Comments to the Revised Draft Feasibility Study 2024

 Submitted by the Point Edwards Unocal Review Committee

 and the Point Edwards Owners Association Board

1. **Introduction**

The Department of Ecology should substitute a new alternative for the current Alternative 6, which is Chevron’s recommended remedial alternative for the Unocal site cleanup. That new alternative would excavate sufficient newly identified locations of contaminated soil to allow a path for Willow Creek to reach Puget Sound. This would allow salmon migration and restoration. The remaining contaminated soil, including that beneath the WSDOT storm drain line, would remain on site. That contaminated soil would be contained by an engineered cover and an environmental covenant.

The current Alternative 6 does not meet the requirements of the MTCA and must be removed because it fails to meet any of these six administrative requirements:

* properly consider Public Concerns;
* properly consider Tribal Interests;
* properly consider Future Uses; or
* present data in a manner that allows the public to comment on selected Alternatives;
* Failed to consider all reasonable alternatives;
* Did not consider climate change.

The need for a new Alternative instead of the current Alternative 6, does not preclude Ecology from selecting Alternative 4, the total removal of all toxic waste from the Unocal site. The newly substituted Alternative would replace the current Alternative 6 for analysis and comparison with Alternative 4 in the Disproportionate Cost Analysis selection process.

1. **Reasons to Substitute Alternative 6 with a New Alternative**
2. **The 2024 Addendum to the 2017 Draft Feasibility Study failed to properly select the appropriate alternative actions for remediation.**
3. **Legal Requirements under the MTCA**

The 2024 Addendum should have substituted a new alternative for the 2017 Alternative in order to meet the changed conditions surrounding the Unocal site. The Department of Ecology requested the addendum to “reevaluate remedial alternatives… .” Addendum 1-1.

 Remedial alternatives are analyzed and selected as a part of a process governed by WAC 173-340: the crafting of a feasibility study.

The purpose of the feasibility study is to develop and evaluate cleanup action alternatives to enable the selection of a cleanup action that meets the requirements in WAC [**173-340-360**](https://apps.leg.wa.gov/wac/default.aspx?cite=173-340&full=true#173-340-360) and conforms to the expectations in WAC [173-340-370](https://apps.leg.wa.gov/wac/default.aspx?cite=173-340&full=true#173-340-370).

WAC 173-340-351(1).

What is to be evaluated in the feasibility study, or its scope, depends upon many factors, including the “characteristics of the site.” WAC 173-340-351(5). Additionally, when developing a feasibility study, specific steps must be taken.

 **Steps.** Except as otherwise directed by ecology, a feasibility study of cleanup action alternatives must be conducted in accordance with the following steps. The study should remain flexible to avoid collecting unnecessary information or conducting unnecessary evaluations.

(a) **Step 1: Identify cleanup goals.** Identify the goals for the cleanup action, in addition to compliance with the requirements in WAC [**173-340-360**](https://apps.leg.wa.gov/wac/default.aspx?cite=173-340&full=true#173-340-360)**.** Include any planned future uses of the site and any habitat restoration or resource recovery goals for the site.

(b) **Step 2: Identify alternatives.** Identify cleanup action alternatives for evaluation in the study. The alternatives must achieve the goals identified in Step 1 and comply with the requirements in WAC [**173-340-360**](https://apps.leg.wa.gov/wac/default.aspx?cite=173-340&full=true#173-340-360).

WAC 173-340-351(6) (emphasis added).

After evaluating alternative remedial actions and in making its selections, the Department of Ecology must consider non-quantitative factors.

**Public concerns and tribal rights and interests.** For ecology-conducted or ecology-supervised remedial actions, ecology will consider the following when selecting a cleanup action:

(i) Public concerns, including the concerns of likely vulnerable populations and overburdened communities, identified under WAC [**173-340-600**](https://apps.leg.wa.gov/wac/default.aspx?cite=173-340&full=true#173-340-600) (13) and (14); and

(ii) Indian tribes' rights and interests identified under WAC [**173-340-620**](http://app.leg.wa.gov/WAC/default.aspx?cite=173-340-620).

WAC 173-340-360(3)(d).

The 2017 Draft Feasibility Study (2017 FS Study) failed to properly meet the requirements of WAC 173-340 351, and the 2024 Addendum failed to correct those errors to meet the changed conditions in the environment.

1. **Characteristics**

Chevron accurately defined the characteristics of the site. The Unocal site is very near Puget Sound, bordering a marsh that has some access to Puget Sound. Willow Creek runs through the site and contains a salmon hatchery. Willow Creek also has access to Puget Sound. The 2017 Draft Feasibility Study and the *2024* Addendum also accurately describe the site.

1. **Goals**

Chevron listed cleanup goals in its Final Feasibility Study Work Plan dated October 5, 2012, at p. 14, and the Final Interim Action Work Plan dated July 19, 2016, at pp. 14-15. The objectives listed in 2012 and 2016 did not include future uses or habitat restoration as required by WAC 173-340-351(6)(a) or comply with WAC 173-340-360(3)(d), which requires consideration of public concerns and tribal rights and interests. The 2017 Draft Feasibility Study and the 2024 Addendum added nothing to Chevron’s objectives.

While Alternative 6 as drafted may meet the objectives listed in 2012 and 2016, Alternative 6 cannot achieve any goal related to public concerns, tribal rights, future use, or habitat restoration, because the Department of Ecology did not consider or set these goals. Ecology also admits that Chevron has deliberately ignored the MTCA requirements that future uses and habitat restoration which are required by WAC 173-340-351(6)(a).

The Cleanup Action Plan is designed for the remedy to be protective of human health and the environment. The current draft Cleanup Action Plan was not designed to incorporate needs of habitat restoration or daylighting tidal connection.

Questions and Answers Sheet Unocal Edmonds Bulk Fuel Terminal 0178, July 2020, Publication 20-09-152, p. 5 (*emphasis added*).

1. **Future Uses**

Chevron’s position on future uses is as follows:

Since 2022, Ecology has stated that the potential future use for the Lower Yard is Open Space. Presumably, Ecology reconsidered the Lower Yard Future Use based on current use, comments received from WSDOT, as well as publicly available information from the City of Edmonds.

Addendum, Land Use and Zoning, page 1-3.

 Yet, Ecology claims that land use was determined by Chevron. Questions and Answers Sheet Unocal Edmonds Bulk Fuel Terminal 0178 July 2020, Publication 20-09-152, p. 5.

Since WSDOT made the decision to abandon the use of the Unocal site as a ferry terminal, neither Chevron nor Ecology has come to terms with what the potential future use of the Unocal site might be. The best that can be said is that Ecology considers the future use to be open space available as an ecological habitat. “Due to the expected future use of this Site as” Open Space available as ecological habitat. … .” Questions and Answers Sheet Unocal Edmonds Bulk Fuel Terminal 0178, January 2024.

 In plain dictionary language, Ecology considers the use of the Unocal site as a space where plants and some types of animals might live. There is no mention how Ecology reached its decision or why it did not consider a salmon recovery estuary. A mere statement that the Unocal site can be used as open space that plants and animals can live in does not meet the Department of Ecology’s obligations under the MTCA.

1. **Public Concerns**

The most complete description of Chevron’s understanding of public concerns is in the 2024 Addendum, 6.1.6, Public Concerns, page. 6-6. The Addendum notes that public concerns relating to noise, traffic, risks, and impacted soil and water remaining on the site have been melded into Alternatives 4 and 6. There is no mention of public concern over the future use of the site. Yet, the MTCA includes in public concerns the “future land use” of the site. WAC 173-340-600(9)(e).

There has been ample public planning on the future use of the Unocal site as a salmon recovery estuary. See paragraph 3(b) below. There have been strong and vocal public efforts to promote consideration of the future use of the Unocal site as a salmon recovery estuary at the public hearings and open houses conducted by Ecology. However, ***there is no mention*** of salmon or an estuary in the 2017 FS Study or the 2024 Addendum. The only comment is contained in the Question and Answer Sheet of July 5, 2020:

The City of Edmonds and community groups have expressed an interest in a portion of the Site being used as part of a marsh restoration project to daylight tidal connections between Edmonds Marsh (not part of the Site) and Puget Sound, making the marsh accessible for migrating salmon, including the endangered juvenile Chinook.

Questions and Answers Sheet Unocal Edmonds Bulk Fuel Terminal 0178, July 2020, Publication 20-09-152, p. 3.

But when asked about Ecology’s position on this public concern, Ecology only said:

Ecology supports habitat restoration projects that actively preserve, restore, and enhance existing wetlands throughout the state. Nevertheless, Ecology does not dictate how property is used by the property owner …

Id. at p. 4.

The issue is not whether Ecology supports salmon recovery estuary as a public concern, but whether Ecology should consider a salmon recovery estuary and include a salmon recovery estuary as a public concern in the Revised Draft Feasibility Study.

1. **Tribal Interests**

Ecology also did not mention tribal interests in the Revised Draft Feasibility Study. Ecology says that they invite tribal participation. Public Participation Plan August 2024, p. 14. But there is no discussion of how the invitations were made or the results of any such invitations.

When selecting alternatives for a cleanup plan, the feasibility study must identify goals for habitat restoration and comply with WAC 173-340-360, which requires that any cleanup action consider Indian tribes' rights and interests identified under WAC [**173-340-620**](http://app.leg.wa.gov/WAC/default.aspx?cite=173-340-620). WAC 173-340-351(6).

WAC 173-340-620 states:

Tribal engagement.

1. **Purpose.** Tribal engagement is an integral part of ecology's responsibilities under chapter [**70A.305**](http://app.leg.wa.gov/RCW/default.aspx?cite=70A.305) RCW, the Model Toxics Control Act. Ecology's goal is to provide Indian tribes with timely information, effective communication, continuous opportunities for collaboration and, when necessary, government-to-government consultation, as appropriate for each site.

…

(3) **Tribal engagement plan.**

(a) Ecology will develop a site tribal engagement plan that identifies Indian tribes that may be adversely affected by the site, opportunities for government-to-government collaboration and consultation, and protocols for communication.

(b) Ecology will seek to initiate meaningful engagement with affected Indian tribes before initiating a remedial investigation or an interim action at a site. Ecology will maintain meaningful engagement with Indian tribes throughout the cleanup process.

There appears to be no tribal engagement plan establishing or discussing meaningful engagement over tribal interests.

1. **Failure to meet with the requirements of the MTCA**

Alternative 6 cannot comply with the required consideration of public concerns and tribal rights, because there was no mention of tribal rights. Any discussion of public concerns was limited to dust, dirt, and noise, as well as containing and not removing contamination. There was a deliberate refusal to consider future uses. Put simply, Alternative 6 cannot be used as a remedial option because it fails to comply with the MTCA. A new Alternative is necessary.

1. **What considerations should go into selecting a replacement for Alternative 6?**
2. **The future use of the site *must* be considered.**

Plans exist for the use of the Unocal site as a salmon recovery estuary. The Washington State Legislature in a budget note gave the COE the right of first refusal to purchase the Unocal site from WSDOT to “rehabilitate near-shore habitat for salmon and related species.” The COE and WSDOT entered into a Memorandum of Understanding (MOU) on the procedures for the purchase of the Unocal site from WSDOT. The Edmonds Marsh Estuary Advocates (EMEA) has circulated a vision of a possible salmon recovery estuary, which is one possible outcome for the Unocal site. EMEA has also helped the COE to obtain a National Fish and Wildlife grant to study sea level rise and use of the Unocal site for salmon recovery.

 These plans should have been mentioned in at least the 2024 Addendum. The MTCA does not require consideration of future use be based upon use by current owners or a prospective purchaser. The MTCA speaks of “***any planed future uses*** of the site and ***any habitat*** restoration or resource recovery goals of the site.” WAC 173-340-351(6)(a) (*emphasis added*). WAC 173-340-708(a and b) speak of “potential future site use.” These plans for future use will support a new alternative to Alternative 6.

1. **Public concern must be properly addressed.**

The purpose of the MTCA is the protection of human health and the environment. The Revised Draft Feasibility Study properly supports that purpose. But public concern is required to be considered in achieving that purpose and public concern encompasses more than human health and the environment.

WAC 173-340-360 governs the evaluation and selection of cleanup action alternatives:

… ecology will consider the following when selecting a cleanup action:

1. Public concerns, including the concerns of likely vulnerable populations and overburdened communities, identified under WAC [173-340-600](http://app.leg.wa.gov/WAC/default.aspx?cite=173-340-600)(13) and (14) …
2. (ii) Indian tribes' rights and interests identified under WAC [**173-340-620**](http://app.leg.wa.gov/WAC/default.aspx?cite=173-340-620).

WAC 173-340-360(d) (*in part).*

The concerns of vulnerable populations, overburdened communities, and tribal interests extend beyond human health and the environment. It is important to note that public concerns are specified as a separate and individual concept and not restricted to vulnerable populations, overburdened communities, and tribal rights and interests. The MTCA puts future use of the site into play.

The work by the Edmonds Marsh Estuary Advocates, the Point Edwards Unocal Review Committee, the Edmonds City Council, the Edmonds Mayor’s Office, and the state legislature, all directed towards the Unocal site becoming a salmon estuary, must be included in the selection of alternatives for the cleanup of the Unocal site.

**3. Tribal interests must be Considered.**

Even if tribal interests cannot be identified through the use of a Tribal Engagement Plan under WAC 173-340-620, known tribal interests must be considered, because they are intertwined with the interests of all citizens of the State of Washington.

In *United States v. State of Washington,* 384 F. Supp. 312 (W.D. Wash. 1974), *aff’d and remanded,* 520 F.2d 676 (9th Cir.1975), commonly known known as the *Boldt Decision*, the courts recognized that, under federal treaties with the tribes, Native American tribes were entitled to take 50% of the salmon and to co-manage the salmon fisheries. In *United States v. Washington*, 853 F.3d 946 (9th Cir. 2017), commonly known as the *Culvert Case*, the court required Washington to replace designated culverts under its highways that impeded the passage of salmon to spawning grounds. In doing so, the court spoke of the decline in salmon stock:

A primary cause of this decline is habitat degradation, both in breeding habitat (freshwater) and feeding habitat (freshwater and marine areas) . . .. One cause of the degradation of salmon habitat is . . . culverts which do not allow the free passage of both adult and juvenile salmon upstream and downstream.” The “consequent reduction in tribal harvests has damaged tribal economies, has left individual tribal members unable to earn a living by fishing, and has caused cultural and social harm to the Tribes in addition to the economic harm.

*Id.* at 961.

The Seattle Times reported on November 19, 2023, that the 20-year cost to remedy the culverts that were barriers to salmon was between 7.3 to 7.8 billion dollars.

 These tribal interests are common knowledge. Both Chevron and Ecology are charged with knowing these interests. The cost of ignoring Tribal rights is a public concern. As the Feasibility Study is designed to develop and evaluate cleanup action alternatives, the study must review and consider Public Concerns including Tribal Interests.

1. **The 2024 Addendum DCA (Disproportionate Cost Analysis) fails to separate the costs for excavating those newly identified locations exceeding 2x the approved CULs from the costs of excavating contamination around the WSDOT storm line, thus preventing the public from making informed comments on the DCA and any possible new Alternatives.**

 It appears that there are cost effective alternatives to the cleanup of the Unocal Site that have not been studied and evaluated by Chevron. The manner in which Chevron reported the costs for Alternative 4 and Alternative 6 prevents the public from adequately commenting on the Alternatives or adequately exploring alternatives not considered by Chevron.

The costs of total excavation under Alternate 4 have risen. In 2024, the site-specific TEE that was directed by Ecology after WSDOT abandoned its planned ferry terminal and Ecology became uncertain as to the site’s future use was released. Addendum, p. 1-2. A TEE determines whether the release of a hazardous substance in the soil poses a threat to plants, animals, or humans. A TEE will set site specific cleanup standards for the site. The data collected from the study will be used in determining cleanup standards for the site. The specific procedures prescribed for a TEE are not suitable for evaluating wetlands or surface water. WAC 173-340-7490(1). The new TEE was requested by Ecology because Ecology did not recognize that the potential future use of the site could be a salmon recovery estuary, and the site was bordered by plants and animals. Addendum, pp.1-2 and 2.2. (With this uncertainty in proposed end use for the Lower Yard) and (A site-specific TEE is required if a site is located on, or directly adjacent to, a natural area.)

In 2017, when the DCA was estimating the cost of excavation for Alternative 4, the areas subject to excavation were a large area near the WSDOT Storm Drain and 4 small locations labeled “statistically insignificant.” The estimates ranged from a low of 5.473 million dollars to a high of 8.645 million dollars. In 2024, when doing the same cost analysis for Alternative 4, nothing had changed except that the new TEE had exposed about 16 new locations of contamination. These new locations increased the 2024 cost estimates for Alternative 4 from a low of 8.021 million dollars to a high of 11.427 million dollars. The 16 new locations had increased the low estimated cost of excavation by 2.568 million dollars and the high estimated cost by 2.782 million dollars. The average cost of excavating the 16 new locations of contamination is $167,187.

But the cost of excavating the new locations of contamination is not equal. The 2024 Addendum speaking of the high excavation costs for Alternative 4 notes:

Excavation of additional areas where COPECs exceed the site CULs will also require shoring to protect the BNSF ROW (Right of Way) and the toe of the northwest slope of the lower Yard. These requirements contribute to the significant cost of these alternatives.

Addendum, page 6.7.

At the public hearing on September 16, 2024, the contaminated soil was reported as being “very shallow.” The Questions and Answers Sheet Unocal Edmonds Bulk Fuel Terminal 0178, Question 7 reported that the contamination was within 4 feet of the surface.

So, there are locations that are high cost to excavate and those that appear lower in cost. But Chevron has not reported the cost to excavate the individual locations of contamination. Perhaps this can be done as the 2024 revision of Alternative 6 includes Chevron conducting additional soil sampling of the new locations. If so, the public can estimate the cost of excavation a channel through the contaminated locations.

The calculations in this comment indicate that there is room for viewing other possible alternatives for cleanup. It very well may be possible to excavate a portion of the newly identified impacted soil and meet the requirements of the MTCA. These possible alternatives should have been considered in the2024 Addendum.

1. **The Public is unable to properly comment on key portions of the Revised Draft Feasibility Study because of the way essential data or information is presented or not discussed.**

The MTCA is replete with requirements that the public be allowed to comment on the analysis and decision made in cleaning up a toxic waste site. However, the Revised Draft Feasibility Study does not allow appropriate public comment on some key points.

* The weight given to public concern and Tribal Interests is unknown. When objectives were set for Alternative 6, public concern and tribal interests were not mentioned. Final Interim Action Work Plan dated July 19, 2016, pp.14-15. This is not to say that the objectives were wrong, they were just inadequate. When Public Concerns were finally discussed, they remained limited to Chevron’s 2012 and 2016 vision of the Unocal site. New issues were brought to Chevron and Ecology around a salmon recovery estuary, and they remained silent. That silence raises concerns over what weight they were given in the Disproportionate Cost Analysis. All that the feasibility study can say is that the old views were considered in Alternatives 4 and 6. But what weight in the Disproportionate Cost Analysis was it given to the concerns of the citizens who attended meetings, the concerns of the City of Edmonds and the concerns of the tribes? If any weight was given, it is unknown.
* Also unknown is what the cost would be to excavate some of the newly identified locations of contamination produced by the 2024 TEE. Without this information, no appropriate comment can be made about the selection of alternatives. The feasibility study is designed to review reasonable alternatives. Without looking at the cost of excavating individual locations of newly identified toxic waste (SWLY A 12WALL, EXB14-FF-6-4, etc.,) no real comment can be made on whether or not all reasonable alternatives have been explored.
* The Revised Draft Feasibility Study does not discuss climate leaving the public unable to comment on whether climate change has been properly considered.
1. WAC 173-340-360 (6)(f) requires that the remedial investigation of the site include the effect of climate change.
2. WAC 173-340-360 (3)(a)(v) requires that cleanup actions have resilience to climate change.
3. WAC 173-340-(360)(d)(5)(iii)(A)(lll) requir4e that when doing a DCA for a cleanup action selection when evaluating long term effectiveness, the feasibility and cleanup action must consider the resilience to climate change impacts.

The Revised Draft Feasibility Study does not consider these factors.

 Given the fact that the Unocal site is a low land former marsh bordering the Edmonds Marsh and the critical slope upon which Point Edwards sits as well as very near Puget Sound with its significant wind and wave action, climate change must be considered. The question is not whether these considerations would change the ultimate decision. Rather the public has a right to comment on why these considerations should or should not impact the ultimate decision.

1. **Conclusion**

The MTCA guides the selection of alternatives for cleanup of toxic waste sites. Unless the requirements of the act are followed, including consideration of public concerns, future use, tribal interests, and habitat restoration, a skewed result considering only the cost of removal will occur. That is what has happened here.

 While Chevron may have been surprised by WSDOT’s abandonment of its ferry terminal, there was time and information available to consider the non-quantitative requirements of the MTCA. WSDOT changes in its plans and Ecology changes in regulations could have been handled by the 2020 Addendum. But new issues raised by the public were ignored and tribal interests were not considered.

What Chevron wants to do is to save money by leaving islands of toxic waste within the Unocal site, knowing that these spots of remaining toxic waste will have to be removed in order to create a channel opening the Unocal site to Puget Sound to salmon. Chevron has a duty to remove toxic waste so that the site is not only safe for humans and the environment, but also that the site can be used. While not falling under the explicit rule of *United States v. Washington*, the Culvert Case, what Chevron is doing clearly disregards tribal interests. Chevron is leaving barriers to salmon recovery in place and telling others, “If you want to use the site for salmon recovery, you have pay for the removal of our toxic waste.”

 If this were a culvert it would not be allowed to happen.

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