



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P.O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
EMD/SHW

February 23, 1996

**POLICY UPDATE**  
***Technical Guidance Manual***  
***for Underground Storage Tank Closure and Release Response***

**Checklist for Final Release Response Reports  
at Leaking Underground Storage Tank Sites**

TO ALL INTERESTED PARTIES:

The Hawai'i Department of Health's (DOH) Solid and Hazardous Waste Branch, Underground Storage Tank Section, is issuing a policy update to its *Technical Guidance Manual for Underground Storage Tank Closure and Release Response* (August 1992). This policy update is effective for all reports received by DOH after March 1, 1996.

The attached checklist is a guide for compliance with DOH reporting requirements for underground storage tank (UST) closure and release responses regulated by the DOH Solid and Hazardous Waste Branch. The checklist was developed to facilitate a more complete preparation of final reports and to help expedite review and approval of reports by the DOH. The checklist reflects guidance presented in the DOH *Technical Guidance Manual for Underground Storage Tank Closure and Release Response* (TGM, August, 1992, edition) and subsequent updates to that manual.

DOH requests that the checklist be completed and submitted with all reports that recommend no further investigative and/or remedial action at leaking underground storage tank sites regulated by the DOH Solid and Hazardous Waste Branch. Note that unless otherwise approved or directed by DOH, reports that do not include all of the information noted in the checklist may be returned to the facility as incomplete. We appreciate your attention and response to this matter. Should you have any questions or comments regarding the checklist, please contact Underground Storage Tank Section of DOH at (808) 586-4226.

Sincerely,

A handwritten signature in cursive script, appearing to read "Thomas E. Arizumi".

THOMAS E. ARIZUMI, P.E., CHIEF  
Environmental Management Division

The attached checklist is intended to serve as a guide for compliance with Department of Health (DOH) reporting requirements for underground storage tank (UST) closures and release responses. The checklist outlines recommended release response and reporting procedures presented in the Department of Health (DOH), UST Section *Technical Guidance Manual for Underground Storage Tank Closure and Release Response* (TGM, August, 1992) and updates to that manual. The TGM and updates to the TGM should be referred to for specific guidance. The checklist does not necessarily reflect a required format for reports, nor is it necessarily inclusive of all information that can be included in a report. Additional information not covered in the checklist may be required upon detailed review of a report.

The checklist should be completed for and included with reports submitted to our office with recommendations of no further action at the leaking underground storage tank (LUST) facility. Unless directed or approved by the DOH, all information noted in the checklist must be included in the report (or series of reports) in order to demonstrate a successful response to a release. Incomplete reports may be returned to the facility for additional work.

A numbered bibliography of all supporting documents (tank closure reports, previous site investigation reports, etc.) should be included at the end of the checklist or as an attachment. Note the corresponding bibliographical reference number in the column provided beside each topic on the checklist. If the requested information or documentation cannot be provided to the DOH (i.e., the "no" option is checked for any topic) then an explanation should be provided in the "Remarks" section at the end of the checklist or attached to the checklist.

Note that for pre-final, status update reports, submission of the checklist is not required.

If no release is detected during closure of a UST(s) then only the "Notification for Underground Storage Tank (EPA Form 7530)" form needs to be submitted. Closure reports for sites where no releases are reported should be submitted only if requested by DOH.

Copies of all closure reports must be retained by the facility for at least three years.

#### REFERENCES:

- HIDOH. 1992 *Technical Guidance Manual For Underground Storage Tank Closure and Release Response, August, 1992*: State of Hawai'i, Environmental Management Division, Department Of Health.
- HIDOH. 1995a. *Risk-Based Corrective Actions and Decision Making at Sites With Contaminated Soil and Groundwater*: State of Hawai'i Department of Health, Environmental Management Division.
- HIDOH. 1995b. Reporting, Remediation, and Management of Petroleum-Contaminated Soil (December, 1995): State of Hawai'i Department of Health, Environmental Management Division, Solid and Hazardous Waste Branch, Underground Storage Tank Section.
- HIDOH. 1995c. Determination of Groundwater Utility at Leaking Underground Storage Tank Sites (September 19, 1995): State of Hawai'i Department of Health, Environmental Management Division, Solid and Hazardous Waste Branch, Underground Storage Tank Section.
- HIDOH. 1995d. Clarification of Monitoring Well Design Recommendations and Acceptance of Groundwater Samples taken from Small-Diameter Monitoring Wells (December 1995): State of Hawai'i Department of Health, Environmental Management Division, Solid and Hazardous Waste Branch, Underground Storage Tank Section.

Hawaii DOH UST Checklist for Final Release Response Reports

Please provide the following information:

Facility ID number assigned by DOH:

Leak ID number:

Facility name and address:

Facility contact name, address, and phone number:

Title and date of submitted final report:

Date submitted:

Report prepared by (name, address, phone):

CHECKLIST FOR CLOSURE, RELEASE RESPONSE & REMEDIAL ACTIONS

I. STATUS OF SITE AND RECOMMENDATION (check one):

	<input type="checkbox"/>	a. No further action requested - Tier 1, DOH-recommended soil and groundwater action levels adhered to.
	<input type="checkbox"/>	b. No further action requested - Tier 2, site-specific soil action levels generated and adhered to (required documentation submitted).
	<input type="checkbox"/>	c. No further action requested - Tier 3 risk assessment prepared and adhered to (required documentation submitted).

Check the appropriate box (Option blocked out if not acceptable).

yes	no	NA	II. FACILITY INFORMATION	Ref#
<b>Contacts:</b>				
			a. Facility name, address, telephone number, and DOH identification number listed.	
			b. Name, title, address, and telephone number of facility owner listed.	
			c. Name, title, address, and telephone number of responsible party listed.	
<b>Site Description:</b>				
			a. Site location and surrounding area described, including nearby surface water bodies and the location of populations that could be affected by the release, if any.	
			b. Vicinity map, topographic map, and site plan map(to scale)provided.	
			c. Future intended use of site discussed	
<b>III. UST INFORMATION</b>				
<b>A. UST System Description:</b>				
			a. Amended Notification Form included (EPA Form 7530).	
			b. Map showing former locations of USTs removed from site and/or UST systems closed in place provided.	
			c. Complete description of UST system provided (number of USTs, age, construction, capacity, storage history, piping, etc.).	
			d. Results of release-detection testing performed on the closed USTs summarized.	
<b>B. UST System Closure Information:</b>				
			a. Procedures followed to remove UST system or close in place described.	
			b. Date UST(s) and associated piping excavated and removed or closed in place noted.	
			c. Bottom depth of UST(s) noted.	
			d. Integrity of UST(s) and associated piping on removal described (photos included).	
			e. Type and extent of fill material originally enclosing UST(s) described.	
			f. Type, source, and volume of material used to backfill UST excavation described. Description and results of compaction testing (if any) provided.	
<b>C. UST Cleaning:</b>				
			a. Actions taken to inert UST system (e.g., displacement, evacuation) and monitor lower explosive limit (LEL) during UST system removal described.	
			b. Procedures followed to clean UST(s) and associated pipings noted.	
			c. Product, sludge, and rinsate removed from UST(s) properly recycled, reused, or disposed of (include manifests, and determination of hazardous waste characteristics as per 40 CFR Part 261). Hazardous Waste Section of DOH notified if more than 27 gallons of hazardous waste was left on site.	
			d. Type, volume, and treatment/disposal method for other investigation derived waste generated during UST system cleaning activities described.	
<b>D. UST System Disposal:</b>				
			a. UST(s) and associated piping removed from site properly disposed of, reused, or recycled. Copy of the disposal/recycled certificate or manifests showing name of company, disposal date, and place tanks and pipings were taken to provided.	

yes	no	NA	IV. INITIAL RELEASE RESPONSE/CONFIRMATION	Ref#
			a. Confirmed Release Notification Form submitted to DOH.	
			b. Source, cause, estimated duration and quantity (if known), and discovery date of the release discussed.	
			c. Degree and extent of soil and/or groundwater contamination on initial removal/investigation of UST(s) described.	
			d. Location and results of field screening tests described and included on a site map(s) and a cross section(s) as necessary.	
			e. Actions taken to prevent further migration of released substance described (e.g. source removed, soil excavated, free product recovery, etc.).	
			f. Methods and results of free product recovery, treatment, and disposal discussed.	
			g. Status of excavation(s)(left open, backfilled, etc.) described.	
<b>V. STOCKPILED SOIL</b>				
			a. Design and management procedures for soil stockpiles described (including design of stockpile cell, volume of stockpiled soil, segregation of soils, etc.)	
<b>VI. SITE INVESTIGATION/CHARACTERIZATION</b>				
<b>A. Local Geology, Hydrogeology, and Well Information:</b>				
			a. Local and regional geology characterized.	
			b. Important geologic and/or manmade preferential migration pathways delineated and described.	
			c. Local and regional hydrogeology characterized in accordance with HIDOH guidelines (1992, 1995b, and any updates). (Including known or estimated depth to uppermost aquifer, water quality and status of aquifer, groundwater flow direction, etc.)	
			d. Nearby groundwater extraction wells denoted and well usages described if groundwater impacted or potentially impacted.	
			e. Surface water bodies within 1/4 mile of the site noted and characterized.	
			f. Approximate annual rainfall for site discussed.	
<b>B. Soil and Groundwater Sampling Procedures:</b>				
			a. Field screening instrument type(s), calibrations, and sampling procedures described.	
			b. Field screening results summarized and sample locations and depths noted.	
			c. Procedures, equipment, and methods of taking soil and groundwater samples for laboratory analysis clearly described. Sampling methods followed TGM or other DOH-approved guidelines.	
			d. Monitoring well(s) design described and included on boring log(s).	
			e. Method used for monitoring well development (e.g., surging, overpumping, etc.) and purging prior to groundwater sample collection, volume of water removed, and results of field measurements for standard water quality parameters (i.e., turbidity, temperature, pH, specific conductance, etc.) described.	
			f. Samples to be tested for TPH-gasoline, TPH-diesel, VOCs, HVOCs and volatile PAHs minimally disturbed and not composited.	
			g. Confirmatory soil samples for vadose-zone impact not taken below groundwater interface.	
			h. Sample preservation, documentation, and shipping information provided (including copy of Chain of Custody form(s)).	

yes	no	NA	VI. SITE INVESTIGATION/CHARACTERIZATION (Cont.)	Ref#
			i. Methods for chemical analyses denoted (8015M, 8010, etc).	
			j. Holding times met and laboratory QA/QC within acceptable range.	
			k. Formal laboratory reports including in appendix. (Chromatograms required only if requested by DOH.)	
<b>C. Soil Investigation:</b>				
			a. Site map showing all soil sample locations presented (location of closed UST system(s) included).	
			b. Summary of all laboratory analysis results presented in table form (including sample ID number, laboratory reporting limits, depth at which sample was taken, target cleanup criteria, etc.).	
			c. Lateral and vertical extent and magnitude of impacted soil determined in accordance with HODOH guidelines (1992, 1995a, 1995b, and any updates). Extent of contamination described in text and clearly denoted on site map(s) drawn to scale. Vertical extent of impact denoted on map (use isopachs if necessary) drawn to scale and/or in cross sections. Sample locations included on map(s) and, if applicable, on cross section(s).	
<b>D. Groundwater/Surface water Investigation:</b>				
			a. Site map showing groundwater sample locations and depths presented (location of closed UST system(s) included). Surface water sampling results included if applicable. Potentiometric surface contour maps illustrating water level measurements at monitoring well location, groundwater gradient(s) and general direction(s) of groundwater flow across site included. Tidal influence, if any, on groundwater gradient and flow direction at site discussed.	
			b. Extent and magnitude of impacted groundwater and utility of impacted or potentially impacted groundwater determined in accordance with HODOH guidelines (1992, 1995a, 1995b, 1995c, and any updates). Extent of contamination described in text and clearly denoted on site map(s) drawn to scale. Sample locations included on map(s).	
			c. Vertical extent of solvent or other dense, nonaqueous-phase-liquids (DNAPLs) contamination defined and depicted on map (use isopachs if necessary) drawn to scale and/or in representative cross section(s) through site.	
<b>VII. REMEDIAL ACTIONS</b>				
			a. Extent and depth of all excavations clearly denoted on map drawn to scale. Locations of confirmatory samples noted. Volume and type of excavated material described in text.	
			b. Design and results of treatment/disposal methods clearly described and supported by confirmatory laboratory analyses.	
			c. Final disposition of remediated media described. Manifests and/or bills of lading for all contaminated media remediated offsite provided in appendix.	
			d. Type, source, and volume of backfill material described. (Include compaction test results, if any.)	
			e. Generation of site-specific Tier 2 soil action levels followed guidelines set forth in DOH document "Risk-Based Corrective Actions and Decision Making at Sites With Contaminated Soil and Groundwater (HODOH, 1995a)." Tier 3 risk assessment followed guidance set forth in DOH TGM (HODOH, 1992), above noted document, USEPA document "Risk Assessment Guidance for Superfund (EPA/540/1-89)," and additional procedures as otherwise directed or approved by DOH. Tier 3 risk assessment summarizes all previous work at the site and is a "stand alone" document.	
			f. All contaminated media that exceed Tier 1, 2, or 3 action levels applied to the site have been remediated.	

yes	no	NA	VII. REMEDIAL ACTIONS (cont.)	Ref#
			g. Monitoring wells not to be reused in the future properly sealed and decommissioned.	
			VIII. REPORT SIGNED AND DATED	
<p>REMARKS:</p>				
<p>BIBLIOGRAPHY OF SUPPORTING DOCUMENTS:</p> <p>1.</p>				
<p>SIGNATURES:</p> <p>FACILITY RESPONSIBLE PARTY: _____ Date: _____</p> <p style="margin-left: 40px;">Title: _____</p> <p>PREPARER OF REPORT: _____ Date: _____</p> <p style="margin-left: 40px;">Title: _____</p>				