GUIDELINES FOR PERMANENT CLOSURE OF UNDERGROUND HAZARDOUS MATERIALS STORAGE TANK SYSTEMS AND SUMPS

A. General Information

These guidelines are applicable to hazardous material underground storage tank systems (tanks and piping) and sumps regulated the California Underground Storage Tank Regulations.

1. A permit for removal of underground tank systems or sumps is made through the **City Building Department.** The permit application must include a completed Underground Storage Tank Closure Plan.

2. Upon satisfactory review and approval of the Closure Permit Closure Plan, the owner of the hazardous materials storage tank or sump shall carry out the proposed actions. Tank and sump removal and sampling activities must be witnessed by a representative from the agency. Closure inspections must be scheduled at least 48 hours in advance.

3. Owners/Operators of tank systems or sumps undergoing closure may be required to possess the following:

   a. A hazardous waste EPA Identification Number.
      Available by telephone from Cal/EPA at (916) 324-1781.
   b. A Generator Hazardous Waste Tax Account Number (for commercial facilities). Available by telephone from the state Board of Equalization at (916) 322-9534.

4. Contractors shall submit or have on file with the local agency information verifying that they possess a current State Contractor's License (A, B, C-36, C-61/D-40), State Hazardous Substance Removal Certificate, Workmen's Compensation Insurance, and, if required by the local jurisdiction, a business license. Contractor information may be obtained by calling the Contractors State License Board at (800) 321-2752.

5. The Bay Area Air Quality Management District requires written notification prior to removal of any tank containing organic material (it must be postmarked at least five days before start of excavation). For further information regarding this requirement, call (415) 771-6000.

6. Underground Service Alert should be contacted at (800) 642-2444 prior to the start of excavation.

7. The contractor shall be responsible for ensuring that conditions at the site provide for workplace safety, protection of the environment, and maintenance of integrity of nearby structures.

8. Cal/OSHA requires that a Site-Specific Health and Safety Plan be maintained on site during closure activities.

9. Soil/groundwater samples shall be analyzed by a laboratory state-certified for the required analyses and handled under a chain-of-custody form. Sample results without a chain-of-custody form shall be considered invalid and re-sampling will be required.

10. When groundwater is encountered, groundwater samples shall be required as described in local Regional Water Quality Control Board Guidelines.

11. If contamination of any detectable concentration is found, further soil and groundwater investigation may be required.

12. The tank owner or authorized representative (applicant or contractor) of the tank owner shall submit a new or revised Hazardous Materials Management Plan/Business Plan, if appropriate.

13. Owners of hazardous materials storage tanks shall submit completed Unified Program Consolidated Form for Underground Storage Tanks – Facility and Tanks - along with the Closure Permit Application/Closure Plan.

B. <u>Tank Removal</u>

1. Hazardous materials shall be removed from tanks and piping prior to tank removal and must be properly managed. BAAQMD requires that VOC residuals in tanks amount to less than 1/1,000 of the tank volume (e.g., less than five gallons VOC remaining in a 5,000 gallon tank). To achieve this, rinsing and/or tipping and pumping of the tank(s) may be necessary. Materials generated as the result of the rinsing or decontamination of tanks shall be manifested as hazardous wastes.

2. All tanks and piping shall be manifested and hauled by a licensed hazardous waste transporter to a permitted hazardous waste facility OR the tanks may be managed in accordance with California Code of Regulations Title 22, Chapter 32 Management of Tanks, Section 67383.1 – 67383.5. If tanks are to be disposed of as non-hazardous waste, the closure plan must specify the steps to be taken and demonstrate Sections 67383.1 – 67383.5 will be followed.

3. Tanks shall be removed from the excavation within 24 hours of removal of backfill.

4. Tank removal or relocation may commence only after the local agency inspector has given approval.

5. All tanks shall be transported from the site on the same calendar day as they are removed from the ground or they may be required to be placed back into the excavation.

6. All electrical service to tank(s)/pumps shall be terminated prior to start of excavation.

7. The pump and all associated piping shall be removed or capped if it is unable to be removed. (Note: Plumbing permits may be required.)

8. For tanks previously containing flammable/combustible materials, the licensed tank closure contractor shall provide, on-site and readily accessible, at least one 40BC rated portable fire extinguisher and a calibrated meter capable of measuring LEL (Lower Explosive Limit) and oxygen levels.

9. Tanks previously containing flammable/combustible materials shall be made safe for removal from the excavation by the addition of dry ice (carbon dioxide) or other methods approved by the local agency sufficient to achieve an atmosphere of less than 8 % oxygen and less than 20% LEL.

10. All openings other than a pressure relief hole at the top of each tank to allow for venting shall be capped or plugged immediately after removal.

11. The tank closure contractor shall provide tank removal/lifting equipment of a size adequate to safely remove tanks.

12. If an excavation is to remain open after the contractor leaves the site, the excavation perimeter shall be fenced 6' high or provided with a 24-hour guard.

13. All stockpiles of contaminated/suspect soil shall be stored on bermed plastic and covered. Contact this agency and the Bay Area Air Quality Management District (415-771-6000) regarding treatment and disposal of contaminated soil

C. Soil and Groundwater Sampling

1. Location and manner of sampling and analyses shall be in accordance with the local Regional Water Quality Control Board Guidelines and as directed by the field inspector. An 8260 will be required for gasoline tanks to check for MTBE.

   Sampling for routine Petroleum or Solvent Tank Removals is based upon tank size and location (in relation to groundwater) and shall include:

   - Water in excavation – at least one sample below each tank.
   - Soil samples:
     - Up to 10,000 gallons - two, per tank, one at each end of the tank
     - Above 10,000 gallons - three or more per tank, one at each end of the tank, and one in the middle (with additional samples equally spaced along tank length)

2. Soil samples shall be required under dispensers and every 20 linear feet along piping runs and as directed by the inspector overseeing closure. Where pipeline samples can not be taken (e.g. under structures), pipeline pressure-testing shall be required to determine if leakage has occurred. Additional samples may be required.

3. All samples shall be immediately transported in a chest on ice to the laboratory for analysis.

4. Samples may not be composited by the laboratory and analyzed together.

D. Sump Closure (Sumps meeting the definition of an "Underground Tank")

All relevant requirements for underground storage tank closure shall apply to sump closure activities. The following are requirements specific to sump closure:

1. All piping and sewer connections shall be removed where applicable. (Note: Plumbing permits may be required.)

2. Sumps shall be sampled to determine proper disposal method, or disposed of as hazardous waste based on generator knowledge of hazardous nature. Specific sample analyses required is dependent upon materials which were or might have been introduced into the sump structure.

3. Concrete shall be cored or jackhammered to permit collection of native soil samples from beneath the structure. Soil samples may be required from beneath any piping run.

4. Sumps may be either removed from the ground and disposed of in an approved manner or broken up and left in place depending on site conditions.

E. Summary of Requirements to Obtain Final Tank System Closure

The following information shall be submitted within 60 days of tank removal:

Two copies of:

- Analytical results from samples
- Sample Chain(s)-of-Custody
- Site drawings showing tank location(s), pipeline runs, sampling locations, and sampling depths
- Other (e.g. backfill compaction report etc.):
- One photocopy of the TSDF-signed copy of each hazardous waste manifest used to transport the following items:
  - Tanks/Piping
  - Rinsate
- Laboratory shall note status of evidence tape and condition of samples at time of sample