Neil Gilham

Neil Gilham - Comments on Unocal Edmonds Bulk Fuel Terminal 0178

First, I want to thank Ecology for the work they do in fulfilling the mandate to "protect human health and the environment" in accordance with the Model Toxics Control Act Regulation (MTCA). On the flip side, Chevron and their consultant Arcadis have missed the mark for several reasons that I'll touch upon. From a high-level view, my impression about the Public Review Draft Final Feasibility Study Addendum (FS) is that it reads to me like "let's frame the DCA for the outcome we really want and then we can dust our hands off and walk away" while in the future, others must deal with the contamination left in place, only protected by piece of paper known as a "covenant" and, well, the five-year review thing that Ecology does. The desire of most Edmonds citizens is to have all contamination removed and have the Marsh restored to a functioning estuary. This is the only reasonable, practical, and permanent outcome.

The FS selects Alternative 6 as the preferred alternative. Alternative 6 includes the following elements:

- Continued operation of the dual-phase extraction (DPE) system for one year following optimization.
- Installation of an engineered cover system.
- Contingency Plan (or plans, depending on the number of contingencies that occur)
- Environmental Covenant

Alternative 6 is fraught with "if this, then that" contingencies. Is Alternative 6 an Interim Action or is it a permanent cleanup action? How many contingencies can one lump on to Alternative 6. Is there an end to this cleanup action? What is the expected timeframe for completion? Does the disproportionate cost analysis (DPA) consider these contingencies and the seemingly never-ending timeframe?

The DPA system has apparently not functioned as intended. The DPA system has operated only 30 percent of the time during its five years of operation. Does Ecology have confidence that further and continued operation of the DPA system will be more effective in the future considering its limited success so far?

Figure 19 in the FS depicts approximately 22 separate contaminated soil areas for the installation of an engineered cover system. Most of those areas are outside of the WSDOT storm drain line or away from the base of the Point Edwards slope, areas with inherent geologic hazards (e.g. slope stability). Why can't these easily accessible outlying contaminated soil areas be excavated instead of capped?

If a functioning estuary is restored in the future, some of remaining 22 contaminated soil areas could require excavation and a reopening of involvement with Ecology. In addition, the cost to remove the capped contaminated soil would fall on a future landowner. This is an unreasonable burden on future landowners with a goal toward estuary restoration.

The 22 capped soil areas would be vulnerable to climate change induced sea level rise that could disrupt the covers and remobilize the contamination. Sea level rise will impact the long-term effectiveness and protectiveness of the proposed engineered covers under Alternative 6. Climate resilience must be separated out as an explicit factor in the DCA when evaluating the long-term effectiveness of a cleanup action alternative.

The Unocal Site is underlain by a mix of unconsolidated sand, silt, clay and sand/gravel fill. The water table is high. These saturated materials are subject to liquefaction during a large earthquake which could disrupt the engineered covers, including the emergence of sand boils through the contaminated soil.

The FS describes the WSDOT storm drain line condition as “adequate.” This is not a very reassuring description of the pipe’s condition. The pipe is over 50 years old and likely near the end of its useful life. The City of Edmonds has commented in detail on the concerns with the aging pipe and the contaminated soil that surrounds it.

My hope and desire, along with my fellow citizens, is that the Unocal Site as part of the Edmonds Marsh system be restored to a fully functioning estuary with connection to Puget Sound. Removal of all or most of the remaining contamination is a critical step toward achieving that goal.

Thank you for the opportunity to comment on the Unocal Site FS.

Sincerely,

Neil R. Gilham, LG