



RESPONSIVENESS SUMMARY

Budd Inlet Sediment Investigation / Port of Olympia

Agreed Order for an Interim Action

**Public Comment Period
October 7 – November 7, 2008**

Prepared by
Washington State Department of Ecology
Southwest Regional Office
Toxics Cleanup Program
Lacey, Washington

January 2009

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Site Information

Address: Budd Inlet / Port of Olympia

Site Manager: Lisa Pearson

Public Involvement Coordinator: Meg Bommarito

The Washington State Department of Ecology (Ecology) entered into an Agreed Order with the Port of Olympia to complete an Interim Action and Pilot Study at one of the Port's shipping berths. This agreement requires the City of Olympia to do the following:

- Remove some of the contaminated sediment from portions of two shipping berths.
- Transport contaminated sediment to an appropriate waste disposal site.
- Conduct post-dredge monitoring to determine impact on sediments and water quality.
- Conduct a pilot study during the dredge to look at the effectiveness of dredge methods.
- Prepare a report detailing the results of the pilot study and dredging action.

The comment period for this Agreed Order and for the State Environmental Policy Act (SEPA) checklist and Determination of Non-Significance ran from October 7 – November 7, 2008. Public comments and Ecology's responses are summarized in this document.

Site Background

Ecology launched an investigation of Budd Inlet dioxin contamination in April 2007. The Port of Olympia found elevated levels of dioxins in an area scheduled for routine maintenance dredging. Results of this study confirmed that dioxin levels were as high as 4212.5 and 230.6 parts per trillion (ppt) at the Port's shipping berths.

The dredging at the Port's shipping berth is an opportunity for Ecology to examine possible cleanup methods that may be applied in other areas of contaminated sediments in Budd Inlet. This method, if effective, could be used to reduce contamination in areas where higher levels of dioxins are detected.

Ecology's work in the larger Budd Inlet Sediment Investigation continues. Next steps include:

- Future sampling at additional locations where elevated dioxin levels were detected.
- Additional analysis to further examine the source of dioxin contamination.
- Continue cleanup work at sites throughout the inlet to help identify additional sources of contamination and other possible contaminants.

Ecology will work with the Port of Olympia to design any future maintenance dredging to be protective of the environment while contributing to cleanup efforts in Budd Inlet.

Comment #1: Hal Bellerud

Port of Olympia Interim Action Berth Dredge
Public Comment Period October 7 to November 7, 2008
Responsiveness Summary
December 2, 2008

Comments received from Hal Bellerud on October 8, 2008

Hi Lisa,

much applause for the efforts on cleaning up Olympia Harbor/Puget Sound. I don't always agree with DOE's projects and directions but I can really get behind this one.

As a long-time Olympia resident, I remember the presence of the Mothball Fleet out in Budd Bay near Gull Harbor, just north of Priest Point Park. I've spoken with some of the fellows who used to work on the ships and been astounded at some of the tales they told of using the bay for their dumping ground. I haven't checked the status of that area lately, I believe it was still under some type of Federal control for a while after the ships were removed, perhaps it still is.

Has the DOE investigated this area and it's potential for hazardous materials? Lead paint is one thing I can think of for sure as well as asbestos, also chemicals from electrical components.

I'd just like to know what the status is of that area and what may have been or will be investigated by DOE and the clean sound effort.

Thank you so much,

Hal Bellerud

Ecology Response

From: Pearson, Lisa (ECY)
Sent: Thursday, October 09, 2008 1:02 PM
To: 'Hal B.'
Cc: Bommarito, Meg (ECY); 'JoanneS@portolympia.com'
Subject: RE: What about the site of the Mothball fleet at Gull Harbor on Budd Inlet?

Hello, Hal

Thank you very much for expressing your support for this project. You ask very good questions about the Gull Harbor area.

I will research what investigation has been done in that area and get back to you. I am out of the office today and tomorrow, but will work to get you something next week.

Best regards,

Lisa Pearson, P.E.
Technical Support Unit Supervisor
Toxics Cleanup Program
Southwest Regional Office
(360) 407-6261
lpea461@ecy.wa.gov

Update: Ecology is aware of this area and will include it as part of additional investigations and eventual cleanup (if appropriate). The Department of Natural Resources has done some sediment sampling in this area. We will be using this data along with the rest of the data to evaluate contamination throughout the Inlet.

Comment #2: James D. Wright

Comments received from James Wright on October 8, 2008

I am 100% in favor of the Dept. of Ecology approach to the clean up of Budd Inlet at the Port of Olympia site. This project is long overdue as it will substantially improve the docking area of the port and at the same time remove harmful contaminants. The work plan appears well organized and planned. Future clean up programs will benefit from this project. An excellent start

James D. Wright

Ecology Response

From: Pearson, Lisa (ECY)
Sent: Thursday, October 09, 2008 12:54 PM
To: 'jimstevie@comcast.net'
Cc: Bommarito, Meg (ECY); 'JoanneS@portolympia.com'; Lawson, Rebecca (ECY)
Subject: RE: Budd Inlet Sediment Investigation

Hello, James

Thank you very much for taking the time to express your support for this project. Ecology is pleased to have this opportunity to get cleanup started in Budd Inlet.

Best regards,

Lisa Pearson, P.E.
Technical Support Unit Supervisor
Toxics Cleanup Program
Southwest Regional Office

(360) 407-6261
lpea461@ecy.wa.gov

Comment #3: Jana Wiley

Dear Ms. Pearson,

I am writing to inquire about the source of the Port of Olympia's contamination. A toxicologist that I was speaking with, who is familiar with clean up plans, asked if the source had been identified, and if so, were there containment plans to prevent a need for future dredging. Why clean when the contamination is ongoing?

To the uninformed citizen, this does not look exactly like clean up. It looks more like shipping berth management, that the Port of Olympia should be paying for. Instead, WA State is kicking in funds, and turning it into a pilot study to boot.

Please consider, does it seem appropriate to do a study to see if the contaminants can be cleaned up using a clamshell type device (cheapest way) that will be allowing sloughing as well, so close to public beaches? What do sediment specialists and toxicologists say about these plans? What are the controls to contain sediments in the water column that is subject to tidal influences?

I believe that this proposal needs oversight by an outside third party who specializes in dioxin and clean up procedures. Something does not sound right about this proposal, but perhaps your illumination will quell my concerns.

Sincerely,

Jana Wiley

Ecology Response

Please see below for responses to individual comments.

Comment 3.1

I am writing to inquire about the source of the Port of Olympia's contamination. A toxicologist that I was speaking with, who is familiar with clean up plans, asked if the source had been identified, and if so, were there containment plans to prevent a need for future dredging. Why clean when the contamination is ongoing?

Ecology Response

Ecology has spent considerable resources investigating and evaluating possible sources of dioxin in Budd Inlet (Budd Inlet Sediments Investigation). Ecology continues to investigate possible ongoing contributions of dioxins from other sources, including stormwater. To date, there is no evidence that indicates this is a significant contribution of dioxins to Budd Inlet. Dioxin contamination appears to be from historic industrial operations. Studies indicate that pentachlorophenol (PCP) was a primary source of dioxin. PCP was used at the former Cascade Pole Company. This is supported by the higher concentrations being buried by clean sediments over time, representing the historic nature of the release. A remedy is in place at Cascade Pole Company and it appears that the primary historical source of dioxin in Budd Inlet has been controlled.

Comment 3.2

To the uninformed citizen, this does not look exactly like clean up. It looks more like shipping berth management that the Port of Olympia should be paying for. Instead, WA State is kicking in funds, and turning it into a pilot study to boot.

Ecology Response

The Model Toxics Control Act (MTCA) is the law which defines what a cleanup action is. According to MTCA, this action qualifies as an Interim Cleanup Action in two ways. First, this action is reducing a threat to the environment by reducing or eliminating a pathway of exposure to the hazardous substance. In this case, this interim action is improving the sediment surface dioxin concentration, which will reduce possible exposure to organisms. This action is removing a mass of contaminated sediments from the environment. Also, this action is necessary to provide for completion of a feasibility study or design of a cleanup action.

The Port's need to perform maintenance dredging is allowing the Department of Ecology a unique opportunity to study and understand the nature and behavior of sediments in Budd Inlet. Before we attempt to design cleanup actions to remove any really high concentrations of hazardous substances, we need to understand how these dredging technologies may or may not work in Budd Inlet. If we are going to find out the sediments are of such a fine, loose nature that it is too difficult to control spreading of the contamination when removing it—we need to know that before we disturb those 'hot spots'.

Comment 3.3

Please consider, does it seem appropriate to do a study to see if the contaminants can be cleaned up using a clamshell type device (cheapest way) that will be allowing sloughing as well, so close to public beaches? What do sediment specialists and toxicologists say about these plans?

Ecology Response

The clamshell bucket is one technology that may be used here. However, the contractor intends to start with a closed bucket. It is likely the contractor will have both a clamshell and a closed bucket available for use. A clamshell is preferred in areas where you are likely to find debris such as old wood pilings. The teeth on the clamshell can break the pilings so the jaws can close around the sediment. If a closed bucket is used and debris is encountered, the debris will hold the jaws open while the bucket is pulled up resulting in a loss of the sediment from the bucket into the water. Due to the construction of the pier adjacent to the berthing area and the density of pilings supporting the pier, they cannot use machinery to remove sediment without risking the structural integrity of the pier. Professionals also say that using machinery to physically scrape the slope under the pier will result in more sediment being suspended in the water column than if that material is allowed to slough and then be picked up.

There are tight controls the Port must maintain while this dredging is on-going. Sediment suspended in the water column must stay restricted to a 150 foot radius around the dredge area. Ecology is requiring that they monitor at multiple water elevations at both a 100 and 150 foot radius around the dredging area. This way they will detect any suspended sediment early enough to modify the operation and avoid any exceedances of water quality criteria at the 150 foot compliance radius.

In addition to a project manager, Ecology has other staff, including a sediment specialist and water quality specialist assigned to the site. Additional staff with related expertise will also be used for oversight. This team will be diligent in making sure this action will stay protective of human health and the environment. Ecology has also gained input for the project from a number of sources including the National Marine Fisheries Service, Washington Department of Fish and Wildlife, Environmental Protection Agency, Washington Department of Natural Resources, City of Olympia, Dredge Material Management Program, Ecology's Shorelands and Environmental Assistance Program, and US Army Corps of Engineers. As you can see, we are dedicated to making sure this action is protective by seeking out all necessary expertise.

Comment 3.4

What are the controls to contain sediments in the water column that is subject to tidal influences?

Ecology Response

Regular monitoring will be ongoing to detect any issues as early as possible. The area of impact of this project is strictly limited to 150 feet away from the dredge area in all directions. Some things that will be used to control the spreading of sediment are moving the bucket slowly through the water column, using filters on the water running off the barge to contain sediment, using a contractor that is an expert at environmental dredging, and adjusting the production rate according to the sediment types, water depth and presence of debris. These contingencies are discussed in detail in the Water Quality Monitoring and Sediment Sampling Plan that was

developed prior to dredging. This plan and the Dredging and Disposal Plan are available online (visit http://www.ecy.wa.gov/programs/tcp/sites/budd_inlet/budd_inlet_hp.htm) and in our central files. Please contact Debbie Nelson at (360) 407-6365 to set up an appointment to review the documents in records.

Comment 3.5

I believe that this proposal needs oversight by an outside third party who specializes in dioxin and clean up procedures. Something does not sound right about this proposal, but perhaps your illumination will quell my concerns.

Ecology Response

Ecology oversight will include a team of water quality and sediment experts. We are also working with several other related agencies to gain additional information when needed. Please see the response to comment 3.3 on page 8 for more information about the team.

Comment #4: Renee C. Ries

Comments received from Renee Ries, Fairchild Record Search, Ltd., on October 9, 2008

I am writing in support of the Interim Action Order. As a business owner and 25-year resident of the Olympia area, I have long been an advocate of economic development to spur a more vibrant community as a whole, and downtown Olympia specifically. I believe that the Port of Olympia is an essential partner in this endeavor and I am pleased to see action in this direction, particularly under the guidance of the Port's skilled and experienced Executive Director, Ed Galligan.

Very truly yours,
Renee C. Ries, President

Ecology Response:

Hello, Renee

Thank you very much for taking the time to express your support for this project.

Best regards,

Lisa Pearson, P.E.
Technical Support Unit Supervisor
Toxics Cleanup Program
Southwest Regional Office

(360) 407-6261
lpea461@ecy.wa.gov

Comment #5: Harry Branch

Comments received on October 20, 2008

Dear Ms. Pearson,

This work looks at first glance like a good thing but it's not. The plan doesn't follow guidelines for environmental dredging and even if it did environmental dredging has not been demonstrated to be effective at reducing risks posed by contaminated sediments. This project is part of a bigger plan, the cumulative impacts of which should be wholly evaluated, not broken off and considered in pieces.

The volume of benthic soil to be dredged in this phase will be 22,000 cubic yards, an area 110 feet by 800 feet to a depth of -37 feet MLL, the size of the biggest ships. The location to be dredged is adjacent to the dock, where these biggest ships would be docked.

Environmental dredging targets the most contaminated spots first. This project leaves the most contaminated sediments in place, immediately adjacent to and north of the shipping berths. Dredging adjacent to hot spots like this can result in contamination being mobilized.

Sediments lying under the dock can't be mechanically dredged because they're full of debris and not directly accessible. One method of removing sediments in such situations is to drag them out from under the dock and then pick them up with a separate clamshell. This method entails moving material twice facilitating its dispersal into the water column.

As an alternative the method in this case is going to be to deliberately dig a steep enough bank adjacent to the dock that sediments will slough off into the berth where they can then be removed. Sloughing by definition is the mobilization of material. Often dredging isn't even permitted in areas or in ways that are prone to sloughing. In this case it's part of the design.

This isn't going to be cheap. According to reliable literature the cost of environmental dredging runs about \$426/cu.yd. or over \$9 million for the 22,000 cubic yards planned for this phase. If we were to really try to do the job right we would install a sheet-piling wall around the shipping berths during dredging operations. This ups the price considerably above \$426/cu.yd. The correct system can be seen at the following link if you toggle down to the bottom of the page.

<http://www.creativewaste.com/sludge-removal/>

The Port has earmarked \$3 million for this project. Ecology has stated that they may contribute a matching \$3 million for a total of \$6 million. This is \$3 million short of what we should plan on spending. One of the most important features of environmental dredging of contaminated sediments is working the clamshell slowly. Being under funded, the economic incentive in this

project will be to work faster. Function often follows funding.

In every respect this project is characteristic of navigation dredging not environmental dredging. Why is The Washington Department of Ecology funding a project for navigation? A matching grant of this kind could be invested in more ecological ways.

The project is described as a "pilot study" to evaluate "the effectiveness of dredge methods...information from this study will be used to plan dredging in other Port shipping berths" and throughout Budd Inlet. Here again I am at a loss. What new data do we hope to collect?

Among the many studies on this subject there is one that stands out for the volume of data and the way it's presented. I am enclosing three long paragraphs from the document because I think they are particularly pertinent. The entire study is worth reading.

(following are excerpts)

Blasland, Bouck & Lee, Inc.

Applied Environmental Management, Inc.

August 2000

Major Contaminated Sediment Sites

(MCSS) Database, which was commissioned by General Electric Company (available at www.hudsonwatch.com)

“Nevertheless, environmental dredging has become the default remedy for contaminated sediments. Most of the decisions appear to be based on the simple, yet largely incorrect, assumption that removing a percentage of the contaminant mass from the sediment will result in a roughly equivalent reduction in risks. This approach is referred to as “mass removal.” Our review shows, however, that this approach is substantially flawed. Environmental dredging and the national program that increasingly promotes it, have not produced the risk reduction that is their central goal.

First, it is only the contaminants within the biologically active, upper-most layer of the sediment bed that are available for uptake by sediment dwelling organisms and fish or susceptible to migration downstream. Second, and a direct corollary to the first point, contaminants buried below the bioavailable zone present a risk only if the overlying sediment is subject to significant erosion or other mechanical disturbance, or if groundwater moves the contaminants upward through the sediments, thus creating the possibility that the buried contaminants might make their way to the surface and become bioavailable. Appendix A provides a more detailed review of sediment contaminant dynamics. Consequently, if a buried chemical mass is stable and is not and will not become available to the water column or biota, the human health and ecological risks at that site will not be reduced by removing that mass. As obvious as this conclusion is, it is frequently overlooked because the greatest mass of contaminants is often found in buried sediments. It is important to remember that most of the contaminants in sediments are the result of waste disposal practices that began 50 to 60 years ago and largely ceased 20 to 25 years ago.

The fact that the chemical mass remains buried 25 to 50 years after it entered the sediment is strong evidence that it is associated with stable sediments and is unlikely to migrate to the surficial bioavailable layer in any significant way. This explains why, at many sites, dredging has not been effective in reducing risks. Dredging is effective in removing sediment mass to, for example, clear a clogged navigational channel. However, removing chemicals that are not available to the food chain or the water column does not reduce risks. In fact, removing the surface layers may expose otherwise stable buried sediments with contaminants at higher concentrations, making them bioavailable and thereby increasing risks.

If the bioavailable surface layer is not receiving contaminants from elsewhere, then methods for accelerating the remediation of the surface layer should occur. If the chemicals in the surficial sediments come from on-shore sources, those sources must be controlled. A particularly important consideration, largely overlooked in previous decisions, is the inability of dredging equipment to achieve low levels of contaminants in the bioavailable surface sediments. Last but not least, one needs to compare the potential benefits from dredging (or any other remedy) against the potential harm to the ecosystem and risks to workers and communities. A large-scale dredging project can have devastating impacts on sensitive ecological habitats, and, like any large construction project, carries with it both significant risks to workers and disruption to local communities. Only after all of these factors are considered can one make a reasoned, well-informed remedy selection. Unfortunately, our review indicates that regulators are not adequately taking these fundamental considerations into account. The bottom line is that a rigorous analysis of the contaminant source and fate in the aquatic system is required before an effective remedy can be evaluated and selected.”

http://pubs.acs.org/subscribe/journals/esthag/42/i14/pdf/GE_dredge_analysis.pdf?sessid=600613

(end of excerpt)

It makes little sense to dredge contaminated sediments if we haven't controlled the source. Assuming contamination came from the adjoining shore, did it ooze from the bank or come down a storm drain? How can we be sure that it won't happen again?

The stated goal for Budd Inlet is to dredge the length of the berths, the turning basin and the inner and outer channels. So far we have dredged part of the outer channel and we are proposing by this Agreed Order to dredge a portion of the shipping berths. The way we are heading, the cumulative impacts of all dredging will never be considered.

The ultimate goal of dredging 500,000 cubic yards of sediment would dramatically impact physical, chemical and biological parameters. Dredging would alter the structure of the estuary and its ability to maintain a healthy mix of phytoplankton and herbivores or remediate contamination, both of which happen best in shallow waters in the presence of abundant sunlight and oxygen. Dredging a large hole in an estuary will impact circulation of algae and herbivores and reduce the availability of atmospheric oxygen and sunlight, all of which increase the risk of eutrophication. It's the structure of estuaries that determines their viability.

Increased lighting adjacent to the shore and the runoff of tannins and pesticides from the log yard

pose threats to the same parameters of dissolved oxygen and primary production. The cumulative impacts of all these threats should have been considered in an Environmental Impact Statement. Hopefully dissolved oxygen and primary production will be documented ahead of time in a baseline study. Impacts can be determined any time after the fact. Then Budd Inlet can at least serve as a case study: How to strangle a bay.

The kinds of persistent toxins that are buried in Budd Inlet should not find their way into the food web. We are at a point where dioxins and PCBs are accumulating in apex predators in concentrations at which damage is predicted to occur and the damage has, as predicted, occurred. This dredging will result in greater bioavailability of the most biologically damaging persistent toxins.

Sincerely,

Harry Branch

Ecology Response

Please see below for responses to individual comments.

Comment 5.1

This work looks at first glance like a good thing but it's not. The plan doesn't follow guidelines for environmental dredging and even if it did environmental dredging has not been demonstrated to be effective at reducing risks posed by contaminated sediments. This project is part of a bigger plan, the cumulative impacts of which should be wholly evaluated, not broken off and considered in pieces.

Ecology Response

The project utilizes dredging methods commonly implemented on cleanup projects around the country. Post-dredge monitoring will ensure that the project complies with Ecology's anti-degradation requirements (WAC 173-204-120). Port development unrelated to the Interim Action is not pertinent to the Agreed Order or Interim Action.

Comment 5.2

The volume of benthic soil to be dredged in this phase will be 22,000 cubic yards, an area 110 feet by 800 feet to a depth of -37 feet MLL, the size of the biggest ships. The location to be dredged is adjacent to the dock, where these biggest ships would be docked.

Environmental dredging targets the most contaminated spots first. This project leaves the most contaminated sediments in place, immediately adjacent to and north of the shipping berths. Dredging adjacent to hot spots like this can result in contamination being mobilized.

Ecology Response

The project will avoid the area with localized elevated concentrations north of the dredge area to collect additional information on site specific conditions and effectiveness of the methods to be implemented. This interim action will provide valuable information to be used when considering various cleanup options for the remainder of contamination in the Port's berth areas or other areas of Budd Inlet. This action is an interim action as defined by MTCA WAC 173-340-430 1(c), 2(c) and 3(b). See page 38 for a full citation.

Comment 5.3

Sediments lying under the dock can't be mechanically dredged because they're full of debris and not directly accessible. One method of removing sediments in such situations is to drag them out from under the dock and then pick them up with a separate clamshell. This method entails moving material twice facilitating its dispersal into the water column.

As an alternative the method in this case is going to be to deliberately dig a steep enough bank adjacent to the dock that sediments will slough off into the berth where they can then be removed. Sloughing by definition is the mobilization of material. Often dredging isn't even permitted in areas or in ways that are prone to sloughing. In this case it's part of the design.

Ecology Response

Dragging sediments down the under-pier slope would generate greater suspended sediments than the proposed plan of dredging at the pier face. In addition, debris under the pier may limit effectiveness of dragging along the slope. The proposed method will control the amount of material that sloughs and is re-suspended by making multiple dredge passes along the toe of the slope- each pass limited to a two to three foot cut. This should make sure too much doesn't come down at once. Water quality monitoring will be implemented to comply with water quality criteria established by Ecology. The Water Quality Monitoring and Sediment Sampling Plan (WQMSSP) was developed in coordination with Ecology prior to any in-water work. A Dredging and Disposal Plan, which contains a list of the water quality best management practices, was also developed. Both documents are available online at http://www.ecy.wa.gov/programs/tcp/sites/budd_inlet/budd_inlet_hp.htm.

Comment 5.4

This isn't going to be cheap. According to reliable literature the cost of environmental dredging runs about \$426/cu.yd. or over \$9 million for the 22,000 cubic yards planned for this phase. If we were to really try to do the job right we would install a sheet-piling wall around the shipping berths during dredging operations. This ups the price considerably above \$426/cu.yd. The correct system can be seen at the following link if you toggle down to the bottom of the page.

<http://www.creativewaste.com/sludge-removal/>

The Port has earmarked \$3 million for this project. Ecology has stated that they may contribute a matching \$3 million for a total of \$6 million. This is \$3 million short of what we should plan on spending. One of the most important features of environmental dredging of contaminated sediments is working the clamshell slowly. Being under funded, the economic incentive in this project will be to work faster. Function often follows funding.

Ecology Response

The cost for this interim action is estimated to be about 3.5 to 4 million dollars. As part of the remedial action grant program, the port could be reimbursed up to 50% of eligible cleanup costs.

The contractor will perform dredging as described in the Interim Action Plan, which includes Best Management Practices (BMPs) to control sediment re-suspension. Ecology will observe dredging activities to confirm the contractor is complying with the required operational controls.

Comment 5.5

In every respect this project is characteristic of navigation dredging not environmental dredging. Why is The Washington Department of Ecology funding a project for navigation? A matching grant of this kind could be invested in more ecological ways.

Ecology Response

This project is an Interim Action cleanup project performed by the Port of Olympia conducted under MTCA and is therefore eligible for grant funding under the Toxics Cleanup Program.

Comment 5.6

The project is described as a "pilot study" to evaluate "the effectiveness of dredge methods...information from this study will be used to plan dredging in other Port shipping berths" and throughout Budd Inlet. Here again I am at a loss. What new data do we hope to collect?

Ecology Response

Dredging and clean cover placement pilot activities will provide valuable information about the effectiveness of certain methods (i.e., dredging and clean cover placement) and site-specific conditions. Specifically, the dredging methods and post-dredge monitoring will provide information on rate and amount of under-pier sloughing, resuspended sediment and turbidity, and implementability of similar dredging methods during future cleanup. Placement of clean cover will also provide valuable information for use in future cleanup activities in West Bay. Monitoring following dredging and placement of clean cover material will also provide information on the chemical concentrations of the final dredged surface and rate and spatial extent of dioxin recontamination on the cover material.

Comment 5.7

Among the many studies on this subject there is one that stands out for the volume of data and the way it's presented. I am enclosing three long paragraphs from the document because I think they are particularly pertinent. The entire study is worth reading.

Ecology Response

Thank you for the reference.

Comment 5.8

It makes little sense to dredge contaminated sediments if we haven't controlled the source. Assuming contamination came from the adjoining shore, did it ooze from the bank or come down a storm drain? How can we be sure that it won't happen again?

Ecology Response

Ecology has spent considerable resources investigating and evaluating possible sources of dioxin in Budd Inlet (Budd Inlet Sediments Investigation). Ecology continues to investigate possible ongoing contributions of dioxins from other sources, including stormwater. To date, there is no evidence that indicates this is a significant contribution of dioxins to Budd Inlet. Dioxin contamination appears to be from historic industrial operations. Studies indicate that pentachlorophenol (PCP) was a primary source of dioxin. PCP was used at the former Cascade Pole Company. This is supported by the higher concentrations being buried by clean sediments over time, representing the historic nature of the release. A remedy is in place at Cascade Pole Company and it appears that the primary historical source of dioxin in Budd Inlet has been controlled.

Comment 5.9

The stated goal for Budd Inlet is to dredge the length of the berths, the turning basin and the inner and outer channels. So far we have dredged part of the outer channel and we are proposing by this Agreed Order to dredge a portion of the shipping berths. The way we are heading, the cumulative impacts of all dredging will never be considered.

Ecology Response

The entire navigation channel and turning basin dredging project was evaluated in 2000 by the Corps of Engineers. However, that evaluation did not consider the presence of dioxin contamination in sediments. Additional sampling was conducted in 2006 for dioxin in the navigation channel and turning basin. The Berth 2 and 3 dredging component was further evaluated for potential effects of dioxin in 2007. Subsequent dredging projects in the navigation channel and turning basin are also expected to be evaluated for dioxin prior to acquisition of federal permits, approval from Ecology, and implementation of the work.

Comment 5.10

The ultimate goal of dredging 500,000 cubic yards of sediment would dramatically impact physical, chemical and biological parameters. Dredging would alter the structure of the estuary and its ability to maintain a healthy mix of phytoplankton and herbivores or remediate contamination, both of which happen best in shallow waters in the presence of abundant sunlight and oxygen. Dredging a large hole in an estuary will impact circulation of algae and herbivores and reduce the availability of atmospheric oxygen and sunlight, all of which increase the risk of eutrophication. It's the structure of estuaries that determines their viability.

Ecology Response

Berths 2 and 3 have been previously dredged to deeper than -40 feet MLLW. This dredging project will dredge sediments to their federally authorized depths within the federal turning basin. Other impacts associated with remaining navigation channel and turning basin dredging are not pertinent to the Agreed Order or Interim Action Plan. Ecology has coordinated with the Washington Department of Fish and Wildlife and the National Marine Fisheries Service to ensure the work is conducted within the time frame when fish would least likely be present. Turbidity and dissolved oxygen will be measured in real time during all in water activities and water quality criteria must be met at all times. Rigorous monitoring will ensure impacts are kept at a minimum and within 150 feet of the work area.

Comment 5.11

Increased lighting adjacent to the shore and the runoff of tannins and pesticides from the log yard pose threats to the same parameters of dissolved oxygen and primary production. The cumulative

impacts of all these threats should have been considered in an Environmental Impact Statement. Hopefully dissolved oxygen and primary production will be documented ahead of time in a baseline study. Impacts can be determined any time after the fact. Then Budd Inlet can at least serve as a case study: How to strangle a bay.

Ecology Response

Port operations are not pertinent to the Agreed Order or Interim Action Plan. Dissolved oxygen and turbidity will be measured at background locations during the project for comparison purposes.

Comment 5.12

The kinds of persistent toxins that are buried in Budd Inlet should not find their way into the food web. We are at a point where dioxins and PCBs are accumulating in apex predators in concentrations at which damage is predicted to occur and the damage has, as predicted, occurred. This dredging will result in greater bioavailability of the most biologically damaging persistent toxins.

Ecology Response

Best Management Practices and water quality monitoring during dredging will limit resuspension of dioxin associated with suspended sediments. The new sediment surface after dredging will be sampled to measure dioxin concentrations. These results will be compared with surface concentrations collected prior to dredging. The project will comply with Ecology's anti-degradation requirements (WAC 173-204-120). A clean sand cover will be placed during the first dredging season in the dredged area to comply with anti-degradation criteria.

Comment #6: Erika Hoffman, Sediment Management Unit of US EPA

Submitted on October 23, 2008

FYI -Wanted to summarize and document some of the conclusions that I came to after last night's meeting/discussion about Ecology's interim clean-up plan at the Port of Olympia.

1. Although ECY is billing this project as an interim clean-up action, its design (or lack thereof) seems to belie that goal. ECY claims that the project will:

- Remove a mass of dioxin from the environment (which is true - although not nearly the most contaminated sediments ID'd thus far);
- Reduce exposure and thereby risk associated with dioxins (which is unknown since the project has at least an equally strong chance of liberating more dioxin that is currently unavailable to biota since it's in subsurface sediments);

- Serve as a pilot dredging project to inform potential future dredging in Budd Inlet (which is highly unlikely since there is neither sufficient pre-dredge information on slope stability and vertical/horizontal under pier dioxin concentrations nor does there appear to be adequate monitoring proposed during and post-dredge to determine the effects of the project on the under pier, berth and in the adjacent navigation channel. As far as I can tell, the only recourse that is being proposed to redress sloughing is returning during the second dredging season to remove any material that has entered the berth. If this were really a pilot project, it would be much smaller in scale.

2. The Interim Action Plan (IAP - which I have reviewed and submitted redline comments 10/21/08 to ECY) describes dredging controls that are, in my opinion, not stringent/prescriptive enough for clean-up dredging.

- The contractor (Anchor) is proposing performance-based controls that are keyed solely to turbidity monitoring.
- There is very little specific information provided on how much monitoring and how much oversight this project will receive.
- Most of the salient aspects of the dredging that are described (e.g., use of the standard 150 ft mixing zone, use of an small open clamshell bucket, physical filtration of effluent from dewatering activities) reflect procedures/standard practices typically employed in a regular dredging project rather than what would be standard for clean-up dredging of a site with moderate-high levels of dioxin contamination and a high likelihood (based on fines content) for resuspension/residuals.

3. There are, in my estimation, several major risks associated with the project as currently described in the IAP

- The dredging will leave a new surface that is more contaminated than was there initially (due to under pier sloughing and/or residuals). The nominal 6-inch diluting sand layer that is being considered as a band-aid will do little if anything to address this exposure since it is likely to be covered by sloughed under pier material and is too thin to resist resuspension by ship/tug prop wash.
- Dioxin-contaminated subsurface sediments will continue to be mobilized from dredging and subsequent shipping operations in the berth post-dredging which will result in a marked decrease in sediment quality in lower Budd Inlet.
- Increased dioxin concentrations in surface sediment will remain until a final remedy is developed by ECY for Budd Inlet. The IAP does not present a definitive plan as to when/how additional dredging/capping will be performed by the Port if the under pier sediments are found to be a source of continuing dioxin exposure. The Port has stated that it is willing to come back during a second dredging cycle in summer of 2009 and re-dredge any under pier sediments that may have sloughed into the berth (based on results of planned post-dredge bathymetry and chemical testing). However, the Port maintains that there is no feasible way to directly remove contaminated sediments from under the pier (pier removal is not being considered) or physically contain side slopes (via armoring or sheet pile wall) although these under pier sediments contain among the highest dioxin concentrations reported in Puget Sound. Thus, there is no

provision in the IAP for controlling what may ultimately be a continuing source of dioxin-contaminated sediments to the berth area and Budd Inlet.

- The dredging will be performed in a manner more suited to a navigation dredging project than a clean-up project. Any remedial options/approaches that are costly or time-consuming have been summarily dismissed from consideration in this interim plan as the Port's desire to achieve permitted berth depths by the end of the dredging window (March 2009) is driving the project schedule.

4. My preference would be to delay this dredging project at least until summer 2009 to allow for necessary testing and planning (especially Re. side slope stability and contamination) and the design of engineering controls which could be put in place to limit the mobilization of under pier contaminated sediments and/or cap residual contamination in the berth area. This would allow for the dredging (and any necessary capping) to be done once and in a fashion that has a high likelihood for success.

5. If the interim project goes forward this winter, I would recommend the following:

- ECY requires stringent controls/prescriptions on the dredging process to limit as much as possible sediment resuspension/sloughing. These would affect the equipment used (bucket size and types), speed of dredging, amount of monitoring, independent contractor oversight, smaller mixing zones, frequent bathymetric surveys, pre- and post dredge surface sediment monitoring within and outside the berth area. Such controls would necessarily have the effect of significantly slowing down the dredging process. If dredging were to start in the beginning of January 2009, it would appear that there would be sufficient time to complete the work by March 1st.
- Foregoing placement of any sand layer or sand cap in the first dredging season. Instead, I would recommend the focus be on information gathering and response planning. Surface sediment grab samples (particularly near the wharf face) should be taken immediately post-dredging (both within and outside the berth area). These should be analyzed for dioxin and conventionals. An additional round of bathymetry and chemistry data should be collected after 2-4 months of shipping operations in the berth area. Based on the results of these data and prior to opening of the work window in summer 2009, the determination can be made as to whether and what actions should be taken to address contamination issues in or affecting the berth. Possible recourse could be additional dredging in the berth and or under-pier area. Other possibilities would be an engineered (and armored) cap in the berth and/or under pier area or a sheet pile wall or other methods of containing/isolating under pier contaminated sediments.
- ECY stipulates as a requirement of the AO that the Port commit to addressing any significant degradation in sediment dioxin that results from the interim action. My concern is that once the Port of Olympia's navigation dredging needs are met, they will have no impetus (or funding) to remedy any worsening of the situation caused by their berth dredging.
- The COE should process this project as an Individual Permit (IP) rather than under a NW #38. As discussed in detail in a separate letter that I sent to Jim Greene (COE) (email dated 7/16/07), intense public interest and scrutiny of this high profile project

as well as the ongoing nature of data acquisition and review (the Port will be providing ECY with a 3rd round of additional data from the berth and under pier area in the upcoming weeks), point to the need for a full public review afforded by an IP.

Ecology Response

Please see below for response to individual comments

Comment 6.1

1. Although ECY is billing this project as an interim clean-up action, its design (or lack thereof) seems to belie that goal. ECY claims that the project will:

- Remove a mass of dioxin from the environment (which is true - although not nearly the most contaminated sediments ID'd thus far);
- Reduce exposure and thereby risk associated with dioxins (which is unknown since the project has at least an equally strong chance of liberating more dioxin that is currently unavailable to biota since it's in subsurface sediments);
- Serve as a pilot dredging project to inform potential future dredging in Budd Inlet (which is highly unlikely since there is neither sufficient pre-dredge information on slope stability and vertical/horizontal under pier dioxin concentrations nor does there appear to be adequate monitoring proposed during and post-dredge to determine the effects of the project on the under pier, berth and in the adjacent navigation channel. As far as I can tell, the only recourse that is being proposed to redress sloughing is returning during the second dredging season to remove any material that has entered the berth. If this were really a pilot project, it would be much smaller in scale.

Ecology Response

The project will avoid the area with localized elevated concentrations north of the dredge area in an effort to collect additional information on site specific conditions and effectiveness of the methods to be implemented. This interim action will provide valuable information to be used when considering various cleanup options for the remainder of contamination in West Bay to be conducted as part of a permanent or final remedy.

Any elevated dioxin concentrations contained in the new post-dredge sediment surface will be immediately mitigated by placement of the clean sand layer. This will result in surface sediment with concentrations lower than pre-dredge surface concentrations and an acceptable environment for benthic organisms.

Post-dredge monitoring will be conducted to evaluate bathymetry changes and slope sloughing as well as surface sediment concentrations. This information will be used to evaluate various cleanup options for the remainder of contamination in the Port's berthing areas or the larger Inlet.

Potentially elevated dioxin concentrations of sediment on the slope under the pier may be exposed during the dredging project. There is expected to be no increased incremental risk above existing conditions. The home range of fish travelling into and out of the berth and underpier areas is far greater than the underpier slope area that may slough (700 feet long by 10 to 20 feet wide). In addition, natural sediment deposition will return underpier slope sediment concentration to ambient conditions relatively quickly, which is on the order of 20 ppt TEQ in West Bay.

Dredging and clean cover placement pilot activities will provide valuable information about the effectiveness of certain methods (i.e., dredging and clean cover placement) and site-specific conditions. Specifically, the dredging methods and post-dredge monitoring will provide information on rate and amount of under-pier sloughing, resuspended sediment and turbidity, and implementability of similar dredging methods during future cleanup. Underpier sloughing is expected to be similar along the entire Marine Terminal thanks to the same slope conditions and dredging history. Placement of clean cover (if necessary) will also provide valuable information for use in future cleanup activities in West Bay. Monitoring following dredging and placement of clean cover material will also provide information on the chemical concentrations of the final dredged surface and rate and spatial extent of dioxin recontamination on the cover material.

Comment 6.2

2. The Interim Action Plan (IAP - which I have reviewed and submitted redline comments 10/21/08 to ECY) describes dredging controls that are, in my opinion, not stringent/prescriptive enough for clean-up dredging.

- The contractor (Anchor) is proposing performance-based controls that are keyed solely to turbidity monitoring.
- There is very little specific information provided on how much monitoring and how much oversight this project will receive.
- Most of the salient aspects of the dredging that are described (e.g., use of the standard 150 ft mixing zone, use of an small open clamshell bucket, physical filtration of effluent from dewatering activities) reflect procedures/standard practices typically employed in a regular dredging project rather than what would be standard for clean-up dredging of a site with moderate-high levels of dioxin contamination and a high likelihood (based on fines content) for resuspension/residuals.

Ecology Response

The Interim Action Work Plan has since been revised as a result of your comments and other comments received during the 30 day comment period. A Water Quality Monitoring and Sediment Plan (WQMSSP) was developed in coordination with Ecology and the US Army Corps of Engineers (Corps) prior to any in-water work. A Dredge and Disposal Plan was also developed which outlines how the Port is going to fulfill water quality criteria during dredge operations. Both documents are now available online (visit http://www.ecy.wa.gov/programs/tcp/sites/budd_inlet/budd_inlet_hp.htm).

Turbidity and dissolved oxygen will be used to monitor in-water dredge activities, and will be consistent with the standard 401 water quality certification requirements issued by Ecology. Activities will be modified if turbidity exceeds criteria specified in the plan.

Ecology will have considerable oversight during the dredge. Dredging is expected to take eight weeks. Ecology staff members will be on scene for all dredging operations each day during the first two weeks of work. After that period, we will evaluate the extent of on-scene staffing we will use for the remainder of the project. At a minimum, site inspections will be done twice daily.

Comment 6.3

3. There are, in my estimation, several major risks associated with the project as currently described in the IAP

- The dredging will leave a new surface that is more contaminated than was there initially (due to under pier sloughing and/or residuals). The nominal 6-inch diluting sand layer that is being considered as a band-aid will do little if anything to address this exposure since it is likely to be covered by sloughed under pier material and is too thin to resist resuspension by ship/tug prop wash.
- Dioxin-contaminated subsurface sediments will continue to be mobilized from dredging and subsequent shipping operations in the berth post-dredging which will result in a marked decrease in sediment quality in lower Budd Inlet.
- Increased dioxin concentrations in surface sediment will remain until a final remedy is developed by ECY for Budd Inlet. The IAP does not present a definitive plan as to when/how additional dredging/capping will be performed by the Port if the under pier sediments are found to be a source of continuing dioxin exposure. The Port has stated that it is willing to come back during a second dredging cycle in summer of 2009 and re-dredge any under pier sediments that may have sloughed into the berth (based on results of planned post-dredge bathymetry and chemical testing). However, the Port maintains that there is no feasible way to directly remove contaminated sediments from under the pier (pier removal is not being considered) or physically contain side slopes (via armoring or sheet pile wall) although these under pier sediments contain among the highest dioxin concentrations reported in Puget Sound. Thus, there is no provision in the IAP for controlling what may ultimately be a continuing source of dioxin-contaminated sediments to the berth area and Budd Inlet.
- The dredging will be performed in a manner more suited to a navigation dredging project than a clean-up project. Any remedial options/approaches that are costly or time-consuming have been summarily dismissed from consideration in this interim plan as the Port's desire to achieve permitted berth depths by the end of the dredging window (March 2009) is driving the project schedule.

Ecology Response

The 6-inch minimum sand layer is not expected to be heavily disturbed by ship or tug propwash. Ships using the berths do not have/use bow thrusters and come in completely under tug power. When berthing vessels (ingress), tugs are located on the outside (west) of the vessel, and propwash is directed away from the berth area. During egress from the berth, the vessel bow line is freed (north), and tugs are oriented parallel to the vessel facing north. As the tug powers forward, the vessel gradually turns to the northwest, at which point the stern line is freed, and the tug and vessel travel out of the berth area and into the shipping channel under tug power. The vessels directed by the tugs are generally 70-90 feet wide. Neither of these scenarios is likely to cause heavy disturbance of the clean sand cover or underpier areas.

The clean sand cover will likely mix with the upper most surface sediment but also create a clean surface that did not mix with surface sediments. This will provide clean material for benthic invertebrates. The cover is not intended to be permanent/final cleanup solution for the sediment. It is also not an engineered cap designed to withstand vessel wake and propwash forces.

Water quality monitoring and adjustments to in-water work will be conducted as required to limit resuspension of sediments during dredging.

Material on the underpier slope may slough onto the clean sand layer. This sloughed material will be redredged if navigation is impaired or the clean sand cover is compromised along the berth face. Sloughed material is expected to remain near the berth face and not distribute over the remainder of the berth area sand layer. In addition, natural sediment deposition will occur on the sand layer over time. Current surface sediment concentrations in West Bay indicate this sediment contains about 20 ppt TEQ.

Removal of underpier sediments are infeasible or will result in greater resuspension or safety concerns, as described in the IAP. The pilot project is being conducted to determine if the proposed plan is feasible and effective at addressing similar contaminated areas in West Bay. Removal of the pier to cleanup underpier sediments has not been considered.

Comment 6.4

4. My preference would be to delay this dredging project at least until summer 2009 to allow for necessary testing and planning (especially Re. side slope stability and contamination) and the design of engineering controls which could be put in place to limit the mobilization of under pier contaminated sediments and/or cap residual contamination in the berth area. This would allow for the dredging (and any necessary capping) to be done once and in a fashion that has a high likelihood for success.

Ecology Response

Additional chemistry data from the supplemental sampling is available, and as a result, a clean cover will be placed during this dredging season. This project is a small project that will be used to determine if engineering controls used in this cleanup adequately address underpier sloughing.

Post-dredge monitoring of the sand cover will provide valuable information on the rate and magnitude of recontamination from underpier sloughing and natural deposition in West Bay.

Comment 6.5

5. If the interim project goes forward this winter, I would recommend the following:

- ECY requires stringent controls/prescriptions on the dredging process to limit as much as possible sediment resuspension/sloughing. These would affect the equipment used (bucket size and types), speed of dredging, amount of monitoring, independent contractor oversight, smaller mixing zones, frequent bathymetric surveys, pre- and post dredge surface sediment monitoring within and outside the berth area. Such controls would necessarily have the effect of significantly slowing down the dredging process. If dredging were to start in the beginning of January 2009, it would appear that there would be sufficient time to complete the work by March 1st.
- Foregoing placement of any sand layer or sand cap in the first dredging season. Instead, I would recommend the focus be on information gathering and response planning. Surface sediment grab samples (particularly near the wharf face) should be taken immediately post-dredging (both within and outside the berth area). These should be analyzed for dioxin and conventionals. An additional round of bathymetry and chemistry data should be collected after 2-4 months of shipping operations in the berth area. Based on the results of these data and prior to opening of the work window in summer 2009, the determination can be made as to whether and what actions should be taken to address contamination issues in or affecting the berth. Possible recourse could be additional dredging in the berth and or under-pier area. Other possibilities would be an engineered (and armored) cap in the berth and/or under pier area or a sheet pile wall or other methods of containing/isolating under pier contaminated sediments.
- ECY stipulates as a requirement of the AO that the Port commit to addressing any significant degradation in sediment dioxin that results from the interim action. My concern is that once the Port of Olympia's navigation dredging needs are met, they will have no impetus (or funding) to remedy any worsening of the situation caused by their berth dredging.
- The COE should process this project as an Individual Permit (IP) rather than under a NW #38. As discussed in detail in a separate letter that I sent to Jim Greene (COE) (email dated 7/16/07), intense public interest and scrutiny of this high profile project as well as the ongoing nature of data acquisition and review (the Port will be providing ECY with a 3rd round of additional data from the berth and under pier area in the upcoming weeks), point to the need for a full public review afforded by an IP.

Ecology Response

Ecology will oversee all cleanup activities to ensure adequate controls are being implemented to limit sediment re-suspension. Water quality criteria will be enforced to confirm compliance with the 401 water quality certification or comparable Ecology-imposed requirements. Bathymetric surveys will be conducted immediately following dredging, immediately following sand cover, and within the first six months after sand placement. Surface sediment monitoring will also be conducted post-dredge and several months after sand placement. The details of this work will be documented in plans submitted and approved to Ecology.

Dredging (15 days), confirmational bathymetry and removal of shallow areas (5-10 days), post-dredge sampling (5 days), placement of the clean sand layer (7 days), and confirmational bathymetry to correct thin cover areas (5-10 days) will require between 37 and 47 days of in-water work. Work must begin by the beginning of February in order to finish by the end of the fish window on March 15, 2009.

Supplemental sampling details will be coordinated with Ecology, but are expected to be tested for dioxin, grain size, moisture content, and total organic carbon. The results of the sampling will be provided to Ecology and next steps will be evaluated at that time.

An engineered (and armored) cap in the berth area is not permitted in a federally authorized channel. Depending on the results of the pilot study, additional actions to control contaminated underpier sediments will be evaluated, if necessary.

The Port of Olympia has included in their Capital Plan to dredge the full length of the Marine Terminal to its federally authorized depth of -40 feet MLLW plus 2 feet of overdredge in 2011. The Port expects to address all areas of contamination as part of the larger West Bay cleanup. The Port and Ecology are committed to working together toward a final cleanup of the berth areas.

The Corps decided what type of Section 404 permit is appropriate for this project. The NWP 38 is specific to cleanup projects, and includes those cleanups under state lead. As part of the permit, the Corps stipulated several conditions to protect water quality such as approving the water quality monitoring plan required by the Agreed Order.. Ecology also required the Dredging and Disposal Plan as part of the Agreed Order. This document outlines how the Port will meet water quality criteria during the dredge and contains a full list of the water quality best management practices. Both documents are now available online (visit http://www.ecy.wa.gov/programs/tcp/sites/budd_inlet/budd_inlet_hp.htm).

Comment #7: Zena Hartung

Received on October 23, 2008

From: Zena Hartung [mailto:zhartung@gmail.com]
Sent: Thursday, October 23, 2008 12:34 PM
To: 'rlaw461@ecy.wa.gov'; 'lpea461@ecy.wa.gov'
Subject: Oct 21 Public Info Night

Dear Ms Lawson & Ms. Pearson,

I attended the public meeting Oct 21 held at Washington Middle School. I came out of a concern for the plans for dredging, and nothing offered that night reassured me. Hence, when I heard the two women identified as Erica and Theresa discussing with you the pitfalls and problems, I was immediately interested.

Please tell me if you know these women, have they any authority? What did you think of their criticisms of the project?

I did not hear everything, but what I heard was:

1-the turbidity of the dredging will be a problem for all living organisms, and will not dissipate quickly, causing die-back in an area likely larger than the 150' planned observation area.

2-the plans for dredging with a clamshell will release lots of contaminated sediments back into the water and it will spread everywhere

3-the plans for dredging are proceeding too rapidly, other ports have been stopped from dredging with less documented pollution than here.

4-the dredging will impact the channel...I didn't understand what the consequences of this were

What do you make of this, did I get it right? Did they make these claims? What do you plan to do about them?

I would appreciate a response.

Thanks, Zena Hartung

Ecology Response

The women that you are referring to, Erica Hoffman (EPA sediment specialist) and Teresa Michelsen (private consultant) do not have direct regulatory oversight roles in this project. Their comments are captured in comment #6 starting on page 18 and Ecology has responded to their written concerns on pages 18 – 26.

Comment 7.1

1-the turbidity of the dredging will be a problem for all living organisms, and will not dissipate quickly, causing die-back in an area likely larger than the 150' planned observation area.

Ecology Response

The water quality impacts that result from this project are short term. All applicable water quality regulations are being followed. A Water Quality Monitoring and Sediment Sampling Plan (WQMSSP) was developed and has been approved by Ecology and the Corps. A Dredging and Disposal Plan was also developed. This document outlines how the Port will meet water quality criteria during the dredge and contains a full list of the water quality best management practices. Both documents are available online (http://www.ecy.wa.gov/programs/tcp/sites/budd_inlet/budd_inlet_hp.htm) and in central records in our Lacey office. Please contact Debbie Nelson at (360) 407-6365 to set up an appointment to review the documents in records.

Turbidity and dissolved oxygen will be used to monitor in-water dredge activities, and will be consistent with the standard 401 water quality certification requirements issued by Ecology. Activities will be modified if turbidity exceeds criteria specified in the plan.

Best management practices will be employed and closely monitored during this project to ensure that any impacts of this action will be minimal. Impacts to the environment (including flora and fauna) were considered during the project design and SEPA review and we have worked with our sister agencies to assure that any impacts are minimal and temporary

Comment 7.2

2-the plans for dredging with a clamshell will release lots of contaminated sediments back into the water and it will spread everywhere

Ecology Response

Please see the response to comment #3.3 on page 8 for information about the use of a clamshell bucket.

Comment 7.3

3-the plans for dredging are proceeding too rapidly, other ports have been stopped from dredging with less documented pollution than here.

Ecology Response

Ecology has no documentation of this.

Comment 7.4

4-the dredging will impact the channel...I didn't understand what the consequences of this were

Ecology Response

This comment is unclear. This specific comment was not recorded in written form and was not included in Erica's comments (on page 18).

Comment 7.5

What do you make of this, did I get it right? Did they make these claims? What do you plan to do about them?

Ecology Response

Ecology has responded to all of the comments submitted by Erica. Ecology has considered these issues and all other public comments. The appropriate steps have been taken so effects from the dredge are minimal and temporary. Plans are in place to ensure this and that contaminants are contained to protect the environment. Please see pages 18-25.

Comment #8: Stanley Stahl

Comments received on November 3, 2008

Ms. Pearson,

This 30 day period for public comment began 10/1/08, and went to 11/1/08, which came out on a Saturday. I am assuming because of the weekend the comment period would be extended to today 11/3, so am submitting my comment at this time, and am signing on to comments made during this comment period by Arthur West and by Harry Branch.

First, I would like to sign on to the thirteen points made by Arthur West in his comment dated 10/27/08, as I believe he has valid points as to why the Agreed Order and the DNS SEPA are both not in order, and needs much more diligent consideration of impacts before any dredging ensues. Arthur's reasons are -

1. The project is intended to be part of an integrated plan of development at the port, involving rail, paving, stormwater facilities, and alteration of regional trade patterns requiring a joint SEPA-NEPA determination of significance and EIS. No Socioeconomic analysis has been prepared.
2. The "cleanup" dredging is a pretext for a development project that will result in larger ships and greater traffic resulting in extremely significant impacts, and which will improperly expend state funds to support Weyerhaeuser.

3. the project will result in degradation of water quality and violation of the clean water act from log yard related discharge. The project will also result in greater timber harvest from Western Washington and resulting flooding, habitat destruction, and other significant impacts caused by weyerhaeuser logging in the region. Import of Canadian timber has potential for introduction of destructive species, and other significant environmental and economic impacts.
4. The cumulative impact of geographically related projects and approvals, including the Reissue of the General Industrial stormwater permit by Ecology have not been evaluated. Water quality degradation from the operation of the port as a log yard for Weyerhaeuser and a facility for loading larger ships has not been evaluated.
5. No joint SEPA-NEPA document has been prepared. This is especially defective in light of the federal funding for the STIP rail facilities designed to be part of the greater port expansion plan, the federal funds involved, and the federal permits required.
6. The six enforceable policies of the CZMA have not been addressed or complied with. he project violates the policy and letter of the CZMA.
7. The project poses a threat of spread of dioxin and does not "clean up" the areas of greatest contamination, but is instead an abuse of MTCA to use State "cleanup" funds to subsidize a corporate log yard operation.
8. The dredging has always been intended as part of a greater regional development program involving many developments required by and mentioned in the Port-Weyerhaeuser lease for which no SEPA or NEPA review has been conducted.
9. The project has a potential to degrade water quality and threatened and protected species habitat, including the Orca and Chinook Salmon.
10. No assessment has been made of the possible impact of the disposal of the dredged spoils.
11. No assessment has been made of the potential impacts of greater marine vessel and vehicular traffic on water or air quality, or protected species, or of he potential for accidents or oil spills.
12. The information in the checklist is incorrect and inadequate. The use of MTCA i improper for a project which has development, not cleanup as its actual goal.
13. The project, and the vehicle and vessel traffic it will promote will result in greater contamination of the sound and in greater spread of the toxic contamination already present in the sound.

Second, I have also read the comments made by Harry Branch of October 20, 2008, and agree with them, and will sign on to his statements as if they were my own. Harry points out that the

project is underfunded at approximately \$3 million from the Port's sale of bonds, \$3 million from Ecology with MTCA funds (this is not certain), and is short by at least \$3 million if the MTCA funds do become available. Harry also points out that this dredging is relatively risky, as the contaminants are essentially stable buried in the lower depths, beneath the marine life and the food chain, and only become a danger when they are disturbed.

In addition to Arthur and Harry's reasons above, there is another point I would like to make. Ecology should require the Port and the City of Olympia to deal with the outfalls on the west side of the Port peninsula at the marine terminal berths, which outfalls are lacking flap gates or storm gates, which would prevent back flow from going back up the pipes at high tide.

In the case of one of the primary lines, a 30 inch pipe belonging to the City of Olympia, and being used by the Port, discharges into Budd Inlet out of outfall "C". This pipe is picking up stormwater from about 90% of the Port peninsula, and originates much further south beneath the downtown of Olympia. The back flow backs all the way up this drain pipe. It would not be a good idea to allow dredging in the area where the contamination can go back up the pipes to come back down again, putting a new flume of contaminants into the water column, under pressure and with great force.

Stanley Stahl

Ecology Response

Please see below for response to individual comments.

Comment 8.1

This 30 day period for public comment began 10/1/08, and went to 11/1/08, which came out on a Saturday. I am assuming because of the weekend the comment period would be extended to today 11/3, so am submitting my comment at this time, and am signing on to comments made during this comment period by Arthur West and by Harry Branch.

Ecology Response

The public comment period actually ran from October 7 to November 7, 2008. We avoid ending comment periods on weekend days.

Comment 8.2

First, I would like to sign on to the thirteen points made by Arthur West in his comment dated 10/27/08, as I believe he has valid points as to why the Agreed Order and the DNS SEPA are both not in order, and needs much more diligent consideration of impacts before any dredging ensues.

Ecology Response

Thank you, your support of Mr. West and Mr. Branch's comments is noted. Ecology responses to comments from Mr. Branch Mr. West are located on pages 10 and 53 respectively.

Comment 8.3

Second, I have also read the comments made by Harry Branch of October 20, 2008, and agree with them, and will sign on to his statements as if they were my own. Harry points out that the project is underfunded at approximately \$3 million from the Port's sale of bonds, \$3 million from Ecology with MTCA funds (this is not certain), and is short by at least \$3 million if the MTCA funds do become available. Harry also points out that this dredging is relatively risky, as the contaminants are essentially stable buried in the lower depths, beneath the marine life and the food chain, and only become a danger when they are disturbed.

Ecology Response

Project funding is not pertinent to the Agreed Order for the Interim Action. The new sediment surface after dredging will be sampled to measure dioxin concentrations. These results will be compared with surface concentrations collected prior to dredging. The project will comply with Ecology's anti-degradation requirements (WAC 173-204-120). Ecology has required that a clean sand cover be placed during the first dredge season in the dredged area to provide a cleaner substrate for organisms.

Comment 8.4

In addition to Arthur and Harry's reasons above, there is another point I would like to make. Ecology should require the Port and the City of Olympia to deal with the outfalls on the west side of the Port peninsula at the marine terminal berths, which outfalls are lacking flap gates or storm gates, which would prevent back flow from going back up the pipes at high tide.

Ecology Response

Thank you for the suggestion.

Comment 8.5

In the case of one of the primary lines, a 30 inch pipe belonging to the City of Olympia, and being used by the Port, discharges into Budd Inlet out of outfall "C". This pipe is picking up stormwater from about 90% of the Port peninsula, and originates much further south beneath the downtown of Olympia. The back flow backs all the way up this drain pipe. It would not be a good idea to allow dredging in the area where the contamination can go back up the pipes to

come back down again, putting a new flume of contaminants into the water column, under pressure and with great force.

Ecology Response

Best management practices (BMPs) described in the Interim Action Plan will be implemented to reduce the generation of suspended sediments. Water quality parameters, including turbidity and dissolved oxygen, will be monitored to confirm compliance with water quality conditions set by Ecology. These BMPs and water quality monitoring will decrease the potential spread of dioxin associated with suspended sediments. Therefore, dioxin associated with suspended sediments is not expected to flow into the Port's outfalls. In addition, Outfall "C" extends up the slope to above the waterline no more than 60 feet. Suspended sediment could not travel up the pipe further than 60 feet, which is still west of the bulkhead and under the existing pier.

Comment #9: Jerome Parker

Comments received on November 7, 2008

Please accept the following comments submitted in conformance with the brochure issued by Ecology on the above document and related documents (Publication No. 08-09-143). In the body of my comments, I raise substantive issues. However, discussion of such substantive issues is preceded by and conditioned on comments regarding the accessibility of key information for which comment is sought by the Department.

The brochure states: "You are invited to ..review the Agreed Order and Interim Action Work Plan." I was able to access the above documents only after a very detailed and difficult search of several web sites. In the electronic copy of the above cited brochure I was not able to identify any active links to the Agreed Order or the Interim Action Plan nor was I able to find any listing of the addresses for such documents. In the web based copies of these documents that I was able to locate through my own efforts, the materials were hardly user-friendly. The Interim Action Plan was broken into several separate documents. More significantly, I was not able to copy any portion of this document in a manner acceptable for use in these comments. I experimented with two browsers but was not able to overcome major format problems.

Ecology states in the above cited brochure that it has completed a SEPA DNS and states that the DNS and the related checklist are available for review. I could not locate either of these documents at any Ecology web site.

Given my experience in attempting to undertake an informed review of the Agreed Order and the Interim Action Plan (IAP), I conclude that both logic and provisions in the Administrative Procedures Act suggest Ecology extend the comment period and make the key documents cited above available in a user friendly manner on the Agency web site.

The following comments in no way are meant to suggest such action is not necessary.

I attended the Public Open House on October 21 regarding the proposed Budd Inlet Sediment Investigation and Interim Cleanup Action and have attempted to review those portions of relevant documents I was able to access on the Ecology web site.

Based on this limited access to relevant information, I have identified the following concerns. First, I was unable to find any discussion in either the Agreed Order or the IAP of the extent to which MTCA funds are being used to fund the actions under the Agreed Order. In the IAP, I was able to find a statement of the four purposes to be served by this plan.(p.2) However, the remaining information I was able to access raises clear and obvious questions about the first three. I was unable to find any compelling argument that the proposed actions constitute an appropriate, much less a preferred, approach to protecting health of both the public and of Budd Inlet. If, indeed, navigational dredging is an appropriate use of MTCA funds, the IAP should cite where such use of funds has been made in other areas of the Sound.

It was the final rationale for the plan that raises a more specific concern. The IAP states that the proposed actions are intended to maintain a navigational depth of 39 feet at Berths 2 and 3. I found no discussion, much less justification, for use of MTCA funds for the purpose of navigational enhancement.

The IAP contains no discussion of how the proposed action relates to the broader issue of toxic contamination in Puget Sound. There is nothing to suggest that the dredging of these two berths represents a prudent use of limited funds. It would be useful if the proposed action were described in relation to the overall issue of toxic contamination in the Sound and to alternative uses of limited funds. There may be compelling reasons for the proposed action at Berths 2 and 3 but such evidence is obvious in its absence in this IAP.

Both the Agreed Order and the IAP do a credible job of describing toxic contamination in Budd Inlet. However, I was not able find in either the Agreed Order or the IAP any discussion of what I read to be dramatically differing distribution of toxics at or near the proposed dredge sites. It appears that at the proposed dredge site, contamination is less severe at successive depths. (p. 8, paragraph 1; p. 10, paragraph 2) However, the contamination is massively higher at a depth of 4 to 6 feet in an area north of the proposed dredge area (p. 9, paragraph 1). If this reading of the data is correct, some explanation for this anomalous distribution of contamination is required. (A clearer depiction of the proposed dredge area and the three Port berths in relation to the sampling sites would bring clarity to what is a very confusing discussion of sampling results.)

Related to this apparent anomaly, the portrayal of the proposed dredging as a “pilot” effort is problematic. First, the term “pilot” and the considerable discussion of alternative dredging technologies in the IAP (Section 4.1/ page 14-18) appears superfluous at best. There has been extensive experience in dredging of toxics in Puget Sound, e.g. at the Puget Sound Navel Shipyard and in the Duwamish Basin. The evaluation of past dredging for toxics appears extensive. In light of this body of existing knowledge, the proposed “pilot” dredging in Budd Inlet raises the question of whether it is directed more to economic development than to improved technology or environmental understanding.

Moreover, the designation of the dredging as “pilot” implies that further dredging is contemplated. In fact, such further dredging has been planned as far back as 1998. Given the

massive contamination at depths of 4-6 feet in areas planned for further dredging, the obvious question of what purpose the “pilot” study serves must be addressed. The conditions differ dramatically.

A specific concern, of course, is the effect of future dredging on the suspension and redistribution of toxics from the area north of Berths 2 and 3. (I assume this to be Berth 1.) What can the “pilot” study possibly provide of value for the evaluation of such future dredging? In light of this extreme contamination at depth in the area north of Berths 2 and 3, the IAP failure to discuss any alternatives to the proposed dredging constitutes a flaw, perhaps fatal, in the IAP. Logic and provisions of SEPA appear to demand that the IAP discuss the possibility of leaving the heavily contaminated sediments north of Berths 2 and 3 undisturbed.

The brochure states that a SEPA DNS has been prepared and is available. As stated above, I was unable to find any link to such documents at the Ecology web site. It would have been most appropriate for Ecology to make its decision to not undertake a more detailed environmental review known to the same list of interested parties as received notice of the Agreed Order. Because I was unable to access the DNS and Checklist, I cannot know whether alternatives to the proposed pilot and future dredging have been considered. However, SEPA is designed to encourage consideration of alternatives (WAC 197-11-440 (5)) I am not sufficiently familiar with case law to know if alternatives must be discussed in a DNS but it is clear that the spirit of SEPA demands this.

In summary, the distribution of the Agreed Order and the Interim Action Plan has not been adequate. Adequate access to the key documents must be provided on the Agency web site and the comment period for these documents extended.

The rationale for use of MTCA funds for a dredging project for a port is absent in the Agreed Order and the IAP and needs to be addressed in a revised IAP.

The use of a “pilot” site that is significantly different than an adjacent site with a vastly higher concentration of toxics that is proposed for future dredging must be explained in a revised IAP. If an adequate rationale for this specific “pilot” area cannot be advanced, the proposed IAP should be withdrawn.

Ecology Response

Please see below for response to individual comments

Comment 9.1

In the body of my comments, I raise substantive issues. However, discussion of such substantive issues is preceded by and conditioned on comments regarding the accessibility of key information for which comment is sought by the Department.

The brochure states: “You are invited to ..review the Agreed Order and Interim Action Work Plan.”

I was able to access the above documents only after a very detailed and difficult search of several web sites. In the electronic copy of the above cited brochure I was not able to identify any active links to the Agreed Order or the Interim Action Plan nor was I able to find any listing of the addresses for such documents. In the web based copies of these documents that I was able to locate through my own efforts, the materials were hardly user-friendly. The Interim Action Plan was broken into several separate documents. More significantly, I was not able to copy any portion of this document in a manner acceptable for use in these comments. I experimented with two browsers but was not able to overcome major format problems.

Ecology Response

Ecology regrets that you had problems accessing information about the Port of Olympia Interim Action and understand your frustration. In the future, please feel free to contact Meg Bommarito, public involvement coordinator (360-407-6255) or myself if you have trouble getting a hold of documents. We would be more than happy to help you find what you need.

The link on the electronic version of the fact sheet was repaired as soon as you alerted us to this problem. In the future, we will make sure to double check that all links are working when they are included in the electronic fact sheet.

Links to all of the documents available for public review can be found on the cleanup site web page. They are listed below the introductory text and site photo. Unfortunately, at this time, the system Ecology uses to post documents online requires all documents to be 1 MB or less in size. Because most of the legal documents are much larger than this, we need to break them into pieces to make them accessible online. We understand that this makes it more difficult to read and print the documents and are currently investigating possible remedies for this. I'm not sure why you had problems printing the documents but again, feel free to contact us in the future if this happens again.

Comment 9.2

Ecology states in the above cited brochure that it has completed a SEPA DNS and states that the DNS and the related checklist are available for review. I could not locate either of these documents at any Ecology web site.

Ecology Response

The SEPA checklist and the Determination of Non-Significance were (and are still) available along with the Agreed Order on the webpage. The link for these documents is right below the link to the Agreed Order.

Comment 9.3

Given my experience in attempting to undertake an informed review of the Agreed Order and the Interim Action Plan (IAP), I conclude that both logic and provisions in the Administrative Procedures Act suggest Ecology extend the comment period and make the key documents cited above available in a user friendly manner on the Agency web site.

Ecology Response

Copies of the SEPA Determination of Non-Significance, draft Agreed Order, and Interim Action Plan are available on Ecology's website (http://www.ecy.wa.gov/programs/tcp/sites/budd_inlet/budd_inlet_hp.htm) and in hard copy form at Ecology's Southwest Regional Office and the Lacey Timberland Library.

Unfortunately, we were not able to extend the length of this comment period as you suggested. Please remember that we are available to assist you at any time, during the comment period or otherwise, if you have problems finding information you need.

Comment 9.4

The following comments in no way are meant to suggest such action is not necessary.

I attended the Public Open House on October 21 regarding the proposed Budd Inlet Sediment Investigation and Interim Cleanup Action and have attempted to review those portions of relevant documents I was able to access on the Ecology web site.

Based on this limited access to relevant information, I have identified the following concerns.

First, I was unable to find any discussion in either the Agreed Order or the IAP of the extent to which MTCA funds are being used to fund the actions under the Agreed Order. In the IAP, I was able to find a statement of the four purposes to be served by this plan.(p.2) However, the remaining information I was able to access raises clear and obvious questions about the first three. I was unable to find any compelling argument that the proposed actions constitute an appropriate, much less a preferred, approach to protecting health of both the public and of Budd Inlet. If, indeed, navigational dredging is an appropriate use of MTCA funds, the IAP should cite where such use of funds has been made in other areas of the Sound.

It was the final rationale for the plan that raises a more specific concern. The IAP states that the proposed actions are intended to maintain a navigational depth of 39

feet at Berths 2 and 3. I found no discussion, much less justification, for use of MTCA funds for the purpose of navigational enhancement.

Ecology Response

MTCA funds are available to local governments who perform cleanup actions of hazardous substances under formal oversight from Ecology. An 'interim cleanup action' is defined in MTCA and this action meets the criteria of WAC 173-340-430 1(c), 2(c) and 3(b).

Excerpt from WAC 173-340-430

(1) Purpose.

An interim action is distinguished from a cleanup action in that an interim action only partially addresses the cleanup of a site. (Note: An interim action may constitute the cleanup action for a site if the interim action is subsequently shown to comply with WAC 173-340-350 through 173-340-390.) An interim action is:

(a) A remedial action that is technically necessary to reduce a threat to human health or the environment by eliminating or substantially reducing one or more pathways for exposure to a hazardous substance at a facility;

(b) A remedial action that corrects a problem that may become substantially worse or cost substantially more to address if the remedial action is delayed; or

(c) A remedial action needed to provide for completion of a site hazard assessment, remedial investigation/feasibility study or design of a cleanup action.

(2) General requirements.

Interim actions may:

(a) Achieve cleanup standards for a portion of the site;

(b) Provide a partial cleanup, that is, clean up hazardous substances from all or part of the site, but not achieve cleanup standards; or

(c) Provide a partial cleanup of hazardous substances and not achieve cleanup standards, but provide information on how to achieve cleanup standards for a cleanup. For example, demonstration of an unproven cleanup technology.

(3) Relationship to the cleanup action.

(a) If the cleanup action is known, the interim action shall be consistent with the cleanup action.

(b) If the cleanup action is not known, the interim action shall not foreclose reasonable alternatives for the cleanup action. This is not meant to preclude the destruction or removal of hazardous substances.

Comment 9.5

The IAP contains no discussion of how the proposed action relates to the broader issue of toxic contamination in Puget Sound. There is nothing to suggest that the dredging of these two berths represents a prudent use of limited funds. It would be useful if the proposed action were described in relation to the overall issue of toxic contamination in the Sound and to alternative uses of limited funds. There may be compelling reasons for the proposed action at Berths 2 and 3 but such evidence is obvious in its absence in this IAP.

Both the Agreed Order and the IAP do a credible job of describing toxic contamination in Budd Inlet. However, I was not able to find in either the Agreed Order or the IAP any discussion of what I read to be a dramatically differing distribution of toxics at or near the proposed dredge sites. It appears that at the proposed dredge site, contamination is less severe at successive depths. (p. 8, paragraph 1; p. 10, paragraph 2) However, the contamination is massively higher at a depth of 4 to 6 feet in an area north of the proposed dredge area (p. 9, paragraph 1). If this reading of the data is correct, some explanation for this anomalous distribution of contamination is required. (A clearer depiction of the proposed dredge area and the three Port berths in relation to the sampling sites would bring clarity to what is a very confusing discussion of sampling results.)

Ecology Response

Any removal of contamination in part of the Sound reduces the overall contamination levels and improves the health of this ecosystem. In addition, Ecology will use information gathered during this project when evaluating and implementing other cleanups in Budd Inlet.

Studies to date have indicated that the primary source of dioxin in Budd Inlet is from pentachlorophenol (PCP). The largest known historic, nearby user of which is the former Cascade Pole Company wood treating facility. The fact that the higher concentrations lay beneath the surface is logically consistent with what we know about historic releases in the area. The high concentrations to the north of the dredge area coincide with the location of a historic stormwater pipe/ditch which originated at Cascade Pole Company. It appears that the high concentrations in this area are localized and this project is being designed so that contamination will not be disturbed at this time. Understanding how the slope will behave in this area is one pilot aspect of this project which is critical to knowing how we can safely remove those high concentrations.

Comment 9.6

Related to this apparent anomaly, the portrayal of the proposed dredging as a “pilot” effort is problematic. First, the term “pilot” and the considerable discussion of alternative dredging technologies in the IAP (Section 4.1/ page 14-18) appears superfluous at best. There has been extensive experience in dredging of toxics in Puget Sound, e.g. at the Puget Sound Naval Shipyard and in the Duwamish Basin. The evaluation of past dredging for toxics appears extensive. In light of this body of existing knowledge, the proposed “pilot” dredging in Budd Inlet raises the question of whether it is directed more to economic development than to improved technology or environmental understanding.

Moreover, the designation of the dredging as “pilot” implies that further dredging is contemplated. In fact, such further dredging has been planned as far back as 1998. Given the massive contamination at depths of 4-6 feet in areas planned for further dredging, the obvious question of what purpose the “pilot” study serves must be addressed. The conditions differ dramatically.

A specific concern, of course, is the effect of future dredging on the suspension and redistribution of toxics from the area north of Berths 2 and 3. (I assume this to be Berth 1.) What can the “pilot” study possibly provide of value for the evaluation of such future dredging ?

Ecology Response

Dredging and clean cover placement pilot activities will provide valuable information about the effectiveness of certain methods (i.e., dredging and clean cover placement) and site-specific conditions. Specifically, the dredging methods and post-dredge monitoring will provide information on rate and amount of under-pier sloughing, re-suspended sediment and turbidity, and implementability of similar dredging methods during future cleanup. Placement of clean cover will also provide valuable information for use in future cleanup activities in West Bay. Monitoring following dredging and placement of clean cover material will also provide information on the chemical concentrations of the final dredged surface and rate and spatial extent of dioxin recontamination on the cover material.

Comment 9.7

In light of this extreme contamination at depth in the area north of Berths 2 and 3, the IAP failure to discuss any alternatives to the proposed dredging constitutes a flaw, perhaps fatal, in the IAP. Logic and provisions of SEPA appear to demand that the IAP discuss the possibility of leaving the heavily contaminated sediments north of Berths 2 and 3 undisturbed.

Ecology Response

The heavily contaminated sediments to the north are not part of what is being addressed at this time. Those sediments will be evaluated through the SEPA process at the time they are included in a project.

Comment 9.8

The brochure states that a SEPA DNS has been prepared and is available. As stated above, I was unable to find any link to such documents at the Ecology web site. It would have been most appropriate for Ecology to make its decision to not undertake a more detailed environmental review known to the same list of interested parties as received notice of the Agreed Order.

Ecology Response

Copies of the SEPA Determination of Non-Significance, draft Agreed Order, and Interim Action Plan are available on Ecology's website at http://www.ecy.wa.gov/programs/tcp/sites/budd_inlet/budd_inlet_hp.htm and at the repository locations listed on the fact sheet and online.

Comment 9.9

Because I was unable to access the DNS and Checklist, I cannot know whether alternatives to the proposed pilot and future dredging have been considered. However, SEPA is designed to encourage consideration of alternatives (WAC 197-11-440 (5)) I am not sufficiently familiar with case law to know if alternatives must be discussed in a DNS but it is clear that the spirit of SEPA demands this.

In summary, the distribution of the Agreed Order and the Interim Action Plan has not been adequate. Adequate access to the key documents must be provided on the Agency web site and the comment period for these documents extended.

Ecology Response

Because public involvement is such a critical component to the MTCA process, Ecology makes certain that information is readily available to the public during the comment period (and after). For this comment period, a fact sheet with detailed information about the project itself and how to locate the documents was distributed to a mail list of over 2,000 community members within a few mile radius of the Port.

In addition, two repository locations were set up (one with extended hours) so the public could access documents. Material was also posted on our website in PDF format. Ecology also hosted

an open house on October 21 and had staff available to answer questions and outline the project. All of the documents were brought to the meeting so the public had another opportunity to access them.

If you have additional suggestions as to how we can make the materials more accessible to the public, we would be happy to hear them. Please contact Meg Bommarito, public involvement coordinator, with your suggestions.

Comment 9.10

The rationale for use of MTCA funds for a dredging project for a port is absent in the Agreed Order and the IAP and needs to be addressed in a revised IAP.

The use of a “pilot” site that is significantly different than an adjacent site with a vastly higher concentration of toxics that is proposed for future dredging must be explained in a revised IAP. If an adequate rationale for this specific “pilot” area cannot be advanced, the proposed IAP should be withdrawn.

Ecology Response

Project funding is not pertinent to the Agreed Order for an Interim Action.

Dredging and clean cover placement pilot activities will provide valuable information about the effectiveness of certain methods (i.e., dredging and clean cover placement) and site-specific conditions. Specifically, the dredging methods and post-dredge monitoring will provide information on rate and amount of under-pier sloughing, resuspended sediment and turbidity, and implementability of similar dredging methods during future cleanup. Placement of clean cover will also provide valuable information for use in future cleanup activities in West Bay. Monitoring following dredging and placement of clean cover material will also provide information on the chemical concentrations of the final dredged surface and rate and spatial extent of dioxin recontamination on the cover material.

Comment #10: Zena Hartung

Comments received on November 7, 2008

Date: November 6, 2008

Re: Agreed Order for an Interim Action to Remove Contamination and Conduct a Pilot Study in Budd Inlet (Facility Site ID #3097108)

The fact that public comment period on this action might soon close, was reminded me by the letter to you from Jerry Parker. I have no such eloquence or knowledge as Jerry as to the formal issues of agency actions. That said, I have a pretty good antenna for shuck and jive, and I sense we are pretty deep in it, with this proposal.

I, too, attended the public information evening at Washington Middle School, on Oct 21, where I learned, only obliquely and after some probing, that the proposed pilot project was in truth, a project to dredge for navigation to the berths at the Port. Why this was not mentioned by Ecology but only by a voice in the audience (Mr Lincoln from the Port), puzzles me as well. The natural question is, then, what makes this a pilot project? Isn't the name meant to indicate a study of some scientific importance? What will be learned from this pilot project that hasn't already been well documented in past dredging?

In addition, the charts depicting results of sediment sampling to me indicated a widespread problem, with dioxin contamination throughout the Budd Bay area, some deep, some hot spots, some more superficial. However, there was no indication that Department of Ecology had studied the problem well enough to be sure of the source, or to have any plan for tracing the source of the contamination. The decision, instead, to pursue a project for dredging with clamshell apparatus, seems only to be a further insult to Budd Bay. Clamshell dredging will lift sediments, spilling some with every dig. That spill will leave turbidity, robbing the living organisms of oxygen, and exposing them to "stirred up" contaminants. What little life has grown in the channel due to the covering of contaminated sediments with clean (from upstream), will be disrupted. Once again Puget Sound must heal with no help from Ecology.

My perspective is perhaps naïve, but as I understand it, Ecology's job is to be the public's watchdog over Port activities. This dredging seems like a partnership to deepen the channel to the berth, to provide for the Port's contract with Weyerhaeuser. Is this appropriate use of Ecology funds?

Please confirm this, my comment, has been received and also I request a phone call. My number is : 360-951-8445

Thanks, Zena

Ecology Response

Please see below for response to individual comments

Comment 10.1

The fact that public comment period on this action might soon close, was reminded me by the letter to you from Jerry Parker. I have no such eloquence or knowledge as Jerry as to the formal issues of agency actions. That said, I have a pretty good antenna for shuck and jive, and I sense we are pretty deep in it, with this proposal.

I, too, attended the public information evening at Washington Middle School, on Oct 21, where I learned, only obliquely and after some probing, that the proposed pilot project was in truth, a project to dredge for navigation to the berths at the Port. Why this was not mentioned by Ecology but only by a voice in the audience (Mr Lincoln from the Port), puzzles me as well. The natural

question is, then, what makes this a pilot project? Isn't the name meant to indicate a study of some scientific importance? What will be learned from this pilot project that hasn't already been well documented in past dredging?

Ecology Response

The navigational aspect of this project is put forth in the very front of the Interim Action Plan as one of the purposes of this project. Dredging and clean cover placement pilot activities will provide valuable information about the effectiveness of certain methods (i.e., dredging and clean cover placement) and site-specific conditions. Specifically, the dredging methods and post-dredge monitoring will provide information on rate and amount of under-pier sloughing, resuspended sediment and turbidity, and implementability of similar dredging methods during future cleanup. Placement of clean cover will also provide valuable information for use in future cleanup activities in West Bay. Monitoring following dredging and placement of clean cover material will also provide information on the chemical concentrations of the final dredged surface and rate and spatial extent of dioxin recontamination on the cover material.

Comment 10.2

In addition, the charts depicting results of sediment sampling to me indicated a widespread problem, with dioxin contamination throughout the Budd Bay area, some deep, some hot spots, some more superficial. However, there was no indication that Department of Ecology had studied the problem well enough to be sure of the source, or to have any plan for tracing the source of the contamination. The decision, instead, to pursue a project for dredging with clamshell apparatus, seems only to be a further insult to Budd Bay. Clamshell dredging will lift sediments, spilling some with every dig. That spill will leave turbidity, robbing the living organisms of oxygen, and exposing them to "stirred up" contaminants. What little life has grown in the channel due to the covering of contaminated sediments with clean (from upstream), will be disrupted. Once again Puget Sound must heal with no help from Ecology.

Ecology Response

The entire navigation channel and turning basin dredging project was evaluated in 2000 by the Corps of Engineers. However, that evaluation did not consider the presence of dioxin contamination in sediments. Additional sampling was conducted in 2006 for dioxin in the navigation channel and turning basin. The Berth 2 and 3 dredging component was further evaluated for potential effects of dioxin in 2007.

Ecology has spent considerable resources investigating and evaluating possible sources of dioxin in Budd Inlet (Budd Inlet Sediments Investigation). Ecology continues to investigate possible ongoing contributions of dioxins from other sources, including stormwater. To date, there is no evidence that indicates this is a significant contribution of dioxins to Budd Inlet. Dioxin contamination appears to be from historic industrial operations. Studies indicate that pentachlorophenol (PCP) was a primary source of dioxin. PCP was used at the former Cascade

Pole Company. This is supported by the higher concentrations being buried by clean sediments over time, representing the historic nature of the release. A remedy is in place at Cascade Pole Company and it appears that the primary historical source of dioxin in Budd Inlet has been controlled.

Best management practices will be employed and closely monitored during this project to ensure that any impacts of this action will be minimal. Impacts to the environment (including flora and fauna) were considered during the project design and SEPA review and we are working with our sister agencies to assure that any impacts are minimal and temporary.

A Water Quality Monitoring and Sediment Plan (WQMSSP) was developed in coordination with Ecology and the US Army Corps of Engineers (Corps) prior to any in-water work. A Dredge and Disposal Plan was also developed which outlines how the Port is going to fulfill water quality criteria during dredge operations. Both documents are now available online (visit http://www.ecy.wa.gov/programs/tcp/sites/budd_inlet/budd_inlet_hp.htm).

In addition, Ecology will have considerable oversight during the dredge. Dredging is expected to take eight weeks. Ecology staff members will be on scene for all dredging operations each day during the first two weeks of work. After that period, we will evaluate the extent of on-scene staffing we will use for the remainder of the project. At a minimum, site inspections will be done twice daily.

Comment 10.3

My perspective is perhaps naïve, but as I understand it, Ecology's job is to be the public's watchdog over Port activities. This dredging seems like a partnership to deepen the channel to the berth, to provide for the Port's contract with Weyerhaeuser. Is this appropriate use of Ecology funds?

Ecology Response

Ecology has a regulatory oversight role for this interim cleanup action. MTCA funds are available to local governments who perform cleanup actions of hazardous substances under formal oversight from Ecology. An 'interim cleanup action' is defined in MTCA and this action meets the criteria of WAC 173-340-430 1(c), 2(c) and 3(b). See page 38 for the full citation.

Comment #11: Tom Conner

Comments received on November 7, 2008

Re: Agreed Order for an Interim Action to Remove Contamination and Conduct a Pilot Study in Budd Inlet

Dear Ms. Pearson,

I support the stated goals of the proposed dredging pilot study on how to remove and mitigate dioxin contamination from marine benthic sediments within Budd Inlet, but not its study design, study sites nor its sampling methodologies, especially if this pilot study will be used as a template for other similar sites within the greater Puget Sound.

To date, there are numerous dioxin contaminated sites within Budd Inlet, and several are well above recognized concentration levels. Removing and mitigating dioxin contamination in this Inlet will greatly accelerate broader ecosystem health while highlighting how human impacts can be remediated through human ingenuity and purpose.

Below are my suggestions regarding this mitigation pilot study by Department of Ecology.

- Directly target the worst site(s). Effectively dredge portions of the highest dioxin contamination sites in areas just north of the current Port of Olympia shipping berth area.
 - Take this study opportunity to remediate portions of the worst to shoulder the most challenging and thereby begin to remove the possibility of additional future migration of contaminants into other areas of the Inlet by hot spot sloughing.
- Suppress the migration and recontamination by known areas either near, adjacent or upslope of the study area(s)
 - In the public meeting, it was identified that a “trench” still exists which may well be providing continual supply of new dioxin sources to or near the shipping berth area and the proposed Ecology study area from contaminated zones of Cascade Pole. This chronic recontamination stream must be address for any short term and long term solution of dioxin pollution into Budd Inlet.
- Go where the truth takes you. Conduct inter-agency dialogue and scientific review of preferred BMPs (best management practices) according to the best available science.
 - For example, consult with the Army Corps of Engineers and the Environmental Protection Agency concerning dredging BMPs and methodologies to strongly marginalize any migration of sediments and their associated chemical constituents either away from or into the dredging site.
 - It is suggested that dredging be conducted at other areas within Budd Inlet and not solely in proximity to the Port of Olympia. Dredging should consider operations along West Bay and East Bay shorelines for example.
- Ecology’s pilot study operations should directly be designed to not benefit the dredging of the Port’s shipping berth zone and the “turn-around” zone for commercial advantage.
 - This state sponsored pilot study is first and foremost for clear scientific purposes to benefit and restore the ecological health and integrity of lower Budd Inlet.
 - Any proposed dredging design should implement a varied dredging sampling depth to ascertain the exact concentration level and location (3-D position) of all dredge sample for the study. Dredging should not be solely design as to meet needed specifications desired by local for-profit or commercial entities, including the Port of Olympia.

- Since this pilot study will be working within or next to (dioxin) contaminated sediments, and since this pilot study seeks to advance the science of dredging, the lead agency and partners for this study should seek a legal understanding from all associated parties adjacent to the study area; furthermore, the lead agency should not pursue a Determination of Non-significance or a Categorical Exclusion under either SEPA or NEPA.
- Post-dredging monitoring should investigate presence and extent of any migration of contamination outside of dredging area, both laterally and vertically.
R: The post dredge monitoring program will investigate and monitor any impacts which may have resulted from the dredging activity. Two years of testing are required after the action is completed.

Thank you for your time and attention, Tom Connor

Ecology Response

Please see below for responses to individual comments

Comment 11.1

Directly target the worst site(s). Effectively dredge portions of the highest dioxin contamination sites in areas just north of the current Port of Olympia shipping berth area.

- Take this study opportunity to remediate portions of the worst to shoulder the most challenging and thereby begin to remove the possibility of additional future migration of contaminants into other areas of the Inlet by hot spot sloughing.

Ecology Response

Ecology is deliberately avoiding that hot spot during this effort. We will be collecting critical data during this project which will help us better understand how we can safely address those high concentrations. It is very important we understand the nature of the underpier slope behavior before we disturb those hot spots.

Comment 11.2

Suppression the migration and recontamination by known areas either near, adjacent or upslope of the study area(s)

- In the public meeting, it was identified that a “trench” still exists which may well be providing continual supply of new dioxin sources to or near the shipping berth area and the proposed Ecology study area from contaminated zones of Cascade Pole. This chronic recontamination stream must be address for any short term and long term solution of dioxin pollution into Budd Inlet.

Ecology Response

This is no longer an active source. The reference in the public meeting was to a historic trench that used to originate from Cascade Pole Company. That was investigated and addressed as part of the Cascade Pole Company cleanup.

Comment 11.3

Go where the truth takes you. Conduct inter-agency dialogue and scientific review of preferred BMPs (best management practices) according to the best available science.

- For example, consult with the Army Corps of Engineers and the Environmental Protection Agency concerning dredging BMPs and methodologies to strongly marginalize any migration of sediments and their associated chemical constituents either away from or into the dredging site.
- It is suggested that dredging be conducted at other areas within Budd Inlet and not solely in proximity to the Port of Olympia. Dredging should consider operations along West Bay and East Bay shorelines for example.

Ecology Response

The Department of Ecology has been committed to coordinating with our sister agencies during this process. We have gained input from the Washington Department of Natural Resources, Washington Department of Fish and Wildlife, US Marine Fisheries Service, US Army Corps of Engineers, National Oceanographic and Atmospheric Administration (NOAA), Environmental Protection Agency, the City of Olympia and the Department of Ecology Shorelands and Environmental Assistance Program.

Comment 11.4

- Ecology's pilot study operations should directly be designed to not benefit the dredging of the Port's shipping berth zone and the "turn-around" zone for commercial advantage.
 - This state sponsored pilot study is first and foremost for clear scientific purposes to benefit and restore the ecological health and integrity of lower Budd Inlet.
 - Any proposed dredging design should implement a varied dredging sampling depth to ascertain the exact concentration level and location (3-D position) of all dredge sample for the study. Dredging should not be solely design as to meet needed specifications desired by local for-profit or commercial entities, including the Port of Olympia.

Ecology Response

MTCA funds are available to local governments who perform cleanup actions of hazardous substances under formal oversight from Ecology. An 'interim cleanup action' is defined in MTCA and this action meets the criteria of WAC 173-340-430 1(c), 2(c) and 3(b). Please see response to comment 9.4 on page 38 for the entire citation.

Comment 11.5

- Since this pilot study will be working within or next to (dioxin) contaminated sediments, and since this pilot study seeks to advance the science of dredging, the lead agency and partners for this study should seek a legal understanding from all associated parties adjacent to the study area; furthermore, the lead agency should not pursue a Determination of Non-significance or a Categorical Exclusion under either SEPA or NEPA.
- Post-dredging monitoring should investigate presence and extent of any migration of contamination outside of dredging area, both laterally and vertically.

Ecology Response

The post dredge monitoring program will investigate and monitor any impacts which may have resulted from the dredging activity. Two years of testing are required after the action is completed.

Comment #12: Heather Trim, People for Puget Sound

Comments received on November 7, 2008

November 7, 2008

To Ms. Pearson,

We are writing to comment on the Agreed Order Port of Olympia, Budd Inlet (DE 6083), dated October, 2008.

People For Puget Sound is a nonprofit, citizens' organization whose mission is to protect and restore Puget Sound and the Northwest Straits.

The Washington Department of Ecology and the Port of Olympia are entering into an Agreed Order to dredge a berthing area in Budd Inlet.

Our comments follow:

1. Name. This project is not a pilot and should not be so named. Dredging of exactly this nature has occurred countless times in Puget Sound. Unless the Port is prepared to

spend significantly more than other PRPs for a truly conducted pilot project with objective 3rd party design and testing, then the project should be described as any other. Furthermore, inaccurately calling this a 'pilot' sets up a bad precedent for other sites in Puget Sound.

2. Source Control. This site is being cleaned up prior to a full understanding of sources of contamination and control of those sources. This issue does not appear to even be addressed in the documents under public review.
3. Timing. Finally, we are also concerned that the Port's dredging project is being conducted without a full cleanup plan for the entire Inlet, including source control. The cleanup of the entire inlet should be conducted as a whole rather than as piecemeal efforts.

Thank you for the opportunity to comment on the Agreed Order. Please contact me with questions at (206) 382-7007 X215.

Sincerely,



Heather Trim

Urban Bays and Toxics Program Manager

Ecology Response

Please see below for responses to individual comments

Comment 12.1

Name. This project is not a pilot and should not be so named. Dredging of exactly this nature has occurred countless times in Puget Sound. Unless the Port is prepared to spend significantly more than other PRPs for a truly conducted pilot project with objective 3rd party design and testing, then the project should be described as any other. Furthermore, inaccurately calling this a 'pilot' sets up a bad precedent for other sites in Puget Sound.

Ecology Response

Dredging and clean cover placement pilot activities will provide valuable information about the effectiveness of certain methods (i.e., dredging and clean cover placement) and site-specific conditions. Specifically, the dredging methods and post-dredge monitoring will provide information on rate and amount of under-pier sloughing, resuspended sediment and turbidity, and implementability of similar dredging methods during future cleanup. Placement of clean cover

will also provide valuable information for use in future cleanup activities in West Bay,. Monitoring following dredging and placement of clean cover material will also provide information on the chemical concentrations of the final dredged surface and rate and spatial extent of dioxin recontamination on the cover material.

Comment 12.2

Source Control. This site is being cleaned up prior to a full understanding of sources of contamination and control of those sources. This issue does not appear to even be addressed in the documents under public review.

Ecology Response

Ecology has spent considerable resources investigating and evaluating possible sources of dioxin in Budd Inlet (Budd Inlet Sediments Investigation). Ecology continues to investigate possible ongoing contributions of dioxins from other sources, including stormwater. To date, there is no evidence that indicates this is a significant contribution of dioxins to Budd Inlet. Dioxin contamination appears to be from historic industrial operations. Studies indicate that pentachlorophenol (PCP) was a primary source of dioxin. PCP was used at the former Cascade Pole Company. This is supported by the higher concentrations being buried by clean sediments over time, representing the historic nature of the release. A remedy is in place at Cascade Pole Company and it appears that the primary historical source of dioxin in Budd Inlet has been controlled.

Comment 12.3

Timing. Finally, we are also concerned that the Port's dredging project is being conducted without a full cleanup plan for the entire Inlet, including source control. The cleanup of the entire inlet should be conducted as a whole rather than as piecemeal efforts.

Ecology Response

This is an interim cleanup action. The data collected as part of this action will help to design a final cleanup action for the entire berth area.

Comment #13: Rick Dunning, Washington Farm Forestry Association

Comments received on November 13, 2008



P.O. Box 1010
Chehalis, WA 98532

Bob Brink, Yacolt, President
Sam Comstock, Grapeview, Vice President
Michelle Blake, Olympia, Secretary
Bill Scheer, Chehalis, Treasurer

www.wafarmforestry.com

info@wafarmforestry.com

November 12, 2008

Washington State Department of Ecology

Director Jay Manning

Dear Director Manning,

I am writing to offer support and sound reason for continued maintenance dredging at the Port of Olympia.

As you know, Washington State is looking for incentives, both public and market based, to offset the impact that Forest and Fish Rules have disproportionately placed on Small Forest Landowners (see SB6090, sec.308(11) and 'The future of Washington Forests' report).

Small Forest Landowners have used the export market, as one way to receive a higher premium for their higher quality, longer age rotation logs (and therefore offset the higher cost of our state's forestry rules as they apply to them).

Continuing to provide access to export log market facilities is of great importance to the continued viability of our state's tree farms.

We hope you will consider support for this dredge project for this reason as well as its importance in maintaining our state's economic opportunities provided by international trade.

Respectfully,

A handwritten signature in black ink that reads "Rick Dunning". The signature is written in a cursive, flowing style.

Rick Dunning, Executive Director

Washington Farm Forestry Association

Ecology Response

Thank you very much for your comments.

Comment #14: Arthur West

TO : LISA PEARSON AND REBECCA LAWSON, WASHINGTON DOE ^{Department of}
SWRO TOXICS CLEANUP PROGRAM, P.O. BOX 4775, OLYMPIA,
WA. 98504-7775

RE: COMMENT ON SEPA DNS FOR PROPOSED AGREED ORDER
BETWEEN PORT OF OLYMPIA AND DOE FOR INTERIM
REMEDIAL ACTION DREDGING PILOT PROGRAM

FROM: ARTHUR WEST

Please regard this as a public comment on the October 1, 2008 DNS issued by DOE for the agreed order for an interim action designed to facilitate a proposed berth dredging project at the port of Olympia. If this is not the proper method to submit comments, please inform me of how they may be submitted to be formally considered, and/or forward this to the proper address.

The DNS for the agreed order for an "interim" project to Port of Olympia berth dredging is defective and a full EIS should be issued under both SEPA and NEPA for the following reasons:

1. The project has been improperly segmented from numerous other toxic cleanup projects and sites in the area that should be the subject of one comprehensive EIS for cleanup of the Sound; including the Cascade Pole, East Bay Redevelopment, Solid Wood Reliable Steel, Hardel Plywood, West Bay Marina, and Budd Inlet Sediment Investigation sites and projects. The segmentation of the project as a "pilot project" violates the intent of both SEPA, NEPA, as well as the CZMA, its six enforceable policies, and the Shorelines Management Act that projects be reviewed in the context of other related actions.
2. The project is being rushed through the process in a segmented and duplicitous manner based upon economic pressure to operate larger ships at the port with absolutely no actual concern for the environment or cleanup of the sound. This lack of good faith and subversion by economic interests taints the entire South Sound Cleanup as it is currently administered.
3. The project will be a complete waste of resources and pose a hazard to the environment if the continuing discharge of contaminated stormwater from the Cascade Pole site that caused the contamination to begin with is not addressed at the same time, since the site will then simply be re-contaminated, and the toxins dispersed by the proposed expansion in shipping traffic. The lack of a comprehensive plan to actually clean up the cause of contamination of the area demonstrates that this project is designed to facilitate a pre-existing agenda that has nothing to do with cleanup, but seeks to facilitate trade and Weyerhaeuser's interests.

4. The project is intended to be part of an integrated plan of development at the port, required by the Weyerhaeuser lease, involving rail, paving, stormwater facilities, and alteration of regional trade patterns requiring a joint SEPA-NEPA determination of significance and EIS. No Socioeconomic analysis has been prepared for the alteration in trade patterns that will be the result of the project.

5. The "cleanup" dredging is a pretext for a development project that will result in larger ships and greater vehicle and vessel traffic resulting in extremely significant impacts to air and water quality, and which will improperly expend state funds to support Weyerhaeuser.

6. The project will result in degradation of water quality and violation of the Clean Air and Water Acts from log yard related discharge. The project will also result in greater timber harvest from Western Washington and resulting flooding, habitat destruction, and other significant impacts caused by Weyerhaeuser logging in the region. Import of Canadian timber has potential for introduction of destructive species, and other significant environmental and economic impacts.

7. The cumulative impact of geographically related projects and approvals, including the reissue of the General Industrial Stormwater permit by Ecology on October 15 have not been evaluated. Water and Air quality degradation from the operation of the port as a log yard for Weyerhaeuser and a facility for loading larger ships has not been evaluated.

8. No joint SEPA-NEPA document has been prepared. This is especially defective in light of the federal funding for the STIP rail facilities designed to be part of the greater port expansion plan, the federal funds involved, and the federal permits required.

9. The six enforceable policies of the CZMA have not been addressed or complied with. The project violates the policy and letter of the CZMA and the Shoreline Management Act.

10. The project poses a threat of spread of dioxin and does not "clean up" the areas of greatest contamination, but is instead an abuse of MTCA to use State "cleanup" funds to subsidize a corporate log yard operation.

11. The dredging has always been intended as part of a greater regional development program involving many developments required by and mentioned in the Port-Weyerhaeuser lease for which no SEPA or NEPA review has been conducted.

12. The information in the checklist is incorrect and inadequate. The project has a potential to degrade water quality and threatened and protected species habitat, including the Orca and Chinook Salmon, which do not appear on the checklist. The project has a potential for significant impact on marine life and protected species due to the toxic contaminants involved and requires a complete EIS.

13. No assessment has been made of the possible impact of the disposal of the dredged spoils, or on the environment where they will be stored.

14. No assessment has been made of the potential impacts of greater marine vessel and vehicular traffic on recreation, water or air quality, or protected species, or of the potential for accidents or oil spills. A DNS is manifestly improper under such circumstances.

15. The use of the opportunistic and transparent pretexts of a "Pilot project" and an "interim MTCA cleanup" are improper for a project which has economic development, not cleanup as its actual primary goal. This violates the intent of SEPA and MTCA

16. The project, and the vehicle and vessel traffic it will promote will result in greater contamination of the sound and in greater spread of the toxic contamination already present in the sound. Further, since no comprehensive approach will be taken to prevent re-contamination of the berth area by untreated stormwater, the project will not accomplish anything except to facilitate marine terminal expansion at the expense of the environment.

Thank you for your consideration. Please acknowledge receipt of this formal comment on the October 1, 2008 DNS for the proposed agreed order on the interim "cleanup" action for the Port of Olympia-DOE berth dredging project. My E-mail is Awestaa@gmail.com. Done October 24, 2008.

Sincerely,

Arthur West

Ecology Response

1. Other development activities by the Port are not pertinent to the Agreed Order or Interim Action Plan, and therefore are not required to be reviewed for this project under SEPA. The clean-up action can proceed independently from any upland development and does not rely on the upland development for justification. A socioeconomic analysis was not developed for the Interim Action as the impacts to social and economic resources were not determined to be significant as defined by SEPA. The Corps of Engineers is the lead federal agency for the project and has determined that the project meets the conditions required for a Nationwide Permit, which has been evaluated for environmental impacts under NEPA, and does not require a NEPA EIS.
2. Comments on other Port development activities and funding are not pertinent to the Agreed Order or Interim Action Plan. MTCA funds are available to local governments who perform cleanup actions of hazardous substances under formal oversight from

Ecology. An 'interim cleanup action' is defined in MTCA and this action meets the criteria of WAC 173-340-430 1(c), 2(c) and 3(b). See page 38 for the full citation.

3. The reference made to the discharge from the Cascade Pole Site was of a historic discharge. This is supported by the higher concentrations being buried by clean sediments over time, representing the historic nature of the release. A remedy is in place at Cascade Pole Company and it appears that source of dioxin in Budd Inlet has been controlled.
4. Please see response #1.
5. MTCA funds are available to local governments who perform cleanup actions of hazardous substances under formal oversight from Ecology. An 'interim cleanup action' is defined in MTCA and this action meets the criteria of WAC 173-340-430 1(c), 2(c) and 3(b). Please see the response to comment 9.4 on page 38 for the full citation.
6. A Water Quality Monitoring and Sediment Plan (WQMSSP) was developed in coordination with Ecology and the US Army Corps of Engineers (Corps) prior to in-water work. A Dredge and Disposal Plan was also developed which outlines how the Port is going to fulfill water quality criteria during dredge operations. Both documents are now available online (visit http://www.ecy.wa.gov/programs/tcp/sites/budd_inlet/budd_inlet_hp.htm).

In addition, Ecology will have considerable oversight during the dredge. Dredging is expected to take eight weeks. Ecology staff members will be on scene for all dredging operations each day during the first two weeks of work. After that period, we will evaluate the extent of on-scene staffing we will use. Comments on other Port development activities and funding are not pertinent to the Agreed Order or Interim Action Plan.

7. Other development activities by the Port are not pertinent to the Agreed Order or Interim Action Plan. The clean-up action can proceed independently from any upland development and does not rely on the upland development for justification. No other geographically related projects or approvals are known to affect the activities proposed as part of the Agreed Order or Interim Action Plan. The second half of this comment regarding use of Port land is not pertinent to the Agreed Order or Interim Action Plan.
8. Other development activities by the Port are not pertinent to the Agreed Order or Interim Action Plan. The clean-up action can proceed independently from any upland development and does not rely on the upland development for justification. The Corps of Engineers is the lead federal agency for the project and has determined that the project meets the conditions required for a Nationwide Permit, which has been evaluated for environmental impacts under NEPA, and does not require a NEPA EIS. The STIP rail facilities are not required to implement the actions detailed in the Agreed Order or Interim Action Plan.

9. The Interim Action is consistent with the following six enforceable policies: Federal Clean Water Act, the Federal Clean Air Act, the State Shoreline Management Act (SMA), the State Environmental Policy Act (SEPA), the Ocean Resources Management Act, and the Energy Facility Site Evaluation Council. The project will comply with Sections 401 and 404 of the Clean Water Act through permits issued by the Corps of Engineers and approvals from Ecology. The project complies with the SMA as implemented by the City of Olympia. The project has been reviewed as required by SEPA. The project is also consistent with or does not trigger review under the Federal Clean Air Act, Ocean Resources Management Act, or Energy Facility Site Evaluation Council.
10. Best management practices described in the Interim Action Plan will be implemented to reduce the generation of suspended sediments. Water quality parameters, including turbidity and dissolved oxygen, will be monitored to confirm compliance with water quality conditions set by Ecology. A Water Quality Monitoring and Sediment Sampling Plan (WQMSSP) was developed in coordination with Ecology and the US Army Corps of Engineers (Corps). A Dredge and Disposal Plan was also developed which outlines how the Port is going to fulfill water quality criteria during dredge operations. Both documents are now available online (visit http://www.ecy.wa.gov/programs/tcp/sites/budd_inlet/budd_inlet_hp.htm).

These BMPs and water quality monitoring will decrease the potential spread of dioxin associated with suspended sediments. The project will avoid the area with localized elevated concentrations north of the dredge area to collect additional information on site specific conditions and effectiveness of the methods to be implemented.

This interim action will provide valuable information to be used when considering various cleanup options for the remainder of contamination in West Bay to be conducted as part of a permanent or final remedy and is acceptable as an Interim Action measure as defined in the MTCA. The Port, like other municipalities, is eligible for funding up to 50% for cleanup actions taken on the site. For more information about the Remedial Action Grant program, visit <http://www.ecy.wa.gov/programs/tcp/paying4cu/paying4cu.html>. Funding through this program is designed to speed up cleanups and reduce the cost to state taxpayers. This program is funded through taxes on hazardous substances.

11. Comments on other development activities at the Port are not relevant to this Agreed Order.
12. This project is an Interim Action cleanup project being conducted under MTCA and is an independent action with independent utility. The SEPA checklist was complete and correct, as evidenced by the Determination of Non-Significance issued for the project. Impacts to endangered species have been evaluated by the Corps and National Marine Fisheries Service (NMFS) for Puget Sound Chinook, Puget Sound Steelhead, Southern Resident Killer Whales and critical habitat for Puget Sound Chinook and Southern Resident Killer Whales. NMFS concurred with the Corps' determination that the project

"may affect, not likely to adversely affect" these species and critical habitat. NMFS also evaluated the project's impact on Essential Fish Habitat (EFH) and determined that the conservation measures required by the Corps are adequate to avoid, minimize, or otherwise offset potential adverse impacts to Essential Fish Habitat.

13. Dredged sediment will be disposed of at an approved Subtitle D landfill facility. These facilities are permitted to receive sediments containing dioxin. Transport and disposal of sediment to be disposed has been reviewed as part of SEPA.
14. Vessel impacts involved with the Interim Action have been reviewed under SEPA. Other vessel traffic impacts unrelated to the Interim Action are not pertinent to the Agreed Order or Interim Action.
15. An 'interim cleanup action' is defined in MTCA and this action meets the criteria of 173-340-430 1(c), 2(c) and 3(b). Please see the response to comment 9.4 on page 38 for the full citation.
16. Vessel impacts involved with the Interim Action have been reviewed under SEPA. Vessel traffic impacts from future actions that area unrelated to the Interim Action are not pertinent to the Agreed Order or Interim Action. As previously stated, studies indicate the source of dioxin in lower Budd Inlet has been controlled with the installation of a final remedy at the former Cascade Pole Company site. This is supported by evidence that the most contaminated spots have many years of much cleaner deposition overlying them.

Comment #15: ILWU Longshore Local #47, Olympia WA

November 25, 2008

To: Department of Ecology

From: ILWU Longshore Local #47, Olympia WA

SUBJECT: Letter of Support for the Agreed Order between the Port of Olympia and DOE for the removal and disposal of contaminated sediments located in the shipping berths at the Port.

DOE:

On behalf of the men and women who work the docks at the Port of Olympia I would like to express our total support for the cleanup of contaminated sediments. This project not only serves the purpose of cleaning up the environment but is also essential to keeping the Port of Olympia viable for international and domestic commerce.

The longshore men and women of Olympia rely on a functional marine terminal and waterway for our jobs. Without dredging, our harbor will not be able to service not only the existing ships that call at our port but also the ever increasing size of newer vessels calling in the Puget Sound. The Port of Olympia berths have not been dredged in over 30 years. This project serves both purposes of cleanup and maintenance dredging.

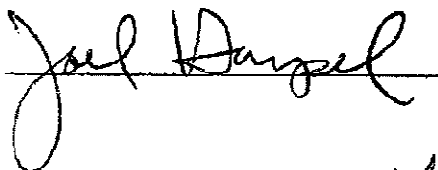
We are the work force that works in the closest proximity to the contaminated area and we have every confidence that this project can be accomplished without threat to our safety or the health of the environment. Thank you for this opportunity to express our opinions.


Sincerely,

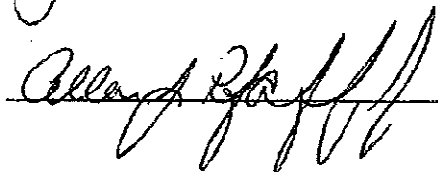
The undersigned members of ILWU Local #47

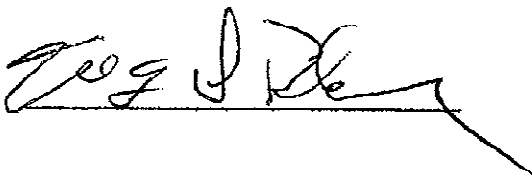

President


Vice President









Robert C Miles

Robert C Miles

John

John

John

Barbara Belton

Richard Korn

Richard Korn

Thomas D. Lang

Michael J. Bejnig

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JEFFREY P. DAVIS

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Timothy W. Kattke

Michael J. Befine Vince Haiden

Luke Belgio

Michael Bishop

Bill Ramsey

Joseph E. Alkwan

L. J. P. P.

Chris Swearingen

Robert A. P.

Robert A. P.

Carole Radloff

Duan W. P.

Jeff Chubb

Jobie Napalun

Walt A. P.

J. P.

Carol Mann

John S. P.

Richard Song

Ecology Response

Thank you for your comments.

Comment #16: Shayne Cothorn, Department of Natural Resources, Sediment Quality Unit



November 6, 2008

Lisa Pearson, P.E., Site Manager
WA Department of Ecology
SWRO Toxics Cleanup Program
P.O. Box 47775
Olympia, WA 98504-6261

Subject: Agreed Order for Port of Olympia Berth Dredging Interim Action Plan, Olympia,
Thurston County, Washington, November 2008

Dear Ms. Pearson:

The Washington State Department of Natural Resources (DNR) appreciates the cooperative nature in which Ecology and the Port of Olympia are working together to determine how best to remove contaminants from Budd Inlet.

DNR's comments are based on principles of stewardship and proprietary management derived from our legislative defined goals to protect State-Owned Aquatic Lands (SOAL) and preserve them for the public's benefit. The Washington State Constitution, the Revised Code of Washington, and the Washington Administrative Code define the nature of DNR's land management responsibilities. The basis of the following comments stems from the authorities and requirements defined in these statutes, rules, and regulations.

General Comments

The State of Washington owns, and DNR manages, the SOAL where this proposed dredging will occur. DNR applauds the effort currently underway to investigate, characterize, and cleanup contaminants found at this site and we support the enhancement to water-based commerce this action will create. DNR has concern with some of the strategies listed in the IAP and unknown factors recognized but not yet addressed. As proprietary managers it is with discomfort that we comment on a plan that is not fully developed yet could have significant impact on sediment quality and future operations in Budd Inlet.

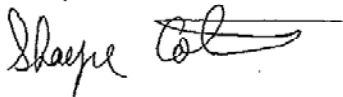
Comments regarding IAP

- 1 DNR concurs with Ecology's recommendations for further sampling. Specific operational approaches will have to be reviewed and revised after an analysis is made of the samples taken from the front of and underneath the pier. DNR requests the opportunity to review these results once available and provide feedback on any proposed modifications or operational methods selected based on these results.

- 2 • The proposed project design recognizes that there will be sloughing from under the pier. The extent of contaminate exposure and recontamination of the dredged area cannot be estimated until under pier sampling results have been analyzed. Adjustments to plan including a reduction in slope may be required.
- 3 • The appropriateness of the specified dredging and dewatering operations cannot be adequately evaluated until contaminate levels throughout the dredge prism are better characterized.
- 4 • Removal and dewatering techniques should not be left to operator to decide but determined by Ecology based on risk factors. Cost based decisions are not appropriate here.
- 5 • If Ecology determines a cap is appropriate, the cap should be appropriately designed according to site specific conditions and use patterns. The cap should be placed within the same work window as initial dredging to limit contaminate exposure.
- 6 • If we are to learn from these efforts then we need to diversify the different techniques used and effectively monitor impacts as well as productivity and cost.
- 7 • Chemical analysis of water samples should be completed at times of highest turbidity readings to review success of operational methods used. These results will still be useful even if received after dredging operations are complete because they meet the intent of IAP/AO, which is to learn from this action and improve the success of future actions.
- 8 • DNR recommends intense post monitoring efforts and asks that the results and analysis of these results be provided for review.
- 9 • DNR will require a use authorization for a cap of contaminated sediments on state owned aquatic land.
- 10 • DNR encourages the Port and Ecology to continue to work together to remediate the adjacent areas where the highest levels of contaminants have been identified.

We look forward to reviewing sediment sampling results and providing further comment as further implementation decisions are made. Please feel free to contact me at (360) 902-1064 or by email at shayne.cothorn@dnr.wa.gov if you have any questions pertaining to my comments.

Sincerely,



Shayne Cothorn, Environmental Specialist
Sediment Quality Unit

Ecology Response

1. Ecology will continue to share information with the public and interested agencies as it becomes available.
2. Ecology has required additional characterization to be conducted in the dredge prism and under pier slope. That data has been considered carefully and as a result, a minimum of 6

inches clean cover material must be placed immediately following dredging activity this season.

3. The entire navigation channel and turning basin dredging project was evaluated in 2000 by the Corps of Engineers. However, that evaluation did not consider the presence of dioxin contamination in sediments. Additional sampling was conducted in 2006 for dioxin in the navigation channel and turning basin. The Berth 2 and 3 dredging component was further evaluated for potential effects of dioxin in 2007.
4. Ecology must approve all strategies proposed by the contractor.
5. Ecology has required additional characterization to be conducted in the dredge prism and under pier slope. That data has been considered carefully and as a result, a minimum of 6 inches clean cover material must be placed immediately following dredging activity this season.
6. Intense post dredge monitoring efforts are planned over the 2 years following completion of activities. Chemical testing of surface sediments both within the dredge prism and inside and outside the 150 foot compliance radius to measure any potential impacts associated with dredging operations. Ecology will continue to consider all appropriate technologies as more information about the dredge area is gathered.
7. Because of the nature of dioxins, they do not dissolve in water and tend to cling to the organic matter in sediment; turbidity is a good method to measure how effectively the contaminants are being contained during the dredge.
8. Ecology will continue to share information as it becomes available with public and interested agencies.
9. Ecology will work with the Port to ensure all appropriate permits are acquired.
10. Ecology plans to continue to work with the Port of Olympia to complete cleanup of the most contaminated areas once we have evaluated the post dredge monitoring and other lessons that will be learned from this action