



UTAH DEPARTMENT *of*  
ENVIRONMENTAL QUALITY

**ENVIRONMENTAL RESPONSE  
& REMEDIATION**

**Corrective Action Plan Guide  
for  
Petroleum Storage Tank Trust Fund  
Leaking Underground Storage Tank Sites**

**June 14, 2017**

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- A: Cleanup Levels and Screening Criteria
- B: CAP Meeting Summary Letter Template
- C: Public Notice Template
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# Corrective Action Plan (CAP) Process

The purpose of this guide is to help underground storage tank (UST) owners/operators, Responsible Parties (RPs), and environmental consultants through the process of preparing a Corrective Action Plan (CAP) for a leaking underground storage tank (LUST) site that is covered by the Petroleum Storage Tank Trust Fund (PST Fund).

After a complete Subsurface Investigation has been performed in accordance with the Division of Environmental Response and Remediation (DERR) Leaking Underground Storage Tank (LUST) Subsurface Investigation Report Guide, an RP may request a CAP meeting with the DERR. Cleanup levels for LUST sites are established using the criteria and standards promulgated in Utah UST Rule R311-211 (see Attachment A).

## 1. CAP Meeting

A CAP meeting is held with the RP, UST owner/operator, Certified UST Consultant (with a current PST Fund Statement of Qualifications), Division of Environmental Response and Remediation (DERR) PST Fund Project Manager, and other stakeholders as appropriate. Other stakeholders may include the current property owner or lessee. The purposes of the CAP meeting are to discuss cleanup alternatives, estimated costs, and logistics, and to reach an agreement on a cost-effective cleanup method for the site.

The PST Fund Project Manager will request, review, and approve a work plan and budget (WP&B) so that the Certified UST Consultant can be reimbursed for attending the CAP meeting. All WP&Bs must be pre-approved by the DERR prior to initiating work in order to be eligible for PST Fund reimbursement.

## 2. CAP Meeting Summary Letter and Public Notice

After the CAP meeting, the cleanup alternatives and the chosen corrective action method will be documented in a letter. Attachment B provides a CAP Meeting Summary Letter template. Public Notice gives the potentially affected public an opportunity to comment on the CAP prior to its implementation. Attachment C provides a Public Notice template. The following steps occur during this portion of the corrective action plan process:

1. The PST Fund Project Manager will request, review, and approve a WP&B for the Certified UST Consultant to develop a draft CAP Meeting Summary Letter and draft Public Notice.
2. The Certified UST Consultant will submit the draft CAP Summary Letter and draft Public Notice to the PST Fund Project Manager for review and approval. Include a list of the potentially affected public.
3. After the DERR Project Manager reviews and approves the draft CAP Summary Letter and draft Public Notice, the DERR will notify the Certified UST Consultant to proceed with the

distribution of the CAP Meeting Summary Letter and Public Notice to the potentially affected public.

4. All public comments will be reviewed by the DERR prior to approving the CAP.

### **3. Technical Specifications and Construction Details**

For CAPs more complex than soil excavations (i.e., “dig & haul”), technical specifications and construction design details including remediation system operation and maintenance (O&M) schedules are required components of the CAP. Technical specifications describe the type and size of all equipment used. Construction design details describe how and where the equipment will be installed. The O&M schedule describes when the system is operated and how often maintenance will be performed on the remediation equipment. Attachment D provides information on other agencies from which approvals and/or permits may be required.

The PST Fund Project Manager will request, review, and approve a WP&B for the Certified UST Consultant to develop the technical specifications, construction design details, bidding documents (RFPs), and estimated costs to implement the CAP.

### **4. CAP Implementation**

The PST Fund Project Manager will request, review, and approve a WP&B to implement the CAP.

### **5. Operation, Maintenance, Sampling, and Reporting**

After the remediation system has been installed, the Certified UST Consultant must submit a CAP installation report, including as-built drawings. In addition, the Certified UST Consultant must submit reports documenting the progress of the remedial action.

# Attachment A

## Cleanup Levels and Screening Criteria

### Initial Screening Levels (November 1, 2005)

Contaminants	Groundwater (mg/L)	Soil (mg/kg)
Benzene	0.005	0.2
Toluene	1.0	9
Ethylbenzene	0.7	5
Xylenes	10.0	142
Naphthalene	0.7	51
Methyl t-butyl ether (MTBE)	0.2	0.3
Total Petroleum Hydrocarbons (TPH) as gasoline	1	150
Total Petroleum Hydrocarbons (TPH) as diesel	1	500
Oil and Grease or Total Recoverable Petroleum Hydrocarbons (TRPH)	10	1000

### Tier 1 Screening Criteria (November 1, 2005)

**Tier 1 Screening Levels are applicable only when the following site conditions are met:**

- 1) No buildings, property boundaries or utility lines within 30 feet of the highest measured concentration of any contaminant that is greater than the initial screenings levels but less than or equal to the Tier 1 screening levels; AND,
- 2) No water wells or surface water within 500 feet of highest measured concentration of any contaminant that is greater than the initial screenings levels but less than or equal to the Tier 1 screening levels.

Contaminants	Groundwater (mg/L)	Soil (mg/kg)
Benzene	0.3	0.9
Toluene	3	25
Ethylbenzene	4	23
Xylenes	10	142
Naphthalene	0.7	51
Methyl t-butyl ether (MTBE)	0.2	0.3
Total Petroleum Hydrocarbons (TPH) as gasoline	10	1500
Total Petroleum Hydrocarbons (TPH) as diesel	10	5000
Oil and Grease or Total Recoverable Petroleum Hydrocarbons (TRPH)	10	10000

# Attachment B

## CAP Meeting Summary Letter Template

Project Manager  
Division of Environmental Response and Remediation  
195 North 1950 West, 1<sup>st</sup> Floor  
P.O. Box 144840  
Salt Lake City, Utah 84114-4840

Re: Corrective Action Plan Meeting Summary Letter  
(**Facility Name**), located at (**Facility Address**), Utah  
Facility Identification No. \_\_\_\_\_, Release Site \_\_\_\_\_

This letter presents the results of the Corrective Action Plan (CAP) meeting that was held at \_\_\_\_\_ on \_\_\_\_\_, regarding proposed corrective action at (**Facility Name**) located in \_\_\_\_\_, Utah. Attendees at the meeting included (**Consultant**) from (**Consulting Firm**) with (**PST Fund Project Manager**) from the Division of Environmental Response and Remediation (DERR), (**responsible party or UST owner/operator**), and any others.

***Explain current property use and give a brief history of the project.***

The following corrective action alternatives were discussed at the meeting:

- 1)
- 2)
- 3)

The corrective action method selected is (**describe approach; i.e., dig & haul, remediation system, monitored natural attenuation, etc.**). This corrective action method was selected because:

- 1)
- 2)

The following permits and approvals will be obtained for this work:

- 1)
- 2)

Sincerely,

Certified UST Consultant No. \_\_\_\_\_

Enclosures: Site Map  
Public Notice

# Attachment C

## Public Notice Template

**PUBLIC COMMENT PERIOD** \_\_\_\_\_ to \_\_\_\_\_  
**Start Date      End Date**

**Leaking Underground Storage Tank Petroleum Cleanup Project**  
**Facility Name & Address**  
**Facility ID No.** \_\_\_\_\_ **and Release Site** \_\_\_\_\_

The Division of Environmental Response and Remediation (DERR) is planning to oversee the remediation of the petroleum-contaminated soil and groundwater at the above site. The environmental consultant for this project is \_\_\_\_\_.

### **Site Description**

*(Include brief history of release and site conditions)*

### **Proposed Remediation Method**

The proposed remediation method is \_\_\_\_\_ and will consist of the following:

- 1)
- 2)...

### **Proposed Schedule**

Excavation/dewatering or in-situ remediation system installation is planned to begin on \_\_\_\_\_ (date) and is expected to take approximately \_\_\_\_\_ (how long?) For in-situ remediation systems, also add: ***The consultant estimates that the system will operate from about \_\_\_\_\_ to \_\_\_\_\_ (estimated time frame)***"

A copy of the Corrective Action Plan Meeting Summary Letter prepared for this site is attached. If you have any comments, please contact:

\_\_\_\_\_ DERR Project Manager  
Division of Environmental Response and Remediation  
195 North 1950 West, 1<sup>st</sup> Floor  
P.O. Box 144840  
Salt Lake City, Utah 84114-4840  
(801) 536-\_\_\_\_\_

# Attachment D

## Permitting and Other Approvals

Permits or approvals from the following agencies may be required to implement a CAP. This list is not all inclusive and the Certified UST Consultant is responsible for complying with all applicable local, state or federal rules, codes or laws. The Certified UST Consultant must submit documentation that all approvals and permits have been obtained.

### **Division of Air Quality at (801) 536-4000**

If you anticipate emitting petroleum vapors into the atmosphere during any phase of the cleanup process, notify the Division of Air Quality so that they can determine whether an air discharge permit or approval letter is required.

### **Division of Water Quality at (801) 536-4300**

Any required permits or approvals, including groundwater or surface water (storm drain) discharge, pretreatment or re-injection, must be obtained prior to implementing the CAP.

### **Division of Waste Management and Radiation Control at (801) 536-0200**

If you suspect or know that the release is a hazardous waste (such as chlorinated solvents) or a mixed hazardous/petroleum waste, notify the Division of Waste Management and Radiation Control to ensure compliance with permitting, disposal, and sampling requirements.

### **Local Agencies**

Contact the appropriate local agencies, such as the County Environmental Health Department, Fire Department, Public Works Department, City Building Departments, Sanitary Sewer Districts, UDOT, etc. for applicable approvals and permits. The Certified UST Consultant must complete any applications and pay all fees that are required for activities related to the construction or cleanup activities, remediation system operation, waste disposal, air emissions, or water discharges.

### **Blue Stakes of Utah at 811, (800) 662-4111, or (801) 208-2100**

Contact Blue Stakes of Utah for marking underground utilities prior to any digging or construction activities. Their website is [www.bluestakes.org](http://www.bluestakes.org).