



State of Oregon
Department of
Environmental
Quality

Beneficial Use of Solid Waste Determination Evaluation Form

Applicant: Port of Portland

BUD-20120320: Solid Waste: dredged sediment

Summary of Proposed Beneficial Use:

The Port is planning to dredge from 10,000 to 40,000 cubic yards of sandy, clayey silt from the Willamette River at Port of Portland's Marine Terminal 2, Berths 205 and 206. Actual volumes will be determined by pre-dredge bathymetric surveys. The Port will use this sediment as fill material for future marine commercial and industrial development at the established West Hayden Island Placement site.

Reviewer: Tim Spencer

Date: May 10, 2012 and
updated June 1, 2012

Tier: One Two Three

Beneficial Use of Solid Waste

Beneficial use of solid waste is a sustainability practice that may involve using an industrial waste in a manufacturing process to make another product or using a waste as a substitute for construction materials.

The environmental benefits of substituting industrial waste materials for virgin materials includes conserving energy, reducing the need to extract natural resources and reducing demand for disposal facilities.

Oregon Administrative Rules (OAR) 340-093-0260 to 0290 establish standing beneficial uses and a process for DEQ review of case-specific beneficial use proposals. Under these rules, DEQ may issue a beneficial use determination as an alternative to a disposal permit for proposals that meet the rule criteria. Once a beneficial use determination is issued, DEQ no longer regulates the waste as a solid waste, as long as the material is used in accordance with the approved beneficial use determination.

Beneficial Use Determination Evaluation Summary

- Yes, the Beneficial Use of this solid waste meets all the case-specific performance criteria listed below and is approved.
- No, the Beneficial Use of this solid waste does not meet all the case-specific performance criteria listed below and is not approved.

Notes: The Port of Portland submitted information necessary for DEQ to make a determination. DEQ evaluated this information against acceptable risk criteria, and surface and ground water interactions.

Case-Specific Beneficial Use Performance Criteria:

DEQ may approve an application for a case-specific beneficial use of solid waste only if all the following performance criteria are addressed: 1) Characterization of the solid waste; 2) Productive beneficial use of

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the solid waste; and, 3) The affect of the proposed beneficial use on public health, safety, and welfare or on the environment.

1) Characterization of the Solid Waste

Did the applicant characterize the solid waste and proposed beneficial use sufficiently to demonstrate compliance with the rules for case-specific beneficial use determinations (OAR 340-093-0280) by submitting required information for the appropriate tier? (See tier sections below for detailed characterization information.)

Yes No

Notes: The Port of Portland provided the necessary description of the material and how it is proposed to be used.

Was the following information submitted for DEQ review and how adequate was it?

Tier 1 Applicable Not applicable

- Did the applicant provide an adequate description of the material proposed for beneficial use, the manner of generation and the estimated quantity to be used beneficially each year?
 Yes No

Notes: The material is fine-grained sediment (mix of sandy, clayey silt) from Terminal 2 (T2) berths 205 and 206 in the Willamette River. The sediments will be generated by maintenance dredging. The quantity will be approximately 10,000 to 40,000 cubic yards. Dredging will occur in accordance with existing U.S. Army Corps of Engineers permit Nos. NWP-2007-204

- Did the applicant provide an adequate description of the proposed beneficial use and justify how the proposed use is beneficial?
 Yes No

Notes: The Port of Portland proposes to use the sediments as fill material to increase site grade prior to future development at West Hayden Island (see section 2 notes below).

- Did the applicant provide a sufficient comparison of the chemical and physical characteristics of the material proposed for beneficial use with the material it will replace?

Yes No

Notes: Dredge sediments have similar characteristics to soil fill. In DEQ's experience, dredged sediments are commonly used as fill material.

- Did the applicant successfully demonstrate compliance of the proposed beneficial use with the performance criteria in OAR 340-093-0280 based on knowledge of the process that generated the material, properties of the finished product, or testing?

Yes No

Notes: See notes 2) and 3) below.

- If required, did the applicant provide any other DEQ required information to evaluate the proposal?

Yes No

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Notes: In addition to the original application, the applicant provided the analytical report on sediment quality, and an email from the City of Portland verification from April 11, 2012, that verifies that the current land use allows placement of sediment at the West Hayden Island facility. The Port also provided information about outreach efforts that the Port has taken.

Tier 2 Applicable Not applicable

- Did the applicant submit all the information required for a Tier 1 application?
 Yes No

Notes: See notes for Tier 1.

- Did the applicant submit adequate sampling and analysis to make a determination of suitability for beneficial use? (Note: The analysis must provide chemical, physical, and biological characterization of the material proposed for beneficial use and identify potential contaminants in the material or the end product, as applicable.)
 Yes No

Notes: The Port provided analytical information for two samples which meets the sampling protocol agreed to by the multi-agency Regional Sediment Evaluation Team for a dredging project of this size. The samples identified three hazardous substances that are discussed below.

The samples also showed concentrations of ammonia. Ammonia concentrations are up to 311 mg-N/kg. The lab reports did not specify subtypes of ammonia. "Ammonia" in upland soil (or sediments dredged and disposed of in an upland area) is typically present in the form of ammonium, NH₄⁺. Ammonium (and ammonia) is metabolized by organisms, assimilated by plants, adsorbed by clay minerals or organic matter, and oxidized to nitrate over time as oxygenated rainfall infiltrates through the ammonium-containing sediments

Because it's present in the ionic or "charged" form, ammonium tends not to transport very far in groundwater. After the ammonium converts to nitrate, the nitrate will travel freely in groundwater. DEQ evaluated the ammonia to determine threats to ground water and surface water. DEQ assumed a worst case scenario that all the ammonium would go into the groundwater and eventually into the river. Based on a low flow volume recorded on 9/9/2001 of 63,600 cubic feet per second, DEQ calculated a dilution ratio of 2 million to one. At these flow rates, the sampled amount of 311 ppm of ammonium would dilute to 0.0002 ppm if every molecule reached the river without being taken up by organisms or mineral materials. The chronic ambient water quality criterion is roughly 1 ppm. Ammonia criteria acute water quality criterion for freshwater may depend on pH, temperature, and the presence of salmonids or other fish with ammonia-sensitive early life stages. Values for freshwater criteria (of total ammonia nitrogen in mg N/L) can be calculated using the formulae specified in the 1999 Update of Ambient Water Quality Criteria for Ammonia (EPA-822-R-99-014) at:

<http://water.epa.gov/scitech/swguidance/standards/criteria/aqlife/pollutants/ammonia/upload/99update.pdf>). A 2009 draft update is available at

http://water.epa.gov/scitech/swguidance/standards/criteria/aqlife/pollutants/ammonia/upload/2009_12_23_criteria_ammonia_2009update.pdf

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DEQ considers it unlikely for ammonia in any form to reach the river. DEQ estimates that the ammonia would either be taken up by clay minerals or be converted to nitrate in the two years it would take for groundwater to reach the river from the placement area. DEQ has not identified any drinking water wells down gradient of the sediment placement area. DEQ has therefore determined that the ammonia identified in the sediment to be placed at the West Hayden Island facility will not negatively impact groundwater beneficial use (drinking water wells) or the Columbia River.

- When applicable, did the applicant provide a risk screening comparing the concentration of hazardous substances in the material to existing DEQ approved, risk-based screening level values, and demonstrate compliance with acceptable risk levels?
 Yes No

Notes: The Port of Portland provided a comparison of chemicals detected to screening levels (Table 1 of the application) for upland ecological and human receptors. The applicant's screening against DEQ risk screening levels identified three compounds of potential concern that exceeded DEQ Level II ecological screening levels (SLVs): zinc, benzo(a)pyrene and dibenzofuran. Accordingly, the applicant performed a detailed risk analysis of these three compounds (Table 2 of the application) considering the ingestion pathway for non-threatened and endangered terrestrial species, including bald eagles. Previously, bald eagles were a state-listed threatened bird. They were removed from the state list on March 9, 2012. This analysis found that the three compounds of potential concern are below DEQ's risk based screening levels.

DEQ's evaluation concurs with the Port's conclusions and finds that the T2 dredge sediments are similar to Post Office Bar and T6 sediments in terms of ecological risk. Although zinc levels (max. 107 ppm) exceeded the screening value of 86 ppm, based on a default background concentration, the concentration of zinc detected is within the expected range of naturally occurring background concentrations in Oregon soil. DEQ is in the process of revising the background screening level for zinc to 95 ppm. T2 zinc levels fall well below EPA's soil screening values. Similarly, average dibenzofuran levels were well below SLVs.

- When applicable, did the applicant supply the location or type of land use where the material will be applied, consistent with the risk scenarios used to evaluate risk?
 Yes No

Notes: The Port of Portland is the site owner. The current zoning is Multiple Use Forest 19 Acre Minimum (MUF 19) with a Significant Environmental Concern overlay. The City of Portland has confirmed that Land Use Compatibility Statements, the most recent signed September 22, 2010, remain valid and that the placement of dredged sediments is currently allowed on West Hayden Island (a pre-existing nonconforming use allowed outright). The City's original LUCS for Tier 2 dredging is dated March 16, 2007. The City of Portland confirmed in a May 9, 2012 email that the land use regulations have not changed with respect to dredging or the placement of dredged material at the facility on West Hayden Island. The statements indicated in the Post Office Bar LUCS signed by Mike Hayakawa on September 22, 2010 are the same that apply today.

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The primary human health risk scenario used in the Port's BUD application is occupational. This protective level is adequate for commercial/industrial, recreational and other uses. Protection would not be adequate for residential use of the property, so the siting of homes there would not be acceptable. Ecological risk was evaluated for both non-threatened and endangered species.

- When applicable, did the applicant supply contact information of property owner(s) if this is a site-specific land application proposal, including name, address, phone number, e-mail, site address and site coordinates (latitude and longitude)? Yes No

Notes: The Port of Portland is the applicant and property owner. Approximate site coordinates are in the application.

- Did the applicant supply an adequate description of how the material will be managed to minimize potential adverse impacts to public health, safety, welfare, or the environment?

Yes No

Notes: The West Hayden Island Placement Facility is an existing dredge material facility. The Port of Portland prepared the facility by constructing a berm around the entire 102-acre site. The lowest elevation of the berm is more than 5 feet higher than the 100-year flood plain. The T2 dredge material would be placed within a cell at the back of the site, furthest from the shoreline of the Columbia River. Return water is held in settling ponds and no surface water would be released back into the river. Contaminant concentrations in the sediments do not pose an unacceptable risk to people and wildlife.

Tier 3 Applicable **Not applicable**

- Did the applicant submit all the information required for a Tier 1 & Tier 2 application? Yes No
- Did the applicant provide an adequate discussion of the justification for the proposal? Yes No
- Is there an estimated length of time that would be required to complete the project, if it is a demonstration? Yes No
- If it is a demonstration project, are their methods proposed to ensure safe and proper management of the material? Yes No

2) Productive Beneficial Use of the Solid Waste

Has the applicant demonstrated that the proposed beneficial use is a productive use of the material by providing information substantiating the criteria listed below?

Yes No

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Notes: See notes below.

- Did the applicant successfully identify or demonstrate a reasonably likely proposed beneficial use for the material that is not speculative?

Yes No

This criterion consists of three parts.

1. Identified Use:

Has the applicant clearly stated what the waste is going to be used for, that the waste is compatible with that use and the proposed quantity is necessary?

Yes No

2. Reasonably Likely Use:

Has the applicant identified, with supporting documentation, the timeframe within which this use is likely to occur (e.g., zoning info, master plan for development, letters from local jurisdictions, etc)?

Yes No

3. Not Speculative:

For Land application - has this material been used at other sites for the same purpose, is the material feasible for use at this site for this purpose, or has the applicant identified a known potential for this use at this site?

Yes No N/A

For uses other than land application - has the material been used in a product before, is the material feasible for use in a product, or has the applicant identified a known potential for use in this product?

Yes No N/A

Notes: The Port of Portland has identified the intended use as fill material at West Hayden Island. The Port requires a large volume of material (well over the 10,000 to 40,000 cubic yards proposed for placement with the proposed project) for development.

While the City of Portland has not made a final decision, the City is midway through a planning process for West Hayden Island's future development. In 2004, Metro identified West Hayden Island as a "Regionally Significant Industrial Area." In 2010 Metro completed a draft Urban Growth Report that assumes approximately 380 acres on West Hayden Island is available for large lot future industrial development. Metro further determined that West Hayden Island contained both high development value and high riparian value. In July 2010 the Portland City Council adopted Resolution No. 36805 that directs the Bureau of Planning and Sustainability to develop a legislative proposal for annexation of West Hayden Island and to identify no more than 300 acres for future marine terminal development. The City of Portland has begun a process to develop a legislative proposal and expects a council decision on the proposal in mid- 2012. If approved, the Port of Portland would then take further steps towards development with an expectation that the complete planning and initial development process will take a minimum of five to ten years.

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The value of sediments as fill material is not speculative. Sediments are commonly used for fill material. DEQ's determination that the proposed use is beneficial relied on the following factors: 1) The history of dredged sediment placement at the site; 2) current land use that allows sediment placement; 3) dredged sediment's common use as fill material; 4) the Port of Portland's need for fill material to develop the property for future marine commercial or industrial use; 5) sediment contaminant concentrations that are below screening levels for current uses by people and wildlife; and 6) the City is engaged in a planning process to evaluate area uses that include marine development.

- Is the use a valuable part of a manufacturing process, an effective substitute for a valuable raw material or commercial product, or otherwise authorized by the Department and does not constitute disposal? Yes No

Notes: Sediments are an effective substitute for soil fill material. The Port of Portland has identified a need for fill material at the West Hayden Island location. Placement at this location for this purpose would not constitute disposal under the beneficial use rules.

Current land use would allow the placement of dredged sediments at this location as either a beneficial use approved through the beneficial use process or as a disposal activity through a DEQ issued solid waste permit. A DEQ solid waste permit is an alternative to meeting the requirements of a beneficial use determination.

- Is the use in accordance with applicable engineering standards, commercial standards, and agricultural or horticultural practices? Yes No

Notes: Sediments are an effective substitute for fill. Structural, landscaping, and hardscape materials will likely be required on top of the fill to prepare the finished surface as part of development.

3) Effect of Proposed Beneficial Use on Public Health, Safety, Welfare and/or the Environment

Has the applicant demonstrated the proposed beneficial use will **not** create an adverse impact to public health, safety, welfare, or the environment, by providing information substantiating compliance with the criteria listed in the bullet list below?

Yes No

Notes: See notes below.

- Has the applicant demonstrated that the material is not a hazardous waste under ORS 466.00? Yes No

Notes: Contaminant concentrations in the sediment are well below hazardous waste criteria.

- Has the applicant demonstrated that until the time this material is used according to a beneficial use determination, the material will be managed, including any storage, transportation, or processing, to prevent releases to the environment or nuisance conditions? Yes No

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Notes:

The Port of Portland prepared the West Hayden Island Placement Facility by constructing a berm around the entire 102-acre site. The lowest elevation of the berm is more than 5 feet higher than the 100-year flood plain. The T2 dredge material would be placed within a cell at the back of the site, furthest from the shoreline of the Columbia River. For a previous beneficial use determination, the Post Office Bar dredge sediment placement project, DEQ evaluated the likelihood that flooding could result in environmental contamination. The same scenario applies to the T2 sediment. Assuming a conservative scenario that all the T2 sediments are released back into the Columbia River from a flood event, about 125 million cubic feet of water will pass by the island within an hour, and 3 billion cubic feet (125,000,000 x 24 = 3,000,000,000) within a day. Because the dredged material is fine to medium grained, it will be dispersed widely during such an event and undergo so much dilution that any identified contaminant concentrations would be further reduced below levels of concern for any aquatic life or people.

The U.S. Army Corps of Engineers evaluated the potential for contaminants from dredged material placed at West Hayden Island to migrate to groundwater and hence to the Columbia River or other water bodies, and found it to be negligible. In addition, DEQ's analysis for T2 is the same as for the Post Office Bar Sediment project and T6 project and concluded that seepage to the Columbia River or wetlands via groundwater will have virtually no impact from chemicals in the sediment placement areas. The pertinent findings include:

- The dredged sediments consist of sandy, clayey silt.
- The material underlying the disposal cell is sand, but also contains significant quantities of silts.
- It is more likely that silty material will absorb zinc, benzo(a)pyrene and dibenzofuran, hindering these chemicals from migrating to groundwater or the Columbia River.
- Using conservative estimates and calculations, DEQ estimates that the time needed for groundwater to flow from the placement cell to the Columbia River is greater than two years, during which time silty material will adsorb any potential contaminants that move along the groundwater flow path.
- Groundwater moves very slowly, and the volume of groundwater moving from the fill area and discharging to the river will be no more than 0.03 cubic feet per second.
- Using the lowest flow in the Columbia River on record (63,600 cubic feet per second on 9/9/2001 at a nearby gauging station), the dilution ratio of Columbia River water to discharging groundwater is over 2 million to 1.
- Geotechnical and monitoring wells indicate the depth to groundwater is about 10 to 15 feet below ground surface, implying that rainfall, not groundwater discharge, forms the wetlands. This means that any chemicals in the groundwater will not reach the nearby wetlands.

Contaminant levels in the T2 sediments are very low to begin with. These particular contaminants have low mobility in soil and therefore, do not pose a significant risk to groundwater quality

- Has the applicant demonstrated that hazardous substances in the material, if any, meet one of the criteria in the bulleted list below? Yes No

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- Hazardous substances do not significantly exceed the concentration in a comparable raw material or commercial product;
- Hazardous substances do not exceed naturally occurring background concentrations; or
- Hazardous substances will not exceed acceptable risk levels, including persistence and potential bioaccumulation, when the material is managed according to a beneficial use determination.

Notes: DEQ's evaluation concludes that sediment contaminant concentrations do not pose an unacceptable risk to human or ecological receptors. A weighted average concentration of 106 ppm for zinc is not significantly different than DEQ's current default background concentration of 86 ppm zinc or DEQ's (draft) revised background concentration for zinc of 95 ppm.

- Has the applicant demonstrated that the proposed beneficial use will not result in the increase of a hazardous substance in a sensitive environment, such as a park, wildlife refuge or wetland?
 Yes No

Notes: The T2 sediments are currently in a sensitive environment, the Willamette River. West Hayden Island has not been sampled to determine existing concentrations of hazardous substances, but low concentrations are often detected in soil and sediment in the Portland metropolitan area and are considered to be urban anthropogenic baseline or background. The concentrations of hazardous substances in the T2 material are similar to concentrations detected in other dredge sediment placements at West Hayden Island, for example T6 and Post Office Bar. The low concentrations of hazardous substances in the T2 sediments will not adversely impact people or the environment at West Hayden Island.

- Has the applicant demonstrated that the proposed beneficial use will not create objectionable odors, dust, unsightliness, fire, or other nuisance conditions?
 Yes No

Notes: Dredged sediments will be pumped as a slurry from a barge into a bermed cell. The Port of Portland manages the West Hayden Island Placement Facility to address potential nuisance conditions.

- Has the applicant indicated that the proposed beneficial use will comply with any other applicable federal, state, and local regulations?
 Yes No

Notes: The dredging project will be managed by the Port of Portland. The US Army Corps of Engineers issued a section 10 permit to the Port (NWP 2007-204), and therefore the Port did not need to obtain a 401 Water Quality Certification from DEQ. The Portland Sediment Evaluation Team consisting of the US Army Corps of Engineers, Environmental Protection Agency, National Marine Fisheries Service, Washington Department of Ecology and DEQ evaluated the T2 sediments to be dredged and determined that the sediments are suitable for unconfined aquatic placement but noted that the Port plans to place the T2 sediments at an upland site (draft April 25, 2012 Memorandum CENWP-EC-HR). No other DEQ permits are needed for this project.

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The City of Portland has confirmed through Land Use Compatibility Statements and an updated interpretation and confirmation that the placement of dredged sediments is currently allowed on West Hayden Island.

4) Public Involvement Evaluation (Note: this is not a Beneficial Use evaluation criterion)
Determine a public involvement recommendation using the current, ***Guidance to DEQ Solid Waste Program Staff and Managers on Public Notice & Participation.***

- Is public notice and participation being recommended for this application?
 Yes No

Notes: DEQ will provide a public notice and open the beneficial use determination for public comment and meet with the local community on May 24, 2012.

DEQ attended the Hayden Island Neighborhood Network meeting on May 10, 2012 to explain DEQ's beneficial use rules and DEQ's evaluation of the Port of Portland Terminal 2 beneficial use application. DEQ also held an information meeting on May 24, 2012. Twenty-one people attended. At this meeting, DEQ answered questions about the BUD evaluation process, health and environmental concerns, and concerns about the Port's proposed development. The Port also answered questions about dredging and the proposed development.

On May 29, 2012, DEQ received email letters from David RedThunder and Kimberly A. Wing. Their emails are attached. Following are their comments and DEQ's response:

Comment 1: I am afraid to let my children and grandchildren drink the water at my house. I am afraid that the toxic material the Port of Portland is being permitted to dump on our island home is possibly contaminating our water. I have to buy bottled water because our water stinks when you smell it, and sometimes it is discolored. When I wash clothes at my house my laundry has a distinct smell to it. So I ask why is that? Has testing been done on the water we are supplied with to see what it contains?
(Wing)

DEQ's response: DEQ has evaluated groundwater flow in the aquifer beneath the Port's sediment placement facility and the locations of existing water supply wells on West Hayden Island and determined that any runoff or leachate generated from the Port's site would flow away from existing water supplies on the Island. Therefore, given its location, the sediment facility will not contribute to taste or odor problems in your water supply. The water supplied to your home must meet state drinking water standards. State regulations also require periodic testing to verify compliance with drinking water requirements. If you have concerns about the taste and smell of your water, DEQ recommends contacting your water provider and the Oregon Health Authority to determine if additional water treatment is needed. The contact phone number at the Oregon Health Authority is: 971-673-0405

Comment 2: The Port of Portland says that these materials will cause no harm to us. My question is how do they know that? Have they studied what the long term effects will be? If they did, how did they do it? I truly believe that it is merely speculation on their part. They have absolutely no idea what

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effect their dumping will have on us a few years from now. If it is so safe, why don't they dump it in their own yards? (Wing)

DEQ's Response: DEQ reviewed information about the sediments, including the results of sediment sampling conducted by the U.S. Army Corps of Engineers as part of the dredging permit process. DEQ and other public agencies reviewed the information to determine whether the material had been adequately characterized. The laboratory data came directly from sediment samples collected in the area of the river where dredging is planned.

DEQ evaluated the proposed use of the sediments as fill and determined that the material will replace raw materials as required by DEQ rules. Using dredged sediments for fill material is a common practice, and the sediments would replace other types of fill needed for proposed development of the site.

DEQ evaluated chemical information including sample results from the Port of Portland's December 2011 Willamette River Terminal 2 Sediment Quality Evaluation Report. DEQ determined that contaminant concentrations were at naturally occurring levels for metals or below screening values for people and animals and would not have an adverse impact. Additionally, DEQ requirements address future land use changes. If the Port of Portland proposes a different use than commercial or industrial use the Port must reevaluate the risk screening to ensure the use is protective of human health and the environment.

There is sample data available for the most recent dredge material placements (Terminal 2, Terminal 5, Terminal 6, Post Office Bar sediments, previous dredging material from Terminal 2, 5 and 6). The concentration of hazardous substances in the T-2 material is similar to the test results for T-6. For the dredging projects that DEQ has reviewed, DEQ considers the Port site to be safe for sediment placement under current zoned uses and proposed uses.

Comment 3: Why is it that people choose to destroy as a way to survive in the world today? The accepted levels of today's toxins pollute the soil and the environment just as man's ideas always seem to have a way of doing (RedThunder). The DEQ's sole purpose is to protect the environment. So as a community we trust that the agency will put a stop to the destruction, and save our environment and natural resources for the generations to come.(Wing and RedThunder)

DEQ's Response: DEQ evaluates proposals such as this one to determine if regulatory requirements can be met. In this case, DEQ evaluated the contaminant levels against criteria DEQ defines as environmentally protective for wildlife and human health. The proposal meets the requirements of the beneficial use rules, and DEQ has determined that placement of the Terminal 2 sediments at the West Hayden Island facility will not harm human health or the environment, for the current and proposed uses.

Attachment A: Letters from residents

Kimberly A. Wing
12730 N Scouler Avenue
Portland, OR 97217

May 29, 2012

Audrey O'Brien, Project Manager
Tim Spencer, Project Manager
DEQ

Dear Tim and Audrey:

I have been watching and reading the information from the community meetings regarding West Hayden Island. I have only been able to attend one meeting because I am a student at Warner Pacific College, and I am unable to attend the meetings to voice my concerns, so I decided to write to you in order to express my opinion.

In the Pacific Northwest, there has been so much development in the past decade that the animal habitat has become no more than an afterthought. Houses are built rooftop to rooftop in areas that used to be open fields and forests that were habitat for our wildlife. What happens when the habitats are completely gone? What kind of world are we as a society going to leave for our children and grandchildren? The almighty dollar seems to be the only thing that matters to big corporations like the Port of Portland. Local government officials do not seem to care what kind of environment we leave for future generations so long as they make their precious money!

I am afraid to let my children and grandchildren drink the water at my house. I am afraid that the toxic material the Port of Portland is being permitted to dump on our island home is possibly contaminating our water. I have to buy bottled water because our water stinks when you smell it, and sometimes it is discolored. When I wash clothes at my house my laundry has a distinct smell to it. So I ask why is that?

We watch the news and on a daily basis we see that the FDA is endorsing drugs that they claim are safe to use, but find out years after the fact they cause major health issues for the people taking them. The Port of Portland is making the same kind of claims. They say that these materials will cause no harm to us. My question is how do they know that? Have they studied what the long term effects will be? If they did, how did they do it? I truly believe that it is merely speculation on their part. They have absolutely no idea what effect their dumping will have on us a few years from now. They don't care what happens to us so long as they make their precious greenbacks. It makes me wonder if they would dump this stuff in their own neighborhood. If it is so safe, why don't they dump it in their own yards? Have they tested the water we are supplied with on this island home of ours to see what it contains? Not to mention the quality of the air that we breathe.

We also see all the time wild animals on the news being tranquilized and removed from residential neighborhoods, yet we fail to understand the fact that we share the world with them. They don't show the stories of the animals having their homes taken from them by the human race. The reason they show up in our neighborhoods is because at one time that was their home, their habitat. We as humans, feeling we are more superior to them, took their homes away from them. I sometimes wonder whether there will be any wildlife left for my grandchildren to enjoy.

The DEQ's sole purpose is to protect the environment. So as a community we trust that the agency will put a stop to the destruction, and save our environment and natural resources for the generations to come.

Sincerely,
Kimberly A. Wing

David RedThunder
1503 N Hayden Island Drive, #229
Portland, OR 97217

May 29, 2012

Tim Spencer, Project Manager
Audrey O'Brien, Project Liaison
DEQ

Dear Tim:

I have listened to the information that your office has shared on how we can imitate the earth's elements when I attended the community meetings regarding West Hayden Island. The environment that remains on West Hayden Island cannot be imitated. It seems that even preserving and protecting nature has become extremely difficult due to the way our society lives today.

For the past two years, I have listened to Bob Salinger make statements to the Port of Portland, complaining of their neglect of the habitat. I have also witnessed the methods the Port uses to get what they want. It is a shame that the City seems to just accept their placing of toxic materials where we have to live and raise our children. Why is it that people choose to destroy as a way to survive in the world today?

It is no less than a miracle that West Hayden Island has an abundance of wildlife trapped on its 866 acres. It is there for all to enjoy. The accepted levels of today's toxins pollute the soil and the environment just as man's ideas always seem to have a way of doing. As we continue to allow this to happen, animals will die just as the Polar Bears are dying because our atmosphere is being destroyed by all of the toxins we create. The ice glaciers will melt and the water will boil in seasons to come.

The DEQ's sole purpose is to protect the environment. So as a community we trust that the agency will put a stop to the destruction, and save our environment and natural resources for the generations to come.

Sincerely,

David RedThunder