



Responsiveness Summary

April 30th – May 29th, 2007 Public Comment Period:

- **Agreed Order for a Remedial Investigation/Feasibility Study.**
- **Interim Removal Action.**
- **State Environmental Policy Act (SEPA) Early Scoping Notice.**

Unocal Bulk Plant #0601 Site

**738 West Marine Drive
Port Angeles, WA**

June 2007

**Prepared by the Washington State Department of Ecology
Southwest Regional Office, Lacey, Washington**

Table of Contents

Site Information	2
Site Map	3
Comments Received and Ecology Responses	4
Comment 1: Clarice Arakawa.....	4
Comment 2: Darlene Schanfald of the Olympic Environmental Council (OEC).....	5
Comment 3: Darlene Schanfald of the Olympic Environmental Council (OEC)...	11
Comment 4: Sam Nugent.....	12
Comment 5: Bob Sextro of Noblis.....	12
Comment 6: Mayor Karen A. Rogers, Port Angeles	13
Contact Information and Repositories	15

Site Information

Address: 738 West Marine Drive, Port Angeles, WA

Site Manager: Lisa Pearson, P.E.

Public Involvement Coordinator: Hannah Aoyagi

The Washington State Department of Ecology (Ecology) and Union Oil Company of California (Chevron) have agreed to perform a Remedial Investigation and Feasibility Study (RI/FS) at the site known as Unocal Bulk Plant #0601. Chevron will also do an Interim Removal Action—cleaning up the most serious known pollution before the RI/FS is complete.

The former bulk plant contained several underground and above ground storage tanks, as well as a petroleum dispenser island and truck loading area. Soil and groundwater on the site was polluted by petroleum leaks. Now Ecology and Chevron are signing an agreed order to continue investigating pollution at the site.

The comment period for this agreed order ran from April 30 to May 29, 2007. Public comments and Ecology’s responses are summarized in this document.

Site Background

In 1984, Ecology found leaks in diesel and gasoline lines during an inspection of Unocal Bulk Plant #0601. Monitoring wells were then put in to check for contamination. Free floating petroleum (free product) was found in the groundwater.

Ten years ago, Unocal stopped removing free product from groundwater when the recovery well collapsed, but continued to monitor the groundwater. In 2006, Ecology decided that Chevron should begin a formal cleanup under the **Model Toxics Control Act** (Chapter 70.105D RCW).

Under the formal cleanup process, Chevron must take immediate cleanup actions to protect the health of humans and the environment. These are also called “**interim actions**”. Chevron must also investigate the type and extent of contamination, and cleanup options. This is the **RI/FS**. Finally, Chevron must clean up the site to meet state standards under the Model Toxics Control Act.

Site Map



Unocal Bulk Plant #0601 site location, 738 West Marine Drive, Port Angeles

Comments Received and Ecology Responses

The following comments were received during the April 30th to May 29th public comment period for the Unocal Bulk Plant #0601 site. These comments will be added to the site file and made publicly available.

Comment 1: Clarice Arakawa

Can the public put pressure on Unocal to not only clean up, but possibly improve the site so that the area there that is adjacent to the marina could be better than just back to the way it was before it was before the toxic leakage?

I am originally from the Avila Beach area in California and Unocal had a big spill there. As a result they not only cleaned it up but put quite a bit of improved infrastructure in so that new and old business' was attracted to the site because of these enhancements?

Ecology's Response:

We appreciate you taking the time to comment on the Unocal cleanup. I have a long response to your question and several resources you can use if you are interested in staying involved:

To answer your question, yes, the public can put pressure on Unocal to improve environmental quality at the site and do it in a way that is best for the community. Although bear in mind, this cleanup is occurring in an industrial area. This part of the waterfront is zoned industrial and will continue to house industrial type operations.

The Department of Ecology does offer **public participation grants** to community groups who want to be more involved with the cleanup process (<http://www.ecy.wa.gov/programs/swfa/grants/ppg.html>). The 2007-2009 grant deadline has passed, but we will be asking for applications again next year (2008). This will also be closer to when Ecology is writing the plan for the final site cleanup.

Right now, Ecology and Chevron are starting the Remedial Investigation (RI), which helps us understand how much contamination there is and how far it has traveled. In this case, a lot of information has already been collected, helping us understand what the contamination is and how it is moving through the subsurface. When the remedial investigation is complete, the feasibility study will look at the different choices for cleanup and identify the best one. Then Ecology will publish the Cleanup Action Plan and the public will be asked to comment again. This is a good opportunity to have input about how the site is cleaned up.

During the remedial investigation and feasibility study process, Chevron will take "interim" cleanup actions at the site. This will include removing free floating petroleum

products from the surface of the groundwater table. When the work plan for the interim cleanup actions is finalized, the public will have another opportunity to comment. At this early stage of the cleanup process we cannot say for sure what the final remedy will be, but it will likely include some soil removal and a groundwater treatment system to protect the nearby harbor.

Ecology will make sure that Chevron cleans up the site according to state law--the Model Toxics Control Act (more information at http://www.ecy.wa.gov/programs/tcp/regs/reg_main.html). We do know that the cleanup will protect human health and the nearby harbor environment.

As a member of the public, you have the right to access cleanup information and voice your concerns to Ecology. We can also include your concerns during the State Environmental Policy Act (SEPA) review process. Since you are familiar with the Avila cleanup, please feel free to contact me and the Site Manager, Lisa Pearson, with any concerns you have about the impacts of the cleanup process on your community.

If you would like more information about public involvement, I can answer questions by e-mail or I can call you. If you have technical questions as the cleanup progresses, Lisa Pearson will be able to answer those.

Comment 2: Darlene Schanfald of the Olympic Environmental Council (OEC)

2.1 I am commenting on this RI/FS for the Olympic Environmental Council (OEC). OEC is a 501(c)(3) organization working on issues related to the environment in Clallam and Jefferson Counties. OEC, with various homeowner associations, initiated the 1995 investigation into Rayonier's attempted expansion of their Mt Pleasant Landfill abutting residential backyards. OEC also initiated the 1997 Port Angeles Rayonier Pulp Mill investigation by Region X EPA and is the recognized public advocacy organization for that site investigation and cleanup. We believe that the Port Angeles Harbor area requires considerable and thorough investigation for the health and welfare of the marine resources, public health and the regional economic success.

In addition to Governor Gregoire's effort to help protect and restore Puget Sound, all Pt Angeles Harbor cleanups will be important to restoring the marine resources for use by the endangered ORCA whales. NOAA has included this water body in its recommended ORCA whale protected area.

Before commenting on the Unocal RI/FS, I'll point out that clicking on your email on the Fact Sheet at <<http://www.ecy.wa.gov/pubs/0709037.pdf>> initiates an email to <mc01461@ecy.wa.gov>. That should be fixed. Some comments may be going to that person instead of to you.

Ecology's Response:

Thank you very much for pointing that out, Hannah [Public Involvement Coordinator] has fixed the problem with the link and I have checked with Marv to make sure he has not received any comments accidentally (he has not).

2.2 It is difficult to ignore the time period over which this contamination was discovered (1984) until this RI/FS (2007). While this immediate action is to protect human health and terrestrial and aquatic receptors, it's taken a generation of human life to achieve just this RI/FS.

Ecology's Response:

Yes, I understand your concern. Ecology's Hazardous Sites List is very long, we have to prioritize and initiate cleanups within our limited resources. Ecology was involved in an interim cleanup action at this site from 1990 to 1995. The interim action involved removing free floating petroleum product from the groundwater table. This was ongoing for four years until the extraction well caved in with sand in 1995, and was never replaced. Since there is already a significant amount of information accumulated about this site, we hope to move rapidly to a permanent remedy.

2.3 Reviewing the current RI/FS Agreed Order (AO) along with the December 2005 FACT SHEET (<<http://www.ecy.wa.gov/pubs/0509111.pdf>>) and AO ([http://www.ecy.wa.gov/programs/tcp/sites/Port Angeles MTA/Port PA Agreed Order.pdf](http://www.ecy.wa.gov/programs/tcp/sites/Port_Angeles_MTA/Port_PA_Agreed_Order.pdf)>) demonstrates the enormity of this cleanup project in the Port of Port Angeles (POPA) Marine Trades Area (MTA) Site (Site), where POPA conducted its investigation in 1995 and 1996 and found groundwater contaminated with diesel, gasoline and benzene above Washington cleanup levels.

Ecology's Response:

I was not able to open the links you provided, but I suspect they go to the fact sheet and Agreed Order for the Port of Port Angeles Marine Trades Area? The Marine Trades Area is actually a different site. The Model Toxics Control Act defines a site as anywhere hazardous substances have come to be located, and if two sites are co-mingled (mixed together) they are considered one site under the law.

Tumwater Creek is a 'losing creek', which means water flows into the ground from the creek. The creek water flows into the ground and down to the groundwater table where it mounds on, mixes with, and then flows with the groundwater. In this case, when the creek water soaks in it affects the direction of the groundwater flow, making the groundwater flow away from the creek on both sides. Tumwater Creek is acting as a hydraulic barrier, preventing contamination from traveling from one side of the creek to the other. The Marine Trades Area is located on the opposite side of Tumwater Creek from Unocal #0601. The contamination from the two sources has remained separated so they are different sites.

Just so you know the remedial investigation for the Marine Trades Area was completed last week. I hope to see a draft RI report for the Marine Trades Area within a month or so.

2.4 The 2005 FACT SHEET describe the boundaries thusly: "The site is bordered by Tumwater Creek on the west, the shoreline on the north, the K-Ply plant to the east, and Marine Drive to the south, including one parcel (former Chevron Bulk Plant, 638 Marine Drive) across Marine Drive. The site includes marine terminals 1 and 2 (northwest property area), the log sort yard (west-central property), and the K-Ply plywood plant (formerly PenPly/Rayonier) in the central-eastern area.

"The Port of Port Angeles Marine Trades Area site also includes a non-adjacent parcel south of the log yard and Marine Drive, which was the location of a Chevron bulk fuel plant until Pettit Oil purchased the parcel in 1988. Three former bulk fuel facilities (Standard Oil, Arco, and D&D Distributors/Phillips 66) were located in the log yard area of the site. The site is crossed by water and sewer pipelines required to service the surrounding area and, at various times, eight former and existing petroleum distribution pipeline systems. Each pipeline system, consisting of one or more individual pipelines, was used to pump fuel from terminal facilities at the docks to the four former bulk plants on Port property, and to the two former and two existing bulk fuel facilities around the area."

In sum, the cleanup includes the Marine Trades Area (Blocks 10 & 37), the former Chevron Properties (Blocks 7, 8, 9, 10 & 48), and KPly (Blocks 11, 12, 35 & 36). The contaminants include diesel, gas, benzene and heavy oil.

Ecology's Response:

Yes, it is extensive. The history of this area, off-loading petroleum from ships through pipelines and into the bulk fuel plants has understandably resulted in a significant area of contamination. These operations began in about 1900 and continued for about 80 years. The good news is, we know how to do things better now to prevent the mess from happening again.

2.5 QUESTIONS and COMMENTS

Given all the above named sites, why is the current RI/FS AO only for the Unocal Bulk Plant? Are other AOs to follow for other contaminated Port of Port Angeles Marine Trades sites?

Ecology's Response:

The Unocal Bulk Plant has its own order because it appears the contamination here is not mixed with any other sources, so we consider it one site. The Agreed Order that was

signed in 2005 with the Port of Port Angeles and Chevron includes all those other sites you mentioned. Because the contamination is all mixed up there is only one order for the one big site. Because the Port owns all the properties (except the Chevron parcel) those sites were on, we only had to list the Port on the order for all those sites. Chevron is also listed on the order because the Port does not own the former Chevron property, and its' contamination is mixed up with the other sources on the properties the Port owns.

The Remedial Investigation in the Marine Trades Area order has been completed and a report will be forthcoming soon.

2.6 Soil and groundwater have been polluted. Realizing the Unocal Bulk Plant is south of Marine Drive, it is still on fill. The polluted groundwater must have reached the Harbor waters. Have sediments and marine life in the nearby area been sampled?

Ecology's Response:

Yes, that is a concern. We have some data indicating the petroleum has migrated into the Boat Haven by way of an old stormline, however, that data is from the late 1980's and the boat haven has been renovated since then. Investigation will have to occur to determine exactly what the extents of contamination are. If evidence shows that contamination remains in the harbor, that will have to be addressed as well.

2.7 Indeed, will they be due to the contamination at all the above sites, many right on the Harbor?

Ecology's Response:

Yes, they will be. We know benzene and gasoline are migrating into the harbor from the Marine Trades Area site and K-Ply facility. The cleanup action will be designed to prevent any further discharge of contaminated groundwater to harbor sediments and cleanup any contamination remaining in the sediments.

2.8 POPA and Chrevron ("The MTA Group ") are said to be responsible for all the cleanup costs. What exonerates ITT/Rayonier from covering some costs for contamination on the PenPly site (now KPly),where only an (assumed) interim cleanup was done years back? Is the additional contamination found there from other sources and not the fault of PenPly operations?

Ecology's Response:

Rayonier is still operating under an order from Ecology to pump and treat the hydraulic oil they spilled to keep it from discharging into the harbor north of the K-Ply facility. Ecology needs 'credible evidence' to name a party potentially liable. We have not named Rayonier a potentially liable party to any release at the K-Ply facility except the hydraulic oil.

- 2.9 While there is an effort to connect a schedule to the RI/FS actions, we recommend an "enforceable schedule" with fines for missing deadlines. The Rayonier Mill site cleanup is a perfect example why an enforceable schedule should be developed for this and all MTCA cleanup sites.**

Ecology's Response:

An Agreed Order is enforceable through court actions. There is a whole section on Enforcement (Section IX). Includes language that to enforce the document the attorney general may bring action in state or federal court, and if Chevron refuses they can be liable for up to three times cleanup costs incurred by the State to clean up the site, and civil penalties up to \$25,000 per day for each day they refuse to comply. Ecology may also elect to issue an Enforcement Order if a party chooses to be recalcitrant. Chevron has been very willing to participate in this process and we anticipate continued cooperation. (Chevron has also been very cooperative in the Marine Trades Area project, which continues to be on schedule after 2 years.)

- 2.10 Since this is in WRIA 18 territory, have you sent this request for comments to the WRIA 18 involved parties? If not, it should be sent and along with an extended response period in case you did not.**

Ecology's Response:

I am not sure who you mean. Do you mean the WRIA people at Ecology? I am happy to seek comments from any other people you think appropriate...let me know who. If I missed someone, of course they can have additional time to comment. In fact, we welcome questions or comments from the public at any time during the cleanup process, you (or anyone) are welcome to contact me at any time to share information, questions or participate in the cleanup process.

- 2.11 We would not like to see "cap and fill" but want to see that Ecology and other involved parties look at alternative cleanup methods.**

Ecology's Response:

Yes, Ecology would like to see a permanent cleanup action implemented if at all possible. Based on site data collected so far, I think this is very possible. The Model Toxics Control Act specifically addresses Minimum Requirements for Cleanup Actions and permanence is a major factor.

- 2.12 What steps will be taken to protect neighboring properties from being contaminated during the cleanup?**

Ecology's Response:

I will not be able to say that for sure until we determine what the cleanup will entail. I am sure things like dust and stormwater will have to be controlled to prevent any fugitive migrations, but we will have to see what other measures are necessary when the time comes.

2.13 ADDITIONAL CONCERNS

In one document, it is stated that Admiral Marine placed a barrier to inhibit toxic vapors from getting inside their work space. Indoor toxic vapors at this site reportedly occurred for some years. Is Ecology continually checking on indoor toxic vapors at both the Admiral Marine and the Westport Marine facilities, and whether the workers are wearing their protective gear?

Ecology's Response:

I do not know of a document that talks about a vapor barrier at Admiral Marine. There is a vapor barrier that was installed under the office space when Westport Shipbuilders was constructed, and Ecology is not performing any vapor monitoring in that structure. It is not within the purview of Ecology to monitor whether a private business has their workers wearing protective gear.

2.14 Reflecting back to the December 2005 FACT SHEET statement, "In October 1990, Ecology issued an enforcement order to ITT Rayonier to conduct an interim cleanup, including removing hydraulic oil and conducting long-term monitoring."

***To where was this PenPly contaminated soil sent, or was it capped?**

***Rayonier was to do long term monitoring on that site? Define "long term" in number of years.**

Ecology's Response:

The hydraulic oil spill was under the building structure, so the soil was not removed; there was no way to get to it. Rayonier installed a pump and treat system to pump out product and control the flow of groundwater which would carry the oil to the harbor. Rayonier has been operating the pump and treat system since that time. It is still in operation today. Long term? In this case, I would say very long term. It will take a great many years to dissolve and/or pump all that product and we will never make them tear down the building to get to it, so if they continue as is, it will take a very long time indeed. That is one significant challenge when it comes to these industrial areas, often the sources of contamination are under large businesses or operations that make removing the source impossible.

2.15 We want to remind Ecology that PenPly waste was dumped at the 13th & M St. Landfill, an unlined landfill, which EPA has listed as a CERCLA site. This landfill is under the watch of Clallam County Environmental Health and Ecology. Over the years we have informed these agencies, to no avail, that monitoring wells at this CERCLA site do not work, the leachate is getting into the groundwater and perhaps into the adjoining wetlands. All this drains into a below ground water system where wastes flow to 4th & N Streets and then exits into the Strait of Juan de Fuca. Did ITT/Rayonier haul contaminated soil to the landfill? If so, those toxins are possibly winding up in the Strait with the dioxins and other site contaminants -- an ORCA whale water body and one the Governor wants cleaned up. This should be investigated and the results publicly reported.

Ecology's Response:

I do not know of any waste that was transported to the landfill. If you have any supporting documentation will you please send it to me? I will be happy to look into it.

2.16 Please keep us informed of continuing actions in the Port of Port Angeles Marine Trades Area Site.

Ecology's Response:

Again, thank you for taking the time to submit such thorough comments and be involved in our process. Community involvement is critical to the maximum success of our program. Please feel free to contact me at any time for updates or with comments and questions.

Comment 3: Darlene Schanfald of the Olympic Environmental Council (OEC)

3.1 What agency is responsible to see workers wear protective gear?

Ecology's Response:

Ms. Schanfald was directed to the federal Occupational Safety and Health Administration (OSHA), the Washington Industrial Safety and Health Act (WISHA), and the Washington State Department of Labor and Industries (L&I).

3.2 All info about the Rayonier M Street Landfill is in Ecology files. Dates way, way back. Closed in 1989, if memory serves me right.

Ecology's Response:

I will check the files for that landfill data.

3.3 WRIA Ecology staff and some citizens. E.G. Robbie Mantooth and Paula Mackrow (North Olympic Salmon Coalition). I've emailed them, so they may care/not care to comment. But Ecology staff working on WRIA could give you more citizens participant names. I don't have these.

Ecology's Response:

Robbie Mantooth and Paula Mackrow were added to the mailing list for the site. Robbie Mantooth was notified by e-mail of the comment period.

Comment 4: Sam Nugent

The Remediators Inc is a soils remediation service company located in Port Angeles, WA specializing in petroleum contamination. We would like to be involved in the cleanup of the [Unical Plant #0601](#), on Marine Drive in Port Angeles. I have read the agreed order, and assume the principal contact at Chevron is Brett Hunter of the Chevron Environmental Management Company. Is that correct?

Ecology's Response:

Yes, that is correct. Also, Don Wyll is the project manager at SAIC who is contracted with Chevron to perform the cleanup work. Don can be reached at (425) 482-3315. (I have cc:ed him on this email.) Thank you for taking the time to be involved in this process. Please let me know if you have any additional questions or comments.

Comment 5: Bob Sextro of Noblis

Lisa, I read over the agreed to order and have no comments, but also looked at the upcoming schedule that calls of an RI work plan in May 2007. Is there a review and comment period for the public on that plan?

Ecology's Response:

Thank you for taking the time to be involved in the cleanup process. You are always welcome to review and offer comments on any document we have. However, there will not be a specific public comment period on the RI work plan. There will be another public comment period on the interim action work plan which will most likely be produced sometime this summer.

Perhaps Hannah can arrange to post the RI work plan on the web site when it is finalized? I expect to receive the draft RI work plan next week, you are welcome to check back and get a copy of it.

Comment 6: Mayor Karen A. Rogers, Port Angeles
(Please see the attached letter on the following page.)

Ecology's Response:

Thank you for your recommendation. The Remediators, Inc. is encouraged to contact Chevron's project manager, Don Wyll from SAIC for information about how they can be involved in the cleanup process. Don can be reached at (425) 482-3315.

-END OF PUBLIC COMMENTS RECEIVED AND RESPONSES-

CITY OF



PORT ANGELES

WASHINGTON, U. S. A.

City Council

RECEIVED

JUN 14 2007

Washington State
Department of Ecology

May 25, 2007

Lisa Pearson
Department of Ecology
SW Regional Office
300 Desmond Drive
Lacey, WA 98503

Reference: MTCA Cleanup - facility site #106
Unocal Bulk Plant #0601, Port Angeles
Agreed Order No. DE 4086

Dear Ms. Pearson,

The City of Port Angeles encourages the Department of Ecology and Chevron to utilize local firms with expertise in contaminated site cleanup and in the remediation for both investigation and cleanup activities under the referenced agreed order.

Recently one of the most forward and leading edge companies in environmental clean-up, The Remediators, located operations in Port Angeles. The Remediators is a soils remediation service capable of servicing the work at the Unocal Site #0601 in Port Angeles.

The Remediators provides full remediation services (including site evaluation, sampling, monitoring, soil treatment, excavation and hauling) and specializes in the bioremediation of petroleum-contaminated soil through fungal augmentation. Based on its location, size, and type of contamination, the site at 738 West Marine Drive in Port Angeles is an excellent candidate for this bioremediation technology.

As Mayor, and on behalf of our City, I take extreme pride in promoting those local companies who contribute to our community stewardship.

Thank you for your consideration as we all look forward to the restoration of this land.

Best regards,

A handwritten signature in cursive script that reads "Karen A. Rogers".

Karen A. Rogers
Mayor

Phone: 360-417-4500 / **Fax:** 360-417-4509

Website: www.cityofpa.us / **Email:** council@cityofpa.us

321 East Fifth Street - P.O. Box 1150 / Port Angeles, WA 98362-0217

Contact Information and Repositories

If you have questions about the site or this summary, please feel free to contact:

Lisa Pearson, PE
Site Manager
WA Department of Ecology
SWRO Toxics Cleanup Program
PO Box 47775
Olympia, WA 98504-7775
(360) 407-6261
lpea461@ecy.wa.gov

Hannah Aoyagi
Public Involvement Coordinator
WA Department of Ecology
SWRO Toxics Cleanup Program
PO Box 47775
Olympia, WA 98504-7775
(360) 407-6790
haoy461@ecy.wa.gov

Information repositories:

You can review information about the site, including documents from this public comment period, at the following locations:

- Port Angeles Public Library - 2210 South Peabody Street, Port Angeles, WA 98362. (360) 417-8501
- WA Department of Ecology, SWRO Toxics Cleanup Program - 300 Desmond Drive, Lacey, WA 98504-7775. Please call (360) 407-6365 or e-mail Dene461@ecy.wa.gov for an appointment.