Presented to:
The State of Montana

Presented by:
CALCLean
PROTECTING AMERICA'S WATERS

www.calclean.com
A look into the FUTURE
CalClean is Proud to Present

528 Case Closures (and counting)

18 States (and Canada) With Storage Facilities

82% Less Carbon Footprint

Average $5 / lb. Hydrocarbon Removed

Safety and Customer Service is our #1 Goal

Equipment manufactured in the USA USING SOLAR POWER

“CalClean Supports our Men and Women Who Have Proudly Served our Country”
Equipment

Services

**Petroleum** Hydrocarbons (Gasoline)

**Heavier** Hydrocarbons (Diesel, Jet Fuel, etc.)

**Chlorinated** Hydrocarbons (PCE, TCE, Stoddard Solvents)

PFAs and PFOs

**Heavy Oils** (Crude Oil, Bunker C)
CALCLEAN HAS REDUCED THE COMPANY CARBON FOOTPRINT BY 82%

by manufacturing all remediation equipment using solar power!

We are currently working on technology to reduce the carbon footprint once onsite during remediation

Protecting America’s Waters and Reducing Carbon Footprint one step at a time
CalClean’s HVDPE Technology

Extraction Process

Flow Diagram
Vapor and Groundwater Extraction

* TIMING FOR ILLUSTRATIVE PURPOSES ONLY
(Longer Events usually increase Cone of Depression and expose more saturated zone for vapor extraction)

Plume Size: CalClean DPE vs Months of Installing a Fixed Based Unit

Cone of Depression

Vapor and Groundwater Extraction

Installation of a Fixed Based Unit

CalClean DPE
# Case Study

**Confidential Client/Site in Santa Ana, CA**

**CARWQCB - Santa Ana Region**

**CalClean’s Proprietary Technology**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Prior To Extraction</th>
<th>After CalClean’s Treatment Process</th>
<th>Percent Reduction</th>
<th>Carbon Polishing Post Treatment</th>
<th>Percent Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MtBE</td>
<td>360,000 µg/L</td>
<td>6,740 µg/L</td>
<td>98%</td>
<td>ND (&lt;0.5 µg/L)</td>
<td>100%</td>
</tr>
<tr>
<td>TPHg</td>
<td>228,000 µg/L</td>
<td>11,300 µg/L</td>
<td>95%</td>
<td>ND (&lt;0.5 µg/L)</td>
<td>100%</td>
</tr>
<tr>
<td>TAME</td>
<td>2,590 µg/L</td>
<td>25.3 µg/L</td>
<td>99%</td>
<td>ND (&lt;0.5 µg/L)</td>
<td>100%</td>
</tr>
<tr>
<td>Benzene</td>
<td>33,700 µg/L</td>
<td>267 µg/L</td>
<td>99%</td>
<td>ND (&lt;0.5 µg/L)</td>
<td>100%</td>
</tr>
<tr>
<td>Toluene</td>
<td>52,700 µg/L</td>
<td>987 µg/L</td>
<td>98%</td>
<td>ND (&lt;0.5 µg/L)</td>
<td>100%</td>
</tr>
<tr>
<td>Ethly-Benzene</td>
<td>6,580 µg/L</td>
<td>162 µg/L</td>
<td>98%</td>
<td>ND (&lt;0.5 µg/L)</td>
<td>100%</td>
</tr>
<tr>
<td>Xylenes</td>
<td>40,900 µg/L</td>
<td>1,497 µg/L</td>
<td>96%</td>
<td>ND (&lt;1.0 µg/L)</td>
<td>100%</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>10,200 µg/L</td>
<td>147 µg/L</td>
<td>98%</td>
<td>ND (&lt;0.5 µg/L)</td>
<td>100%</td>
</tr>
</tbody>
</table>

MtBE - Methyl tert-Butyl Ether  
TPHg - Total Petroleum Hydrocarbons - Gasoline Range  
TAME - tert-Amyl Methyl Ether  
ND (<0.5 µg/L) - Not Detected Above the Laboratory Reporting Limit of 0.5 µg/L
“Where Can CalClean Work?”

Everywhere!

States with Storage Locations

“Storage locations across the USA and Canada”

Corporate Office Location
1790 N. Case Street, Orange, CA

Visit our website
www.calclean.com