

# UST Closure Report (following UST-12 format) and Site Investigation Report for Permanent Closure or Change-in-Service of UST (UST-2 Form)

A UST Closure Report following the UST-12 format outlined below must be submitted to the appropriate regional office of the UST Section within thirty (30) days following completion of closure, **if the results of the UST closure investigation indicate that no soil contamination equal to or in exceedance of 10 mg/kg TPH, no groundwater contamination in exceedance of 2L, and no FREE PRODUCT are present.** (If contamination in exceedance of these limits is present, then initial response and abatement actions, followed by an Initial Abatement Action Report (Appendix A, p. 66) which incorporates the information required by the UST Closure Report format, are required within 90 days of release discovery.)

Complete the minimum elements of the UST Closure Report format as presented in Sections A-H.

## A. Site Information

### 1. Site Identification

- ☐ Date of Report: \_\_\_\_\_
- ☐ Facility I.D.: \_\_\_\_\_ UST Incident Number (if known): \_\_\_\_\_
- ☐ Site Name: \_\_\_\_\_
- ☐ Site Street Address: \_\_\_\_\_
- ☐ City/Town: \_\_\_\_\_ Zip Code: \_\_\_\_\_ County: \_\_\_\_\_
- ☐ Description of Geographical Data Point (e.g., diesel fill port): \_\_\_\_\_
- ☐ Location Method (GPS, topographical map, other): \_\_\_\_\_
- ☐ Latitude (decimal degrees): \_\_\_\_\_ Longitude (decimal degrees): \_\_\_\_\_

### 2. Information about Contacts Associated with the Leaking UST System (Addresses must include street, city, state, zip code and mailing address, if different).

- ☐ UST Owner: \_\_\_\_\_  
Address: \_\_\_\_\_ Tel.: \_\_\_\_\_
- ☐ UST Operator: \_\_\_\_\_  
Address: \_\_\_\_\_ Tel: \_\_\_\_\_
- ☐ Property Owner: \_\_\_\_\_  
Address: \_\_\_\_\_ Tel: \_\_\_\_\_
- ☐ Property Occupant: \_\_\_\_\_  
Address: \_\_\_\_\_ Tel: \_\_\_\_\_
- ☐ Consultant/Contractor: \_\_\_\_\_  
Address: \_\_\_\_\_ Tel: \_\_\_\_\_
- ☐ Analytical Laboratory: \_\_\_\_\_ State Certification No. \_\_\_\_\_  
Address: \_\_\_\_\_ Tel: \_\_\_\_\_

### 3. Information about Release

- ☐ Date Discovered: \_\_\_\_\_
- ☐ Estimated Quantity of Release: \_\_\_\_\_
- ☐ Cause of Release: \_\_\_\_\_
- ☐ Source of Release (Dispenser/Piping/UST): \_\_\_\_\_
- ☐ Sizes and contents of UST system(s) from which the release occurred: \_\_\_\_\_

## **B. Site History and Characterization**

1. Provide UST owner and operator information
  - ☐ List the names, addresses, telephone numbers, and dates of ownership/operation of all previous UST owners and operators of the UST system(s). Present in table form (Use Reporting Table B-2, Site History, UST Owner/Operator and Other RP Information, from the *Guidelines*, Appendix B.).
2. Provide UST information (inclusive of all USTs, currently and historically in place at facility). For each UST, provide the following information in table form (Use Reporting Table B-1, Site History, UST/AST System and Other Release Information, from the *Guidelines*, Appendix B.):
  - ☐ Tank identification number (keyed to a site map showing the locations of all UST systems);
  - ☐ Last contents of tank;
  - ☐ Previous contents of tank (if any);
  - ☐ Capacity of tank in gallons;
  - ☐ Construction (material and structure);
  - ☐ Tank dimensions;
  - ☐ Installation date;
  - ☐ Description of piping and pump(s) associated with each UST;
  - ☐ Status of UST (in use or not in use, closed in place, closed by removal; date of last use, date of closure); and
  - ☐ Indication that a release was or was not associated with the tank or associated piping or pump(s).Provide discussion to supplement Table B-1 and the UST location map in order to clarify the spatial and historical relationships among tanks and between tanks and piping and dispensers. Provide information about any historical compliance issues.
3. Provide non-UST information.
  - ☐ List, describe, and indicate location of ASTs and associated piping and pump(s) currently and historically in place at facility) and describe historical releases. For each AST, present the information in table form (Use Reporting Table B-1, Site History, UST/AST System and Other Release Information, from the *Guidelines*, Appendix B); and
  - ☐ List, describe, and indicate location and date of spills which have occurred at facility.
4. Describe relation of location of current UST system to historical UST releases, non-UST releases, and off-site releases.
5. Provide a brief description of site characteristics (including status of facility (active or inactive), land use of site and surrounding area, water supply, topography, vegetation, surface water, wells, buildings, surface cover, soil type, depth to and nature of bedrock, depth to groundwater, direction of groundwater flow, etc.)

## **C. Closure Procedure**

1. Describe preparations for closure including steps taken to notify authorities, permits obtained, and steps taken to clean and purge the tanks.
2. Describe the closure procedure (For guidance, see the *Guidelines*, Section 5.0.), referencing site and sampling location maps and cross-sections presented in Section F of this report. Clearly state how the selection of sample types and locations was influenced by the nature of the stored substance, any initial alarm or cause for suspicion, the type of backfill, the depth to groundwater, and other factors appropriate for identifying the presence and source of a release. Describe the condition of the UST system (pitting, holes, etc.) where it could be observed. If it was necessary to install and sample monitoring well(s), explain.
3. Note the amount of residual material pumped from the tank and describe the storage, sampling and disposal of the residual material and the disposal of the tank, pumps and piping (Refer to appendices with disposal manifests and certificate of tank disposal in Section H.).
4. Document any soil excavation activities.
  - ☐ Describe excavation procedures noting the condition of the soil encountered and the dimensions of the excavation in relation to the tanks, piping, and/or pumps;
  - ☐ Note the depth from the land surface to the top and to the base of the tank and to the piping;
  - ☐ Note the volume of soil excavated;
  - ☐ Describe the soil type(s) encountered;
  - ☐ Describe the type and source of backfill used;
  - ☐ Note if groundwater, free product, or bedrock was encountered during the excavation process; and
  - ☐ Describe the method of temporary storage, sampling, and treatment/disposal of soil.

#### **D. Site Investigation**

1. Describe field screening, including:
  - ☐ Physical characteristics of the soil samples, as observed during collection;
  - ☐ Field instrumentation used to screen soils;
  - ☐ Field instrument calibration procedures; and
  - ☐ Screening results (Refer to table provided in Section G.).
2. Document soil sampling information (Refer to tables and appendices provided in Sections G and H.), including:
  - ☐ Lithological descriptions from logs for borings, excavations;
  - ☐ Type of samples (from excavation, borehole, geoprobe boring, stockpiled soil, etc.);
  - ☐ Sample collection procedures (grab, split spoon, hand auger, etc.);
  - ☐ Location of soil samples;
  - ☐ Depth of soil samples ( feet below land surface);
  - ☐ Time/date collected;
  - ☐ Sample identification; and
  - ☐ Method(s) of soil sample analysis.
3. Document groundwater and surface water sampling information (Refer to tables and appendices provided in Sections G and H.), including:
  - ☐ Location of water samples (e.g., of monitoring well, water supply well, stream sampling point);
  - ☐ Field measurements (e.g., pH, dissolved oxygen, specific conductivity, temperature)
  - ☐ Sample collection procedures (grab, bailer, etc.);
  - ☐ Time/date collected.
  - ☐ Sample identification; and
  - ☐ Method(s) of water sample analysis.
4. Document quality-control measure information (Refer to tables and appendices provided in Sections G and H.), including:
  - ☐ Sample handling procedures including sample preservation techniques and sample transport procedures;
  - ☐ Decontamination procedures;
  - ☐ Time and date samples were submitted to lab; and
  - ☐ Collection of samples for quality control purposes (e.g., duplicates, field blanks, trip blanks).
5. Describe soil and groundwater investigation results, including:
  - ☐ Presentation of analytical results for soil and groundwater samples (Refer to table(s) provided in Section G. and to appendix with laboratory analytical results provided in Section H.) and discussion of the results in relation to the cleanup levels or action levels, as appropriate; and
  - ☐ Discussion pertaining to the effect of quality control sample results on the interpretation of soil, groundwater, or surface water analytical results.

#### **A. Conclusions and Recommendation**

1. Present conclusions, referencing maps, tables, and appendices in Sections F-H, as follows:
  - ☐ Indicate that soil contaminant levels are below the action level;
  - ☐ Indicate that free product is not present;
  - ☐ Indicate if groundwater or bedrock was encountered during investigation and, if so, at what depth below land surface;
  - ☐ Indicate if groundwater assessment was necessary due to the proximity of the UST system to groundwater or bedrock (or to the presence of a slab or tank for which removal was determined to be economically or technologically unfeasible), thereby preventing the reliable determination of a release by soil assessment alone;
2. If soil contaminant levels were equal to or below 10 mg/kg TPH and if groundwater, bedrock, and free product were not encountered, then no further action should be requested.

#### **B. Figures**

Provide the following:

1. Provide an topographic map illustrating the area within 1500-foot radius of the UST system, showing:
  - ☐ Topographic contours;
  - ☐ Site location;
  - ☐ Buildings;
  - ☐ Adjacent streets, roads, highways (identified by street names and numbers);

- ⇒ Surface water bodies;
  - ⇒ Groundwater flow direction (if determined); and
  - ⇒ North arrow and scale.
2. Provide a site map and cross-sections illustrating the UST system(s), drawn to scale, showing:
    - ⇒ Buildings and property boundaries;
    - ⇒ Underground utilities, such as sewer lines and other conduits; basements; and vaults;
    - ⇒ Water supply wells, surface water bodies;
    - ⇒ Location and orientation of current and former UST(s), pumps, product lines, sumps, etc.;
    - ⇒ Length, diameter and volume of current and former UST(s);
    - ⇒ Type of material(s) stored in UST(s) (currently and formerly);
    - ⇒ Soil sample identification (unique letter and/or numerical code), location, and depth;
    - ⇒ Groundwater monitoring locations, if applicable;
    - ⇒ Groundwater flow direction, if determined;
    - ⇒ Final limits of each stage of excavation for each excavation on site; and
    - ⇒ North arrow and scale.
  3. Provide map(s)\* and geological cross-sections, drawn to scale, depicting all soil analytical results obtained to date and final confirmatory sample results, to include:
    - ⇒ Description of soil and bedrock lithology (as determined by investigation to date);
    - ⇒ Location and orientation of UST(s), pumps, piping, sumps, etc.(current and former);
    - ⇒ Soil sample identification (unique letter and/or numerical code), location, and depth;
    - ⇒ Soil sample analytical results;
    - ⇒ Final limits of UST pits, piping trenches, etc. after system removal; and
    - ⇒ North arrow and scale.
  4. Provide map(s)\* and geological cross-sections, drawn to scale, depicting the groundwater and surface water analytical results,\*\* to include:
    - ⇒ Location and orientation of UST(s), pumps, piping, sumps, etc.(current and former);
    - ⇒ Groundwater sample identification (unique letter and/or numerical code referencing monitoring or water supply well)and location;
    - ⇒ Surface water sample identification (unique letter and/or numerical code) and location; and
    - ⇒ Groundwater and surface water sample analytical results.
  5. Provide a potential receptor map that clearly identifies water supply wells (municipal or public/private wells, etc.) and other potential receptors (surface water bodies, basements, utilities, etc.) which are at risk.

*\*Note: If possible, use a single base map to prepare site plans using a map scale of 1 inch = 40 feet (or a smaller scale for large sites, if necessary). Maps and figures should include conventional symbols, notations, labeling, legends, scales, and north arrows and should conform to generally accepted practices of map presentation such as those enumerated in the USGS Geological Survey pamphlet, "Topographic Maps."*

*\*\*If applicable*

### C. Tables

Provide the following:

1. Site History (Complete Tables B-1 and B-2 from *Guidelines*, Appendix B);
2. Public and Private Water Supply Well and Other Receptor Information (Complete Table B-5 from *Guidelines*, Appendix B);
3. Field Screening Results
4. Soil Sample Identification, Location, Depth, Analytical Methods
5. Summary of Soil Sampling Results (Complete Table B-3 from *Guidelines*, Appendix B);
6. Summary of Groundwater and Surface Water Sampling Results ( Complete Table B-4 from *Guidelines*, Appendix B)\*;
7. Monitoring and Remediation Well Construction Information (Complete Table B-7 from *Guidelines*, Appendix B)\*;

*\*If applicable*

### D. Appendices

Provide the following:

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|------------|--|
| Appendix A | Tightness testing results and supporting documentation*                                  |
| Appendix B | Notification of Intent: UST Permanent Closure or Change-in-Service (UST-3 Form)          |
| Appendix C | Site Investigation Report for Permanent Closure or Change-in-Service of UST (UST-2 Form) |
| Appendix D | Site Specific Health and Safety Plan (HASP)  |
| Appendix E | Certificate of UST disposal  |

Appendix F Groundwater field measurements (pH, dissolved oxygen, specific conductivity, temperature)\*  
Appendix G Standard procedures (sampling, field equipment decontamination, field screening, etc.)  
Appendix H Soil, water, and sludge disposal manifests and soil treatment permits\*  
Appendix I Complete chain-of-custody records  
Appendix J Copy of all laboratory analytical records  
Appendix K Photographs of closure activities (optional)  
Appendix L Geologic logs for excavation(s)/borings

*\*If applicable*