## CITY OF SANTA FE SPRINGS CERTIFIED UNIFIED PROGRAM AGENCY

# UNDERGROUND STORAGE TANK CLOSURE APPLICATION PACKAGE



## CITY OF SANTA FE SPRINGS FIRE DEPARTMENT OF FIRE-RESCUE

11300 Greenstone Avenue, Santa Fe Springs, CA 90670 Telephone: (562) 944-9713 Fax: (562) 941-1817

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## UNDERGROUND STORAGE TANK CLOSURE CHECKLIST

Closure of an underground storage tank (UST) is permitted by the Santa Fe Springs Department of Fire-Rescue (SFSFR) Environmental Protection Division. A checklist is provided below to assist businesses and contractors with the application, inspection, and documentation requirements. Closure by removal of an UST, piping and/or dispensers, the closure in-place of an UST and the temporary closure of an UST must comply with the closure conditions as directed in the Closure Permit as well as meet the requirements of California Health and Safety Code Division 20, Chapter 6.7, Section 25298, California Code of Regulations Title 23, Division 3, Chapter 16, Sections 2670 through 2672, and the City of Santa Fe Springs' Municipal Ordinance. Closure in-place of an UST is not permitted unless it can be demonstrated from an engineering perspective that it is not feasible to remove the UST. Preliminary approval for in-place UST closure is required by the Building Department.

#### **SECTION I**

#### **Application/Closure Plan Submittal Requirements**

Complete and submit the following documents to apply for an UST Closure Permit. Allow 30 days for plan review; however; most typical UST Closure Permit applications can be approved over-the-counter provided an appointment is scheduled and all documents requested below are provided at the time of application. Approved plans shall be taken to the Building Department by the customer for further action. A Health and Safety Plan is required for all tank closures and must be available on the work site. It is required to be submitted upon request only. All site workers must have HAZWOPER training certificates. Additional information may be needed to obtain permit approval. Once the Application for Storage Tank Closure has been approved, it becomes a Closure Permit.

- Santa Fe Springs Fire-Rescue Plan/Review Permit Application Form
- Three copies of a scaled plot plan showing the location of the UST, piping, and dispensers
- Application for Storage Tank Closure
- Copy of Contractors License
- Copy of Workers Compensation Insurance
- Closure Permit Sampling Supplement (inspector will complete)
- Notification/Permit Requirements and Contractors Declaration (attachment)
- Storage Tank Closure Requirements and Conditions (attachment)
- Closure Report Requirements (attachment)
- Authorization letter from UST owner allowing contractor to perform work/secure permits
- Fees checks may be made payable to: City of Santa Fe Springs
- Customer to go to Building Department

#### **SECTION II**

#### **Inspection Requirements**

A SFSFR inspection must be requested at least 48 hours in advance. The SFSFR inspector shall witness the following items during a single inspection.

- For **closure by removal** using the non-hazardous tank method, see Condition A in the Storage Tank Closure Requirements and Conditions. The hazardous tank method is in Condition B.
- For closure in-place see Condition C in the Storage Tank Closure Requirements and Conditions
- For temporary closure see Condition D in the Storage Tank Closure Requirements and Conditions

#### **SECTION III**

#### **Final Documentation Requirements**

- A UST Closure Report must be submitted in hard copy and electronically within 30 days from the sampling date
  or 180 days from the date of the permit was issued, whichever is earlier. See Closure Report Requirements for
  details.
- The SFSFR will issue a No Further Action letter when all requirements of the Closure Permit have been met and where no unauthorized release has occurred. When an unauthorized release is believed to have occurred, referral will be made to the Los Angeles Regional Water Quality Control Board or other appropriate agency.
- The revised tank status in CERS must be submitted within 30 days from the date of tank closure. The web
  address to CERS is <a href="http://cers.calepa.ca.gov/">http://cers.calepa.ca.gov/</a>. Historic tanks that were never registered in CERS are not
  required to enter information in CERS.



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## DEPARTMENT OF FIRE-RESCUE

## APPLICATION FOR UNDERGROUND STORAGE TANK CLOSURE

FACILITY N	JAME:									
LOCATION:										
CERS ID NU	MBER:									
	LE PARTY INFORMATION:									
M	ailing Address		City	State Zip						
	ontact Person									
be provided.	ACTOR OR  OWNER List must include subcontractor na me	ime, address, phone nur	nber, scope of work, and a copy of	of the contractor	's license.					
Ac	ldress		City		State	Zip				
Co	ontact Person			State License Number  State Zip Phone						
DATE TANK	Permanent, tank removal, Permanent, closure in place Temporary (see condition Monitoring well abandons SYSTEM WILL BE CLEANE DESTINATION OF TANK SYS	e (see condition C D attached) nent (see Condition D AND/OR EXCAVA	attached).  a E attached)  TED, OR CLOSED:							
	THE FOLLOWING (ATTACH									
			•	ТО	BE COMPLET	ED BY SFSFR				
NUMBER OF USTS			LAST MATERIAL STORED/ PAST MATERIAL(S) STORED	DATE CLOSED	INSP. INITIALS	COMMENTS				
1										
2										
3										
Will any pe Has an una Have struct Will new ta	ermitted confined space entruthorized release ever occur ural repairs ever been made unks be installed after this ci tanks will remain after tl	red at this site? to these tanks? osure?	YES  □ □ □ □ □ ASTs US		yes, see Condi	ition F attached.)				
and Contractor's the last material	ow the applicant certifies that they have Declaration, and all other conditions or waste stored or accumulated in the table Signature	and limitations attached. Eank is true and correct.	By signature below you declare you are							
		Phone								
Title (pleas		☐ Operator	☐ Contractor							
PERMISSIC CONDITION		OMPLETED BY T TO PROCEED W IS PERMIT EXPIRE	ES 180 DAYS FROM THE D	CRIBED AB ATE BELOW	OVE SUBJECT					
Fire Chief			Amount \$	Date Approved  S Date Paid Received by						

## STORAGE TANK CLOSURE REQUIREMENTS AND CONDITIONS

A permit is required to perform storage tank closure work. No on-site work shall begin until plans have been submitted and approved by the Santa Fe Springs Department of Fire-Rescue (SFSFR). The SFSFR must witness parts of the work and an inspection must be scheduled at least 48 hours in advance. A fee is also required. Any other governmental agency having jurisdiction must be notified before starting closure work in order to obtain proper clearance, permits, and arrange for required inspections. A copy of the Health and Safety Plan and other necessary permits must be obtained and kept available at the site. A tank closure report is required for all aboveground storage tank removals when soil or groundwater sampling is required and all underground storage tank closures that are not temporary. The requirements for this report are listed under Closure Report Requirements.

## **CONDITION A**

## PERMANENT UNDERGROUND AND ABOVE GROUND STORAGE TANK REMOVALS NON-HAZARDOUS METHOD

#### The Santa Fe Springs Department of Fire-Rescue Inspector shall witness items 10-16.

- A minimum of two 2A 40 BC rated fire extinguishers must be on site no further than 75 feet from the tank removal location. Extinguishers must have a current State Fire Marshal's tag attached.
- All ignition sources must remain at least 50 feet away from the excavation. No smoking signs shall be posted.
- Colored tape, fencing, and/or appropriate barriers shall be used to maintain site security.
- 4. All tanks shall be monitored for flammability and oxygen by a monitoring device that has been calibrated within the last six months. A sticker or tag with the last calibration date must be on the unit.
- 5. All piping associated with the tank shall be removed and disposed of unless removal might cause damage to other structures or pipes that are being used in a common trench, in which case the piping to be closed. Pipeline abandonment sampling shall comply with 23 CCR 2672 (d).
- S. All liquids, including rinseate, shall be removed from the tank and connected piping prior to excavation by approved methods. Grounding and bonding procedures shall be followed. Hazardous waste shall be manifested and transported to a fully approved and permitted TSD facility by a Licensed Hazardous Waste Transporter. The fire inspector shall be provided with a copy of the Hazardous Waste Manifest. Associated piping, including vent lines, electrical lines, and in-tank pumps, shall be disconnected from the tank and removed from the ground unless approved by the Chief. Continuous supervision must be maintained during the operations by the contractor named on the permit.
- 7. Vapor recovery shall be in accordance with AQMD Rule 1149.
- 8. NFPA guidelines shall be followed for the cleaning process. Bonding and grounding shall be in place. No "hot" work is permitted for any tanks that previously contained flammable or combustible materials. A pneumatic cold-cutting tool may be used to cut openings for the cleaning procedures. Use only beryllium or approved non-sparking tools. The lower explosive limit must be below 10% to conduct such work.
- Each tank is cleaned on-site, certified by a Certified Marine Chemist, Certified Industrial Hygienist, or Certified Safety Professional as "clean" and vapor free. Tank cleaning shall be timed such that it is completed prior to the arrival of the fire inspector.

- 10. The Certified Marine Chemist, Certified Industrial Hygienist, or Certified Safety Professional must take the lower explosive limit reading in the presence of the fire inspector before adding dry ice to the tank. The monitor must be properly calibrated. The LEL must be 0% for the "clean" certification.
- 11. A minimum of 15 pounds of dry ice per thousand gallons of tank capacity shall be placed into the tank. Dry ice is not required if tanks are immediately cut on-site.
- 12. The Certified Marine Chemist, Certified Industrial Hygienist, or Certified Safety Professional shall apply an identification number and date to each tank that corresponds to the "certification". A copy of the signed "clean" closure certification form must be given to the fire inspector before he/she leaves the job site. A Storage Tank Closure Certification form is available in this packet. Tanks can only be moved or cut for demolition the same day of the date of certification.
- 13. Tanks shall be lifted using a crane unless the contractor, at the time of permit application, can show the inspector that another piece of equipment is acceptable and safe. The tank exterior canonly be cleaned with beryllium or non-sparking tools.
- 14. The tank shall be secured on an appropriate vehicle for immediate removal from the premises. The tank(s) shall be transported for material recycling or salvage with their respective certification(s). Demolition of above ground tanks shall be conducted as in the work plan approved by the Santa Fe Springs Fire Department.
- 15. In the event that a Certified Marine Chemist, Certified Industrial Hygienist, or Certified Safety Professional will not certify the tank as clean, the tanks shall be handled as a hazardous waste and be transported under all applicable regulations. See Condition B
- 16. Soil samples shall be taken as listed on the Closure Permit Sampling Supplement form.
- 17. Each tank will be allotted a maximum of one hour for removal, loading, off-site transportation, and soil sampling. Closure periods which exceed this time frame, are subject to the fire inspector's schedule and will be charged at the Fire Department hourly inspection rate.
- 18. The site shall be backfilled and compacted to a relative compaction of 90%.
- 19. All Closure Report Requirements must be submitted to the Fire Department within 30 days from the sampling date or 180 days from the date of the permit, whichever is earlier.

#### **CONDITION B**

#### PERMANENT UNDERGROUND AND ABOVE GROUND STORAGE TANK REMOVALS

## HAZARDOUS METHOD Per CHSC§67383.5

#### The Department of Fire-Rescue Inspector shall witness item numbers 4 - 6.

- Items 1-7 as described for Condition A, shall be followed as applicable.
- 2. All residual liquids, solids, or sludges, shall be removed and handled as a hazardous waste or recyclable materials in accordance with Chapters 6.5 and 6.7 of the Health and Safety Code. NOTICE: Contaminated tanks and residues that may be left in tanks to be closed may be a hazardous waste which must be transported and disposed of pursuant to Chapter 6.5 of the California Health and Safety Code. Failure to comply may be prosecuted as a felony conviction.
- 3. The tank's interior atmosphere shall be inerted using 22.2 pounds of dry ice per 1000 gallons of tank capacity.
- 4. A Certified Industrial Hygienist, Certified Marine Chemist, or Certified Safety Professional shall take LEL readings with a CGI that has been properly calibrated prior to inerting the tank. Oxygen content shall also be measured and must be below 8% or less than 50% of the oxygen concentration required to support combustion, whichever is less, during the entire period that work is in progress. The readings shall be taken at the top, center and bottom of the tank before it is loaded onto the transport vehicle.
- All openings in the tank shall be plugged, except an 1/8 vent. Cracks, holes or other damage shall be covered to contain any release.
- Items 16 –19 as identified in Condition A shall be complied with.

## **CONDITION C**

#### PERMANENT IN PLACE UNDERGROUND STORAGE TANK CLOSURES

#### The Fire Department Inspector shall witness item numbers 4 - 6.

- All in place storage tank closures must be approved by the Building Department before applying to the Department or a scaled drawing, stamped by a Professional Engineer, may be submitted. The drawing must show the location of the tank in plan view and in cross section. The drawing must show the angle (in degrees) from the closest footing of the permanent structure to the closest part of the tank system.
- Items 1-7 as described for Condition A, shall be followed as applicable.
- All residual liquids, solids, or sludges, shall be removed and handled as a hazardous waste or recyclable materials in accordance with Chapters 6.5 and 6.7 of the Health and Safety Code.
- A Certified Marine Chemist, Certified Industrial Hygienist, or Certified Safety Professional shall monitor the tank interior and exterior for potential harmful vapors. LEL must be below 10%.

- 5. The tank shall be completely filled with an inert solid. Cement slurry is acceptable. Sand or water is not. Alternative proposals must be submitted in writing and are subject to the Department of Fire-Rescue's approval.
- Each tank will be allotted a maximum of one hour for filling of the tank and soil sampling. Closure periods which exceed this time frame, are subject to the fire inspector's schedule and will be charged at the Department of Fire-Rescue's hourly inspection rate.
- Soil samples shall be taken as listed on the Soil Sampling. Requirements form in the Application for Storage Tank Closure.
- 8. All Closure Report Requirements must be submitted to the Fire Department within 30 days from the sampling date or 180 days from the date of the permit, whichever is earlier.

#### **CONDITION D**

#### TEMPORARY STORAGE TANK CLOSURES

#### The Fire Department Inspector shall witness items 2-5.

- Items 2 and 3 as described in Condition C, shall be followed as applicable.
- 2. The Department of Fire-Rescue shall witness verification that the tank is empty. This may be done by dip sticking the tank. Afterward, the storage tank may be filled with a non-corrosive liquid that is not a hazardous substance. Proof of compatibility of the liquid with the tank must be submitted to the Department of Fire-Rescue.
- Except for required venting, all fill and access locations and piping shall be sealed using locking caps or concrete plugs.
- Power service shall be disconnected from all pumps associated with the use of the storage tank unless the power services some other equipment which is not being

- closed, such as an impressed-current cathodic protection system.
- Monitoring shall continue pursuant to the permit during the temporary closure, unless determined otherwise by the Department of Fire-Rescue
- The storage tank shall be inspected every 3 months by the owner or operator to verify temporary closure requirements are still in place.
- 7. Temporary closure permits are valid for six months from the date of approval. The tank must be removed, closed in place, or put back into use. If the tank is reused, it must meet the requirements of the California Fire Code, Article 3 or 6 of Title 23 of the California Code of Regulations, Division 3, Chapter 16, and Health and Safety Code Ch. 6.7.

## **CONDITION E**

#### **WELL ABANDONMENTS**

- 1. All abandoned wells shall be destroyed in such a way that they will not produce water or act as a channel for interchange of water, when such interchange may result in deterioration of the quality of water in any or all water bearing formations penetrated, or present a hazard to the safety and well being of people and animals.
- A well destruction permit issued by the Los Angeles
  Department of Public Health shall be required for all wells
  requiring a permit for their initial construction.
- 3. Well destruction shall be accomplished according to methods described in the latest "Water Well Standards: State of California" by the Department of Water Resources, contained in bulletin 74-81, December 1981, or any other methods that will provide equivalent or better protection.
- 4. Verification of well abandonment may be submitted in writing or by requesting a Department of Fire-Rescue inspection.

### **CONDITION F**

#### CONFINED SPACE ENTRY

- The Department of Fire-Rescue requires 48-hour notification prior to performing permitted confined space entry work where the Department of Fire-Rescue or 911 is designated as the confined space rescue team. The notification must be made verbally during business hours (voice mail messages not accepted).
- Any permitted confined space entry shall be performed in accordance with Cal OSHA standards.
- It is the businesses' responsibility to prove the confined space rescue team is qualified to perform such work.

# NOTIFICATION/PERMIT REQUIREMENTS AND CONTRACTOR'S DECLARATION

Storage tank work is subject to compliance with all applicable laws and regulations relating to the performance of work including, but not limited to, business license requirements, Building Codes, Fire Codes, Air Quality regulations, Health and Safety Codes, Water Codes and Transportation regulations.

You are required to complete **ALL** of the agency notifications indicated below within 48 hours prior to the commencement of work on this project. A request for an inspection within 48 hours does not guarantee you will receive the desired inspection appointment time. You may want to schedule appointments in advance of the 48 hour minimum requirement.

#### **48 HOUR NOTIFICATION REQUIRED TO:**

- (X) Santa Fe Springs Department of Fire-Rescue 11300 Greenstone Avenue Santa Fe Springs, CA 90670 (562) 944-9713 (562) 941-1817 FAX
- (X) City of Santa Fe Springs Building Department 11710 E. Telegraph Road Santa Fe Springs, CA 90670 (562) 868-0511 (562) 868-7112 FAX
- (X) South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765 (909) 396-2000

#### **NOTICE TO UST PERMIT APPLICANTS:**

The South Coast Air Quality Management District (SCAQMD) has adopted Rule 1166 regulating emissions of Volatile Organic Compounds (VOC) from decontamination of soil effective August 6, 1988. A Site Specific Soil Mitigation Plan or a Various Site Soil Mitigation Plan may be required. The SCAQMD has provided a link to Rule 1166 at: <a href="http://www.aqmd.gov/home/regulations/compliance/rule-1166-site-specific-and-various-locations-soil-mitigation-plan">http://www.aqmd.gov/home/regulations/compliance/rule-1166-site-specific-and-various-locations-soil-mitigation-plan</a>. Please contact the SCAQMD at (909) 396-2000 for details regarding Rule 1166. It is the business's responsibility to ensure SCAQMD and California Air Resources Board requirements are met.

# FAILURE TO PROVIDE NOTICE AS REQUIRED ABOVE MAY RESULT IN PERMIT REVOCATION, ADDITIONAL SITE ASSESSMENT REQUIREMENTS, AND/OR ADMINISTRATIVE PENALTIES AS PROVIDE BY LAW.

- A City of Santa Fe Springs Business Operators Tax Certificate is required by contractors performing work in the City of Santa Fe Springs.
- No work is to begin on the project until the application and plans are approved.
- The Santa Fe Springs Department of Fire-Rescue must be contacted at least 48 hours in advance to schedule each required inspection.
- Site and worker safety are solely the responsibility of the property owner or his agent and the responsibility is not shared nor assumed by the City of Santa Fe Springs.
- A Health and Safety Pan shall be prepared before performing any site work and a copy of that Plan shall be available on the job site.
- A late fee will be charged as a result of an inspection not being canceled in a timely manner or a "not ready for inspection" condition existing upon arrival of a Department of Fire-Rescue Inspector.
- Variations from the approved plans may void the approval of the plans.

## **CLOSURE REPORT REQUIREMENTS**

A closure report for storage tanks shall be submitted to the Santa Fe Springs Department of Fire-Rescue containing the items listed below. All closure report requirements must be submitted to the Department of Fire-Rescue within 30 days from the sampling date or 180 days from the date of this permit, whichever is earlier.

- 1. Site address of tank closure location.
- Plot plan to scale showing the location of tanks, sampling points, buildings, adjacent streets, and a north arrow. Use a legend to identify tank size and past contents.
- 3. Description of methods for obtaining, handling, and transporting samples.
- 4. Time and date samples were obtained.
- 5. Soil sampling certification (including but not limited to soils classification, boring logs, sample procedures, sample locations, initiating chain of custody, and groundwater location) for tank closure shall be certified by a California Professional Geologist, a California Certified Engineering Geologist, or a California Registered Civil Engineer with sufficient experience in soils. The certification must clearly state that all work was done under the supervision of the person signing.
- 6. Chain of custody documentation initiated by the person obtaining samples through the person at a Cal/EPA Department of Toxic Substances Control certified laboratory.
- 7. Copy of "clean" closure certification signed by a Certified Marine Chemist, Certified Industrial Hygienist, or Certified Safety Professional.
- Copy of Santa Fe Springs Building Department permit. This is required on all underground tank closures and some aboveground tank closures.
- Disposal destination of tanks and legal evidence of disposal. Include copy of the Storage Tank Closure Certification form if tanks were removed as hazardous waste.

- 10. Disposal documentation such as manifests signed by the receiving facility, for the disposal of any removed soil, tank rinseate, and/or remaining tank contents. Records shall also include a proper waste determination for all waste material related to the removal of the tank(s).
- 11. Analysis results by a State certified laboratory submitted on laboratory letterhead showing analysis date, method of extraction, and method of analysis.
- 12. Documentation as to depths of groundwater at facility.
- 13. Any observations of site contamination. If an unauthorized release is believed to have occurred or any detected constituent in soil or groundwater is found above the method detection limit of an analytical method as identified the laboratory in testina requirements, reporting must comply with the Health and Safety Code Division 20, Chapter 6.7. and Article 5 of Title 23 of the California Code of Regulations. In this case, an Unauthorized Release Form shall be submitted.
- 14. Recommendation for closure or further action.
- 15. Report to be signed by a California Professional Geologist, a California Certified Engineering Geologist, or a California Registered Civil Engineer with sufficient experience in soils.
- 16. The revised tank status in CERS must be submitted within 30 days from the date of tank closure. The web address to CERS is <a href="http://cers.calepa.ca.gov/">http://cers.calepa.ca.gov/</a>. Historic tanks that were never registered in CERS are not required to enter information in CERS.

### **CLOSURE PERMIT SAMPLING SUPPLEMENT**

To satisfy the permanent closure requirements for storage tanks previously storing hazardous materials, site integrity must be demonstrated by the analysis of soil samples and, if applicable, groundwater samples as outlined below. These requirements are in addition to the conditions listed on the Application for Storage Tank Closure or contained in an approved Closure Permit. Compliance with the "Soil Sampling Requirements for Extremely Hazardous Materials" may be required. Additional guidelines regarding soil sampling requirements are available upon request.

- 1. Samples shall be obtained at the sampling points (SP) indicated on the attached plot plan.
- 2. For each SP, samples shall be obtained at the following depths identified below. Note: UST sites undergoing closure or modifications requiring sample testing for all constituents of the previously stored substance(s) and their breakdown or transformation products. Testing must also be conducted in accordance with according to Health and Safety Code §25296.15 and the Los Angeles Regional Water Quality Control Board's "General Laboratory Testing Requirements for Petroleum Hydrocarbon Impacted Sites". Preparation method 5035 must be used for testing of volatile organic compounds.

SP	Depth(s)	Compounds	Analysis Method

#### **CLOSURE PERMIT SAMPLING SUPPLEMENT (CONT.)**

- 3. All soil samples obtained shall be discrete, undisturbed and unexposed prior to analysis. The method used to obtain the samples and the date of sampling shall be included in the final report.
- 4. If groundwater is encountered during sampling, a groundwater monitoring well shall be established at the most down gradient sampling point. The well shall be developed by removing a minimum of four well volumes and a groundwater sample shall be obtained and analyzed.
- 5. The analytical results for all soil samples shall be expressed milligrams per kilogram (mg/kg), or micrograms per kilogram (ug/kg) as appropriate. Analytical results for groundwater samples shall be expressed in ug/l (ppb). Required Minimum Detection Limits shall comply with the Los Angeles Regional Water Quality Control Board's "General Laboratory Testing Requirements for Petroleum Hydrocarbon Impacted Sites"
- 6. Analytical results shall be reported on laboratory letterhead and shall include the following information: a) The date the analysis was conducted; b) The method of extraction (if applicable); c) Detection limits for each analytical procedure and determination; d) The method of analysis; e) Signature of chemist certifying results.
- 7. All soil/groundwater samples obtained shall be handled and transported to the laboratory in strict accordance with applicable EPA regulations utilizing chain-of-custody procedures. Chain-of-custody documentation shall be included in the final report.
- 8. If the soil/groundwater analysis indicates contamination at the facility, the case will be referred to the Los Angeles Regional Water Quality Control Board.
- 9. The number of samples is dictated by each underground storage tanks (USTs) capacity and the length of piping run, with some exceptions. Exceptions may include, but are not limited to, the extreme hazard of the material stored, bulk tank configurations, encountering groundwater, length of time of UST abandonment, or history of a possible release. Stockpiled soil must also be sampled. A chart identifying typical sampling requirements is provided below for your reference. Sampling for aboveground tanks is prescribed on a case by case basis.

UST CAPACITY, PIPING, & STOCKPILES	SAMPLE LOCATION								
less than 1,000 gallons	One sample located two to four feet								
	below the tank invert								
Equal to or greater than 1,000 gallons and	Two samples, one located at each end of								
less than 12,000 gallons	the UST and two to four feet below the								
	tank invert								
12,000 gallons or greater	Three samples consisting of two at each								
	end of the UST and one at the center,								
	located two to four feet below the tank								
	invert								
Piping runs	Every 20 linear feet and 2- 4' below the								
	pipe								
Stockpiled soil	One sample for every 100 cubic yards,								
	two to four feet into the stockpile								

- 10. All Closure Permits are site specific and may be subject to additional sampling as necessary to protect the public health and safety, underground and surface water supplies, and may include requirements requested by other agencies.
- 11. A final report that contains all of the required information shall be submitted to the SFSFR within one (1) month from the sampling date or 180 days from the date of this permit, whichever is earlier.

# SOIL SAMPLING REQUIREMENTS FOR EXTREMELY HAZARDOUS MATERIALS

Site integrity shall be demonstrated as indicated below prior to tank removals where the tank presently or previously contained either 1) a volatile or semi-volatile priority pollutant as defined by the Federal Register, Vol. 44, No. 233, December 3, 1979, (Revised 1981), or 2) any material which, as a waste, would be considered an extremely hazardous waste as defined by Title 22, California Administrative Code, Section 66680.

It is the Owners/Operators responsibility to insure tanks are not excavated until site integrity has been determined and that all applicable safety measures are taken to protect all personnel at the removal site from exposure to hazardous materials. Owners/Operators shall demonstrate site integrity as follows:

- 1. Test borings shall be slant drilled to intercept a point beneath the center of the tank, if possible. If slant drilling is not feasible, the test borings may be as close as practicable to the tank.
- 2. For single tanks, a minimum of two test borings will be required, each located on opposite sides of both the major and the minor axis of the tank. The borings shall be as close as practicable to the tank.
- 3. For multiple tanks, as a minimum, borings shall be placed at 20 foot intervals around the tank cluster. The actual number and location of borings shall be evaluated on a case-by-case basis. Tanks separated by 20 feet or more shall be considered single tanks for the purpose of boring location and placement.
- 4. Samples shall be obtained under the direct supervision of a California Certified Engineering Geologist, California Registered Geologist or California Registered Civil Engineer with sufficient experience in soils.
- 5. Soil samples shall be obtained at depths of 5, 10, 20, 30, and 40 feet below grade level.
- 6. A Shelby Tube or a Modified California Sampler shall be utilized for obtaining all soil samples.
- 7. Soil samples shall be capped immediately with teflon or aluminum foil.
- 8. Soil samples shall not be extruded in the field but are to be immediately placed in a protected and chilled ice chest and transported to a State certified laboratory for analysis, using suitable methods.
- 9. If groundwater is encountered during sampling, a groundwater monitoring well shall be established at the most downgradient sampling point. The well shall be properly developed and a groundwater sample shall be obtained and analyzed. Groundwater monitoring well installation and sampling shall meet current Los Angeles Regional Water Quality Control Board guidelines.
- 10. All soil samples obtained shall be discrete, undisturbed, sealed and unexposed prior to analysis. The method used to obtain the samples and the date of sampling shall

be included in the final report. Samples submitted for laboratory analysis are not to be used for field screening.

- 11. The analytical results for all soil samples shall be expressed in milligrams per kilogram (mg/kg), or micrograms per kilogram (ug/kg) as appropriate. Practical quantitation limits of 5-10 ug/kg (ppb) for volatile organics and 1 mg/kg (ppm) for the petroleum hydrocarbons must be achieved by the laboratory. Analytical results for groundwater samples shall be expressed in ug/l (ppb) and practical quantitation limits of .5-5 ug/l (ppb) for volatile organics, and 1 mg/l (ppm) for petroleum hydrocarbons must be achieved by the laboratory.
- 12. Analytical results shall be reported on laboratory letterhead and shall include the following information: a) The date the analysis was conducted; b) The method of extraction (if applicable); c) Detection limits for each analytical procedure and determination; d) The method of analysis; e) Signature of chemist certifying results.
- 13. All soil/groundwater samples obtained shall be handled and transported to the laboratory in strict accordance with applicable EPA regulations utilizing chain-of-custody procedures. Chain-of-custody documentation shall be included in the final report.

Owners/Operators can also demonstrate site integrity in the field using an organic vapor analyzer for head space analysis of soil samples obtained at boring and sampling locations and depths specified above. Alternative field demonstration methods may be acceptable if approved by this Department in advance. Field demonstrations shall not be substituted for the requirement of laboratory analysis.

Either the laboratory analytical results of soil/groundwater samples or the field demonstration results must be available to tank removal field personnel and this Department's inspector at the time the tank is removed.

Owners/Operators must report the detection of an unauthorized release to this Department within 24 hours. If contamination is inadvertently found during excavation, backfill immediately and report the finding to this department within 24 hours. If contamination is indicated by laboratory analysis or found in the field, the case will be referred to the Los Angeles Regional Water Quality Control Board for oversight.

#### UNIFIED PROGRAM CONSOLIDATED FORM

#### **HAZARDOUS WASTE**

## HAZARDOUS WASTE TANK CLOSURE CERTIFICATION

																	Page of
				I. FACILI	ITY ID	ENTII	ICAT	ION	1								
BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) <sup>3</sup> FACI				FACI	LITY II	)#										1	
TANK OWNER	R NA	ME				-			,								740
TANK OWNEI	R AD	DRESS															741
TANK OWNER	CITY					742	STAT	 Е			743	3	ZIP C	ODE			744
			II.	TANK CI	LOSUR	E INF	ORM	ATI	ON								
		Tank ID#		Concentration of Flammable							(	Con	centra	tion of	Oxyg	en	
		tach additional copies his page for more than	Тор	Cent		Bottom			Тор			T		Center			Bottom
TANK INTERIOR	1	three tanks) 745	746		746b			746c		r	747a	ı			747b		747c
ATMOSPHERE READINGS	2	748	749	a	749b		749c		750a			1			750b		750c
	$\vdash$	751	752	a	752b		-	752c			753a					753c	
3 751 752a 752b 752c 753a 753b 753b 753c																	
On arramination	- C 41	touls I soutified to to							1 . 64.	1				1 .1	.1	Y C 41	416.41.4
the information	provid	tank, I certify the talled herein is true and	d accurate to the b	est of my knov	, stuage, s wledge.	cale (till	п, паку	residi	iai oi ta	ик со	nienis	5), 11	nseate	and d	edris.	1 luru	ier certify that
SIGNATURE O	F CEF	RTIFIER				STATI	JS OR A	AFFIL	IATIO	N OF	CERT	TFY	'ING F	ERSC	)N		
						Certifier is a representative of the CUPA, authorized agency, or LIA:											
NAME OF CER	TIFIE	CR (Print)			754	☐ Yes ☐ No											
		()				Name of CUPA, authorized agency, or LIA:											
TITLE OF CERT	CIFIE	R			755	-											
	- ~ ~	•				If certifier is other than CUPA / LIA check appropriate box below:											
ADDRESS					756												
ADDICESS						a. Certified Industrial Hygienist (CIH)  b. Certified Safety Professional (CSP)											
OVER 1 757						- , , , , , ,											
CITY						c. Certified Marine Chemist (CMC)											
758					d. Registered Environmental Health Specialist (REHS)												
PHONE						e. Professional Engineer (PE)											
759					f. Class II Registered Environmental Assessor												
DATE	CERTIFICATION TIME						g. Contractors' State License Board licensed contractor (with hazardous substance removal certification)										
TANK PREVIO	USLY	HELD FLAMMAE	BLE OR COMBUS	STIBLE MATI	ERIALS												763
(If yes, the tank interio	r atmos	phere shall be re-checked w	with a combustible gas in	dicator prior to wor	rk being con	ducted on th	e tank.)						] Ye	s [	] No		
CERTIFIER'S T	ANK	MANAGEMENT I	NSTRUCTIONS F	OR SCRAP D	DEALER,	DISPOS	AL FA	CILIT	Y, ETC	): :							764
		shall accompany the tan					CUPA.	If there	e is no C	UPA,	copies	shall	be sub	mitted	to the L	IA and	authorized

UPCF (12/99)