RESPONSE to COMMENTS

Draft Consent Decree/Cleanup Action Plan, Draft Public Participation Plan SEPA Determination of Nonsignificance

Cornwall Ave Landfill cleanup site Bellingham, Washington

October 22, 2014

WASHINGTON STATE DEPARTMENT OF ECOLOGY

TOXICS CLEANUP PROGRAM

1. Introduction

On June 2, 2014, a draft Consent Decree and Cleanup Action Plan (CD/CAP), a draft Public Participation Plan (PPP), and a SEPA Determination of Nonsignificance for the Cornwall Ave Landfill cleanup site in Bellingham were issued for a 30-day public comment period. The public comment period closed on July 2, 2014. Public involvement activities related to this public comment period included:

- Distribution of a fact sheet describing the site and requesting review of the draft RI/FS through mailing and emailing to approximately 1,700 people, including neighboring businesses and other interested parties;
- Publication of one paid display ad in *The Bellingham Herald*; dated May 29, 2014;
- Publication of a notice in the Washington State Site Register, dated May 29 and June 26, 2014;
- Hosting of an informational public meeting at the Bellingham Public Library on June 5, and a later meeting for the Spanish-speaking public on July 5.
- Announcement of the public comment period and posting of the documents on the Department of Ecology (Ecology) website.
- Providing copies of the documents through information repositories at Ecology's Bellingham Field Office and Northwest Regional Office, and the Bellingham Public Library – Downtown Branch.

A total of 8 commenters submitted written statements during the comment period.

Table 1: List of people who submitted comments.
Section 2: Background information on the site.
Section 3: Next steps for the cleanup site.
Section 4: Ecology's response to comments received.
Appendix A: Comments received.

Table 1. Summary of Commenters

1	Tom Olsen
2	Michael Leftwich
3	Louann Chapman
4	Glenn Hayman
5	Judith Akins
6	Bob Burr
7	Gaythia Weis
8	Douglas Tolchin

2. Background

The Cornwall Avenue Landfill cleanup site is located on the Bellingham waterfront at the south end of Cornwall Avenue between Boulevard Park and the former Georgia Pacific pulp mill. Property within the site is owned by the city of Bellingham (city) and Washington state (managed by the Department of Natural Resources (DNR)). Until 2013, the Port of Bellingham (Port) also had an ownership interest in the city-owned property. The site is most recognizable today for the large mounds covered with white plastic. The portion of the site addressed in the CAP is about 26 acres in size. Approximately 13 acres of the site are on land, and about 13 acres are in water.

The history of property activities since the late 1880s was as follows:

- 1888-1946: The property was used for sawmill operations, including log storage and wood disposal.
- 1953-1965: The property was used as a municipal waste landfill.
- 1965: Upon closure of the landfill, the property was covered with a layer of soil.
- 1971 to 2005: The property was used for log storage and warehousing operations.
- 2011-2012: An interim action took place in which low-permeability dredged sediment was stabilized, imported, and placed on the property. A landfill gas collection system was installed under the imported dredged sediment and storm drainage improvements were made.

The city, port and DNR, with Ecology oversight, investigated contamination, evaluated cleanup options, and identified a preferred option for cleaning up the Cornwall Avenue Landfill site. This information was presented in a remedial investigation/feasibility study report (RI/FS) finalized in December 2013 following public review.

The site investigation found potentially harmful levels of hazardous substances in the groundwater, soil and sediment from historic municipal and wood waste disposal practices.

An estimated 295,000 cubic yards of municipal waste and 94,000 cubic yards of wood waste were found. Some of the contamination associated with this waste includes:
tannins and lignins associated with wood waste breakdown products; elevated nitrogen

compounds like ammonia; elevated dissolved metals like manganese; volatile organics like benzene; and various other organic compounds like PCBs, phenol, phthalates, and PAHs (polycyclic aromatic hydrocarbons).

To prevent people, plants and animals from being exposed to contaminants, four cleanup options were evaluated in the RI/FS. Three of the options considered containing contaminants through various methods. The fourth option considered removing the contaminants. A cost benefit analysis of the cleanup options identified the preferred option.

Based on the information in the RI/FS report, Ecology prepared draft cleanup documents as the next step in the cleanup process. These documents include the four listed above: CD/CAP, PPP, and SEPA Determination of Nonsignificance. The CAP outlines Ecology's chosen plan for the site, which includes: a cover, consisting of topsoil, a drainage layer, a synthetic membrane, and a low-permeability soil layer; a shoreline stabilization system; a thin-layer sediment cap; a storm water drainage system, and monitored natural recovery for sediment. The CAP is part of the CD, a legal agreement between Ecology, the city, the port, and DNR for implementing the cleanup.

3. Next Steps

The draft CD/CAP and PPP will be finalized, and the SEPA Determination of Non-Significance will stand as is. The CD will be signed by authorized representatives of Ecology, the city, the port, and DNR, and will be filed in Whatcom County Superior Court.

The CAP will be finalized with the following changes that resulted from public comment:

- Section 2.1.1 – Imported dredged sediment will be added to the bullet list of indicator hazardous substances.
- Section 4.1.2 – Wording will be added to clarify that both Management Units (MUs) are equally well defined for purposes of the CAP, but that more precise boundaries will be defined during the engineering design phase based on additional investigations.
- Section 4.2.1.1 – The first sentence will be modified to clarify that the imported dredged sediment will be used for the low-permeabilty soil portion of the capping system.

Once these steps are completed, engineers will begin to design and permit the cleanup action. The results of the design work will be summarized in an Engineering Design Report, expected to be out for public review in early 2015. Site cleanup is expected to begin later in 2015.

4. Comments and Ecology Responses

Comment #1, Tom Olsen

You expressed support for the draft cleanup plan, and indicated you would like to see it implemented as soon as practical.

Your preference for the proposed cleanup action is noted and we share your desire for timely completion of this important project.

Comment #2, Michael Leftwich

You expressed support for the recommended plan, and indicated you believe the clean-up work should be started as soon as possible.

Your preference for the proposed cleanup action is noted and we share your desire for timely completion of this important project.

Comment #3, Louann Chapman

You asked about the type and thickness of material proposed to be used for the landfill cap, and specifically asked "why be cheap, and not use the thickest", especially without apparently knowing the "lifespan" of the material.

Assuming that you are referring to the 20 mil scrim reinforced polyethylene liner that was proposed as part of the landfill cap, the actual type and thickness of material to be used will be determined during the engineering design phase, which is the next phase of work on this project. The intent is to specify a product that will fulfill its physical separation and hydraulic barrier functions in perpetuity. Function will be the main driver in this analysis, not cost. A draft engineering design report describing the results of the evaluation will be issued for public review.

Comment #4, Glenn Hayman

You make a number of suggestions that are editorial in nature, including terminology consistency, wording changes, grammar and punctuation, and the order and location of information presented in the text.

> Ecology appreciates your taking the time to suggest these editorial improvements. However, in the interest of moving forward as quickly as possible to the next stage of the cleanup process, only those comments that pertain to the clarity and accuracy of information in the report are addressed below.

Draft Cleanup Action Plan – General Comments

Section 1.5, you note that the text appears to indicate the dredged sediment is contaminated. Based on that, you indicate the CAP should clearly state that the cleanup action will protect human health and the environment from contaminants released from the sediment. You also indicated it should be noted as contaminated throughout the CAP, if it is, in fact, contaminated.

> Your interpretation of Section 1.5 is correct. All of the sediment is considered contaminated and to be managed in the same manner as the municipal refuse, wood waste, and existing cover material. This is explicitly mentioned on the following page in Section 2.1.1. However, for clarity, imported dredged sediment (and cover soil) will be added to the bullet list of indicator hazardous substances on Page 1-6.

Draft Cleanup Action Plan – Detailed Comments

Page 1-6, first bullet, you mention the associated media (i.e., soil) needs to be identified.

> The first bullet lists refuse and wood debris. These are essentially media in their own right, as they are not truly soil or water or sediment or gas.

Page 4-2, second paragraph, you indicate the wording suggests the area of MU-2 is not as well defined as the area of MU-1.

> We agree and will modify the wording to clarify that both MUs are equally well defined for purposes of the CAP, but that more precise boundaries will be defined during the engineering design phase based on additional investigations, including property surveys, topographic mapping, oceanographic studies of scour depth, etc.

Page 4-3, first paragraph, requests the following sentence be inserted after the first sentence in this paragraph – The soil used in the capping system will utilize the contaminated low permeability soil placed on the landfill in 2011 and 2012.

> We agree this is an important concept and will clarify the sentence.

Figure 6, you suggest that this be modified to show a layer of imported low permeability fill to the right of the refuse/wood debris to ensure that contaminated sediment used as part of the low-permeability soil layer is separated from the shoreline area and monitoring well casings. You also point out that the liner and geotextile layer do not overlap, leaving underlying layers open to surface water infiltration.

> While we do not fully understand your suggestion regarding the low permeability fill layer, we do recognize the importance of the isolation issue in the area where the upland cap meets the shoreline stabilization system/sand filter. This junction will be considered carefully in the engineering phase, and a design developed that will provide for protection of potential exposure and infiltration pathways, for physical stability/longevity, and for isolation from sensitive remediation elements, such as the ground water monitoring wells embedded in the sand filter.

Draft Public Participation Plan

Page 6, you note that the descriptions of cleanup activities on Ecology's website pertaining to Bellingham Bay sites are commonly not up to date, and provide a list of when these sites were last updated. You suggest that the websites be updated at least annually. You also note a Port of Seattle cleanup project website that is out of date.

> Our websites are typically updated when a milestone MTCA document (such as an Engineering Design Report) has been issued for public review or is in final form, or when a milestone activity (such as remediation construction) is either beginning or has ended. For most of the sites on your list, the last update coincided with one of these milestones.
>
> Regarding an annual status update, we cannot commit to this in the PPP. However, this is a good idea which we will pursue.
>
> Concerning the Port of Seattle cleanup project website, your comment has been forwarded to the appropriate Ecology personnel.

Draft Consent Decree

You suggest adding electronic reporting requirements to the Consent Decree, as a means of simplifying record keeping and keeping the website up to date.

> In recent years all documents relating to the Cornwall Avenue Landfill site have been submitted in electronic format without a requirement to do so. As a result we do not believe it necessary to add this provision to the Consent Decree. However, we will consider this for future CDs.

Comment #5, Judith Akins

You indicate a belief that there has to be input from the Lummi Nation, and that planning has to take into consideration fishing rights and the health of the of the water and surrounding environment of Bellingham Bay.

Ecology is aware that the Cornwall Avenue Landfill site is located within the Lummi Nation adjudicated usual and accustomed grounds and stations, and we have taken a number of steps to coordinate with the tribe on this project. The tribe is a member of the Bellingham Bay Action Team, which is a multi-organization group meeting generally every other month to coordinate waterfront cleanup and habitat restoration work. There have been a number of Cornwall Landfill-related briefings with this group over the years. The Lummi's were also invited to a June 2014 public meeting on the draft CAP/CD, and Ecology sent them a copy of these documents, asking for their input. Additional coordination with the Lummi will occur as the project moves through remedial design and permitting.

The tribes assert various treaty rights, including the right to take fish. Ecology and the tribes have an overlapping interest in taking actions to protect fish, wildlife, and habitat. For the purpose of this DCAP and cleanup of this site, Ecology is acting under the authority of MTCA to address the release of hazardous substances and ensure that human health and the environment are protected.

With regard to the health issue, this project does consider the health of the water and the surrounding environment. The selected cleanup action will protect people, plants, and animals by eliminating exposure to harmful levels of contamination. It will restore areas of degraded sediment, improve the quality of groundwater discharging to the bay, isolate contaminated materials within the landfill, and stabilize the shoreline to prevent contaminated materials from eroding into the bay. The ground slopes into the water and the types of surface materials used on these slopes will be designed to restore historically lost habitat. Additional habitat restoration elements may also be incorporated into the cleanup based on future project permitting requirements or City development plans.

You also ask that we investigate ways of trapping and stabilizing contaminants with some type of amendment in order to prevent leaching.

Cleanup technologies that involved trapping and stabilizing contaminants were evaluated during the feasibility study completed in 2013. Two mechanisms were considered. One involved an injection or mixing program wherein "soils" throughout the site were stabilized, essentially creating a block of inert material. The other involved placing a blanket of reactive material along the shoreline or within a trench to intercept ground water discharging into the bay. Both mechanisms were considered infeasible based on a variety of factors, including the difficulty of stabilizing the variety of materials likely to be found in the landfill and the lack of reactive material appropriate for the range of

contaminants being detected in ground water. As a result, these technologies were not carried forward in the analysis of alternatives.

Finally, you indicate concern that the cleanup plan downplays the effects of climate change, tsunamis, and earthquakes, and will not assure safety for 100 years. You also indicate the cost of cleanup is simply being pushed down the road to be paid for by future generations. Based on this, you ask for the most stringent standards to be used, and to consider again excavating the entire site and moving it elsewhere away from the bay.

Ecology is also very concerned about these environmental factors, and recognizes that they pose a long-term risk to the integrity of the cleanup. The selection of alternatives in the RI/FS did address climate change, tsunamis, and earthquake risk in terms of potential impacts and estimated magnitudes, but a final consideration of these issues will take place during the engineering design phase of the project. A key focus of the engineering will be to develop a design that protects the Site from these forces in perpetuity. A draft engineering design report that includes an evaluation of these concerns will be issued for public review.

Pertaining to the cleanup costs, most of the larger landfills in Washington have been closed/cleaned up via containment, and it has not been necessary to do later, more extensive cleanups. Containment solutions tend to work for the long-term because they consist of elements that are generally passive and relatively easy to maintain: Low-permeability soils and buried synthetic liners don't degrade; gas venting systems remain simple conduits for air flow; and storm water drainage systems rely on gravity flow. In addition, the potential impact of landfills on the environment in terms of leachate generation and gas production tends to lessen with time.

With regard to revisiting the idea of excavation as the selected cleanup action, Ecology will not reconsider this option based on the factors cited in your comment, because there is no basis to believe a reanalysis would change the existing determination that containment is the option that is "permanent to the maximum extent practicable" per the Model Toxics Control Act and regulations (MTCA; chapter 70.105D RCW; WAC 173-340). Ecology must operate within the scope of its authority, as defined by MTCA regulations, one requirement of which is that the selected cleanup action be "permanent to the maximum extent practicable" WAC 173-340-360(2)(a)-(b). To make this determination, a disproportionate cost analysis (DCA) is used WAC 173-340-360(3). For the Cornwall site, the DCA (Section 9.7 of the 2013 RI/FS) found containment Alternative 2 to be permanent to the maximum extent practicable.

Comment #6, Bob Burr

Your comment indicates the cleanup plan is a least-cost, cover-up, rather than an effective cleanup that protects public health.

Ecology must operate within the scope of its authority, as defined by MTCA regulations, one requirement of which is that the selected cleanup action be "permanent to the maximum extent practicable" WAC 173-340-360(2)(a)-(b). To make this determination, a disproportionate cost analysis (DCA) is used WAC 173-340-360(3). For the Cornwall site, the DCA (Section 9.7 of the 2013 RI/FS) found containment Alternative 2 to be permanent to the maximum extent practicable.

Containment of hazardous materials is authorized under MTCA, and has been determined to be effective given the circumstances at this Site. *See* WAC 173-340-740(6)(f). Containment has been used to protect human health and the environment at most landfill cleanups/closures in Washington state, and have proven themselves to be reliable and effective over the long term.

You also state the liner covering the "toxic slime" should be thicker as a minimum.

We are not certain what is meant by toxic slime, but assume for purposes of this response that it is the imported dredged sediment. The liner currently covering the sediment is temporary. It will be removed and discarded when the sediment is re-graded to be used as the low-permeability soil layer underlying the upper three layers of the capping system. The upper three layers will consist of a new liner, a drainage layer, and a mix of topsoil-pavement-park structures. The exact type and thickness of the new liner will be determined during the engineering design phase. An engineering design report describing the design details will be issued for public review.

You add a final request that the toxic slime be moved to a site designed to hold toxins, and then the underlying toxins should be dealt with.

The imported dredged sediment is natural bay sediment, with cement added for strength and handling purposes. It contains typical urban contaminants, including dioxins/furans at concentrations similar to concentrations found in soils in the area.

The environmental benefit of removing this material is no different than removing the other fill materials from the site. In fact, the underlying municipal waste and wood waste likely contain a wider variety of contaminants and in greater concentration than the contaminants present in the imported dredged sediment. While there is not a clear environmental benefit to removing the imported dredged sediment, there is a clear environmental benefit, and cost savings, if it is used as part of the cleanup. It is a ready-made source of fine-grained material suitable for reducing infiltration within the cap system proposed as part of the cleanup action.

Comment #7, Gaythia Weis

You commented on the draft CAP.

1.3 Site History and Background. You ask that a discussion of historical use of the Site for traditional purposes be added to this section.

The purpose of the site history and background section in the CAP is primarily to provide a summary of land uses and property occupants that have (or may have) contributed to site contamination. Tribal activities before the beginning of industrial development in the late 1800s are not mentioned because Ecology does not consider them as having contributed to the contamination.

1.4 Interim Action. You suggest that "careful consideration" of the dredged sediments needs to be directly connected to every point in which they are referenced throughout the CAP. You also want dioxin background measurements taken, and indicate that the dredged sediments should not be handled in ways that raise dust or allow re-entry into surface water.

The dredged sediments are discussed early in the CAP to establish the fact that they are contaminated and must be addressed by the cleanup action. Further discussion beyond this is not appropriate as the purpose of the CAP is to outline Ecology's selected cleanup action for the site, to establish a schedule of work and deliverables (contained in the Consent Decree), and to finalize the cleanup standards that will be used to ensure that the cleanup action protects human health and the environment.

With regard to dioxin/furan soil background measurements, Ecology evaluated existing urban data in Bellingham, and formalized the results in a 2011 technical memorandum. The results indicated a dioxin/furan soil background concentration of 13.6 parts per trillion, as a toxicity equivalent (TEQ). Ecology is considering a larger-scale study, but no decision has been made on if or when that might occur.

We agree that dust and storm water erosion control will be important when dredged sediments are excavated and graded during construction. Both aspects will be addressed in construction documents and health and safety plans, and will be monitored in accordance with Ecology-approved construction monitoring requirements. Cleanup actions under MTCA, Chapter 70.105D RCW and its implementing regulations, Chapter 173-340 WAC are required to comply with legally applicable local, state, and federal laws as well as relevant and appropriate requirements per WAC 1730340-710. For additional information on this subject, see Section 3.0 of the draft CAP.

1.5 Environmental Investigations and Conclusions. You ask that another bullet be added along the lines of – Potential for unknown waste in dump site.

The potential for unknown waste was discussed in the RI/FS as an integral characteristic of a municipal landfill, and is implicit whenever the term "refuse" is used. As a result, an additional bullet is not necessary.

2.1.2 Ground Water. You suggest periodic monitoring for a wider range of constituents than manganese and ammonia, given the potential for future changes in the dynamics of ground water flow and chemistry.

Ecology agrees that the long-term ground water monitoring program should include more than manganese and ammonia. A draft ground water monitoring plan will be included in the draft Engineering Design Report, which is expected to go out for public review in 2015. The monitoring plan will be finalized after the construction work has been completed.

2.1.3 Sediment. You indicate that biota-sediment accumulation factor (BASF) should be developed for persistent bioaccumulative toxins (PBTs) as the basis for establishing risk-based screening levels. You also mention that greater attention needs to be paid to the 1 foot thick sediment cap over time considering waves, currents, storm action, and shipyard operations.

In accordance with the Sediment Management Standards WAC 173-204, and the draft Sediment Cleanup Users Manual II, the Sediment Cleanup Objective for PBTs is established at the higher of natural background, the practical quantitation limit (PQL), or a risk-based concentration. This is because levels below natural background or below what can be measured cannot be achieved.

As shown in Table 2 of the CAP, natural background and PQL have been selected as cleanup levels. Since these are the lowest achievable values, it is not necessary to calculate risk-based values.

With regard to the sediment cap, we agree that the potential effects of natural forces and human activities need to be considered in detail. The actual thickness, composition, and extent of this cap will be developed during the engineering design phase of the cleanup, when further oceanographic studies will be conducted and a more precise definition of site boundaries developed. Further refinement of the cap design will also occur during the permitting phase, when agencies and groups responsible for fish and wildlife management conduct their detailed reviews.

2.2.4 Air. The comment is made that air outside the site should be considered as well as air throughout the site, and that contaminants could concentrate against the adjacent bluff.

Air emissions will be addressed for air at the property and surrounding the property as part of evaluating landfill gas impacts. We intend to measure contaminated soil vapor production from the refuse/wood waste, estimate its' on- and off-property dispersion in the atmosphere, determine whether and where it exceeds air cleanup standards, and develop a gas control system based on these studies.

4.1.2 Areas Subject to Cleanup. You indicate that storm drainage improvements should be made on the hillside above the site and a cutoff trench installed at the east property line. You also question what is meant by drainage improvements near the BNSF railway.

As part of the RI/FS, stormwater affects on the site were evaluated. Reducing infiltration through placement of an impermeable a cap over the upland portion of the site is expected to meet cleanup levels at the point of discharge into Bellingham Bay. As a result all cleanup alternatives evaluated in the RI/FS included an impermeable cap. In addition, the environmental benefit and cost of taking additional stormwater control measures (e.g. cutoff wall and improvements to the BNSF railway) were evaluated in two cleanup alternatives. The incremental increase in environmental benefit of the cut off wall was not proportionate to the increase in cost, but the increase in environmental benefit of improvements to the BNSF railway were proportionate to the increase in cost. Therefore the alternative Ecology selected for implementation at the site includes drainage improvements to the BNSF railway area.

The BNSF drainage ditch currently does not adequately intercept surface water runoff from the hillside and redirect it to an off-site discharge point into Bellingham Bay. As a result, water in the ditch is a source of recharge to ground water at the site, as described in the RI/FS. The BNSF drainage improvements planned as part of the cleanup action for the site will address these issues. The scope for this work will be developed during the engineering design phase of the cleanup, and outlined in an engineering design report that will be issued for public review.

4.1.3 Cleanup Action Overview. You comment on Figure 6 that the interface between the scrim liner and the geotextile separation layer is not well defined at the level of the gas control layer. You also suggest the assertion in the CAP – "habitat benefit and function will result from the cleanup action itself" needs to be backed up by studies before and after the cleanup action is implemented.

With regard to Figure 6, this figure is a conceptual profile, not a design drawing. Details of the interface between layers will be developed during the engineering design phase of the cleanup.

With regard to habitat benefit and function, creating an environment that does not expose plants and animals to harmful levels of contamination is the most fundamental component of improving habitat. In addition, the cleanup action will replace an existing degraded shoreline of refuse, rubble, and woodwaste with a shoreline comprised of sand and other clean materials. There is no question these measures will improve the existing habitat.

Having said this, in terms of existing habitat, the City of Bellingham is currently conducting a marine nearshore study of the entire Bellingham waterfront. Regarding post-cleanup habitat monitoring, a monitoring plan will be included in the draft Engineering Design Report for the Cornwall site which is expected to go out for public review in 2015. The monitoring plan will be finalized after the construction work has been completed.

4.2.1.1 Low Permeability Capping System - Scrim-reinforced polyethylene liner. You indicate a 60 mil HDPE liner should be used, and state more generally that "..a robust, long term mechanism for containment is dependent on use of an appropriate geotextile."

We agree with your latter statement, but as for the former, our initial evaluation has shown that a 20-mil scrim-reinforced polyethylene is chemically resistant and has an essentially unlimited life expectancy in the subsurface once installed. However, the actual thickness and composition of the liner will be evaluated during the engineering design phase of the cleanup. The results of the evaluation will be presented in an engineering design report, which will be issued in draft for public review. Ultimately, the goal is to specify a geomembrane that will fulfill its physical separation and hydraulic barrier functions in perpetuity.

4.2.1.1 Low Permeability Capping System – Low permeability soil layer. You note again that the dredged sediments contain contaminants and "deserve concern" during construction.

We agree that the imported dredged sediment must be handled carefully during construction. Please see our response to your comments on Section 1.4 of the CAP.

4.2.1.2 Stormwater Management System. You note again that uplands water runoff needs greater consideration, and suggest that the BNSF right of way is a "conduit for contaminants…into the bay."

With respect to runoff, please see our response to your comments on Section 4.1.2 of the CAP.

With respect to the BNSF right of way, we do not understand what is meant by "conduit for contaminants".

4.2.1.3 Landfill Gas Control. This comment repeats a previous comment.

Please see our response to your comment on Section 2.2.4 of the CAP.

4.2.2.1. Shoreline Stabilization. You agree with the need to stabilize the shoreline to protect the sand filter and suggest that an extended shallow area offshore could help with that and with eelgrass, but comment that any loss of eelgrass habitat would not support remedying Lummi rights to fishing in the area. You also suggest Ecology note that this section of the CAP is not in accordance with the City of Bellingham park plans.

We will take your suggestion of an extended shallow area into consideration during the design of the shoreline stabilization system.

Pertaining to your comment about loss of eel grass habitat, the design of the cleanup will try to avoid impacts to the existing eel grass bed. If this is not possible due to the overarching need to address contaminants, agencies and groups responsible for fish and

wildlife management will define mitigation requirements as part of the permitting phase of the cleanup process. These requirements will be incorporated into the cleanup.

Concerning Lummi rights to fishing in the area, the tribes assert various treaty rights, including the right to take fish. Ecology and the tribes have an overlapping interest in taking actions to protect fish, wildlife, and habitat. For the purpose of this DCAP and cleanup of this site, Ecology is acting under the authority of MTCA to address the release of hazardous substances and ensure that human health and the environment are protected.

With regard to a discrepancy between the CAP and park plans, the cleanup plan has been developed in accordance with MTCA, which requires that the cleanup action consider the intended use of the property. The CAP does this (Section 6.3), as did the previous RI/FS document. However, the actual thickness and composition of the shoreline stabilization system will be determined during the engineering design phase of the cleanup. During this phase, land use/habitat restoration plans developed by the City, or that are required by other agencies during the permitting process will be accommodated while maintaining the integrity of the cleanup action.

4.2.2.2 Sand Filter Treatment Layer. You indicated having difficulty understanding how the integrity of the sand filter would be maintained with time, and requested some specific examples of where a sand filter had been placed and how effective it proved to be. You also repeated your comment that figure 6 was vague in illustrating the interface between the upland liner/cap and shoreline geotextile layer.

The sand filter bed and overlying geotexile will be designed to retain the existing landfill material, while allowing water to pass freely through. The actual grain size gradation used in the filter and the type of geotextile will be determined during the engineering design phase of the cleanup. The goal will be to specify a filter system that fulfills its' physical separation and hydraulic functions in perpetuity. Two examples of sand filter use at the shoreline include the Scott Paper Mill site, located on Fidalgo Bay (Anacortes), and the Lockheed Shipyard Site, located on Elliot Bay (Seattle). Both have functioned effectively.

With regard to Figure 6, please see our response to your comment on Section 4.1.3.

4.3 Institutional Controls. You suggest Ecology have a greater role in meetings that are part of the City park planning process, so that the public would have a better appreciation of limitations on park development imposed by the cleanup plan.

The City is aware of the limitations on park development because they are one of the parties responsible for conducting the cleanup action at this site. As a result, Ecology defers to the City to communicate with the public on the nexus between cleanup and land use issues at this site. However, we have assisted the City with other public presentations at their request and we are available to do so again.

Also, please see our response to your comment on Section 4.2.2.1.

4.4 Types, Levels, and Amounts of Hazardous Substances to Remain In-Place. You request language be added emphasizing the fact that existing soil, refuse, and wood waste is assumed to contain hazardous substances above cleanup levels, and is therefore assumed to pose a threat to human health or the environment.

Please see our response to the comment from Glen Hayman on Section 1.5

5.0 Rationale for Selecting the Cleanup Action. You indicate disagreement with the RI/FS determination that Alternative 2 is permanent to the maximum extent practicable.

Ecology acknowledges your disagreement. However, we must operate within the scope of our authority, as defined by MTCA regulations, one requirement of which is that the selected cleanup action be "permanent to the maximum extent practicable" WAC 173-340-360(2)(a)-(b). To make this determination, a disproportionate cost analysis (DCA) is used WAC 173-340-360(3). For the Cornwall site, the DCA (Section 9.7 of the 2013 RI/FS) found Alternative 2 to be permanent to the maximum extent practicable.
Also, please see our responses to your comments on Sections 4.1.2 and 4.2.1.1.

6.1 Whatcom Waterway. You indicate that specific mechanisms for avoiding prop wash and anchor dragging need to be implemented.

We agree that activities/uses that may disturb sediments need to be considered as part of designing the sediment cap, shoreline stabilization system, and associated institutional controls. Please note that while the Whatcom Waterway cleanup site contamination overlaps the Cornwall cleanup site contamination, the Whatcom Waterway federal navigation channel designated for ship traffic is not located near the Cornwall site.

6.2 R.G. Haley. The comment is that the intermingling of contaminant from the R.G. Haley site with the Cornwall site is a serious issue, and that Section 6.2 answers some of the concerns you had about the impact of contaminated ground water on the Cornwall site sand filter.

Comment noted.

6.3 Site Redevelopment. Reference is made here to a former comment on Section 4.3 regarding how information being presented to the public is at odds with the limitations placed on the site.

Please see our response to your comment on Section 4.3.

Conclusion. You make a number of general statements about how residents of Bellingham can benefit from engaging with Bellingham Bay, and what the public education process should focus on. You also suggest that the long term goal of the cleanup should be restoration in accordance with treaty obligations to Lummi Nation.

Ecology agrees with your general commentary, and shares the goal of restoring the environmental health of Bellingham Bay. With regard to treaty obligations, please see our response to your comment on Section 4.2.2.1

In addition to our regulatory cleanup work in the bay, Ecology co-manages the Bellingham Bay Action Team, a multi-organization group that includes the Lummi Nation and RE Sources. The team has been working since 1996 to achieve the mutual goals of contaminated site cleanup, marine habitat restoration, control of pollution sources, and sustainable waterfront land use in Bellingham Bay.

Comment #8, Douglas Tolchin

Note: This comment consists of a series of linked emails. Our response below is organized by time, and starts with the earliest email.

11:17 PM email

First paragraph. You object to the "pollution cover-up scheme".

> Ecology acknowledges your objection to the selected cleanup action. However, we must operate within the scope of our authority, as defined by MTCA regulations, one requirement of which is that the selected cleanup action be "permanent to the maximum extent practicable" WAC 173-340-360(2)(a)-(b). To make this determination, a disproportionate cost analysis (DCA) is used WAC 173-340-360(3). For the Cornwall site, the DCA (Section 9.7 of the 2013 RI/FS) found containment Alternative 2 to be permanent to the maximum extent practicable.
>
> Alternative 2 involves covering contaminated materials with layers of clean material, which will prevent humans and the environment from being exposed to harmful levels of contamination. The basic elements of Alternative 2 have been used to protect human health and the environment at most landfill cleanups/closures in Washington State, and have proven to be reliable and effective over the long term.

1) You state the SEPA DNS was incorrectly issued, and that instead a SEPA DS should be issued followed by a complete EIS.

> As required under SEPA, Ecology completed a SEPA checklist and made a determination that the cleanup of the Cornwall Avenue Landfill site is unlikely to have a significant adverse environmental impact. Without specific comments on the SEPA checklist identifying errors or omissions, we conclude that the checklist was completed correctly and the DNS determination stands.

2) You indicate the sea level rise assumptions are underestimated or flawed; that capping is not going to work in the long-term or perhaps the short-term; that the "Log Pond Cap" at GP failed; that all contaminated materials at the site must be removed and replaced with clean materials in order to comply with relevant or applicable City, State, Federal, and First Nations-related laws and authorities and that it is the right thing to do; and that Ecology must make sure that liable parties, not the public, pay for the cleanup.

> Estimates of the total amount and rate of sea level rise will be re-considered during the engineering design phase of the cleanup process. This work will be presented in an engineering design report expected to be issued for public review in 2015.
>
> Regarding the effectiveness of capping, it is a viable technology that has been used extensively and effectively at landfills and other contaminated sites throughout Washington. Post-construction long-term monitoring will evaluate cap effectiveness.

Corrections will be made if the caps are not successfully protecting human health and the environment.

Concerning the Log Pond interim cleanup action, monitoring showed that the cap successfully isolated contaminants except for a small area of unanticipated erosion where the cap thinned near the shoreline. As part of the final cleanup of the Whatcom Waterway site this area and the shoreline erosion issue will be addressed.

With regard to your comment that all contaminated materials must be removed in order to comply with various laws and regulations, as stated above, containment of contamination has been used as the cleanup method at a number of sites throughout Washington. All of these cleanups complied with applicable laws and regulations. The selected cleanup action for the Cornwall Avenue Landfill site will also be designed and constructed to comply with applicable laws and regulations. Please see Section 9.2.2 in the 2013 RI/FS for a list of potentially applicable laws and regulations that were reviewed. Also see Exhibits D and E of the CD for a list of required permits and applicable substantive requirements of procedurally exempt permits or approvals.

Regarding your comment that removal of all contaminated materials is the right thing to do, removal is considered a more permanent and therefore preferred option than containment under the MTCA. Removal of all contaminated material was evaluated in the 2013 RI/FS. Please see our response to the first paragraph of your 11:17 pm email above.

Concerning who pays for the cleanup, Ecology conducted a search for potentially liable parties and identified the City of Bellingham, the Port of Bellingham, and the Washington Department of Natural Resources. The landfill portion of the Site is the result of historic municipal waste disposal practices by the City of Bellingham under a lease with the Port of Bellingham, which in turn was operating under a lease from the Washington State Department of Natural Resources. The wood waste portion of the Site was likely created by the various now-defunct lumber mills that operated at the property; Ecology was not able to identify viable descendants of the lumber mill businesses.

Ecology will reimburse up to half of the Port and City costs through the state's remedial action grant program, which helps to pay to clean up publicly owned sites. The Legislature funds the grant program with revenues from a tax on hazardous substances.

3) You suggest the First Nations have not been properly consulted, their objections not properly recognized or communicated to the public, and their prior consent not obtained.

Ecology has taken a number of steps to coordinate its work on this project with the Lummi Nation. The Lummi's are a member of the Bellingham Bay Action Team, which is a multi-organization group meeting generally every other month to coordinate Bellingham Bay waterfront cleanup and habitat restoration work. There have been a number of Cornwall landfill-related briefings with this group over the years, and last year the Lummi's reviewed and commented on the Cornwall Avenue Landfill draft RI/FS.

Their comment letter and Ecology's response can be found in our *Response to Comments* on the draft RI/FS on Ecology website (https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=220). Most recently, the Lummi's were invited to a June 2014 public meeting on the draft CAP/CD, and Ecology also sent them a copy of these documents, asking for their input. Additional coordination with the Lummi will occur as the project moves through remedial design and permitting.

With regard to obtaining prior consent, Ecology is acting under the authority of MTCA to address the release of hazardous substances and ensure that human health and the environment are protected. MTCA includes public notice and participation requirements as described in WAC 173-340-600, which allows for public participation through the cleanup process, including interested First Nations.

4) The point is made that the cleanup action selected for this site is not a "cleanup" in the conventional sense of the word, and that this is misleading to the public.

We recognize that the word cleanup could be misunderstood in the context of a MTCA remediation. As noted above, we are acting to address the risk posed by this site through the authority of MTCA, and the associated regulations known as the Model Toxic Control Cleanup Regulation WAC 173-340 (underlined for emphasis). These regulations recognize a variety of activities as "cleanup" if they eliminate or minimize exposure to harmful levels of contamination. Because addressing exposure is the key attribute, a containment remedy, such as that being selected for the Cornwall Ave Landfill site, is considered cleanup under MTCA. *See WAC 173-340-740(6)(f)*.

5) The comment is that the contaminated and otherwise toxic waste put there by rogue corporations in the past should not be allowed to remain at the shoreline, given that dumping this kind of material would never be allowed today.

Ecology acknowledges this sentiment, but must operate within the scope of its authority, as defined by the cleanup regulations. Per MTCA, the selected cleanup action must meet a number of requirements, including the requirement to be "permanent to the maximum extent practicable" WAC 173-340-360(2)(a)-(b). To make this determination, we employ the disproportionate cost analysis WAC 173-340-360(3). For the Cornwall site, the DCA (Section 9.7 of the RI/FS) found containment under Alternative 2 to be permanent to the maximum extent practicable.

In terms of the origination of the contaminated materials at the site, please see our response to comment #2 above.

6) You indicate our reports failed to identify Gray Whales as species of concern in the area, or that four of these whales foraging near the site in 2000, washed up dead a short time later. You also note that NOAA is in the process of designating Bellingham Bay as critical habitat for Southern Resident Orcas. Finally you suggest that the selected cleanup action violates the Endangered Species Act, present hazards to various cetaceans, and is therefore unacceptable.

Ecology is aware that gray whales may stop in Bellingham Bay during their annual migrations. This is noted in Section 4 of the 2013 RI/FS. We understand that this is a rare occurrence, likely driven by hunger.

We are also aware that a deceased gray whale washed ashore near the former GP pulp mill in April, 2000. Our understanding is that the cause of death was starvation, as many gray whales do not have sufficient fat reserves to make the 6,000-mile trek from Baja Mexico to the Bering Sea.

Regarding the proposed designation of Puget Sound and the Straits of Georgia and Juan de Fuca as critical habitat for the Northern Pacific Southern Resident Orca whale population, Ecology is aware of this as indicated in Section 4 of the 2013 RI/FS. With regard to the Endangered Species Act (ESA) and hazards to cetaceans, the selected cleanup action will prevent exposure to harmful levels of contamination, thereby protecting not harming aquatic and terrestrial species. In addition, to ensure no harm, agencies and groups responsible for fish and wildlife management, including federal ESA agencies, will review engineering design documents as part of the future permitting phase of the site cleanup.

7) The comment is that the proposed cleanup action at Cornwall is inconsistent with the Salish Sea marine Sanctuary standards.

We excerpted the following statement from the Salish Sea website:

> **"Marine Sanctuaries** are special places where water quality, wildlife populations and habitats are protected and restored. Pollution levels are reduced, while eco-tourism revenues are multiplied."

The cleanup action is consistent with reducing pollution levels. The cleanup action will isolate harmful levels of contamination, providing a healthier environment for wildlife.

8) This comment is a broad critique of Ecology's efforts to cleanup contamination caused by Georgia Pacific's operations.

Over the last several years Ecology has added staff to move cleanup efforts forward more quickly. The large-scale Whatcom Waterway Phase 1 cleanup and the GP West Pulp & Tissue area cleanup are slated to begin construction next summer. Contamination at these sites is related to GP historic operations.

Note that in-water cleanups can take some time as there are multiple federal, state, local and tribal organizations with authority over this work. In addition, land use decisions affect how people, plants and animals could be exposed to harmful levels of contamination. As a result, when land use changes significantly new cleanup options must be developed, evaluated and reviewed by the public.

9) The last comment incorporates by reference all other objections and comments in opposition to the selected cleanup action, and all facts and comments contained in the documents accessible via hyperlinks in the email.

Your comment is noted.

11:24 PM email

You add that the selected cleanup action also violates the "United Nations Declaration of Rights of Indigenous Peoples, as well as the fiduciary duties of Washington State and the U.S. Federal Government as Trustees for the .....First Nations pursuant to the Treat of Point Elliott and other relevant laws, statutes, regulations, etc."

Please see our responses to comments #2 and #3. Also, concerning the First Nations, the tribes assert various treaty rights, including the right to take fish. Ecology and the tribes have an overlapping interest in taking actions to protect fish, wildlife, and habitat. For the purpose of this CAP and cleanup of this site, Ecology is acting under the authority of MTCA to address the release of hazardous substances and ensure that human health and the environment are protected.

11:44 PM email

The clarifying comment is added that all of the previous comments are also being submitted on behalf of the Salish Sea Defense Council. You also provide a link to some additional information on sea level rise that was not included.

Ecology acknowledges your emails as also being from the Salish Sea Defense Council.

Also, thank you for the additional information on sea level rise. As noted in our response to comment #2, a final consideration of this issue will take place during the engineering design phase of the project. A key focus of the engineering will be to develop a design that protects the Site in perpetuity. A draft engineering design report that includes an evaluation of sea level rise will be issued for public review.

You also clarify that the term "PCBs" in a previous email was meant to be "PBTs".

Ecology acknowledges the clarification.

11:52 PM email

This comment is a warning not to "easily underestimate or unwisely dismiss the seriousness of the matters at hand" based on what happened to other executives who "did things they were not supposed to do".

Like you, Ecology is deeply committed to protection of the environment, and this objective is fundamental in all cleanups conducted under the authority of MTCA. We therefore greatly value input from people who care enough to invest their time and energy in reviewing our draft documents and submitting thoughtful comments.

11:56 PM email

Your last comment is that implementing the selected cleanup action would create multiple violations of the Clean Water Act, RCRA, the Endangered Species Act, and CERCLA.

Cleanup actions under MTCA, Chapter 70.105D RCW and its implementing regulations, Chapter 173-340 WAC are required to comply with legally applicable local, state, and federal laws as well as relevant and appropriate requirements (ARARs) per WAC 1730340-710. For additional information on this subject, see Section 3.0 of the draft CAP.

APPENDIX A
Comments Received

-----Original Message-----
From: TFO2 [mailto:tfo7470@comcast.net]
Sent: Monday, June 02, 2014 5:26 PM
To: Adams, Mark (ECY)
Subject: Public comments for inclusion in the project file

Re: Bellingham Cornwall Avenue Landfill, draft cleanup plan.

I'm a Bellingham resident, a regular user of the South Bay Trail, and an interested citizen. I endorse your draft cleanup plan.

Excavating all that buried waste isn't practical or affordable, and would probably spread even more contamination.

Cap and seal, as you propose, is the logical and affordable alternative.

No doubt, some special interest groups will hold out for project perfection. But in this case, "perfect" would be the enemy of the "possible."

I would rather see speedy approval of your draft proposal, then beginning work as soon as practical.
--
Tom Olsen
2024 Falcon Ct
Bellingham, WA 98229
Ph 360.647.1223

From: Michael Leftwich [mailto:mikeleft71@gmail.com]
Sent: Monday, June 02, 2014 5:40 PM
To: Adams, Mark (ECY)
Subject: Cornwall Avenue Landfill

I am in favor of the recommended plan for the Cornwall Site. I believe that it should be approved and clean-up work started as soon as possible.

Sincerely,
Michael Leftwich
245 S. State St.
Bellingham

---------- Forwarded message ----------
From: **Louann Chapman** <loumura@gmail.com>
Date: Fri, Jun 6, 2014 at 7:40 AM
Subject: Re: Cornwall Avenue Public Meeting Tonight at Bellingham Public Library, 6-8pm
To: Lee First leef@re-sources.org

Yes, sorry it happened and I'm wondering how many others did the same as me. Is there a way I can learn what happened at the meeting maybe through an group email or somethiing? I was particularly interested in the material they are choosing to use to cap the area, the "medium" thickness to save money. This is what I remember from the meeting a year ago. I thought without anyone apparently knowing the lifespan of this material, why be cheap and not use the very thickest? With a project of this magnitude, cutting corners irritates me. Thanks!

From: Glenn [mailto:glenn@haymanenvironmental.com]
Sent: Friday, June 06, 2014 12:16 PM
To: Adams, Mark (ECY)
Subject: Comments on Cornwall Avenue Landfill Documents

Mark,

Attached are my comments on the Cornwall Avenue Landfill Draft Cleanup Action Plan, Draft Public Participation Plan, and Draft Consent Decree. My comments are primarily on the DCAP. I found the documents to be well written and complete. One concern I have is that the low permeability soil generated by dredging part of the bay are contaminated, and are not clearly and consistently identified as contaminated. Another concern is that the terminology or name of some things is not consistent throughout the DCAP, for example the low permeability sediment mentioned above, the material in the landfill and the material eroded from the landfill. You will see there are a number of comments suggesting wording changes and a few added sentences.

If you have questions regarding my comments or would like clarification, please call or email me at your convenience. Nice job pulling these together.

Best regards,
Glenn
Glenn A. Hayman, LHg
CEO and Hydrogeologist
Hayman Environmental, LLC
18425 NE 95th Street, Suite 201
Redmond, WA 98052
ph. 206-235-0589
www.HaymanEnvironmental.com

June 6, 2014

Mr. Mark Adams
Ecology NWRO
3190 160th Ave SE
Bellevue, 98008-5452
Sent via email to mark.adams@ecy.wa.gov

Subject: Review and Comment on Cornwall Avenue Landfill Draft Cleanup Action Plan, Draft Public Participation Plan, and Draft Consent Decree

Dear Messer's Adams and Petrovich

Hayman Environmental is pleased to submit comments on the Cornwall Avenue Landfill Draft Cleanup Action Plan, Draft Public Participation Plan, and Draft Consent Decree.

Draft Cleanup Action Plan
General Comments

There are a number of media and materials that are referred to by several names. One name should be consistently applied to each material throughout the CAP. For example, the waste material in the landfill is referred to as refuse, wood debris, solid waste and contaminated fill. One name should be consistently used for this material. Similarly, the dredge sediment discussed in Section 1.4 Interim Action appears to be referred to as dredge sediment, imported fill (Figure 6) and low permeability soil layer. At the end of Section 1.4 add a sentence giving the name that will be used throughout the rest of the document for this material.

Section 1.5 summarizes the constituents of potential concern and associated media. The second bullet reads "*Metals, dioxins/furans, phthalates, and n-nitrosodiphenylamine in interim action sediment*." I interpret this to say that the dredged sediment discussed in Section 1.4 is contaminated. Assuming this is correct, then the CAP must clearly state the Cornwall Avenue Landfill cleanup action will be protective of human health and the environment from releases of the sediment contaminants. Throughout the document it should be made clear that this material is contaminated so that the cap designers and constructors do not overlook this important characteristic of this material. Looking forward to the design documents, it must be excessively clear that this material is contaminated to ensure the people reading the plans and building the cap handle the material safely and use this material correctly. If the second bullet does not refer to the Section 1.4 sediment, revise the CAP to clearly identify what this bullet refers to.

On page 4-2 the second paragraph implies that the MU-2 cleanup area is not well defined and may extend beyond the area shown on Figure 3. I suggest either using the same wording used to describe MU-1 cleanup or clarify when the outer edge of MU-2 will be defined.

The R.G. Haley site and Whatcom Waterway site are referred to with and without site in their name. The document should be consistent.

Detailed Comments
Page 1-3
First paragraph, provide the projected date the PBT background concentrations are planned to be completed.

Third paragraph, revise the note to read, *to simplify discussions about the Site, project north was established as the northeastern Cornwall property line*.
Last line, capitalize Inner Harbor Line

Page 1-4
Third paragraph, line 6, replace *City* with *R.G. Haley site*.
Fourth paragraph, line 1, after *cleanup site* insert *(Whatcom Waterway)*.
Fourth paragraph, last line, provide an estimate for when the Whatcom Waterway cleanup will occur.

Page 1-5
Paragraph 1, line 1, after *development* insert *in 1954*.
Line 2, delete the comma after *use*.
Line 7, replace *the adjacent aquatic area* with *a portion of Bellingham Bay*.
Last bullet, before *sediment* insert *site*.
Paragraph 4, insert a comma after the word *debris*.

Page 1-6
First line, replace *from* with *after*.
First bullet, the associated media needs to be identified.
Second bullet, delete *Site*. It is implicit the ground water IHSs are for the Site. Alternatively, be consistent and add Site to the other bullets.
Last paragraph, line 4, replace *two sites* with *Site and the R.G. Haley site*. Also delete *Site* later in the sentence.
Last line, delete *releases*.

Page 2-3
First line, after *risk* insert *for carcinogens*.
First line, after *individual* insert *non-carcinogens*.
Second paragraph, last line, after *Waterway site* insert *and will be remediated as part of that site's cleanup;.*
Third paragraph, sixth line, after *or* insert *if*.

Page 2-4
Second bullet, second paragraph, line 3, after *capping* insert a comma.
Second bullet, second paragraph, line 5, after *point of compliance* insert *(see Section 2.2.3)*.
Fourth paragraph, line 7, after *action* insert *construction*.

Page 4-1
First paragraph, line 7, after *area* replace *where* with *(MU-3)*. A cleanup action is not formally selected at this time for MU-3.
Second paragraph, line 1, add a period after *CAP*, delete *but* and capitalize *The*.
Last paragraph, line 1, replace *was* with *is*. Alternative 2 is still the preferred alternative in the FS.

Page 4-2
Second paragraph, this paragraph implies that the extent of the MU-2 cleanup is not well defined and may extend beyond the area shown on Figure 3. If the extent of MU-2 is well defined, revise the second sentence to the same structure as the first sentence. If MU-2 is not well defined, add a sentence stating when during design or construction phase of the cleanup the extent of the thin layer sediment cap will be determined.

Section 4.1.3, this section identifies the landfill waste by several different names. The first paragraph discusses contaminated fill in MU-1. The second paragraph refers to contaminated fill (refuse, wood waste) in MU-2. The third paragraph discusses the refuse/wood waste in MU-2. While there is a continuum of material from the waste put in the landfill to the material eroded from the landfill that is now present in MU-3, to the extent possible the material in the different MUs should be given different names to clarify the discussion for people implementing the CAP. At a minimum, the waste that remains in place in the landfill and the material eroded from the landfill should be referred to with easily distinguishable names such as landfill fill and eroded or reworked waste.
Third paragraph, line 2, it is unclear what *contaminated fill* refers to. It appears to be the contaminated fill in the landfill, however; it could also be the contaminated fill described in Section 1.4 Interim Action.
Fifth paragraph, line 2, this line uses the metric system, centimeters, to give the thickness of the protective sediment. The rest of the document uses the English system for length and distance measurements. After *12 centimeters* insert *(4.72 inches)*.
Fifth paragraph, lines 4 and 5, after *stabilization system* insert *(MU-1)*. Also, at the end of the paragraph insert *(MU-2)*.

Page 4-3
First paragraph, after the first sentence insert *The soil used in the capping system will utilize the contaminated low permeability soil placed on the landfill in 2011 and 2012 (Section 1.4).*
First paragraph, lines 4, 5, and 6, the description of the scrim reinforced liner should include ensuring that the interim action sediment/soil (Section 1.4), which is contaminated, is stabilized and isolated from the environment.
Last bullet, add to the description of the low permeability soil layer that the design and construction of the cleanup action will ensure that contaminants in the 2011/2012 interim action sediment stored on site will not be released to the environment.

Page 4-4
Section 4.2.1.3 Landfill Gas Control, line 1, revise the start of the sentence to read *Based on the time since the landfill closed in 1965, ….*

Fourth paragraph, line 4, delete the words *passive* and *potentially.* Later in this paragraph it discusses modeling to evaluate LFG generation and passive or active LFG control.
Fourth paragraph, line 5, delete *It is anticipated that*.
Fourth paragraph, line 6, replace *gas* with *LFG*.
Section 4.2.2, this section describes the shoreline stabilization system from the top down. A layered constructed system like this is more easily understood and visualized when it is described in the order it is built, from the bottom up.
Last paragraph, move the last two sentences to Section 4.2.2. These sentences discuss coordination with the R.G Haley site cleanup.
Last paragraph, line 3, replace *property* with *site*.
This Section is missing a discussion of how the Cornwall Avenue Landfill cleanup action will be coordinated with the Whatcom Waterway cleanup in areas where they overlap.

Page 4-5
First paragraph, last sentence, delete *In addition to the sand filter layer* and *resulting from wave action.*
Second paragraph, line 5, replace *required* with *conducted.*
Second paragraph line 6, replace *significant* with *intense.*
Section 4.2.2.2 Sand Filter Treatment Layer, the terminology for this section is not consistent

with Figure 6.
Fourth paragraph, last line, insert *sand* before filter and delete *media.*

Page 4-6
First paragraph, line 3, after *Additionally* delete *the*.
First paragraph, line 3, replace *system* with *wells*.
First paragraph, line 4, delete *ground.*
First paragraph, line 5, replace *at* with *in* and replace *interface* with *transition zone.*
First paragraph, last line, add to the end of the paragraph *sample collection procedures. The plan will also specify when in the tidal cycle samples will be collected and the rationale for specifying that time. The monitoring plan may also present methods for modifying and optimizing the monitoring in the future.*
Section 4.2.2.3 Thin Layer Cap, this terminology is not consistent with Figure 6.
Second paragraph, add to the end of the paragraph *as presented at the end of Section 2.1.3.*
Third paragraph, line 2, delete the period after stable.
Third paragraph, last sentence, delete *In combination with*, after system and insert *, and*. Also, replace *will cap* with *cover.*
Fourth paragraph, there is no mention of coordinating this cleanup with the Whatcom Waterway site cleanup.

Page 4-8

Line 2, insert *the* before *Site* and delete *releases.*

Page 6-1
Add the word *Site* to the end of the titles for Section 6.1 and Section 6.2.
Second paragraph, line 1, after *action for* insert *MU-2 of the Site,* and after *Whatcom Waterway* delete *within MU-2.*
Second paragraph, line 2, replace *Site vicinity* with *area where the sites overlap.*
Second paragraph, line 3, delete *the area of overlap* and the parentheses around *MU-2.*
Second paragraph, line 4, insert *In the overlap area* before *Cleanup in MU-2.*
Second bullet, last line, insert *Site's* before *sand filter.*

Figure 2
The Interim Placement Areas should be relabeled to be consistent with the terminology used for these features in the text of the CAP.

Figure 3
Under ***MU-3*** revise the caption to read *(outer boundary to be determined later*).*

Figure 4
Revise the figure title to *Upland Overlap Area of the Cornwall Avenue Landfill site and the R.G Haley site.*

Figure 5
Delete *Selected* from the figure title. The CAP does not discuss any of the unselected cleanup actions to any significant extent. 10

Figure 6
Delete *Selected* from the figure title.
The labels on the various components of the cleanup action need to be revised to use the

names or terminology used in the text of the document.
As I understand the cleanup action at the Site, the cap layer directly above the refuse/wood debris includes the contaminated sediment dredged from the bay as an interim action. To ensure that this contaminated material is not placed near the shore or around the monitoring well casing, the portion of this layer to the right of the refuse/wood debris should be divided from the rest of the layer with a diagonal line and labeled as imported low permeability fill.
The Scrim-Reinforced Liner and the Non-woven geotextile separation layer do not overlap. The gap between these layers exposes the low permeability soil layer and the highly permeable Gas Collection and Control Layer to surface water infiltration. Extending the Scrim-Reinforced Liner under the Non-woven geotextile would ensure that surface water and ocean water do not enter and potentially compromise the landfill cap. Note, the inconsistent use of capitalization in the cleanup action components is how they are labeled on Figure 6.

Draft Public Participation Plan
Page 6
Ecology Website, it has been my experience that Ecology's websites commonly are not up to date. The Public Participation Plan should at a minimum commit to providing an annual status update or summary on the website.

The Bellingham Bay sites are high priority sites for cleanup, but it is hard to see the importance when website for 8 of the 13 sites have not been updated in over a year. The following is a list of Bellingham Bay websites and the date they were last updated.

Central Waterfront.....May 2014
Cornwall Avenue Landfill.....May 2014
Eldridge Municipal Landfill .....May 2012
Georgia Pacific West..... August 2013
Bellingham Port Harris Ave Shipyard ....January 2013
Holly Street Landfill ..... September 2004
I & J Waterway.....January 2014
Little Squalicum Park .....December 2009
R.G. Haley .....May 2013
S State Street Manufactured Gas Plant ..... April 2013
Weldcraft Steel & Marine ..... November 2012
Whatcom Waterway..... November 2013

Another example of an out of date website is the one for the Port of Seattle 115 https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=1229 . The most recent information is from 2011 when an Agreed Order was signed. The order requires a RI/FS be conducted, however the approved work plan is not posted even though the RI sampling is almost complete.

Draft Consent Decree
Add to the Consent Decree language that requires all reports, plans and other documents be provided to Ecology in electronic format, either .PDF or .DOC. This will greatly simplify record keeping and keeping the website up to date.

If you have any questions regarding my comments, please contact me at your convenience. Thank you for the opportunity to review and comment of these documents.

Best regards,
Delivered via email
Glenn A. Hayman, LHg
Principal
glenn@HaymanEnvironmental.com
206-235-0589
Hayman Environmental, LLC
18425 NE 95th Street, Suite 201
Redmond, WA 98052
www.haymanenvironmental.com

From: Judith Akins [mailto:sunsetjam@gmail.com]
Sent: Friday, June 13, 2014 12:52 PM
To: Adams, Mark (ECY)
Subject: Cornwall Ave Landfill

To: Mark Adams
Re: Toxic Cleanup Program Cornwall Ave

Thank you for your presentation regarding the Cornwall Avenue Landfill cleanup on June 5 and I would like to address a few concerns in writing as you requested.

First of all, I do believe there has to be input by the Lummi Nation; their rights have to be considered. Any planning has to take into consideration fishing rights and the health of the waters and surrounding environment of Bellingham Bay.

Secondly, I would like Ecology to further investigate a way of trapping and stabilizing contaminates with use of a biochar or such products in preventing leaching into the waters (such as the women on the audience recommended).

Lastly, I remain very concerned that this plan inadequately downplays the the effects of climate change on the entire project as well as the threat from tsunamis and earthquakes. I cannot believe that this site will be safe for over 100 years and that we are just pushing down a cost that will have to dealt with by future generations.(As we are now doing!) I am requesting that you use the most stringent standards to contain this site for our future and our childrens' children. Therefore, should we not consider again, moving this whole landfill away from our bay and placing in a containment facility that will prevent any future problems to our waters.

Looking forward more information in this continued process.

Sincerely,
Judith Akins
2174 E Birch St
Bellingham, WA
98229-4558

From: bobburr@comcast.net [mailto:bobburr@comcast.net]
Sent: Wednesday, July 02, 2014 3:02 PM
To: Adams, Mark (ECY)
Subject: Cornwall Beach "Clean-up"

You know the plan is a least-cost, cover-up, rather than an effective clean-up that will eliminate public concern over the health hazards of this site. I won't let my dog or grandkids walk there. At the very least, the liner covering the toxic slime should be thicker. This plan would never be approved by the voter if educated on it.. Make the Port remove the slime to an inland site designed to hold such toxins. Then deal with the contaminants that rest beneath.

Bob Burr
Bellingham

To:
Mark Adams, Site Manager
WA Department of Ecology
3190 160th Ave. NE
Bellevue, WA 98008-5452
Phone: 425-649-7107
Email: Mark.Adams@ecy.wa.gov

FROM:
Gaythia R. Weis
InfoPteryx LLC
1713 Edwards Ct
Bellingham, WA 98229
gaythia@gmail.com

July 2, 1014
Public Review Draft Cleanup Action Plan
Cornwall Avenue Landfill Bellingham, Washington

I have organized my comments within the headings as outlined in the original document

1.3 Site History and Background
The first sentence here does state that:

"Prior to its original development, the majority of the site consisted of tide flats and subtidal areas."

However, in Table 1, Site History, Lummi Nation use of this land, and current claims to rights for that use, are completely omitted. This is highly inappropriate, in my opinion. In the response to my previously submitted comments, it was noted that:

"The Lummis claimed historical use of this area, and requested that we add a discussion of historical use of the Site for traditional purposes to the RI/FS, which we will do."
This should be done here.

1.4 Interim Action
This mentions the use of what are described as *"stabilized and fine grained"* sediments from a Port dredging action. The history of how these sediments came to be at this site are not mentioned until section 1.5 *as "constituents of concern"*

- *"Metals, dioxins/furans, phthalates, and n-nitrosodiphenylamine in interim action sediment"*

In my opinion, careful consideration of the nature of these sediments needs to be directly connected to every point in which they are referenced throughout the cleanup document, as well as in subsequent monitoring documents. I believe that a careful science based balance needs to be maintained. Dioxins are highly toxic, and on the other hand fairly ubiquitous. As reference points, I would like to see area background measurements taken, in neighboring upland areas, similar to those for Seattle's Ballard neighborhood as documented here: https://testfortress.wa.gov/ecy/testpublications/SummaryPages/1109216.html. I believe that there is a serious communication gap on this issue with two local extremes. One is that of members of the public who

fear a “dioxin mountain”. The other is that of some port officials, who in my opinion seem too cavalier about the harmlessness of this material, and too apt to feel clever to have thought of using it in this manner. I think that a well-reasoned understanding is crucial to correct handling and containment. The dredged sediments should not be handled in ways that raise dust, nor allowed to reenter surface waters.

1.5 Environmental Investigations and Conclusions

This gives a listing of *“constituents of potential concern”*.
In my opinion, this should add a bullet point along the lines of:

- Potential for unknown waste in dump site

Unless the dumpsite was to be completely evacuated, it is not really known what was put there. Bellingham was an industrial town. Pre-1965, standards for waste disposal were far different than they are today. This dumpsite was not operated in a manner that is in accordance with modern standards for landfills. I think we need to maintain mindfulness that potential for discovery of currently unknown contaminants exists.

2.1.2 Ground Water

Unlike many landfills, which are raised above surrounding surfaces, and thus hydrologically isolated, this landfill is likely to be subjected to considerable groundwater fluctuations, as well as to long term effects of sea level rise.

Here, in addition to rain water falling on the dumpsite surface there is also the potential for groundwater flow off of upland areas into and through the dumpsite materials. This has the potential of driving contaminants towards the shore.

The bullet point in Section 1.5 above notes that the following are present in groundwater:

- Metals, plycholorinated biphenyls (PCBs) fecal coliform, manganese and ammonia

As I noted above there may be other yet unknown substances in the dump wastes.
Changes in groundwater flows and levels from both upland and seawater sources can potentially affect the chemistry (pH, oxidation state) of the dumpsite materials, and thus, the composition of what is discharged. In addition to the established CLs for manganese and ammonia, screening for other constituents ought to be established as a mechanism for providing warnings of changing conditions. This should include periodic more widespread groundwater screening in an effort to ensure that substances are not missed.

2.1.3 Sediment

This section notes that:
“Establishment of a Site-specific risk-based screening level (for persistent bioaccumulative toxins,
or PBTs) would require determining a Site-specific biota-sediment accumulation factor (BSAF) based on bioaccumulation testing, which has not been conducted.”

I believe that site-specific risk based screening levels for PBTs should be conducted as part of this cleanup action plan, that not only take into account PQLs of individual constituents, but insofar as

possible, the cumulative effects of the total spectrum of contaminants.

Lummi Nation use of the area for fishing just offshore from this site also needs to be taken into consideration in an analysis of bioaccumlative toxins.

In the final paragraph here on physical criteria, I think greater attention needs to be taken with what it means to provide 1 ft. of clean sediment as a cover over debris or contaminated sediments over time. Natural waves, currents, storm action, and also the operation of the Whatcom Waterway as a shipyard and terminal needs to be taken into account.

Initial placement of clean sediments may need to be much thicker, and/or heavier materials utilized in some areas.

2.2 Points of Compliance
2.2.4 Air
In addition to ambient air throughout the Site, I think that consideration should be made to points upslope (and potentially downwind) of the Site. I believe that there is some potential that contaminants originating in a tall stack could clear the site but concentrate against the adjacent bluff, where there is housing.

4.0 Selected Cleanup Action

4.1.1 Preferred Alternative Selection

4.1.2 Areas Subject to Cleanup
I believe that stormwater drainage improvements on the hillside above this site should be included along with a cutoff trench installed at the east property line. Answers to my previous comments on this topic described a cutoff trench as being an element of Alternative 4. I am not sure what the caption on figure 5 means by "Improve Drainage near BNSF Railway to Reduce Infiltration" but this sounds as if it is less than a "cutoff".
The reduction of groundwater flow through the site as well as protecting the site from rainwater percolation, are what provides protection from driving contaminants out of the site and into the Bay. I think that more stringent upland stormwater protection measures should be applied.

4.1.3 Cleanup Action Overview
Figure 6: As I interpret the cross section shown in figure 6, it seems to me that the interface between the scrim-re-enforced liner and what is described as a non-woven geotextile separation layer is not well defined at the level of the gas collection and control layer. I'd like to see this better defined.
Habitat: This section asserts that *"habitat benefit and function will result from the cleanup action itself"*.
This should be backed up by scientific habitat studies both before and continuing after the cleanup action.

4.2 Description of the Selected Cleanup Action

4.2.1 Management Unit 1

4.2.1.1 Low Permeability Capping System
- **Scrim-reinforced polyethylene liner**

This liner should be specified as a sealed seam, 60 MIL, HPDE landfill grade geotextile. Studies demonstrate that the composition and the thickness of the geotextile determines its longevity. When buried, thickness reduces outward diffusion of antioxidants and other compounds that help flexibility and thus help delay cracking or other degradation. The composition and the thickness of the geotextile also determines the diffusion of contaminants through the material. While much of the volatiles will be contained by the layer of dredged sediments, some may reach the underside of the geotextile. And the sediments themselves were previously described as having contents of concern: *"Metals, dioxins/furans, phthalates, and n-nitrosodiphenylamine in interim action sediment".* Thus a robust, long term mechanism for containment is dependent on use of an appropriate geotextile.

- **Low permeability soil layer**

The description here should retain mindfulness as to the nature of the dredged sediments, as I discussed in section 1.4 above, and explicitly repeat that these do contain *"Metals, dioxins/furans, phthalates, and n-nitrosodiphenylamine in interim action sediment"* that do deserve concern as the seduments are manipulated and handled in constructing the capping system.

4.2.1.2 Stormwater Management System

As I noted in comments to section 4.1.2 above, I believe that uplands water runoff needs greater consideration. I also believe that the potential of the BNSF railroad right of way itself to serve as a conduit for contaminants along the bluff and then later into the Bay needs to be taken into account.

4.2.1.3 Landfill Gas Control

As I noted in section 2.2.4 above, I think greater consideration needs to be taken to the possible conveyance of contaminants from venting upslope, where there are residences, and air flow may be constrained by the slope of the bluff.

4.2.2 Management Unit 2

4.2.2.1 Shoreline Stabilization

This section states that:
"The use of soft bank technologies in this area could minimize the loss of eelgrass habitat and better
support its re-establishment following construction."

I agree with the need to stabilize the shoreline to prevent wave action from dislodging the sand filtration system. I am unclear as to where the boundaries lie between the lands here and those of the Whatcom Waterway (with its needed depth for shipping). I would think that an extended fairly shallow offshore area, beyond the immediate shoreline stabilization might be beneficial for both stabilization and eelgrass. I think that any consideration of loss of eelgrass habitat is not in accordance with working towards remediation of Lummi rights to fishing in this area. I also believe that the Department of Ecology should at least note that this section is not in accordance with City of Bellingham park plans, which seem to imply much greater "soft shore" access, and imply to
the public that that the site is to be a "beach" Park.

4.2.2.2 Sand Filter Treatment Layer

I am not knowledgeable of the technologies to be put into place here, in a tidal mixing zone with expected sea level rise and the possibility of severe storms. I have difficulty in visualizing how the integrity of the seaward end of the sand filter can be maintained over time.

I am concerned by the vague language here such as:

"The actual thickness, composition and gradation of the filter layer will be determined during remedial design, however for conceptual design purposes…"

In my opinion, for the purpose of providing constructive comments here, regarding our acceptance of this as a cleanup plan, we need some specific references as to how this has been implemented elsewhere and the effectiveness of such systems. As noted in 4.1.3 above I found Figure 6 to be vague as to how the upland end of the sand filter and its none woven geotextile layer interfaced with the liner of the upland liner/capping system.

4.3 Institutional Controls

The phrasing here regarding control plans and covenants, is, I believe acceptable in a general fashion. What matters is the specifics as to how these are negotiated and enforced. In my opinion, The Department of Ecology could be playing a greater role in meetings regarding Bellingham City Parks planning of the future "Cornwall Beach" park site. I do not believe that public expectations as to what such a future park might entail are in accordance with the limitations set forth in this Cleanup Action Plan document.

4.4 Types, Levels, and Amounts of Hazardous Substances to Remain In-Place

I think that the low key sounding phrasing here is what is going to lead to implementation problems with the Institutional Controls of section 4.3 above. In general, members of the public have heard about the sediments and their dioxin contaminants. They are, in my opinion, much less informed about the dumpsite itself. Wood waste sounds innocuous, and refuse sounds like garbage as if this was a neighborhood compost pile. Of course, for some long time Bellingham residents, it was that, and they can remember back to when they drove out with their parents to empty their trash there. But Bellingham was an industrial city. And this was an era in which industrial waste was not at all handled with the care with which it is accorded today. I think this section needs language that emphasizes those facts such as this from section 6.1 of the Remedial Investigation / Feasibility Study:

From 6.1
As discussed in Section 3.0 (Remedial Activities), soil, refuse, and wood waste within the landfill
is ***assumed to contain hazardous substances*** *above applicable MTCA soil cleanup levels* ***and extensive soil quality testing was not conducted during the RI.***
It is assumed that refuse poses a threat to human health or the environment through direct contact or release to the environment, and will be addressed in general accordance with regulatory requirements for solid waste landfills

5.0 Rationale For Selecting the Cleanup Action

I disagree that Alternative 2 should have been determined to be permanent to the maximum extent practicable. As noted above, I believe that both a higher quality geotextile and greater attention to upland groundwater runoff are quite possible. These would provide greater confidence in longer term success in containing the waste materials and contaminants.

6.0 Compatibility with Adjacent Cleanup Actions and Site Redevelopment

6.1 Whatcom Waterway
Recently, a ship at port at the old GP site apparently got stuck in the sediments and had to "work its way" loose again. Specific mechanisms for avoiding prop wash and anchor dragging need to be implemented.

6.2 R.G. Haley
The intermingling of this area with the landfill is a matter of serious concern. The bullets here seem to recognize these issues in greater specificity than I've seen before. The address some of my concerns that flows of the R.G. Haley wastes into the landfill materials will be remediated and won't make their way through the sand filters planned for the dump site and then into the Bay.

6.3 Site Redevelopment
As noted in section 4.3 Institutional Controls I believe that the manner in which many aspects of this area are being conveyed to the public are at odds with the limitations placed on this site by its past use.

Conclusion
I do believe that creating connections for the residents of Bellingham with their natural surroundings along Bellingham Bay is crucial for creating ecological awareness that will aid in preventing similar environmental fiascos in the future. I support ideas that would give residents an opportunity to enjoy being by the Bay, but believe that this public use facilities on this site will need to be designed in ways that make it clear that this was a historic dump site. Awareness of the limitations inherent in use of this site, and the ways in which the protective constructions of the current mediation work need to be guarded, should be important components of the public education process that accompany this work. I believe that actions at this dumpsite should be well integrated with other efforts to work towards restoring Bellingham Bay's original ecological functions. In my opinion, our long term goal ought to be a restoration that is in accordance with our treaty obligations to Lummi Nation, for whom Bellingham Bay was part of an ecosystem that provided habitat for salmon, shellfish and other organisms.

From: Douglas Tolchin [doug@salishsea.org]
Sent: Wednesday, July 02, 2014 11:56 PM
To: Adams, Mark (ECY)
Subject: Re: Cornwall Avenue Landfill - Public Comment

Additionally, I believe that the following also applies to the subject contemplated actions:

multiple violations of the Clean Water Act, RCRA, the Endangered Species Act, and CERCLA

On Jul 2, 2014, at 11:52 PM, Douglas Tolchin <doug@salishsea.org> wrote:
Additionally...
Just to make sure that no one reviewing these comments will easily underestimate or unwisely dismiss the seriousness of the matters at hand, please see what happened to other executive types who did things they were not supposed to do relative to large amounts of mercury, chlorinated mercury compounds and waterways relating to a chlor-alkali mercury facility such as the one which operated for decades in and around the subject Cornwall Avenue Landfill and dredged sedimentation-related areas...
http://www.alston.com/Files/Publication/7a2ebd38-22e4-4de5-b213-72fa3f1021f2/Presentation/PublicationAttachment/a98e2472-e3d3-478c-b240-17a05408b499/US%20Supreme%20Court%20Declines.pdf

On Jul 2, 2014, at 11:44 PM, Douglas Tolchin <doug@salishsea.org> wrote:
Additionally...All the below and related comments and previously provided attachments are also on behalf of Salish Sea Defense Council, a Washington State nonprofit corporation, as well, for whom I am an authorized representative.
Here's some sea level rise information you failed to take into account or otherwise disclose properly to the public.
http://oceana.org/en/blog/2014/05/west-antarctic-ice-sheet-collapse-calls-for-revised-sea-level-rise-predictions
Where I said PCBs below, I meant PBTs...Persistent Bioaccumulative Toxics (of which PCBs are only one type of PBTs).
Sincerely,
Douglas Tolchin

On Jul 2, 2014, at 11:24 PM, Douglas Tolchin <doug@salishsea.org> wrote:
Additionally, the proposed contemplated actions violate numerous aspects of the United Nations Declaration of Rights of Indigenous Peoples, as well as the fiduciary duties of Washington State and the U.S. Federal Government as Trustees for the below mentioned First Nations pursuant to the Treaty of Point Elliott and other relevant laws, statutes, regulations, etc.
http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf
http://thorpe.ou.edu/guide/robertson.html
http://www.darrp.noaa.gov/northwest/lowerduwamishriver/pdf/EB_TC_Resolution_2009-04.pdf

On Jul 2, 2014, at 11:17 PM, Douglas Tolchin <doug@salishsea.org> wrote:
Dea Mr. Adams,
On behalf of myself as an individual, long-time citizen of Bellingham, and also on behalf of the Salish Sea Foundation, Salish Sea Land Trust and the Salish Sea Marine Sanctuary, I hereby object to the subject pollution cover-up scheme contemplated by your agency, the Port of Bellingham and the City of Bellingham.

The subject public process as well as the preferred alternative identified in the feasibility study report are inadvisable, inappropriate (and quite possibly illegal) for a variety of reasons including but not limited to the following:

1) The related SEPA DNS (Determination of Nonsignificance) is inappropriate and incorrectly issued by DOE. Prior to proceeding further with the subject remediation process, a SEPA DS (Determination of Significance) should be issued, and the public should have the benefit of a complete Environmental Impact Statement and all other protective elements and procedures required pursuant to a SEPA DS.

2) The Sea Level Rise-related assumptions, and other hydrodynamic assumptions, are grossly underestimated and otherwise flawed. Capping is not going to work in the long-term, and maybe not even in the short-term. The socalled "Log Pond Cap" at the G-P site was also supposedly a bona fide and proper 'cleanup" and the cap failed not long after it was installed. Full removal of all contamination at the Cornwall Avenue Landfill must be removed and backfilled with clean materials. This is necessary to comply with all relevant and otherwise applicable City, State, Federal and First Nations-related laws and authorities, and it is also the right thing to do, and DOE must make sure that the liable parties (not the public) pay for it.

3) First Nations such as Lummi Nation, Nooksack Indian Tribe and Samish Indian Nation have not been properly consulted, their objections have not been properly considered or disclosed to the public, and their prior informed consent has not been obtained.

4) DOE, the Poret and the City of Bellingham have routinely, intentionally and knowingly mislead the public by using the word "cleanup" to describe the subject remediation scheme which entails "covering up" aka "capping," and therefore for this and other reasons this whole charade is fraudulent. In much the same way that throwing a carpet on top of spilled milk in the kitchen is not a "cleanup," this isn't either. The public deserves plain truthful language to describe the contemplated actions, not 'corporate greenwashing jargon" designed to produce a cheapo coverup which is repeatedly referred to as a cleanup, which it is not. To be consistent with the word cleanup, Ecology must require full removal of all contamination from the subject waterfront site, and dispose of it in an upland facility where such toxic wastes are lawfull allowed to be sited.

5) Our community (and various laws) would never allow a dumpsite of any kind to be established along our shoreline nowadays, let alone one into which contaminated and otherwise toxic wastes would be dumped. So why would we allow one to remain there which was illegally, ignorantly and stupidly put there by rogue corporations in the past? And then to add more contaminated dredge spoils on top, and call it good? This is absurd, and insulting, and is not going to happen.

6) Your reports fail to identify Gray Whales as species of concern in the area, and further fails to inform the public that four gray whales who were foraging in and around Bellingham Bay and the Cornwall Avenue Landfill during the year 2000 all washed up dead not soon thereafter...one of them within a tennis ball throw away from the subject site! (see attached photo of the subject dead whale). Prior to Georgia-Pacific brutally poisoning Bellingham Bay without remorse during and since the 1960's, Bellingham Bay was a major Oyster Farming area frequented by Cetaceans of various kinds. NOAA is in the process of designating Bellingham Bay as critical area habitat for Southern Resident Orcas which are an endangered spacies. The proposed actions relating to Cornwall Avenue Landfill **violate the Endangered Species Act**, present undue hazards to Cetaceans of various kinds (Orcas, Gray Whales, Harbor Porpoises, Dall's Porpoises, Pacific White-sided Dolphins, etc.) The proposed actions are Unacceptable

Bellingham Bay Designated by NOAA as Critical Habitat for Endangered Southern Resident Orcas
http://www.nmfs.noaa.gov/pr/pdfs/criticalhabitat/killerwhale_sr.pdf

Bellingham Bay brims with whales

Seattle Times staff: Seattle Times news services
http://community.seattletimes.nwsource.com/archive/?date=20000423&slug=4017015

CLEAN UP or COVER UP?

Dead Whales
http://www.skookum.us/fowcweb/whales.htm
http://www.skookum.us/fowcweb/sediments.htm

7) The proposed coverup of the Cornwall Avenue Landfill is inconsistent with Salish Sea Marine Sanctuary standards, and therefore will not be tolerated or otherwise allowed. (see attached)
www.salishsea.org
https://www.facebook.com/SalishSeaMarineSanctuary?ref=br_tf

8) The proposed improper and illegal coverup of the Cornwall Avenue Landfill is a symptom, and part and parcel, of a broader pattern of corruption and/or incompetence which has plagued the non-remediation of the vast majority of the massive amounts of mercury, dioxin and other PCB-related pollution left by 40 years of Georgia Pacific Corporation's Pulp & Chemical Factory Operations along the shores of Bellingham Bay, into Bellingham Bay via its outfall and outrageously pernicious "mixing zone" granted by DOE, as well as their illegal dumpsites along Whatcom Creek and elsewhere in and around Whatcom County, almost none of which the Port of Bellingham and/or the Department of Ecology has addressed in a meaningful or appropriate manner. Frankly, this whole show is a scandal of ginormous proportions. GP ceased pulping and chemical factory operations in early 2001. Now, 13 years later, with the vast majority of almost $100 million dollars eanring interest fort AIG Insurance company instead of being timely spent on properly removing and disposing of contamination, it is quite clear that this whole affair has been improper, mismanaged and needs to change in a variety of categorical ways.

9) All other objections and comments in opposition to the subject "capping scheme" received by DOE, for which a reasonable factual basis exists, are hereby incorporated by reference. All facts and comments contained in the documents accessible via the hyperlinks above are also incorporated herein by reference.

Thank you for carefully considering the foregoing comments and doing the right things regarding the Cornwall Avenue Landfill (and G-P Site and Bellingham Bay in general) going forward.

Sincerely,
Douglas Tolchin
Douglas Tolchin, as an individual
and also on behalf of:
Salish Sea Foundation, Salish Sea Land Trust & Salish Sea Marine Sanctuary
Bellingham, WA

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