Strategies To Increase LUST Cleanups: Lessons From States

California’s Impressive Backlog Reduction And Continuing Efforts To Increase LUST Cleanups

Summary

- In 2009, California’s leaking underground storage tank (LUST) backlog was the second largest in the nation. Since then, they reduced their backlog by over 9,200 releases through a variety of policies, improvement plans, and initiatives and they continue to look for ways to close LUST sites.

- Implementing the state’s low-threat closure policy (policy) in 2012 is central to California’s success. The policy establishes both general and media-specific criteria. If both the general and applicable media-specific criteria are satisfied, then California considers the LUST case presents a low threat to human health, safety and the environment, and can likely be closed. California used contractor support to evaluate backlog sites against the policy and this led to many closures. USEPA Region 9 used a portion of the state’s LUST cleanup grant in the form of in-kind assistance to fund the effort.

- More recently, California and USEPA Region 9 created a stalled case team to identify barriers and focus on sites across the state. The team includes water quality, financial assistance, and enforcement staff from the central state office; program managers and case workers from state regional offices; USEPA Region 9; and USEPA contractors. In 2018, each regional office identified 15-25 stalled sites and the team developed individual case strategies for each with actions assigned to the state or regional office, USEPA Region 9, or its contractor. The team continues to check in with each regional office every 3-4 months and tracks all sites until closure.

- Additional efforts include:
  - Creating a new enforcement team with a dedicated attorney, technical staff, and USEPA-funded geologist or engineer to pursue enforcement where initial efforts failed to spur progress.
  - Working to improve the effectiveness of funding programs for releases ineligible for California’s Underground Storage Tank (UST) Cleanup Fund, in particular the Emergency, Abandoned and Recalcitrant Account Program (state lead) and the Orphan Site Cleanup Fund.
  - Focusing on over 400 military LUST cases to organize records, group closable and non-closable cases, and press military branches on their sites that need investigation and remediation.

Results

- From 2012 to 2020, California reduced its backlog of releases by more than 65 percent, from 7,703 to 2,544.

- California’s policy resulted in closing over 1,000 releases a year for three consecutive years from 2012 to 2015.

- California’s stalled case team expanded their efforts from 175 to 314 sites. They closed 73 and are currently working on 241. Of those 241 sites, 27 are now in or proceeding toward enforcement; 63 have now secured funding and 34 more have funding applications pending; and 30 are now in closure. State regional offices recommended most of the 139 cases added to the stalled case initiative in 2019 and 2020, which indicates that the initiative is a success.

California’s Progress Reducing LUST Backlog

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
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<tbody>
<tr>
<td>Closure Rate</td>
<td>58%</td>
<td>67%</td>
<td>78%</td>
<td>89%</td>
<td>94%</td>
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California closed 94 percent of their reported confirmed releases since the start of the federal underground storage tank program in 1988. Calculated by cumulative number of cleanups completed divided by cumulative confirmed releases.
Lessons Learned

- California found that the policy was effective in promoting consistent closure criteria for low-threat releases, but implementation and acceptance across the state required strong leadership from the state’s central office and took time. The central office’s use of contractors to review cases helped expedite the effort.

- Business as usual was not an effective approach to addressing stalled sites. Additional effort and leadership involvement were required. Contractor assistance is particularly helpful for atypical and time-sensitive tasks.

- Sites outside urban areas are a challenge. Legislative changes to the Orphan Site Cleanup Fund eliminated requirements that releases must be brownfields projects in urban areas. As a result, California can now address orphan releases in addition to urban brownfields.

- California improved their efficiency by transforming their UST Cleanup Fund’s initial technical case review document into a draft scope of work. This reduced back and forth negotiations, rework, and associated contracting wait times for releases paid for by the Emergency, Abandoned or Recalcitrant Account Program.

Background

- The policy ensured regulatory agencies could use available money and other resources to clean up the highest threat releases, particularly those without viable responsible parties. California regulators are ensuring that by closing lower threat releases, they can focus on higher priority releases.

- California estimated the time for closure of 67 percent of their remaining open releases is within five years. This data does not include military cases but does include federal exempt tanks, such as heating oil.

- California has several funding options to close LUST releases:
  - UST Cleanup Fund—Reimburses eligible petroleum UST corrective action costs for UST owners and operators.
  - Emergency, Abandoned, and Recalcitrant Account Program—Pays for state lead petroleum UST cleanups when the site is abandoned, there is an imminent threat that requires emergency action, or the responsible party is recalcitrant. This program includes a cost recovery component.
  - Orphan Site Cleanup Fund—Reimburses eligible petroleum UST corrective action costs for property owners who did not own or operate the USTs.
  - Site Cleanup Subaccount Program—Provides grants for corrective action costs related to cleaning up groundwater or surface waters impacted by human-made contaminants. This program includes an ability to pay component.
  - Proposition 1 Groundwater Sustainability Program—Provides grants and loans for protecting and cleaning up groundwater previously or currently used as drinking water.

For More Information

- [California State Water Resources Control Board Division of Water Quality Underground Storage Tank Program](https://www.water.ca.gov/ust), (916) 341-5455

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**Expected Time For Closure Of Remaining Open Cases**

- 33% (827) 1-2 years
- 26% (647) 2-5 years
- 41% (1,012) 5+ years

California is focusing on cases that are estimated to take longer than 5 years to close. Stalled cases require more staff resources and the state continues to develop new business processes and tools to address these challenging sites.