



DEPARTMENT OF  
**ECOLOGY**  
State of Washington

**Central Waterfront cleanup site  
Bellingham, Washington**

**Responses to public comments on  
interim action – first amendment to agreed order**

**September 2012**

**ISSUED BY:**

**WASHINGTON STATE DEPARTMENT OF ECOLOGY**

**TOXICS CLEANUP PROGRAM**

## **Introduction**

From July 17 through August 15, 2012, the Washington Department of Ecology (Ecology) issued for public review and comment an amendment to an agreed order for an interim action at the Central Waterfront cleanup site.

Ecology's public involvement activities for this document were:

- Mailing a fact sheet describing the proposed interim action and the agreed order amendment to 4,209 addresses, including residents and businesses within about a half-mile of the site, and to other interested parties. Ecology's Bellingham Field Office received its copy on July 13, 2012.
- Emailing a fact sheet to 86 people on Ecology distribution lists.
- Placing a paid display advertisement in The Bellingham Herald on July 17, 2012.
- Publishing notice in the Washington State Site Register on July 12, 2012.
- Posting notice in Ecology's Public Events Calendar on July 16, 2012.
- Posting the agreed order first amendment, fact sheet and agreed order on Ecology's website, and updating the website to explain the documents and advertise the comment period.
- Providing copies of documents to information repositories at Ecology's Bellingham and Bellevue offices, and at the Bellingham Public Library downtown branch.
- Sending a news release to The Bellingham Herald on Monday, July 16, 2012. The newspaper ran a long news brief on A2 of the July 17 edition.
- Posting notice on Twitter and Facebook on July 17, 2012.

Five comments were received by email. Copies of the comments and Ecology's responses are below.

## **Site background**

The Central Waterfront cleanup site is about 55 acres on Bellingham's downtown waterfront, between I & J Waterway and Whatcom Waterway, and between Roeder Avenue and the former Georgia-Pacific industrial wastewater treatment lagoon.

Beginning in the early 1900s, the site and surrounding tidelands were filled for various industrial uses, including:

- Manufacturing concrete, boat repair and storage, and wood fabrication by Colony Warf. The property has been used for various other industrial activities since 1908.
- A bulk fuel and storage facility from 1904 through 1987 by Chevron.
- An olivine rock processing plant from 1963 to 1993 by the Olivine Corp. The company also operated an experimental incinerator on the property from 1981 to 1982.

- A landfill used by various nearby industrial properties owned or operated by the city, port, G-P, Puget Sound Energy and others from 1965 to 1974.

Property within the site is now owned primarily by the Port of Bellingham or city of Bellingham.

Environmental assessments to date have found contaminants in soil and groundwater associated with these historical industrial uses. Contaminants include petroleum hydrocarbons, polycyclic aromatic hydrocarbons, and metals, including arsenic, cadmium, lead, nickel, mercury and copper, and methane gas.

Soil, sediment, and groundwater are contaminated at levels that must be addressed under the state's cleanup law, the Model Toxics Control Act.

The port and city are conducting cleanup work, with Ecology oversight, according to the terms of a 2006 agreed order.

## **Interim action**

A failing bulkhead along the shoreline is allowing water at high tide to saturate a small area and draw out old petroleum contamination, leaving an occasional oily sheen on Whatcom Waterway.

An interim action is described in a first amendment to the 2006 agreed order that Ecology issued for 30 days of public review and comment.

The interim action will involve removing about 800 cubic yards of petroleum contaminated soil and sediment from an estimated 5,000 square-foot area along the shoreline, and rebuilding the excavated areas with clean sand and rock. Workers also will install a barrier into the soil inland of the excavated area to prevent recontamination of the newly rebuilt shoreline.

Meanwhile, work will continue on a remedial investigation and feasibility study. The report presents the results of the study, proposes alternatives for cleanup actions and identifies a preferred action.

Ecology expects to issue a draft report on the investigation and study for public review in 2013.

## Comments received and Ecology responses

### Comment 1 –carl nln [carl4so@yahoo.com] (email)

**From:** [carl nln](#)  
**To:** [Sato, Brian \(ECY\)](#)  
**Subject:** Bellingham waterfront cleanup interim action  
**Date:** Wednesday, July 25, 2012 1:23:53 PM

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While it appears that there is an immediate problem to be resolved, the proposed interim cleanup may be too limited. Even if there is leak source within the proposed interim action area that does not mean that there are not other leak sources within the larger Chevron sub-area. If so, there will likely be continued leakage flowing around the proposed barrier created for the interim action area. Has this been studied? If not, the proposed action may be a wasted effort.

#### Ecology response

While we have been taking steps toward this interim action, we have performed an additional investigation as part of a site-wide characterization of contaminants, called a remedial investigation, and as part of remedial design work at the adjacent Whatcom Waterway cleanup site. From this investigation, we are confident that the interim action area will not be re-contaminated.

In addition, this area will receive several feet of clean fill as part of implementing the first phase of cleanup at the adjacent Whatcom Waterway site. Future site characterization work at the Central Waterfront site and post-construction monitoring at the Whatcom Waterway site will determine if the interim action and the Whatcom Waterway cleanup action are achieving cleanup standards. If not, additional cleanup actions will be taken.

A report on the draft remedial investigation and an analysis of cleanup options (called a feasibility study) for Central Waterfront is scheduled to be available for public review and comment in 2013.

A consent decree and cleanup action plan are expected in late 2013 to early 2014, with design and permitting in late 2014, followed by construction (cleanup implementation) in 2015.

The Phase 1 engineering design report for the Whatcom Waterway site is scheduled to be available for public review in early 2013. The cleanup action is expected to begin in the fall of 2013.

## Comment 2 – Tom Olsen (email)

**From:** [Tom Olsen](#)  
**To:** [Sato, Brian \(ECY\)](#)  
**Subject:** Public comment for file  
**Date:** Wednesday, July 25, 2012 2:12:01 PM

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Re: Site 2864, interim action amendment

The proposed amendment seems practical and appropriate. Please move ahead with work under this amendment as soon as practical.

Since the specific site contamination under this interim amendment is on a Chevron site, it would seem logical to bill Chevron for the incremental cost. I recommend this even though I'm a Chevron shareholder.

But I do not propose slowing down cleanup work while liability disputes are sorted out. It would make more sense to do the work, accumulate the costs, and deal with Chevron after the fact.

Tom Olsen  
2024 Falcon Ct  
Bellingham, WA 98229  
Ph 360.647.1223  
Email [tom.olsen@comcast.net](mailto:tom.olsen@comcast.net)  
F 360.334.7782

### Ecology response

Implementation of this interim action is moving forward as planned. Design and permitting work is occurring now, and construction is scheduled to begin in January or February 2013 in order to minimize impacts to migrating fish.

Chevron shares potential liability for the cleanup of the Central Waterfront site with several other parties, including the Port of Bellingham and city of Bellingham, as property owners. Ecology understands that the port and city have agreements in place with Chevron regarding their participation in the cleanup of the Central Waterfront site. As a result, the port and city have elected to enter legal agreements with Ecology to implement cleanup work at the site.

Ecology will reimburse up to half of the cleanup cost from the state's remedial action grant program, which helps pay to clean up publicly owned sites. The state Legislature funds the grant program with revenues from a voter-approved tax on hazardous substances.

### Comment 3 – Evaan Dossa (email)

**From:** [Evaan Dossa](#)  
**To:** [Sato, Brian \(ECY\)](#)  
**Subject:** Bellingham Central Waterfront Clean-up Facility Site ID #2864  
**Date:** Friday, July 27, 2012 6:31:15 PM

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Mr. Sato  
Site Manager

Regarding Toxic Cleanup Program for Bellingham Central Waterfront Area.

I recently received the Dept of Ecology Publication Number 12-09-121, Central Waterfront.

I fully support moving forward with the Bellingham Central Waterfront Clean-up - responsible removal and disposal of all toxic materials from not just the "**sub-area**" but the **entire site**.

I can only hope this site clean-up will continue to move forward in a "timely manner" and equally important making it safe for Bellingham Residents and visitors to fully enjoy.

Thank You  
Evaan Dossa

### Ecology response

The Department of Ecology appreciates your support for this interim action.

Remedial alternatives for the entire site will be evaluated in a feasibility study. We expect to release a report on the environmental investigation of the site, called a remedial investigation, and the feasibility study for public review and comment in 2013.

A consent decree and cleanup action plan are expected in late 2013 to early 2014, with design and permitting in late 2014, followed by construction (cleanup implementation) in 2015.

**Comment 4 – (attachment to email)**



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Brian Sato, site manager  
WA Department of Ecology  
Toxics Cleanup Program  
3190 160<sup>th</sup> Ave SE  
Bellevue, WA 98008-5452  
[via e-mail: [bsat461@ecy.wa.gov](mailto:bsat461@ecy.wa.gov)]

RE: Bellingham Central Waterfront Interim Cleanup Action

August 15, 2012

Dear Brian Sato,

RE Sources North Sound Baykeeper exists to protect and preserve habitat and water quality in Whatcom and Skagit County. We have approximately 800 members, most residing and recreating in Bellingham.

We thank you for the opportunity to comment on this cleanup action and appreciate the efforts to clean Bellingham Bay, especially by taking action to control the petroleum source and protect the marine environment. We do, however, have a few concerns and clarifications that we would like to see addressed.

First of all, the groundwater is a point of concern. We are pleased to see that the groundwater will be collected during the cleanup action. Although this is the case, we are concerned with the potential for the groundwater contamination after the interim cleanup. We propose that there be groundwater monitoring and contingency plans. These should be outlined in the compliance monitoring plan.

In addition, the work plan should delineate the source of the petroleum. We would like to see the source of contamination completely removed, to ensure that petroleum seeps do not reoccur in the near future. If this is not possible, contingency plans to contain the contamination are needed.

Thank you for taking our comments into consideration.

Sincerely,

Jackson Barnes, Baykeeper Intern  
Wendy Steffensen, Lead Scientist  
North Sound Baykeeper, RE Sources

## **Ecology response**

Ecology shares your concern about groundwater. It is a key component of the site-wide remedial investigation work at the site.

Based on a review of groundwater data for the site and a recent investigation of the shoreline, we are confident that the interim action area will not be re-contaminated by groundwater. This will be verified during the completion of the remedial investigation and feasibility study for the Central Waterfront site. Any additional required cleanup actions will be implemented as part of the final cleanup of the site.

Regarding the source of the petroleum contamination, the interim action will remove all visibly contaminated soils. In addition, the shoreline in this area will receive several feet of clean fill as part of implementing the first phase of cleanup at the adjacent Whatcom Waterway site. Future site characterization work at the Central Waterfront site, and post-construction monitoring at the Whatcom Waterway site will determine if the interim action and the Whatcom Waterway cleanup action are achieving cleanup standards. If not, additional cleanup actions will be taken as part of implementing the final cleanup of the Central Waterfront site.

A report on the draft remedial investigation and feasibility study for Central Waterfront is scheduled to be available for public review and comment in 2013.

A consent decree and cleanup action plan are expected in late 2013 to early 2014, with design and permitting in late 2014, followed by construction (cleanup implementation) in 2015.

The Phase 1 engineering design report for the Whatcom Waterway site is scheduled to be available for public review in early 2013. The cleanup action is expected to begin in the fall of 2013.





**Comment 5 – People for Puget Sound (attachment to email)**

August 15, 2012

Mr. Brian Sato  
Site Manager, Bellingham Central Waterfront  
WA Department of Ecology  
Toxics Cleanup Program  
3190 160th Avenue SE  
Bellevue, WA 98008-5452  
Via E-mail: [brian.sato@ecy.wa.gov](mailto:brian.sato@ecy.wa.gov)

**RE: Proposed First Amendment to Agreed Order No. DE 3441 (2006 Order),  
Interim Action to Deal with Leaking Bulkhead, Chevron Subarea Beach, Whatcom  
Waterway**

Dear Mr. Sato,

Thank you for the opportunity to comment on the proposed first amendment to Agreed Order No. DE 3441 announced last month, for the Chevron Subarea Beach (Facility Site Identification Number 2864), located on the Whatcom Waterway, Bellingham, Washington.

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

We view this interim action to excavate and remove the Chevron Subarea Beach non-aqueous phase liquid (NAPL) petroleum and petroleum contaminated soil/sediments from the perspective of restoring the Sound's long-term characteristics. The potential flow of toxic chemicals from the site to the Sound must be reduced and, hopefully, eliminated.

*Background:* This site, a pocket smaller than 5,000 square feet, is located on the northwest bank of Bellingham's Whatcom Waterway, near the southwest end of C Street. It is now owned by the Port of Bellingham. The soil and sediment were reportedly contaminated by petroleum from the former Chevron Fuel Terminal operations during the period 1904 to 1987. In February 2012, Ecology and the Port of Bellingham site managers discovered an intermittent oily sheen on Whatcom Waterway. The resulting investigation revealed a completely deteriorated bulkhead (~70 feet long) that is allowing water at high tide to saturate the shoreline and draw out this historical contamination, particularly when rain increases the groundwater flow to the waterway. The proposed interim action involves removing about 800 cubic yards of petroleum-contaminated soil and sediment from this pocket and rebuilding the excavated area with clean sand and rock. It also involves installing an impermeable plastic sheet (design life: ~5 years) into the soil inland of the excavated area to prevent recontamination of the newly rebuilt shoreline. It is expected to take between four and six working days to

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complete. This interim action will be integrated into the cleanup of the full 55-acre Central Waterfront site, owned by the Port and others. Ecology expects to release the latter's draft remedial investigation (RI) and feasibility study (FS) in 2013 for public review.

Our comments on the proposed interim action plan follow:

- We support the work of Ecology and the Port to contribute to recovering the health of Puget Sound (1) by alleviating the immediate environmental danger posed by the failed bulkhead (please correct as expeditiously as possible!) and (2) by accomplishing the necessary post-cleanup monitoring until it can be effectively integrated into the Central Waterfront cleanup and monitoring operations, to deal with any long term threat posed by contaminants found on this interim cleanup site.
- We are concerned about the considerable elapsed time until the interim action is taken (the time elapsed since last February plus a minimum of 45 days for the Port's actions after this amendment is approved plus the time for Ecology to approve the interim action work plan and then to approve any revised interim action work plans plus the time needed by the Port to prepare for the start of the cleanup). Meanwhile contaminated material from this site continues to enter Whatcom Waterway. (What about additional contamination entering the Waterway that does not emit a recognizable sheen?) We understand Ecology has measures in place to expedite dealing with time-sensitive disasters. Should an expedited procedure also be formulated to deal with time-sensitive emergencies of this nature, i.e., slow, continual leaks of toxic materials that aggregate into significant environmental threats over time?
- We strongly support the potential for Port personnel (and supported by them) to use the information garnered from this project to support Central Waterfront RI/FS planning and other Sound rehabilitation projects, e.g., further detail on the flow of contaminated material through intertidal areas via both tidal movement and ground water, especially after rains; the effect of this material on fish, both those species resident in the waterway (e.g., forage fish) and the migrating Whatcom Creek salmon. We suggest an independent research and development effort be conducted in parallel with this interim action to capture the maximum possible amount of this valuable information. Is it practicable to support nearby university research entities to do this study?
- Although we understand the sampling to date has not revealed contaminated material on either side of the interim cleanup site, we urge continual attention be placed on detecting possible flows of toxic material around/through the interim barrier once it is established.

Thank you for your consideration. You can reach me at (206) 382-7007 X172 or Tom Winter at (206) 723-5311/t2winterjr@yahoo.com if you have any questions or concerns.

Sincerely,



Heather Trim  
Director of Policy

**Ecology response**

- Bullet 1: Ecology appreciates the support for the interim action.
- Bullet 2: Expedited emergency actions can be taken when warranted. In this instance, Ecology concluded that the timeframe for an interim action was acceptable. This is due to the type of contamination, the isolated and intermittent seep, and because pore water data collected from in front of the failed bulkhead do not indicate contamination from this subarea to Whatcom Waterway. The work is on schedule to occur in January and February 2013, to minimize impacts to migrating fish.
- Bullet 3: The discharge of contaminated groundwater to Bellingham Bay is a key component of the remedial investigation effort at this site and will be fully evaluated and reported in a remedial investigation and feasibility study report scheduled for public review and comment in 2013.
- In terms of effects on fish, sufficient regulatory criteria/approaches exist to establish protective cleanup levels. The cleanup levels ultimately established for the site will be based upon a review of all relevant and appropriate criteria, including surface water criteria established to protect human health and the environment. Preliminary cleanup levels will be presented in the remedial investigation and feasibility study report.
- Bullet 4: Ecology concurs. The site-wide remedial investigation and feasibility study and post-construction monitoring of Phase 1 of the Whatcom Waterway cleanup (which will place several feet of clean fill on the shoreline of the interim action area in 2013/2014) will determine if the interim action is sufficient to achieve cleanup levels. If not, additional cleanup actions will be taken.