are valued and have access to resources to meet their needs.
- Assure outstanding stewardship of the natural and built environment.
- Encourage and promote an efficient and effective government, which is fiscally sustainable and guided by engaged residents.

Specifically, laboratory analysis results from stormwater monitoring studies will be used in the City of Tacoma's new modeling tool developed in the Urban Watersheds Protection Plan (UWP Plan). The UWP Plan prioritizes sub-basin areas across the city for additional stormwater management based on Tacoma Equity Index, known areas of degraded surface water quality, and critical areas overlays to prioritize human and environmental wellbeing for future stormwater management.

Economy/Workforce: *Equity Index Score*: Low Opportunity
Increase the number of infrastructure projects and improvements that support existing and new business developments.

Livability: *Equity Index Score*: Moderate Opportunity
Improve access and proximity by residents to diverse income levels and race/ethnicity to community facilities, services, infrastructure, and employment.
Increase positive public perception of safety and overall quality of life.

Explain how your legislation will affect the selected indicator(s).
A clear understanding of the abundance of these CEC in stormwater and storm carried sediments will allow us to refine the UWP Plan to prioritize efforts to control sources of these contaminants in areas of greatest needs across the city. Actions include source control activities to track and stop sources of toxics into the City's stormwater systems. Other actions include building or implementing more stormwater best management practices to prevent and reduce concentrations across different land uses of the City. The Washington State Department of Health, Ecology, Washington State Department of Transportation, and other agencies are evaluating environmental impacts to salmon and other affected fisheries, Tribal food security, human health, and receiving waters for many of these CECs, and the EPA and Ecology have begun to add requirements to draft National Pollutant Discharge Elimination System permits.

ALTERNATIVES:

Alternative(s)	Positive Impact(s)	Negative Impact(s)
1. Do not accept the funds from Ecology for 6PPDQ laboratory method development.	No obligation to manage the contract.	No known laboratory method for 6PPDQ from sediments exists. No data will be gathered to inform environmental and human prioritization metrics for stormwater management.

EVALUATION AND FOLLOW UP:
ES staff intend to use significant findings in the City's stormwater management program and stormwater design manuals, stormwater comprehensive plan and UWP Plan. This data will aid with decisions on where to add stormwater treatment across the city and compete well for grant funds to build stormwater treatment facilities that will best protect natural resources and people.

STAFF/SPONSOR RECOMMENDATION:
ES recommends approval of this interagency agreement award to develop a laboratory procedure to measure 6PPDQ in storm sediments, to manage our liability under our stormwater permits and to begin to investigate how and where to minimize harm to our residents and natural resources.

FISCAL IMPACT:
Funds received from this interagency agreement, deposited into the ES Stormwater Fund, will be used to develop laboratory procedure to measure 6PPDQ from storm sediment samples around the city.

Fund Number & Name	COST OBJECT (CC/WBS/ORDER)	Cost Element	Total Amount
ES Stormwater Fund 4301	529500	5310100	$ 69,440
TOTAL			$ 69,440

What Funding is being used to support the expense?
ES Stormwater Fund 4301

Are the expenditures and revenues planned and budgeted in this biennium's current budget?
NO, PLEASE EXPLAIN BELOW
Cost impacts to 2024 budget will be absorbed from existing budget savings. We anticipate contributions will be included in the 2025/2026 biennium budget.

Are there financial costs or other impacts of not implementing the legislation?
No

Will the legislation have an ongoing/recurring fiscal impact?
No

Will the legislation change the City's FTE/personnel counts?
No

ATTACHMENTS:
- Draft Interlocal Agreement with Ecology