7311 East Side Drive NE Tacoma, WA 98422 26 June 2017

Kerry Graber, Site Manager Washington State Department of Ecology PO Box 47775, Olympia, WA 98504-7775 Kerry.graber@ecy.wa.gov

Dear Ms. Graber:

I appreciate the opportunity to comment on the draft Feasibility Study for cleanup of the Occidental Chemical Corporation site located on the Hylebos Waterway in Tacoma. I have a long term knowledge of the site and been involved in issues with the site since the early 1990's, when Occidental Chemical established a Responsible Care Committee under the guidance of the Chemical Manufacturers' Association. I appreciate the regular communications from the Department of Ecology and from Occidental Chemical Corporation staff regarding this project. I have reviewed the draft Feasibility Study and related materials, including the draft Agreed Order (AO), Vapor Intrusion Memo and Reports, Corrective Action Permit, Porewater Data Report and University of Washington (UW) study.

I have been a part of developing the Citizens for a Healthy Bay comments, and support those comments in their entirety. I have some additional specific comments to add.

In my opinion, this site has a particular and unmeasured risk to Commencement Bay that requires additional future study and remediation. This draft Feasibility Study can act as a first phase of the necessary cleanup, but needs a second phase to deal with the extensive mixed CVOC and sodium hydroxide contamination. It is imperative that cleanup begin while further options for sodium hydroxide removal are under consideration, and a method for removing the sodium hydroxide is developed. Occidental has chosen not to seek remedies for this part of the problem, even they are a sophisticated chemical company. Consequently, the Department of Ecology should contract with an independent consultant to develop a removal technique, and bill Occidental for the cost of the consultant.

I am relieved that there is proposed action that removes some of the contamination from the site, but implore Ecology to set a goal of removing **substantially all** of the contamination. This will then meet the requirements of MTCA. This site is different than many of the other contaminated sites in Tacoma like the ASARCO site, where the contamination was in a solid, rather than liquid, form. (Other VOC and CVOC sites were much smaller in size and scope.) Because the majority of the chemicals are liquid In this case, the overall cleanup plan should remove the concentrated sodium hydroxide along with CVOC's. In addition, the facility was built on fill material put in place in the 1920's and this fill may not be geologically stable. This adds to the need to **remove** all of the contamination, rather than relying on technology to

control the sodium hydroxide containing plume. Any geologic activity at the site could cause catastrophic damage to the biota of Commencement Bay and the Hylebos Waterway.

As a first phase, a pump and treat system should be put in place, and begin operation as soon as possible. Likewise, subsurface removal of contamination should move forward as soon as possible. The feasibility study includes no detail regarding the sheet pile wall, and I question its efficacy. The sheet pile wall should be designed so is up slope from the intertidal zone, and it protects the intertidal slope along the Hylebos Waterway. It should also be designed to take sea level rise into account.

Contamination has spread off of the Occidental property and is under public property as well as property of the Puyallup Tribe. Occidental is responsible for this contamination as well. The final Feasibility Study should acknowledge this in a way that Occidental pays for remediation as well as for lost income from lost use of the property.

It seems that it is in Occidental's interest to stretch out the timeline for remediation. Ecology should specify a deadline for each segment of the remediation in the final Feasibility Study, and should issue financial penalties for not meeting the respective timelines. Ecology should also require a mechanism of assuring that the financial resources exist for this cleanup. This could come in the form of a reserve account, a performance bond, or other funds set aside so Occidental pays for the cleanup irrespective of corporate changes or acquisitions.

In addition, timelines should be specified for Occidental to release all data and other results of the operations as quickly as possible, but no longer than 90 days after results are obtained. All data should be released for public review and comment. The data should be made available via the web and at public repositories.

I recognize that study of impacts to the Hylebos Waterway and Commencement Bay was not a part of this study, and the porewater analysis was not helpful in measuring any impact. The porewater analysis study only shows that contamination to the waterway and bay is not significant at the specific sites measured. It should not be used to draw broad conclusions regarding the interface of the plume and the marine environment. Specifically, the number of porewater analysis sites in the waterway was limited.

Thank you for the opportunity to comment on the draft Feasibility Study. Current and future residents of the area deserve a thorough and expeditious cleanup of this contaminated site.

Sincerely yours,

Sheri J. Tonn, PhD

Sheri Jeanse Do