

May 31, 2005

Mr. Bob Duffner  
Port of Seattle, Aviation Environmental Program  
Seattle-Tacoma International Airport  
P.O. Box 68727  
Seattle, WA 98168

Dear Mr. Duffner:

Thank you for your public comment letter received on December 17, 2004, regarding Washington State's Water Quality Assessment for 2002/2004. The department received over 45 comment letters during this last review process and is appreciative of the time you took to review and comment on this assessment. We realize that there is an extensive amount of information in the Water Quality Assessment. The scrutiny given by you and other public reviewers has resulted in many changes and corrections that improved the accurateness of the final submittal to the Environmental Protection Agency (EPA).

The Water Quality Assessment is being submitted to EPA as an "integrated report" to meet the Clean Water Act requirements of sections 305(b) and 303(d). EPA will only take approval action on Category 5 of the assessment, which represents the state's 303(d) list. The Water Quality Assessment can be viewed at <http://www.ecy.wa.gov/programs/wq/303d/index.html>.

Staff in the Environmental Assessment Program who were involved in the technical assessments of the data were asked to review the attached 28 comments that were provided in Table 4 of your letter. Because some of the comments raised similar concerns, we have jointly addressed the comments where appropriate. Please note that Listing ID's # 10833m 42673, and 42311 were duplicate locations of other listings so they have been inactivated. Also note that several listings below are in Category 2.

*Insufficient Exceedances:* Comment 1, Listing: #12568

Data from Hallock 2004 has been reassessed. The results show excursions of both the geometric mean criterion and the percentile criterion for Class AA waters.

*Insufficient Exceedances:* Comment 6, Listings: #42313, #42350

During the assessment of data Ecology determined that WQ Policy 1-11 (updated 9/03) was overly restrictive for the number of years of data excursions needed to list for D.O. impairments. Based on a review of monitoring studies for D.O. statewide, Ecology determined that multiple (three or more) excursions for at least two years of monitoring should be used as an alternative indicator that a water body continues to be impaired. (Braley, ECY/WQP, 2003). This has been noted in the remarks of these listings.

*Data is aged:* Comment 2, Listing #12568

This listing is based on data from the last ten years and shows impairment and sufficient information to place this water body in Category 5. Policy 1-11 page 19, explains that older data is used to determine impairment in the assessment only if data is not available from the last ten years. In this case data older than ten years is retained in the database for reference only.

*Inadequate representativeness:* Comments: 7, 8, 9, 11, 13, 14

Listings: #12568, #42310, #42311, #42306, #42307, #42308, #42309, #42542, #42313, 42314, #42350, #42352

WQ Policy 1-11, page 19 provides guidance for developing a sampling regime. EPA has expressed that listings derived from a point in space must contain a linear (streams) or spatial (open water) component to identify waters of impairment. In response, Ecology divided the states' water bodies into discrete segments to represent the conditions of the water body found at one or more stations within the segment.

*Natural sources for listing parameter:* Comment: 18, 19

Listings: #42673, #42314, #12568, #42311, #42307, #42542, #42351

In response to questions on fecal coliform, we note that state water quality standards do not currently differentiate fecal coliform sources for the purpose of assessing waterbody impairment.

*Natural sources for listing parameter:* Comment: 28

Listings: #10833, #42349, #42313, #42306, #42350

In response to questions on dissolved oxygen, anthropogenic contributions to the pollutant concentrations which resulted in these listings cannot be ruled out.

*Inappropriate use of criteria:* Comment 27

Listings: #42934, #42935, #42936, 42937, #42308, #42309

Port of Seattle refers to a site specific WQC study which was not completed nor submitted to Ecology for evaluation for the 2004 303(d) listing process. This data may be submitted to Ecology for the 2006 303(d) listing process.

*Exceedances occurred only in storm flow-weighted composite samples:* Comment 29  
Listings: #42308, #42309, #42352

WQ Policy 1-11, p. 23, states that toxic pollutants have significant potential to adversely affect characteristic water uses, aquatic biota, and public health – singularly or cumulatively, acutely or chronically – when present at levels above those defined in the water quality standards. Therefore, assessment decisions for toxic pollutants are based on clear detection of these substances at these levels, even if on limited occasions, rather than on the more prolonged persistence required for other pollutants.

*Improper sampling technique:* Comment 12  
Listings: #42313, #42310, #42306, #42350

Ecology staff reviewed the Quality Assurance Project Plans (QAPP) for both Hallock, 2001 and Herrera, 2001 studies. Hallock, 2001 does not include dissolved oxygen data obtained from a calibrated instrument. All dissolved oxygen values were obtained using the Winkler titration method. Herrera, 2001 includes data collected using a calibrated instrument and the Winkler titration method. Quality assurance measures to maintain the calibration of the dissolved oxygen instrument are detailed in the study QAPP.

*Inadequate documentation of sampling procedures:* Comment 16  
Listings: #42308, #42309

Policy 1-11, page 20, states that “Metals should be sampled using clean sampling and analytical techniques, or appropriate alternate sampling procedures or techniques”. Ecology staff reviewed the Quality Assurance Project Plan (QAPP) for Herrera, 2001 and determined that appropriate sampling procedures with necessary QA/QC measures were employed in the field and laboratory.

*Pollution control plan in place:* Comments: 20, 21, 22, 23, 24, 25  
Listings: #42934, #42935, #10833, #42312, #42673, #42936, #42937, #42349, #42313, #42314, #12568, #42310, #42311, #42306, #42307, #42308, #42309

Ecology understands that Port of Seattle (POS) has addressed sources of several pollutants to reduce concentrations in stormwater discharge. Because other sources of discharge are contributing to the flow of Des Moines and Miller Creeks, information solely from Port of Seattle’s stormwater discharge can not act as a surrogate for receiving waters studies. As noted in POS Annual Stormwater Monitoring Report, September 30, 2003, Section 3.5, “highly urbanized areas surround STIA. As a result, port generated runoff typically commingles with non-port runoff prior to reaching the receiving waters.”

Ecology recognizes that POS improvements to the stormwater pollution prevention plan and use of best management practices reduces the occurrence of pollutants entering the receiving waters, however other sources can not be ruled out without further study.

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Thank you again for taking the time to provide comments to Ecology. If you have questions regarding the above responses, or would like further clarification, please feel free to call me at 360-407-6414.

Sincerely,

A handwritten signature in cursive script that reads "Susan Braley". The signature is written in black ink and is positioned below the word "Sincerely,".

Susan Braley  
Unit Supervisor  
Watershed Management Section