



City of Tacoma

Environmental Services Department

July 7, 2023

**Via Email and U.S. Mail**

Thomas Middleton  
Washington Department of Ecology  
SWRO Toxics Cleanup Program  
P.O. Box 47775  
Olympia, WA 98504

**Re: WA UW Tacoma Branch, Cleanup Site ID: 141**  
*City of Tacoma's Response to Preliminary Liability Determination re:  
Alleged PCE and TCE Releases from Sanitary Sewer and Stormwater  
System*

Dear Mr. Middleton:

The City of Tacoma (“the City”) contests the Washington Department of Ecology’s (“Ecology”) proposal to find the City a Potentially Liable Party (“PLP”) under the Model Toxics Control Act (“MTCA”) based on alleged Tetrachloroethylene (“PCE”) and Trichloroethylene (“TCE”) releases from City-owned sanitary sewer and stormwater systems near the University of Washington-Tacoma (“UWT”) campus in downtown Tacoma. Ecology’s proposed finding of liability communicated to the City in a May 17, 2023, Preliminary Determination of Liability for Release of Hazardous Substances letter (“PLP letter”) is based on data that does not support its conclusions. Ecology’s letter adopts incorrect assertions by UWT’s environmental consultants, GeoEngineers, that the solvents PCE and TCE were discharged into the sanitary sewer from the West Coast Engravers property (Pierce County parcel #2017120080) and entered the subsurface from cracks in the terra cotta sanitary sewer line and that TCE contaminated groundwater then migrated further downgradient via the stormwater system along South 19th Street.

As described in the comments below, the data indicate that the City’s sewers are not a source of groundwater contamination to the UWT’s regional groundwater contaminant plumes. The groundwater data indicates that the sewer acts as a groundwater sink rather than a source to groundwater. Even if contaminants passively migrated via groundwater into the sewers from upgradient contaminant releases to soil and groundwater, it would not support a determination of potential liability against the City. From a factual standpoint, the City’s sewers are not a

contaminant source. From a legal standpoint, under MTCA's "plume clause", RCW 70A.305D.020(22)(b)(iv), the City is not a MTCA liable party. The City requests that Ecology withdraw its proposed finding that the City is a PLP with regard to the UWT site.

## **Comments and Clarifications**

The May 17, 2023, letter contains four bullet points summarizing alleged evidence supporting Ecology's proposal to designate the City as a PLP. The City provides the following comments and clarifications regarding Ecology's letter:

- The available data does not support Ecology's proposed finding that PCE and TCE entered the subsurface from cracks in the terra cotta sanitary sewer line along Tacoma Ave. S.:

First, groundwater level data indicates that the sanitary sewer, which is not pressurized, is below the Qvi Aquifer, creating a strong inward hydraulic gradient to the sanitary sewer. This means that groundwater from the aquifer collects in the sewer via infiltration, similar to a French drain. For dissolved PCE and TCE to leak from the sewer as alleged, the contaminants would need to travel against that inward hydraulic gradient.

Second, if PCE and TCE free product were discharged into the Sewer from the West Coast Engravers property and entered the sewers through lateral sewer connections as alleged, there would be evidence of dense non-aqueous phase liquids ("DNAPLs") in the sewer. There is no such evidence. Indeed, soil gas and liquid concentrations of volatile organic compounds ("VOCs") such as PCE and TCE in the sewer are low, suggesting that no residual DNAPL is present in the sewer sludge. Further, concentrations of PCE and TCE in soil samples in the vicinity of the sewer are consistent with a dissolved phase plume migrating from upgradient properties. If the sewer were a source of free product contamination, PCE and TCE levels in vapor samples from nearby sewer manholes would be higher than in surrounding soil gas samples. The opposite is the case. Soil gas concentrations collected outside the sewer are much higher than vapor samples collected from nearby sewer manholes. This difference indicates that groundwater or soil vapor contamination likely infiltrated the sewer from the surrounding groundwater, which has much higher levels of contamination.

Third, the sanitary sewer is located hydraulically downgradient in the Qvi Aquifer from three source area properties (SA4, SA5, and SA7) that exhibit evidence that contaminants were released onsite to soil and groundwater. These upgradient source areas are more likely to have caused the soil and groundwater contamination in the vicinity of the sewer than an alleged release from the sewer. As discussed above, the potential for releases from the sanitary sewer is limited due to the sewer's relative position below the

Qvi Aquifer groundwater level and the resulting inward hydraulic gradient. In contrast, the data indicate that there is extensive subsurface contamination in multiple locations beneath SA7.

Site-specific data disprove assertions by UWT and its consultants that SA7 Qvi Aquifer groundwater concentrations on the west side of Tacoma Avenue South are not high enough to cause the Qvi Aquifer groundwater contamination on the east side of Tacoma Avenue South. They incorrectly posit that the contamination upgradient of the sewer could be caused by localized mounding in the Qvi Aquifer, leading contamination to spread to both the east and west. However, mounding is unlikely given the low flow rate. Indeed, Monitoring Well A11-MW1S along Tacoma Avenue South was consistently dry when sampled. Additionally, soil gas concentrations along the sewer alignment proximate to SA7 are low or not detected. Moreover, as previously noted, the sewer alignment represents a line of depression in the groundwater table which creates an inward hydraulic gradient in the area, with groundwater flowing towards and into the sewer from both the east and west.

GeoEngineers concedes that “the consistency of the Qvi is highly variable at the Site and not easily predictable.” Despite this concession, based on detections from samples from a single well beneath SA7 (A11-MW7S) UWT and Geoengineers advanced an unsupported theory of liability against the City that conflicts with the groundwater data.

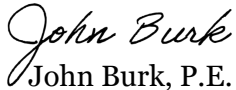
Accordingly, Ecology’s Proposed Finding that PCE and TCE entered the subsurface from cracks in the terra cotta sanitary sewer line based on these assertions by GeoEngineers is not technically sound and should be withdrawn.

- The City is not liable for any passive migration of TCE contaminated groundwater via the stormwater system along South 19th Street: To the extent that any TCE contaminated groundwater infiltrated the stormwater system, the City is exempt from owner or operator liability under MTCA. RCW 70A.305D.020(22)(b)(iv). The Act excludes owners and operators from liability where a hazardous substance has come to be located on the property “solely as a result of migration of the hazardous substance . . . through the groundwater from a source off the property.” *Id.* Here, the City did not contribute to the release of the chlorinated solvents to the environment and no discharges occurred directly to the stormwater system. The City is not liable for the passive migration of TCE contaminated groundwater.

Ecology’s preliminary determination of liability against the City is contrary to the facts and legally inconsistent with MTCA. Although the City disagrees with Ecology’s preliminary determination and underlying analysis, it would welcome an

opportunity to meet with Ecology to further discuss its position and assist Ecology in granting the City's request that Ecology withdraw its proposed PLP determination with regard to the UWT site.

Sincerely,

A handwritten signature in cursive script that reads "John Burk".

John Burk, P.E.  
Division Manager – Environmental Services  
City of Tacoma

Enclosures

cc: Ivy Anderson, Office of the Attorney General  
Rebecca Lawson, Ecology  
Jeff Kray, Marten Law LLP