

LTCP CHECKLIST VALIDATION AND CASE TRANSFER PROJECT

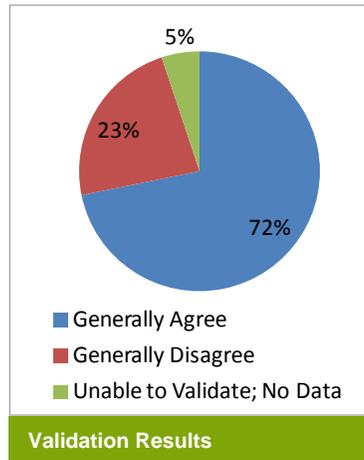
Performed by Sullivan International Group, Inc.

Sullivan International Group, Inc. (Sullivan) completed three phases of support for the California State Water Resources Control Board (State Water Board) from January to December 2013.

A total of 3,249 Low-Threat Closure Policy (LTCP) Checklist Validations were conducted in GeoTracker for regulatory agencies in California, including Regional Water Quality Control Boards (Regional Water Boards) and local agencies. Sullivan generally disagreed with 23% of the LTCP Checklists primarily due to,

- ⇒ improper uses of LTCP definitions, and
- ⇒ information provided within the LTCP Checklist, or the conclusions reached, did not appear to match information available in the GeoTracker case file.

Cases were transferred from 32 local agencies to the State and Regional Water Boards. Sullivan worked on the transfer of 383 cases from 13 local agencies by obtaining and digitizing the case files, uploading pertinent case documents to GeoTracker to create a complete electronic file, and reviewing the cases according to the LTCP.



Phase I

Phase I included conducting validations on the checklists completed by the agencies and providing feedback on their interpretation and application of the policy. Sullivan, along with the State Water Board, held meetings with 8 Regional Water Boards and 15 local agencies to discuss common trends between agencies and specific agency observations on how the LTCP Checklists were being completed. Additionally, the categorization of “stuck” cases was discussed.² Regulatory agencies generally appreciated the feedback and indicated they would implement changes as warranted to ensure the Checklists were completed consistently statewide. The goal of this phase was to ensure regulatory agencies were properly completing the checklists and to identify issues impeding closure.

Top Trends in LTCP Checklists

*Based on validation observations for agency meetings (8 Regional Water Boards and 15 Local Agencies)

	Percent of Occurrence Statewide ³	
	Regional Water Boards	Local Agencies
Definition of secondary source not consistent	4 (50%)	11 (73%)
Definition of nuisance not consistent with LTCP.	6 (75%)	3 (20%)
Inconsistencies between indicated Conceptual Site Model completeness and Media Specific Criteria sections.	4 (50%)	5 (33%)
Not granting Active Fueling Facility Exemption	1 (13%)	2 (13%)

January 2014

Sullivan completed a total of 3,249 LTCP Checklist Validations.

GeoTracker shows a total of 3,203 LTCP Checklist Validations were completed by Sullivan. The variance of 46 cases is due to several reasons, such as case closures or change in case status.¹ Out of the 3,203 validations, 1,271 were Underground Storage Tank (UST) Cleanup Fund (CUF) and 1,932 were non-CUF sites.

Discussed In This Report

- Stuck versus On-Track Cases
- Case Transfer Life Cycle
- Case Transfer Statistics
- Cases Eligible for Closure and Closed
- Lessons Learned
- References

Phase II

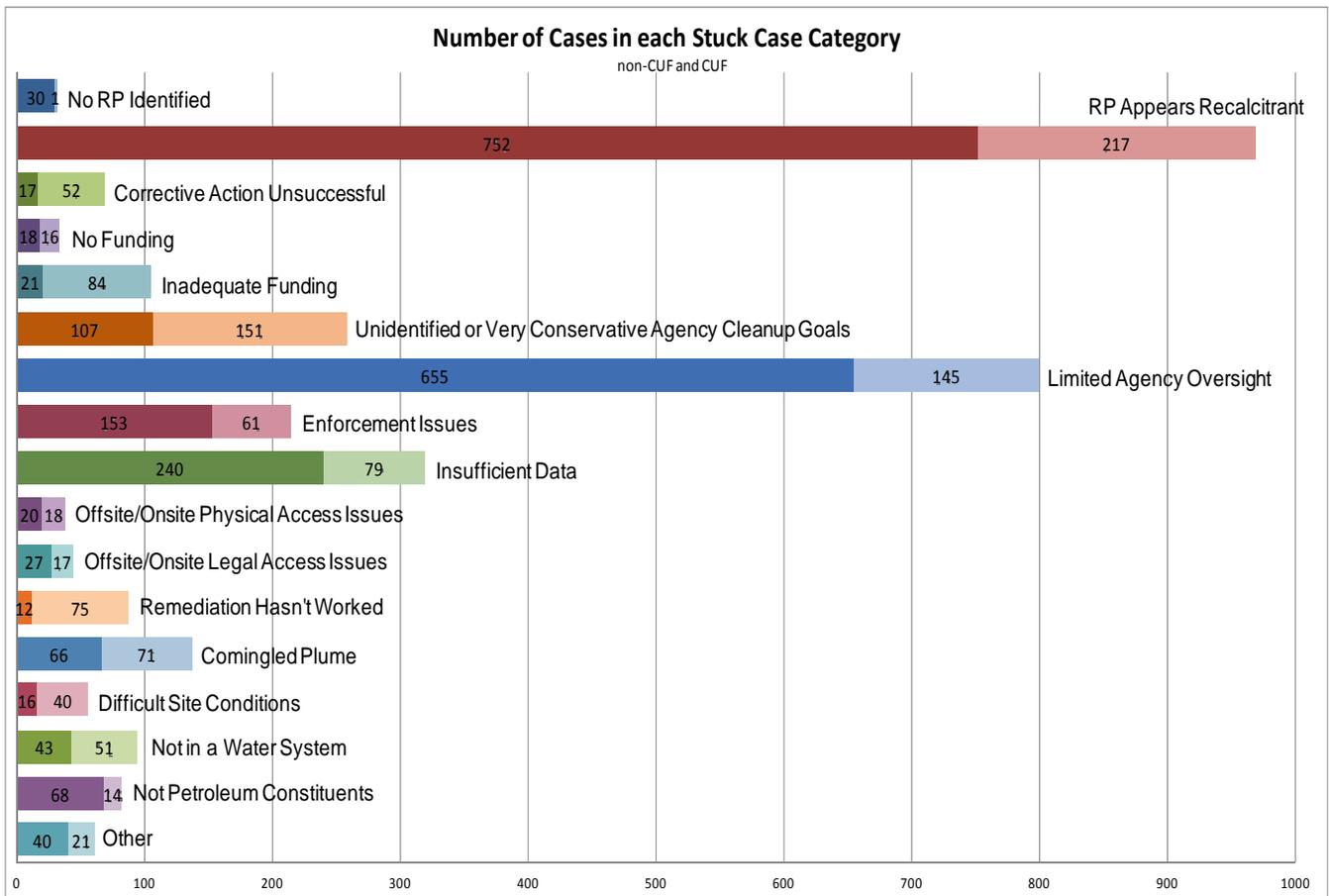
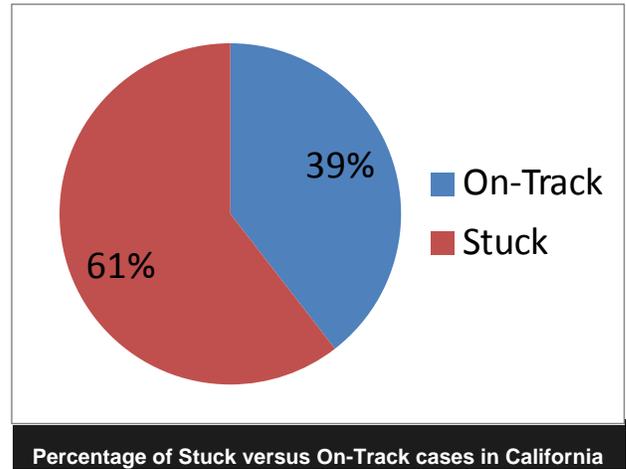
Phase II included the completion of the remaining LTCP checklist validations that were completed by agencies after the agency meetings were held (April 2013 through the middle of December 2013 timeframe). The goal of this phase was to continue to ensure LTCP Checklists were completed properly and to provide an assessment of how cases are progressing on the path towards closure. In October 2013, Sullivan changed focus from all open cases to cases not in the CUF because the CUF staff assumed responsibility of validating CUF case LTCP Checklists at that time.

Stuck versus On-Track

An on-track case is generally defined as a case progressing towards closure in a reasonable timeframe. Categories of stuck cases are identified below and include various technical and administrative impediments.¹

The three top reasons cases were identified as stuck:

1. *Apparent Recalcitrant Responsible Party (RP)*
2. *Limited Agency Oversight*
3. *Insufficient Data to Make a Determination*



Note: Cases determined to be stuck were assigned one or more categories as a part of the LTCP validation process.

Phase III

As of July 1, 2013, all UST cleanup cases required oversight by a certified local agency or Regional Water Board. Phase III, the Case Transfer Phase, included transferring cases from 13 uncertified local agencies to the State Water Board.

Case Transfer Life Cycle

The case transfer process was dynamic in nature due to the variability amongst the local agencies (see case transfer process flow-chart).

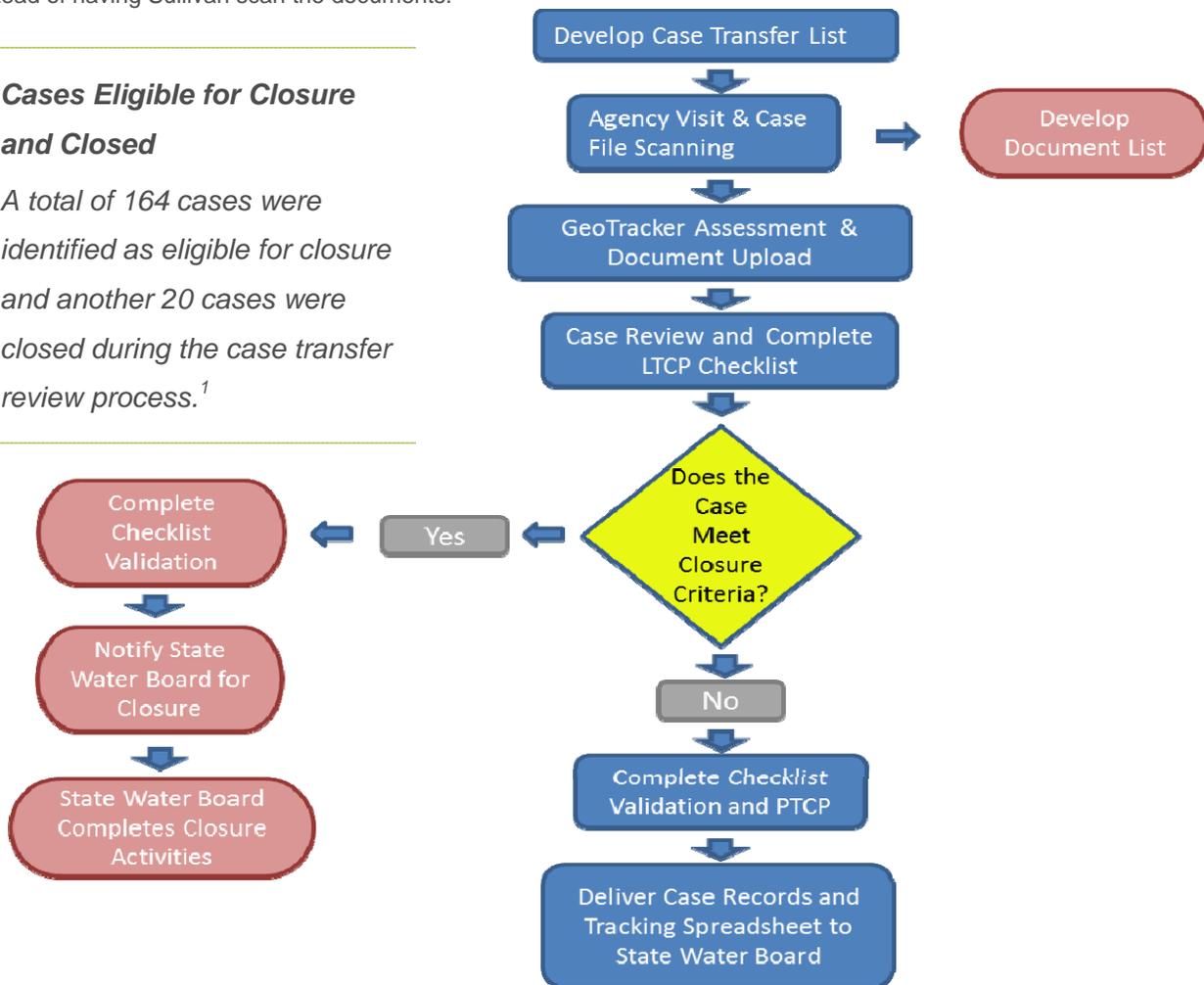
Only open UST cleanup cases (active and inactive) were transferred to the State Water Board. These cases included both CUF and non-CUF cases. Sullivan conducted Case File Scanning and GeoTracker Assessment and Document upload stage for both CUF and non-CUF cases but the completion of the case reviews, checklists, validations, and Path to Closure Plans (PTCPs) were conducted only for the non-CUF cases.

Sullivan provided the State Water Board with DVDs of all transferred cases for each individual agency. The DVD included detailed case and document tracking spreadsheet, detailed case review/ LTCP checklist summary forms, and all the scanned case documents. Four agencies elected to scan and send all case files, either in hard copy or electronically, instead of having Sullivan scan the documents.

Case Transfer Statistics	
Total Number of Cases	383
Number of Cases Uploaded to GeoTracker	356
Number of Documents Scanned	3,621
Number of Documents Uploaded to GeoTracker	1,732
Number of Case Reviews/LTCP Checklists Completed	299
Number of Checklists Validated	313
Path to Closure Plans Completed	163

Cases Eligible for Closure and Closed

A total of 164 cases were identified as eligible for closure and another 20 cases were closed during the case transfer review process.¹



Lessons Learned

Phase I

Sullivan found agencies interpreted the LTCP policy differently. Some examples are:

- ⇒ The definition of groundwater plume boundaries varied among regulatory agencies; not all agencies defined plumes based on concentrations that exceed water quality objectives.
- ⇒ Secondary Source was defined and interpreted differently amongst regulatory agencies.
- ⇒ Nuisance was defined and interpreted differently amongst regulatory agencies.
- ⇒ Agencies interpreted measurable free product differently, examples include considering it saturated soil or an expression of Light Non-Aqueous Phase Liquids on the water column.

Path to Closure Plans Completed

During Phase I Sullivan and the State had conversations with the regulatory agencies regarding not having many of their PTCPs complete. All of the 2013 PTCPs were completed by their deadline of December 31, 2013.

Phase II

- ⇒ Observed that the Limited Agency Oversight impediment accompanied the RP Recalcitrant impediment for many cases.
- ⇒ Key project information, such as shallow soil data, was not easily accessible or uploaded as ESI data and needed to be dug out of correspondences and documents. This information was sometimes overlooked by caseworkers and may not have been considered in the regulatory agency's LTCP Checklist.

Phase III

One of the major LUFT program impacts was that approximately 50% of cases that went through the case transfer process were determined to be eligible for closure or closed. Many of the cases were determined to meet LTCP criteria based on the application of the following items that were not previously applied to the case:

- ⇒ Using a comparison to benzene concentrations with a safety factor of ten for cases that did not have naphthalene data.
- ⇒ Not holding a case hostage for not having poly-aromatic hydrocarbons (PAHs) data where soil was not known to be impacted by either waste oil or Bunker C fuel.
- ⇒ Total petroleum hydrocarbons (TPH) data was used to evaluate the extent of petroleum impact: there is no criterion for TPH in any medium, except to define "clean" soil for the Petroleum Vapor Intrusion pathway (TPH <100 mg/kg).
- ⇒ Groundwater conditions "speak" for soil leaching potential: a stable or shrinking plume means that current soil concentrations (whatever they are) cannot be adding significant mass to groundwater. The policy has no criteria for soil concentrations "to protect groundwater".
- ⇒ All cases from the City of Los Angeles and Los Angeles County should have been "Soils Only" cases, based on depth to groundwater in excess of 100 feet below ground surface; however, best practice was to check groundwater conditions at adjacent sites if applicable.
- ⇒ There are options for site-specific analysis for media-specific criteria: under current and reasonably anticipated near-term future scenarios, remaining contamination poses a low threat to human health and the environment and the concentration limits or goals will be reached in a reasonable timeframe.

Agency Visits and Document Scanning

- ⇒ Many agencies lacked an organized filing/tracking system. Sullivan found that reviewing the case files for complete and pertinent information prior to scanning allowed for less time spent on the QC process.

LTCP Checklist Validation and Case Transfer Project

References

1. Low-Threat Closure Policy Review Summary Report data exported from GeoTracker, January 22, 2014.
2. Sullivan LTCP Validation Agency Meeting Reports, May-July 2013.
3. Sullivan Accelerated Stage Trends Tracking, May 2013. Based on validation observations for agency meetings.