



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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Can Ecology implement a turbidity monitoring program in Kenmore not just related to 520; and Medina/Laurelhurst also?

We do not believe a turbidity monitoring program will improve upon the current best management practices KGM is required to follow under the Ecology's water quality order designed to minimize sediment disturbance. Ecology will continue to enforce the order governing KGM vessel operations and respond to any formal complaints about turbidity.

Designing a formal monitoring program for turbidity associated with prop wash from a moving vessel is not simple. We explored two approaches:

- 1) Continuous turbidity measurements involving probes and data loggers located at docks and/or near navigation channel and around the lake (to assess background);
- 2) Collection of grab samples for lab analysis.

Continuous measurements is likely the only approach to generate reliable data given the complications of associating turbidity impacts with a moving vessel (i.e., when establishing a baseline that includes turbidity contributions from algae blooms, other vessels, Sammamish River, wind/waves, etc.). Such an approach would include design, likely permitting (e.g., probe moorings in or near a navigation channel) and regulatory analysis related to an unclear standard, since water quality standards for turbidity are designed for stationary sources. Option 2 would likely have a high degree of uncertainty associated with any findings, which would lead to additional sampling, technical and legal debate.

As previously stated, under state clean water law, Ecology issued an order to KGM in May 2013 in response to formal complaints received about turbidity associated with KGM vessels. It was clear in that instance that KGM vessels had strayed from the navigation channel causing visual turbidity. Consistent with state rule, Ecology required specific BMPs as the primary means to require compliance with water quality standards (WAC 173-201A-510[3]).

The last complaint Ecology received about barges operating outside the navigation channel was July 9, 2014. KGM verified through captain's reports and GPS tracking that their vessels remained in the channel for the days in question. KGM's web cameras did indicate that other vessels were transiting the channel during the period of concern.

Sediments in the navigation channel

Concerns have been raised about the contamination in the Kenmore federal navigation channel. To address these concerns in part, Ecology conducted sediment sampling in November 2012 in Northeast Lake Washington and the Sammamish River. Following formal consultation with Department of Health, Ecology believes the sampling results show no immediate threat to human health and the environment. Dioxins in sediment at two private marinas were at levels Ecology uses to determine if health risks are present from contact with dioxin in soils, but those sediments are not readily accessible to people or pets.

The Army Corps of Engineers conducted additional sampling from July 10-12, 2014, to characterize the channel and inform their January 27, 2015, DMMP Suitability Determination findings. The Corps' samples were taken at greater depth and over a greater portion of the navigation channel. The dioxin concentrations in the channel were lower than those found in the marinas that were the primary source of concern. Even though concentrations were lower than the marinas, the Corps concluded that the sediments were not suitable for open water disposal under the DMMP. The Corps' finding is not uncommon to sediments in urban waters. Given that the Corps samples were deeper and farther from shore when compared to Ecology 2012 samples, Ecology believes that the sediments continue to pose no immediate threat to human health and the environment. Ecology will pursue further investigation of the channel and marina areas as funds and competing priorities allow.

When does Kenmore have jurisdiction vs. Ecology in the berthing channel?

Ecology's May 2013 order applies to all KGM vessels associated with the 520 demolition project in the Kenmore Navigation Channel, including the berthing area. The order specifies best management activities that must be followed to minimize sediment disturbance.

With regard to activities associated with barge unloading and other upland activities, KGM is not required and does not have coverage under a construction general stormwater permit (CSGP). Ecology's PARIS database shows permit WAR125943 for Kenmore Yard, which is an older CSGP that applied to staging and construction activities associated with the new bridge. That permit is no longer active. Also in PARIS is permit WAR304198, which was a more recent KGM CSGP application for the 520 Kenmore Yard. This application was withdrawn by KGM after it became clear that concrete was not going to be broken down in Kenmore Yard. Transloading materials does not require stormwater permit coverage. Ecology will issue a notification of the withdrawn status of the WAR304198 permit shortly.

While there is no water quality permit issued by Ecology for Kenmore Yard, the State of Washington prohibits unauthorized discharges to waters of the state. Consequently, Ecology does have authority to take enforcement action under state clean water law (RCW 90.48.080) for unauthorized discharges. Before any such enforcement action would be taken, Ecology must have sufficient documented evidence of a discharge, which could include observation or measurement of a water quality parameter.