



# County of Santa Cruz

## HEALTH SERVICES AGENCY

701 OCEAN STREET, ROOM 312, SANTA CRUZ, CA 95060-4073

(831) 454-2022 FAX: (831) 454-3128

<http://www.co.santa-cruz.ca.us/>

ENVIRONMENTAL HEALTH

### MEMORANDUM

RE: Underground Storage Tank Installation Packet

FROM: Environmental Health Services (EHS)

This packet contains information that you will need in order to apply and receive approval for the installation of new underground hazardous materials storage tanks. It includes the following:

1. Standards for the Design of Underground Hazardous Substance Storage Facilities.
2. Application for permit to construct Underground Hazardous Materials Storage Tank. (complete and return).
3. Sign-off sheet for other agencies (complete and return).
4. Licensing and workers compensation insurance declaration form. (complete and return).

Please read the information carefully. In order to avoid unnecessary delays in approval be sure to fill in the application for permit, compensation/declaration form, and required plan details as outlined in the Design Standards completely before submitting to EHS. Submittals must be accompanied by the appropriate fees. Failure to provide the necessary information will result in the denial of your application.

If you require additional assistance feel free to contact this office at (831) 454-2022 any weekday between 8:00 and 9:30 a.m.

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FACILITY (in addition to annual permit fee)

Construction Plan ..... \$ \_\_\_\_\_

Plus for each underground storage tank (if proposed) ..... \$ \_\_\_\_\_

TOTAL DUE: \$ \_\_\_\_\_

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**STANDARDS OF THE  
SANTA CRUZ COUNTY HEALTH SERVICES AGENCY - ENVIRONMENTAL HEALTH SERVICES  
DESIGN OF UNDERGROUND STORAGE TANK FACILITIES  
(THESE STANDARDS ARE SUBJECT TO CHANGE WITHOUT NOTIFICATION)**

The following requirements pertain to Health Codes only. Applicants must meet requirements of Fire, Air Quality and Building Departments in addition to the following.

**A. General Information**

1. Underground storage tank systems constructed in Santa Cruz County must conform to standards approved by the County Environmental Health Service. Written approval must be obtained prior to the installation of any new or replacement storage facility. At a minimum, all installation projects must comply with requirements specified in Chapter 6.7 of the California Health and Safety Code, Title 23, Chapter 16 of the California Code of Regulations, and Chapter 7.100 of the Santa Cruz County Code.
2. It is the obligation of the applicant to show that the proposed site and existing soil and groundwater conditions are suitable for the construction of the proposed storage system. Should unsuitable soil or high groundwater conditions exist, it is necessary that the design reflect these conditions and that the excavation be dewatered and inspected by a representative of the Santa Cruz County Environmental Health Service.
3. Written approval of plans is required before the start of construction. Plans shall be submitted to:

Santa Cruz County Environmental Health Service  
Hazardous Materials Program  
701 Ocean Street, Room 312, Santa Cruz, CA 95060  
(831) 454-2022
4. Contractors shall submit, or have on file with our agency, information verifying that they possess a current State Contractor's License (A, C-36, C-61/D-40), Workers Compensation Insurance, and an ICC UST Installer-Retrofitter certification.
5. All tanks, piping, and equipment shall be installed and tested in accordance with the manufacturer's recommendations and/or guidelines.

**B. Required Submittals**

***To be submitted with initial application and plans:***

1. An application for permit to construct signed by the owner, or in the case of a corporation, by an officer of the corporation.
2. Manufacturers' cut sheets for tanks, piping, and equipment (e.g. monitoring equipment, spill containment device, overfill protection device, dispenser pan, etc.)
3. Sign-off by the appropriate jurisdictions (including fire, building, planning etc.) that they have been notified and have received copies of plans.
4. Payment of required fees.

**Plans shall:**

1. Be submitted in sufficient quantity to allow the Department to retain one copy permanently.
2. Be drawn to scale, 20 to 100 feet to the inch for plot plan, depending upon area covered, and a suitable scale for details of the tank system proposed.

3. Show the following:
  - a. Plot plan and key map.
  - b. Buildings.
  - c. Water supply well or water service lines.
  - d. Sewage disposal system.
  - e. Location of proposed and existing underground storage tanks.
  - f. Details of the proposed tank installation and piping system, plan cross-section and elevation.
  - g. Elevation of highest groundwater level on record and source of data, existing and finished grades and pertinent inverts.
  - h. A cross-section of a test hole and its location may be required. Test holes should be carried down at least four feet beyond the bottom elevation of the tank or to groundwater, if encountered, prior to full depth exploration.
  - i. Material of construction of the storage tank and piping system.
  - j. All stormwater recharge basins and piping on the property or within 100 feet of the property line must be shown to scale on the plot plan.
  - k. Any surface waters within 200 feet of the tank(s).
  - l. Leak detection system.
  - m. Overfill protection system

Upon review of completed applications (plans, specifications, fee, etc.), approval of acceptable plans will be issued by the placement of an approval stamp on the site plan. **Approval will be valid for a period of six months from the time of issuance.**

The Department may require plans prepared by a registered Professional Engineer if structural or physical features of the installation are determined to require special considerations.

***To be submitted prior to final inspection:***

1. The following completed Unified Program Consolidated Forms (UPCF): Business Activities; Facility Information - Business Owner/Operator Identification; UST Facility Form; UST – Tank (one form for each tank); UST – Installation Certification of Compliance (one for each tank)
2. New or revised UST Monitoring Plan.
3. New or revised UST Emergency Response Plan.
4. Owner statement of Designated UST Operator and Understanding of Compliance form.
5. UST Certification of Financial Responsibility form along with any required attachments.
6. New or revised Hazardous Materials Management Plan (HMMP) forms.
7. Copy of “As Built” plans accurately showing final locations of tanks, piping, dispensers, monitoring equipment, and any changes of materials or equipment used.

## C. Required Inspections And Testing

All activities described below must be witnessed by a representative of Environmental Health Services: [Note: Other permitting agencies should be contacted for their inspection requirements]

**A minimum of 48-hour advance notice is required.**

- a. Excavation
  - 1) Before placing backfill to determine if hole is wet or dry.
- b. Tank
  - 1) Upon delivery and prior to placement in excavation.  
Inspection of tank annular space vacuum gauge (if applicable)  
Observation of Holiday Test (for fiberglass coated tanks) at site.
  - 2) Verification of tank set and anchorage after placement in excavation.  
Primary tank pressure/vacuum tests performed per manufacturer's instructions.
- c. Piping and Containment Sumps.
  - 1) All required primary and secondary piping soap/pressure tests, including vent and vapor piping.
  - 2) Visual inspection of piping to ensure proper slope prior to covering
  - 3) Leak tests on piping sumps, spill buckets, and under dispenser containment pans.
- d. Final System Tests
  - 1) Complete functional test of tank and piping monitoring systems. The functional test shall consist of the activation of the alarm by exposing the probes to less than ½-inch of both the product to be stored in tank(s) and/or water and test of secondary vacuum or hydrostatic systems and overfill alarms.
  - 2) Enhanced Leak Detection (ELD) test on entire system.
  - 3) Final inspection and written approval to operate.

**NOTE:** Under no circumstances shall fuel or any regulated material be put into any storage facility without written approval of the Santa Cruz County Environmental Health Service.

**COUNTY OF SANTA CRUZ HEALTH SERVICES AGENCY  
ENVIRONMENTAL HEALTH SERVICES  
701 OCEAN STREET, ROOM 312, SANTA CRUZ, CA 95060 (831) 454-2022**

**GENERAL DETAILS AND SPECIFICATIONS  
UNDERGROUND STORAGE TANK INSTALLATION**

<p>1. <u>Distance</u></p> <p>a. From Structures/ Property Lines: 3 Foot Minimum</p> <p>b. Tank to Tank: 1 Foot Shell to Shell</p> <p>2. <u>Backfill</u> Must be clean, non-corrosive, inert material (pea-gravel, sand, etc.)</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 15%; text-align: center;"><u>Steel</u></th> <th style="width: 15%; text-align: center;"><u>FRP</u></th> </tr> </thead> <tbody> <tr> <td>a. Below Tank</td> <td></td> <td></td> </tr> <tr> <td>1) Dry Hole</td> <td style="text-align: center;">6 inch</td> <td style="text-align: center;">12 inch</td> </tr> <tr> <td>2) Wet Hole</td> <td style="text-align: center;">12 inch</td> <td style="text-align: center;">12 inch</td> </tr> <tr> <td colspan="3">(must be anchored to prevent flotation; highest anticipated groundwater must be considered)</td> </tr> <tr> <td>b. Horizontally</td> <td style="text-align: center;">12 inch</td> <td style="text-align: center;">18 inch</td> </tr> <tr> <td>c. Cover</td> <td></td> <td></td> </tr> <tr> <td>1) No Traffic</td> <td style="text-align: center;">24 inch</td> <td style="text-align: center;">24 inch</td> </tr> <tr> <td style="padding-left: 20px;">-OR-</td> <td colspan="2" style="text-align: center;">12 inch with 4 inch reinforced concrete</td> </tr> <tr> <td>2) Traffic</td> <td style="text-align: center;">36 inch</td> <td style="text-align: center;">36 inch</td> </tr> <tr> <td style="padding-left: 20px;">-OR-</td> <td colspan="2" style="text-align: center;">18 inch with 6 inch reinforced concrete</td> </tr> <tr> <td style="padding-left: 20px;">-OR-</td> <td colspan="2" style="text-align: center;">18 inch with 8 inch asphaltic concrete</td> </tr> <tr> <td colspan="3">(cap extension for asphalt/concrete must extend at least 1 foot beyond the outline of the tank in all directions)</td> </tr> </tbody> </table> <p>3. <u>Corrosion Protection</u> Must be provided for all tanks and piping by: Corrosion Resistant materials of construction.</p> <p>4. <u>Piping and Venting</u></p> <p>a. Venting must be of a size sufficient to prevent build-up of excessive pressure or blow back of vapors or liquid at the fill opening during tank filling.</p> <ul style="list-style-type: none"> <li>- Minimum inside diameter of 1¼ inch, Maximum 3 inch.</li> <li>- Terminate minimum of 12 feet above grade, 8 feet above fill opening and at least 2 feet above building eaves.</li> </ul> <p>b. All piping should be surrounded with 6 inches of clean, non-corrosive fill.</p>		<u>Steel</u>	<u>FRP</u>	a. Below Tank			1) Dry Hole	6 inch	12 inch	2) Wet Hole	12 inch	12 inch	(must be anchored to prevent flotation; highest anticipated groundwater must be considered)			b. Horizontally	12 inch	18 inch	c. Cover			1) No Traffic	24 inch	24 inch	-OR-	12 inch with 4 inch reinforced concrete		2) Traffic	36 inch	36 inch	-OR-	18 inch with 6 inch reinforced concrete		-OR-	18 inch with 8 inch asphaltic concrete		(cap extension for asphalt/concrete must extend at least 1 foot beyond the outline of the tank in all directions)			<p>c. Fill pipes and discharge lines shall enter tanks only through the top.</p> <p>d. Piping should be arranged so that lines do not cross over tanks.</p> <p>e. All piping and vapor recovery lines must be sloped to the tank a minimum of 1/8 inch per foot.</p> <p>f. Swing joints should be used for changes in direction at the dispenser and at the tank connection for metallic piping. Fiberglass piping shall be used as recommended by pipe manufacturer.</p> <p>g. Piping joints for Class I liquids shall be welded when located within concealed spaces within buildings.</p> <p>h. Vent discharge and product dispensing must be a minimum distance of 5 feet from any building opening or property line that may be built upon.</p> <p>5. <u>Miscellaneous</u></p> <p>a. Minimum of 20A/20-BC (rated fire extinguisher) located within 75 feet of any pump, dispenser or fill-pipe openings.</p> <p>b. "NO SMOKING" signs.</p> <p>c. Obtain clearance from the Monterey Bay Unified Air Pollution Control District (831) 647-9411; ask for "PERMITS".</p> <p>d. Special requirements for automotive service stations and pressurized systems refer to Uniform Fire Code sections 79.902(h), 79.903(a)(c)(e), 79.904(e).</p> <p>6. <u>Secondary Containment</u></p> <p>a. Required of entire system</p> <p>b. Compatible and resistant to materials stored.</p> <p>7. <u>References</u></p> <p>a. Other requirements may apply. Refer to 1988 Uniform Fire Code and Chapter 7.100, Santa Cruz County Code.</p>
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SANTA CRUZ COUNTY HEALTH SERVICES AGENCY  
ENVIRONMENTAL HEALTH SERVICE  
701 Ocean Street, Room 312, Santa Cruz, CA 95060 (831) 454-2022

**APPLICATION FOR PERMIT TO CONSTRUCT  
UNDERGROUND HAZARDOUS MATERIALS STORAGE TANK**

PERMIT NUMBER: \_\_\_\_\_ FEE PAID: \$ \_\_\_\_\_ DATE: \_\_\_\_\_

CASH REGISTER VALIDATION

Location: \_\_\_\_\_

Facility Name: \_\_\_\_\_ APN: \_\_\_\_\_

Owner/Operator: \_\_\_\_\_ Telephone: \_\_\_\_\_

Property Owner: \_\_\_\_\_ Telephone: \_\_\_\_\_

Contractor: \_\_\_\_\_ License Number: \_\_\_\_\_

Address: \_\_\_\_\_ Telephone: \_\_\_\_\_

Owner/Builder Declaration submitted:  Yes  No  Not applicable

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**TANKS** (ATTACH DETAIL SHEETS FROM MANUFACTURER)

Number of tanks being installed: \_\_\_\_\_

	<u>CAPACITY</u>	<u>WILL STORE</u>	<u>MANUFACTURER</u>
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____

PIPING: Pressure \_\_\_\_\_ Suction \_\_\_\_\_

CONSTRUCTION MATERIAL: Primary \_\_\_\_\_ Secondary \_\_\_\_\_

Depth to groundwater: \_\_\_\_\_ Determined by: \_\_\_\_\_

Describe leak detection system for tanks & piping (attach detail sheets from manufacturer):

\_\_\_\_\_

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**FOR OFFICE USE ONLY**

PERMIT APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ EXPIRATION DATE: \_\_\_\_\_

INSPECTED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

FINALED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

**APPLICANT TO OBTAIN CLEARANCES:**

**HAZARDOUS MATERIALS FACILITY ROUTING AND CLEARANCE FORM**

Address \_\_\_\_\_ APN \_\_\_\_\_

Project Name \_\_\_\_\_

Owner/Operator \_\_\_\_\_ Telephone \_\_\_\_\_

Contact Person \_\_\_\_\_ Telephone \_\_\_\_\_

**CLEARANCES:**

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**ZONING/PLANNING** By: \_\_\_\_\_ Date \_\_\_\_\_

( ) APPROVED ( ) NOT APPROVED ( ) NOT APPLICABLE

Remarks: \_\_\_\_\_

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**BUILDING INSPECTION** By: \_\_\_\_\_ Date \_\_\_\_\_

( ) APPROVED ( ) NOT APPROVED ( ) NOT APPLICABLE

Remarks: \_\_\_\_\_

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**FIRE AGENCY** By: \_\_\_\_\_ Date \_\_\_\_\_

( ) APPROVED ( ) NOT APPROVED ( ) NOT APPLICABLE

Remarks: \_\_\_\_\_

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**ENVIRONMENTAL HEALTH** By: \_\_\_\_\_ Date \_\_\_\_\_

( ) APPROVED ( ) NOT APPROVED ( ) NOT APPLICABLE

Remarks: \_\_\_\_\_

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**OTHER (RWQCB, AIR POLLUTION CONTROL DISTRICT, SANITARY DISTRICT, ETC.)**

\_\_\_\_\_ By: \_\_\_\_\_ Date \_\_\_\_\_

( ) APPROVED ( ) NOT APPROVED ( ) NOT APPLICABLE

Remarks: \_\_\_\_\_

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\_\_\_\_\_ By: \_\_\_\_\_ Date \_\_\_\_\_

( ) APPROVED ( ) NOT APPROVED ( ) NOT APPLICABLE

Remarks: \_\_\_\_\_

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\_\_\_\_\_ By: \_\_\_\_\_ Date \_\_\_\_\_

( ) APPROVED ( ) NOT APPROVED ( ) NOT APPLICABLE

Remarks: \_\_\_\_\_

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WORKER'S COMPENSATION INSURANCE

UNDERGROUND STORAGE TANK(S) LOCATION \_\_\_\_\_

FACILITY NAME \_\_\_\_\_

PROPERTY OWNER'S NAME \_\_\_\_\_ PHONE: \_\_\_\_\_

**OWNER-BUILDER DECLARATION**

Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to provisions of the Contractors License Law (Chapter 9 [commencing with Section 7000] of Division 3 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.):

I hereby affirm that I am exempt from the Contractors License Law for the following reason

- I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his or her own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he or she did not build or improve for the purpose of sale.)
- I, as the owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law).

WORKER'S COMPENSATION DECLARATION

If you will not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California, fill out Section A. If you employ persons in a manner that will require you to provide Workers' Compensation Insurance or self-insurance you must fill in Section B and provide a copy of the insurance documents.

A. CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE

I certify that in the performance of the work for which this permit is issued. I shall not employ any person in any manner so as to become subject to the Workers' Compensation Laws of California.

Date \_\_\_\_\_ Applicant \_\_\_\_\_

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked.

B. WORKERS COMPENSATION DECLARATION

I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Workers' Compensation insurance, or a certified copy thereof (Sec. 3800 Lab. C.).

Policy No. \_\_\_\_\_ Company \_\_\_\_\_

Certified copy is hereby furnished

Certified copy is filed with the County Building Inspection Department or County Environmental Health Department.

Date \_\_\_\_\_ Applicant \_\_\_\_\_