Occidental Chemical Corporation

Occidental Corporation Tacoma Site Feasibility Study

The draft Feasibility Study (FS) develops remedial action goals (RAGs), identifies contamination solutions, and evaluates cost estimates for remediation alternatives. Institutional controls, groundwater monitoring, and soil vapor monitoring are required at this site.

Remedial Action Goals (RAGs)
These serve as the basis for developing cleanup actions. The extensive Site characterization data have shown that the areas of concern at the Site include soil, groundwater, and indoor air. The RAGs focus on preventing:

- Discharge of contaminated groundwater.
- Human and ecological receptor exposure to contamination.
- Further spread of contamination.

The RAGs are based on Site-specific risks evaluated by Occidental Chemical Corporation (OCC), Environmental Protection Agency (EPA), and Department of Ecology (Ecology) together with a contractor, Ridolfi Environmental.

How were remediation options assessed?

Each remedial option underwent initial screening to determine its ability to:

- Protect human health and the environment.
- Comply with cleanup standards.
- Comply with applicable state and federal laws.
- Provide compliance monitoring.
- Be easily implemented.
- Be cost effective.

After this initial screening, the options that met the above standards underwent a second detailed individual and comparative evaluation based on:

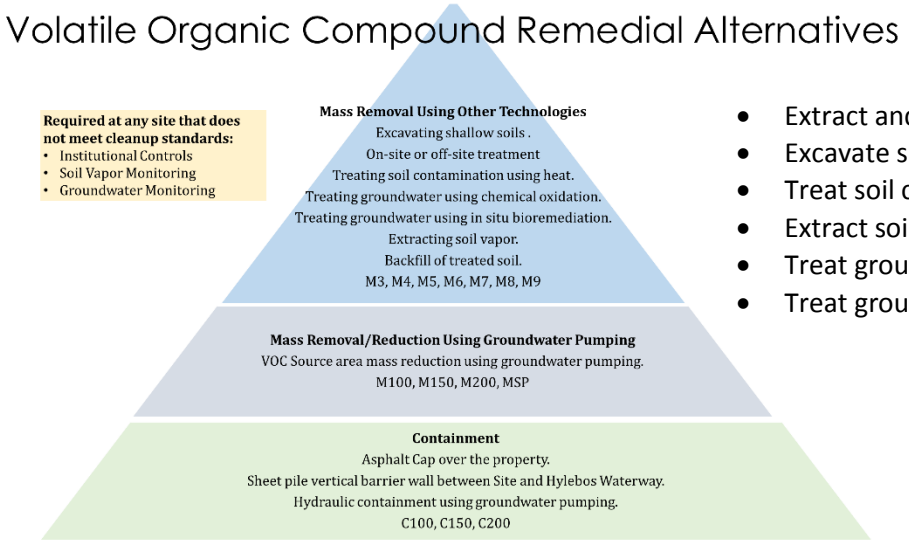
- Protectiveness.
- Permanence.
- Effectiveness over the long term.
- Management of short-term risks.
- Technical and administrative implementability.
- Consideration of public concerns.
- Disproportionate cost analysis.
- Site-specific performance objectives.
- Other site-specific factors.

What alternatives are outlined in the FS?

Containment Alternatives

- Asphalt cover over the Site.
- Sheet pile vertical barrier wall adjacent to the Hylebos Waterway.
- Variable amounts of groundwater extraction and treatment.

Volatile Organic Compounds (VOCs) Mass Removal or Reduction Alternatives



- Extract and treat groundwater.
- Excavate shallow contaminated soils.
- Treat soil contamination with heat.
- Extract soil vapor.
- Treat groundwater with a chemical oxidant.
- Treat groundwater with bioremediation.

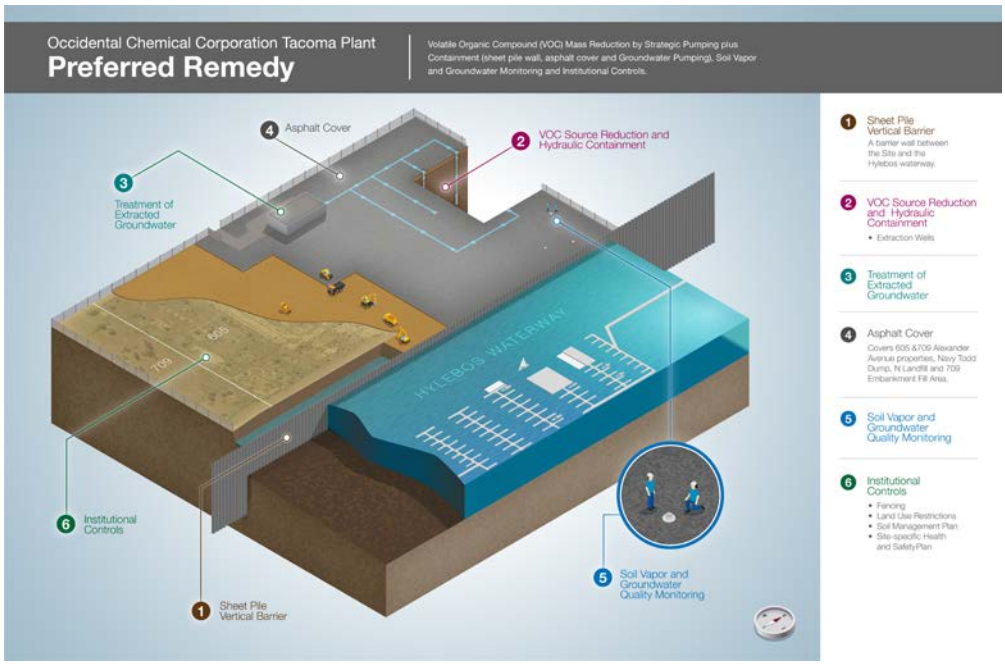
pH Reduction/Enhanced Containment

These alternatives are designed to address high pH in groundwater and soil. They include in-situ treatment or containment of soil and groundwater. These alternatives need to be combined with containment alternatives.

Occidental's Preferred Remedy

Occidental's preferred remedy identified in the FS is the Mass Reduction by Strategic Groundwater Pumping (MSP) Alternative. This alternative includes volatile organic compounds (VOCs) mass reduction and containment, with the following:

- Asphalt cover for 605 & 709 Alexander Avenue Properties, Navy Todd Dump, N Landfill, and 709 Embankment Fill Area.
- Sheet pile vertical barrier wall between the Site and the Hylebos Waterway.
- VOC source area mass reduction by strategic groundwater pumping.
- Containment by asphalt cover, barrier wall, and groundwater pumping.
- Ex situ treatment of extracted groundwater through a new groundwater treatment system.
- Institutional Controls (ICs) - fence, land use restrictions, soil management plan and Site-specific health and safety plan.
- Groundwater Quality Monitoring.
- Soil Vapor Monitoring.



What comments are useful for the draft FS?

- Your ideas about how cleanup or remediation activities could affect you and your neighborhood.
- Feedback on cleanup or remediation solutions you support or don't support.
- Factors that could prevent a remediation solution from working.

What's next?

Once the public comment period for the FS ends, we will review and respond to all comments. Based on the comments, we may modify the documents. If there are significant changes, we will hold another public comment period. If there are no significant changes, the document will be finalized. Ecology will select one of the alternatives or combine alternative elements into the remedy for the Cleanup Action Plan (CAP).