

Appendix A Underground Storage Tank Permit

Contents of Appendix A

- I. Application
- II. Workplan for UST Closure
- III. Workplan for Post Tank Removal Investigations
- IV. Stormwater Management Plan for Underground Storage Tank Permits

I. Underground Storage Tank Permit Application



**PERMIT APPLICATION
PART I
GENERAL PROJECT INFORMATION**

UNDERGROUND HAZARDOUS MATERIALS STORAGE TANK FACILITY

OFFICE USE ONLY

PERMIT #: _____

PLAN CK#: _____

DATE RECEIVED: _____

FEE PAID: _____

PLAN APPROVAL: _____

HYDRO UNIT: _____

BENEF. USE: _____

A. SITE NAME: _____

SITE ADDRESS: _____ City _____ Zip _____

B. PROPERTY OWNER:

Assessors Parcel No. _____

Company _____ Contact _____

Mailing Address _____ City _____ State _____ Zip _____

Phone () _____

24-Hour Emergency Contact _____ Phone () _____

C. TANK OPERATOR:

Company _____ Contact _____

Mailing Address _____ City _____ Zip _____

Phone () _____

24-Hour Emergency Contact _____ Phone () _____

D. CONTRACTOR PERFORMING WORK:

Primary Contractor _____ Contract _____

Mailing Address _____ City _____ Zip _____

Phone () _____

State Contractor License _____

Hazardous Substances Certificate _____

Worker's Compensation Insurance Company _____

E. APPLICATION SUBMITTAL, PLAN APPROVAL, PERMIT ISSUANCE, AND REQUIRED INSPECTIONS

Submit one (1) original and two (2) copies of this application package, including plan drawings with the required fee to the Department of Environmental Health (DEH), Hazardous Materials Division, 1255 Imperial Avenue, San Diego, CA 92101; or mail to P.O. Box 129261, San Diego, CA 92112-9261. **Checks should be made payable to the County of San Diego.**

A permit will be issued by DEH upon review and approval of the application and plans. The required fees must be submitted with the application package. Information in addition to that presented in the application package may be needed in order to obtain final approval. No work is to begin on the proposed project until a permit has been issued. The required inspections cannot be scheduled until a permit is issued.

Once the permit has been issued, it is the responsibility of the permittee to notify DEH at least two (2) working days in advance to schedule each required inspection.

Construction stages at which inspections are required are indicated in each subpart of this application form (i.e., Part II, III, IV, & V).

DEH:HMD-9311 (Rev. 01/03)

1-1

County of San Diego
Department of Environmental Health

APPENDIX A: UNDERGROUND STORAGE TANK PERMIT

F. PROJECT WORK TO BE COMPLETED: Check Applicable Box	COMPLETE APPLICATION PARTS	FEE CODE TABLE G
☐ Installation/Construction of new tank(s) systems only (without closing any existing tanks)	I & II	1
☐ Closure of existing tank(s) systems with installation of new tanks (tank replacement)	I, II & III	1 & 2
☐ Closure of existing tank(s) systems with no new tank installation	I & III	2
☐ Interior coating/repair of an existing underground storage tank	I & IV	1
☐ Repipe/pipe-repair piping upgrade of an existing underground storage tank facility	I & V	3
☐ Installation/Construction of vaulted tanks	VI	4

G. FEES: The fees shown below cover plan review and the required field inspections. Use the appropriate Fee Code as determined in Section F above.

FEE CODE	Installation fee for first tanks \$890.00 (fee will apply to all <u>tank</u> installations, <u>tank</u> repairs, interior lining and bladder installations)	Fee: \$
1	Installation fee for each additional tank No. _____ X \$90.00	Fee: \$
	Establishment Base Fee \$180.00 (Applies to establishments not currently under permit with DEH)	Fee: \$
	Operating Permit Fee per tank No. _____ X \$270.00 (Does not apply to replacement tanks if the existing tank to be replaced has paid current operating permit fees)	Fee: \$
2	Closure fee for first tank \$535.00	Fee: \$
	Closure fee for each additional tank No. _____ X \$90.00	Fee: \$
3	NOTE: Upgrades / Repair shall include but not limited to pipe repairs, repipes, and new monitoring system installations	
	Upgrade /Repair – 2 inspections (including soil sampling) \$755.00	Fee: \$
	Upgrade /Repair – 1 inspection and no soil sampling \$535.00	Fee: \$
4	Consultation fee (e.g. vaulted tank: minimum 2 hours) Hours X \$90.00	Fee: \$
5	Re-inspection fee \$300.00	Fee: \$
	Plan Re-Review \$200.00	Fee: \$
TOTAL FEE: \$		

H. PERMITS REQUIRED BY OTHER AGENCIES:

FIRE DEPARTMENT _____ APCD _____ BUILDING DEPARTMENT _____ OTHER _____

Provide copies of approved applications from these departments and others if needed.



PERMIT APPLICATION

PART II

APPLICATION FOR PERMIT TO CONSTRUCT UNDERGROUND STORAGE TANK FACILITY

BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER-Call (916) 324-2300 for information

TY (TK) HQ

4	4	-						
---	---	---	--	--	--	--	--	--

NOTE: Application will be disapproved without this information

A. TOTAL NUMBER OF TANKS TO BE INSTALLED _____

B. TYPE OF PRIMARY CONTAINMENT

TANK NO.	MANUFACTURER	COMPOSITION	CAPACITY	STORAGE MATERIAL

C. TYPE OF SECONDARY CONTAINMENT

- ☐ Multiple compartment double wall tanks
☐ Double wall tanks ☐ Concrete Vault
☐ Flexible liner (manufacturer) _____
 Other, briefly describe _____

D. DISPENSER CONTAINMENT

Manufacturer _____
 Type of Monitoring:
☐ Mechanical Monitoring
☐ Electronic Monitoring _____ Model

E. UNDERGROUND STORAGE TANK LEAK DETECTION SYSTEM

- ☐ Continuous leak detection device within the secondary containment, connected to an audible/visual alarm system
 Manufacturer/Model No. _____
☐ Other, briefly describe _____

F. UNDERGROUND STORAGE TANK PIPING MATERIALS AND CONSTRUCTION

PRODUCT PIPING: Primary containment _____
 Secondary containment _____
VAPOR, VENT, FILL PIPING: Primary containment _____
 (fittings and unused bungs)
 Secondary containment _____

G. TYPE OF PRODUCT DELIVERY/FILL SYSTEM (I.E., PRESSURIZED, SUCTION, REMOTE FILL)

Motor vehicle fuel tanks _____

Waste oil tanks _____

Other tanks, briefly describe _____

**NOTE: MANIFOLDED PRODUCT DELIVERY SYSTEMS REQUIRE
SECONDARY CONTAINMENT AND CONTINUOUS MONITORING**

H. PIPING LEAK DETECTION SYSTEM

Continuous monitoring device within the secondary containment

Manufacturer _____

-AND-

☐ Leak detector on pressurized line (must shut down pump and activate alarm)*

Manufacturer _____

-OR-

☐ Continuous monitoring device shuts down pump and activates alarm*

*NOTE: not required for non-pressurized systems (i.e., suction, remote fill)

I. CORROSION PROTECTION FOR UNDERGROUND PIPING

☐ Coated and Cathodically Protected Steel

☐ Fiberglass

J. UNDERGROUND STORAGE TANK SPILL/OVERFILL PREVENTION SYSTEM

Catchment Basin surrounding the product fill pipe.

Manufacturer _____

-AND-

☐ Product Level Sensing Device with High Level Alarm and Ball Float Valves

Manufacturer _____

-OR-

☐ Positive shutoff device in fill riser set at 95% of tank capacity

Manufacturer _____

-OR-

☐ Secondary containment for vent, vapor, and tank riser piping with Ball Float Valves or Product Level Sensing Device with High Level Alarm

Manufacturer _____

K. TYPE/MANUFACTURER OF VAPOR RECOVERY SYSTEM TO BE USED

Stage I Recovery System _____

Stage II Recovery System _____

L. DESCRIBE HOW YOU PROPOSE TO BALLAST THE TANKS FROM FLOTATION
(TANKS MUST BE BALLASTED IF HIGHEST ANTICIPATED GROUNDWATER IS AT LEAST 25' BELOW GROUND SURFACE)

☐ Anchor Straps per manufacturer's specification with deadman and/or slab

☐ Buoyancy Calculations (must be submitted)

☐ Depth of Groundwater: _____ ft. (Provide documentation)

DEH:HM-9312 (Rev. 01-03) II-2 County of San Diego
Department of Environmental Health

M. CERTIFICATION

Attach certification from the manufacturer that the Hazardous Materials to be stored are compatible with the tank and piping materials.

N. ATTACH THREE COPIES OF PLANS SHOWING THE FOLLOWING:

1. Location of all existing and proposed structures.
2. Location of all existing underground tanks and piping (indicate if tanks are to be closed or replaced).
3. Location of all proposed tanks and piping.
4. Cross section of the tank and piping system(s). This drawing must show secondary containment of tank(s) and piping, spill/overflow prevention devices, leak detection equipment with the correct number of sensing probes and extension of all pipes and ancillary equipment to finish grade.
5. Location of underground utility vaults and lines.
6. Site plan showing site address, nearest cross street and property lines (scale and north arrow must be used).

O. REQUIRED INSPECTIONS - NEW UNDERGROUND STORAGE TANK INSTALLATIONS

EACH NEW TANK INSTALLATION MUST BE INSPECTED BY DEH. TWO INSPECTIONS ARE REQUIRED.

1. **FIRST INSPECTION: CERTIFICATION AND PRESSURE TEST INSPECTION**
- pressure test of entire primary system (tank, product, vent, vapor, fill).
2. **SECOND INSPECTION: MONITORING EQUIPMENT AND INTEGRITY TEST VERIFICATION**
- performance check of the monitoring system. Tank manufacturer's certification, DEH Certification of Tank System installation, Certification of Monitoring Equipment, Integrity Test Report, Form C, and Monitoring and Response Plans must be submitted to the inspector at the time of inspection. **All documents must be submitted before final operating permit will be issued.**

Note: Failure to meet any of the conditions of the permit may result in a reinspection and reinspection fee.

P. DECLARATION

I declare that to the best of my knowledge and belief the statements and information provided are correct and true. I understand that information, in addition to that provided above, may be needed in order to obtain a permit from the Department of Environmental Health (DEH), and that no work is to begin on this project until the permit is issued.

I understand that any changes in design, materials, or equipment will void my permit to construct if prior approval is not obtained. I further understand, that a permit to operate the underground storage tank(s) will not be issued until the DEH inspector approves all conditions of the permit.

I will notify the DEH at least two working days (48 hours) in advance to schedule each required inspection. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared or assumed by the County of San Diego.

SIGNATURE & TITLE: _____

PRINT NAME: _____

TELEPHONE: () _____ DATE _____



PERMIT APPLICATION
PART III
APPLICATION FOR PERMIT TO CLOSE UNDERGROUND STORAGE TANK SYSTEM

- A. TOTAL NUMBER OF TANK SYSTEMS TO BE CLOSED: _____
 NOTE: UST SYSTEMS INCLUDE TANK AND ALL ASSOCIATED PIPING.
 B. DESCRIPTION OF TANKS TO BE CLOSED:

TANK NO.	CAPACITY	DATE INSTALLED	TANK COMPOSITION	TANK PRESENTLY IN USE?	MATERIALS STORED IN TANK

- C. HAS THE TANK SYSTEM EVER FAILED OR LEAKED? YES ☐ NO ☐ UNKNOWN ☐

D. REASON FOR TANKS TO BE CLOSED:

- ☐ Meet current state/federal requirements
☐ Replacement of existing tanks
☐ Tank system failure, briefly describe _____

- ☐ Other, briefly describe _____

DEH USE ONLY:

Project Manager: _____
 Type: _____
 Status: _____

E. PREVIOUS OWNERS AND OPERATORS OF THE TANKS:

Dates

Owner/Operator

_____	_____
_____	_____
_____	_____
_____	_____

F. PROPOSED METHOD OF CLOSURE: ☐ REMOVAL ☐ CLOSURE IN PLACE

SAMPLING PROTOCOL Tank owner/authorized representative responsible for all sampling analyses and associated costs.

- For tank systems that are to be removed. The excavation shall be exposed prior to the scheduled inspection and sampling points identified by the Department of Environmental Health (DEH) inspector. Sampling is required for both tank and piping. **The tank and piping must remain in the excavation until the DEH Inspector approves the removal.**
- Tank systems to be closed in place. Submit an alternate plan which must include soil sampling, reason for closing the tank system in place and type of material to be used to fill the tank. Soil sampling and/or hydrostatic testing is also required for piping closures. Tank system closure in place will only be considered after evaluating the risks and hazards if the tank system

G. DISPOSAL SITE OF TANK: _____

Note: You must inform DEH of the address of where the tank and piping is to be disposed. **Plans will be disapproved without this information.**

H. ATTACH THREE COPIES OF PLANS SHOWING THE FOLLOWING:

1. Property lines, site address, scale, north arrow.
2. Location of all existing structures.
3. Location of all existing underground storage tank facilities.
4. Location of underground storage tanks and piping to be closed.
5. Location of underground utility lines and vaults.

I. REQUIRED INSPECTION-PERMIT TO CLOSE

A representative from DEH must be on site at the time the tank(s) are closed.

1. TANK SYSTEM CLOSURE BY REMOVAL:

- The excavation shall be exposed prior to the scheduled inspection. The tank owner/authorized representative on site must submit a uniform hazardous waste manifest demonstrating that the tank has been properly decontaminated. A combustible gas instrument and soil sampling equipment must be on site. The DEH Inspector will identify sampling points. The tank and piping must remain in the excavation until DEH approves the removal.

2. TANK SYSTEM CLOSURE IN PLACE:

- Soil sampling for tank(s) and piping.
- After approval of the alternate plan, the tank owner/authorized representative on site shall submit a uniform hazardous waste manifest demonstrating that the tank has been properly decontaminated. The DEH Inspector shall verify that the tank system has been properly emptied and will witness the filling with an approved inert substance. Piping must be closed at the same time as the tank

J. DECLARATION

I declare that to the best of my knowledge and belief, the statements and information provided are correct and true. I understand that information in addition to that provided above may be needed in order to obtain final approval by the Department of Environmental Health (DEH).

I understand that tests and procedures that may be required by other departments and agencies to demonstrate adequate site safety or suitability for further development (e.g. soil compaction testing) are in addition to the requirements of the Department of Environmental Health (DEH).

I will notify the Department of Environmental Health (DEH) at least two working days (48 hours) before work is to begin in order to schedule the required inspections. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared or assumed by the County of San Diego.

SIGNATURE & TITLE _____

PRINT NAME _____

TELEPHONE () _____ DATE _____



PERMIT APPLICATION

PART IV

APPLICATION FOR PERMIT TO INTERIOR LINE/COAT/REPAIR UNDERGROUND STORAGE TANK

The repair material and lining process shall be listed or certified by an independent testing organization based on voluntary consensus standards.

NOTE: Only motor vehicle fuel storage tanks may be repaired by the interior coating process. In accordance with Section 25296 of Chapter 6.7 of the California Health and Safety Code, such an underground storage tank may only be repaired once.

BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER-Call (916) 324-2300 for information

TY (TK) HQ

4	4	-					
---	---	---	--	--	--	--	--

A. NUMBER OF UNDERGROUND STORAGE TANKS TO BE INTERIOR LINED/COAT/REPAIRED: _____

B. DESCRIPTION OF UNDERGROUND STORAGE TANKS TO BE INTERIOR LINED/COAT/REPAIRED:

TANK NO.	CAPACITY	DATE INSTALLED	TANK COMPOSITION	TANK PRESENTLY IN USE	MATERIALS STORED IN TANK

C. REASON FOR TANKS TO BE INTERIOR LINED/COATED/REPAIRED:

- ☐ Upgrade to meet current state/federal requirements
☐ Tank system failure, please describe _____

D. DESCRIBE WHAT TESTS WILL BE CONDUCTED TO DETERMINE THE STRUCTURAL INTEGRITY OF THE UNDERGROUND STORAGE TANK TO BE INTERIOR LINED/REPAIRED:

STEEL TANKS

- ☐ Ultrasonic Test (Required in San Diego County)
AND

Certification by a "Special Inspector" that the shell will provide structural support for the interior lining

NON-STEEL TANKS

- ☐ Certification in accordance with manufacturer's specifications

E. DESCRIBE THE TYPE OF CORROSION PROTECTION SYSTEM YOU PLAN TO INSTALL (Design must be certified and inspected by a registered corrosion engineer) _____

F. UNDERGROUND STORAGE TANK SPILL/OVERFILL PREVENTION SYSTEM

Catchment Basin surrounding the product fill pipe: Manufacturer _____

-AND-

- ☐ Secondary containment for vent, vapor, and tank riser piping with Ball Float Valves or Product Level Sensing Device with High Level Alarm Manufacturer _____

-OR-

- ☐ Positive shutoff device in fill pipe at 95% full Manufacturer _____

-OR-

- ☐ Product Level Sensing Device with High Level Alarm and Ball Float Valves Manufacturer _____

G. CERTIFICATION: (Application will be disapproved without this information)

Attach detailed information as to the methods used to line the tank and a certification from the manufacturer, or his authorized representative, of the tank lining material's capability to store the proposed hazardous substances.

DEH:HM-9314 (Rev 01-03)

IV-1

County of San Diego
Department of Environmental Health

H. ATTACH THREE COPIES OF PLANS SHOWING THE FOLLOWING:

1. Property lines, site address, scale, north arrow.
2. Location of all existing structures.
3. Location of all existing underground storage tank facilities.
4. Location of underground storage tanks to be lined/coated/repared.
5. Location of underground utility lines and vaults.

I. DESCRIBE THE MONITORING ALTERNATIVE/PROPOSAL YOU PLAN TO IMPLEMENT AFTER THE REPAIRS ARE COMPLETED. _____

J. REQUIRED INSPECTIONS-PERMIT TO INTERIOR LINE/COAT/REPAIR

All tests and evaluations required by Chapter 6.7 of the California Health and Safety Code, Section 25296, and CCR Title 23, Article 6 are subject to inspection and review by the Department of Environmental Health (DEH).

1. FIRST INSPECTION (INTERIOR LINING/REPAIR EVALUATION):

- The first required inspection is of the tank upon completion of the soil sampling, abrasive blasting and vacuum procedure. Documents to determine the structural integrity of the tanks and manifests of proper disposal of the wastes must be received by the SAM inspector at this time.

2. SECOND INSPECTION (INTERIOR LINING/REPAIR VERIFICATION):

- The second inspection is upon completion of repair/upgrade. Documents required at this time are: Integrity Test Data, Certification of Monitoring, Cathodic Protection Certification, Lab results/hazardous waste manifest for sandblast waste, holiday, thickness and hardness certification. The contractor shall certify that fill pipe striker plates have been installed and the tank lining process was conducted in accordance with CCR Title, Article 6, and NLPA 631 or equal. The DEH inspector shall witness the pressure test and verify installation of monitoring system, cathodic protection and overfill/kill protection.

K. DECLARATION

I declare that to the best of my knowledge and belief the statements and information provided are correct and true. I understand that information in addition to that provided above may be needed in order to obtain a permit from the Department of Environmental Health (DEH), and that no work is to begin on this project until a permit has been issued.

I understand that any changes in design, materials, or equipment will void my permit to modify if prior approval is not obtained.

ANY UNAUTHORIZED RELEASE (LEAK) DISCOVERED DURING THE INTERIOR LINING COATING PROCESS MUST BE REPORTED TO HMD AND WILL BE SUBJECT TO SITE ASSESSMENT/ MITIGATION ACTIVITIES BY SAM AND OTHER RESPONSIBLE AGENCIES.

I will notify DEH at least two working days (48 hours) before work on this tank interior coating is to begin in order to schedule each required inspection. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that the responsibility is not shared or assumed by the County of San Diego.

SIGNATURE AND TITLE: _____

PRINT NAME: _____

TELEPHONE: () _____ DATE: _____



**PERMIT APPLICATION
PART V**

APPLICATION FOR REPIPE, PIPING UPGRADE OR PIPE REPAIR OF AN EXISTING TANK FACILITY

BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER-Call (916) 324-2300 for information

TY (TK) HQ

4	4	-						
---	---	---	--	--	--	--	--	--

NOTE: Application will be disapproved without this information

A. TOTAL NUMBER OF TANKS WHERE PIPING IS TO BE REPIPED, REPAIRED OR UPGRADED _____

B. DESCRIPTION OF TANKS WHERE PIPING IS TO BE REPIPED, REPAIRED OR UPGRADED

TANK NO.	TANK CAPACITY	PRODUCT TYPE	COMPOSITION

CHECK BELOW WHAT PIPING IS TO BE REPLACED, REPAIRED OR UPGRADED.

	PRODUCT	VAPOR	VENT	FILL LINES
TANK NO. 1				
TANK NO. 2				
TANK NO. 3				
TANK NO. 4				

C. REASON FOR TANKS TO BE REPIPED/REPAIRED/UPGRADED:

- ☐ Upgrade to meet current state/federal requirements
☐ Piping system failure
☐ Other, briefly describe _____

D. PIPING MATERIALS AND CONSTRUCTION:

Primary Containment _____ Manufacturer/model _____
 Secondary Containment _____ Manufacturer/model _____
 Dispenser Containment _____ Manufacturer/model _____

E. TYPE OF PRODUCT DELIVERY/FILL SYSTEM:

- ☐ Pressurized ☐ Suction ☐ Gravity ☐ Direct Fill ☐ Manifolded System

F. PIPING LEAK DETECTION/MONITORING SYSTEM:

- ☐ Leak detector on pressurized line: Manufacturer _____
☐ Continuous monitoring device within the secondary containment: Manufacturer _____
☐ Leak detector on pressurized line (must shut down pump and activate alarm) (pressurized lines only)
☐ Continuous monitoring device shuts down pump and activates alarm (pressurized lines only)

G. DISPENSER CONTAINMENT MONITORING: (at a minimum must shut down dispenser)

- ☐ Mechanical monitoring
☐ Electronic monitoring _____ Model _____

H. TANK OVERFILL PREVENTION:

Catchment Basin surrounding the product fill pipe:

Manufacturer _____

-AND-

- ☐ Product Level Sensing Device with High Level Alarm and Ball Float Valves

Manufacturer _____

-OR-

- ☐ Positive shutoff device in fill pipe at 95% full

Manufacturer _____

-OR-

- ☐ Secondary containment for vent, vapor, and tank riser piping with Ball Float Valves or Product Level Sensing Device with High Level Alarm

Manufacturer _____

I. PIPING UPGRADE REQUIREMENT:

- ☐ Cathodic protection for all product piping in direct contact with backfill material, including turbine, flex connectors and all other appurtenances containing product
- ☐ Secondary containment of all product piping including turbines, dispenser piping, and all other appurtenances containing product

J. PROPOSED METHOD OF PIPE CLOSURE:☐ REMOVAL☐ CLOSURE IN PLACE

SAMPLING PROTOCOL Tank owner/authorized representative responsible for all sampling analyses and associated costs.

- For piping that is to be removed, the trenching shall be exposed prior to the scheduled inspection, sampling points will be identified by the DEH inspector and samples taken every 20 feet.
- Piping to be closed in place may be considered only if the removal might damage structures. Submit an alternate plan which must include soil sampling.

K. ATTACH THREE COPIES OF PLANS SHOWING THE FOLLOWING (Must be drawn to scale):

1. Location of existing and proposed structures.
2. Location of all existing underground tanks and piping. (Indicate what piping is to be closed in place or by removal)
3. Location of new piping, secondary containment, leak detection, and overfill prevention.
4. Cross section of piping, tank sumps, dispenser containment.

L. REQUIRED INSPECTIONS-PIPING REPAIR/REPLACEMENT/PIPING UPGRADE:

EACH PIPING REPAIR/REPLACEMENT AND/OR PIPING UPGRADE MUST BE INSPECTED BY DEH. THREE INSPECTIONS MAY BE REQUIRED.

1. FIRST INSPECTION:

- Piping to be closed by removal. Trenching shall be exposed prior to the scheduled inspection and sampling points identified by the DEH inspector.
- Piping to be closed in place. Piping shall be capped and drained and per alternate approved plan, samples collected by the DEH inspector.

2. SECOND INSPECTION:

- Pressure test of all piping repaired, replaced, or upgraded - verification of cathodic protection.

3. THIRD INSPECTION:

- Verification of leak detection devices/secondary containment.

M. DECLARATION

I declare that to the best of my knowledge and belief the statements and information provided are correct and true. I understand that information in addition to that provided above may be needed in order to obtain a permit from the Department of Environmental Health (DEH).

I understand that any changes in design, materials, or equipment will void my permit to construct if prior approval is not obtained.

I understand that tests and procedures that may be required by other departments and agencies to demonstrate adequate site safety or suitability for further development (e.g. soil compaction testing) are in addition to the requirements of the Department of Environmental Health (DEH).

I will notify the Department of Environmental Health (DEH) at least two working days (48 hours) before work is to begin in order to schedule the required inspection. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that the responsibility is not shared or assumed by the County of San Diego.

SIGNATURE & TITLE _____

PRINT NAME _____

TELEPHONE () _____ DATE _____



PERMIT APPLICATION
PART VI

APPLICATION TO CONSTRUCT A VAULTED UNDERGROUND STORAGE TANK FACILITY

A. TOTAL NUMBER OF TANKS TO BE INSTALLED _____

B. TYPE OF PRIMARY CONTAINMENT

TANK NO.	MANUFACTURER	COMPOSITION	CAPACITY	STORAGE MATERIAL

C. TYPE OF SECONDARY CONTAINMENT

☐ CONCRETE VAULT

☐ Other, briefly describe _____

D. TANK LEAK DETECTION SYSTEM

☐ Visual monitoring of the primary and secondary containments (NOTE: All exterior surfaces of the primary containment including the floor surface must be monitored by direct viewing.)

☐ Other, briefly describe _____

E. TANK PIPING MATERIALS AND CONSTRUCTION

PIPING TYPE	PRIMARY CONTAINMENT	SECONDARY CONTAINMENT
PRODUCT		
VAPOR, VENT, FILL		

F. TANK PIPING LEAK DETECTION SYSTEM

☐ Leak detector on pressurized line
Manufacturer _____

☐ Continuous monitoring within the secondary containment
Manufacturer _____

☐ Other, briefly describe _____

G. TYPE OF PRODUCT DELIVERY/FILL SYSTEM (CHECK ALL THAT APPLY)

☐ PRESSURIZED ☐ FUEL OIL SUPPLY (FOS)

☐ SUCTION ☐ FUEL OIL RETURN (FOR)

☐ REMOTE FILL ☐ Other, briefly describe _____

H. TANK SPILL/OVERFILL PREVENTION SYSTEM

☐ Automatic Shutoff Device
Manufacturer _____

☐ Product Level Sensing Device with high Level Alarm

☐ Ball Float Valves on vapor and vent lines

☐ Other, briefly describe _____

I. ATTACH TWO COPIES OF PLANS SHOWING THE FOLLOWING:

1. Location of all existing and proposed structures (generator, boiler, etc.)
2. Location of all existing underground tanks and piping
3. Location of all proposed tanks and piping
4. Cross section of tank and piping system. All surfaces of the tank must be visible for direct viewing, including the secondary containment of tank and piping, and leak detect equipment.
5. Location of underground utility vaults and lines.
6. Site plan showing site address, nearest cross street and property lines (**SCALE AND NORTH ARROW MUST BE USED**).

J. REQUIRED INSPECTION

After plans have been reviewed, a field inspection shall be made to verify if the tank system submitted on the plans were completed on the job site. The actual plans that were stamped from our office must be on site for the inspector to sign and finalize the status of the tank in accordance to Section 25283.5 of the California Health and Safety Code.

K. DECLARATION

I declare that to the best of my knowledge and belief, the statements and information provided are correct and true. I understand that information, in addition to that provided above, may be needed in order to obtain final approval by the Department of Environmental Health (DEH).

I understand that that tests and procedures that may be required by other departments and agencies to demonstrate adequate site safety or suitability for further development (e.g. soil compaction testing) are in addition to the requirements of the Department of Environmental Health (DEH).

I will notify the Department of Environmental Health (DEH) at least two working days (48 hours) in advance before work is to begin in order to schedule the required inspections. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared or assumed by the County of San Diego.

SIGNATURE & TITLE: _____

PRINT NAME: _____

TELEPHONE: () _____ DATE _____

DEH:HM-9316 (Rev. 01-03) VI-2 County of San Diego
Department of Environmental Health



PERMIT APPLICATION
PART VII
APPLICATION FOR PERMIT TO INSTALL A BLADDER IN AN UNDERGROUND STORAGE TANK

The bladder material and process shall be listed or certified by an independent testing organization based on voluntary consensus standards.

NOTE: Only motor vehicle fuel storage tanks may be retrofitted with a Bladder System.

BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER-Call (916) 324-2300 for information

TY (TK) HQ

4	4	-						
---	---	---	--	--	--	--	--	--

- A. NUMBER OF UNDERGROUND STORAGE TANKS TO BE RETROFITTED WITH A BLADDER:** _____
B. DESCRIPTION OF UNDERGROUND STORAGE TANKS TO BE RETROFITTED WITH A BLADDER:

TANK NO.	CAPACITY	TANK COMPOSITION	MATERIALS STORED IN TANK

C. REASON FOR TANKS TO BE INTERIOR LINED/COATED/REPAIRED:

- ☐ Upgrade to meet current state/federal requirements
☐ Tank system failure, please describe _____

D. TYPE OF SECONDARY CONTAINMENT:

- ☐ Steel Tank(s)
☐ Concrete Tank(s)
☐ Other _____

E. DESCRIBE WHAT TESTS WILL BE CONDUCTED TO DETERMINE THE STRUCTURAL INTEGRITY OF THE UNDERGROUND STORAGE TANK TO BE RETROFITTED WITH A BLADDER:

STEEL TANKS

- ☐ Ultrasonic Test (Required in San Diego County)
 AND
 Certification by a "Special Inspector" that the shell will provide structural support for the Bladder.

NON-STEEL TANKS

- ☐ Certification by a "special inspector" that the shell will provide structural support for the Bladder.

F. DESCRIBE THE TYPE OF CORROSION PROTECTION SYSTEM YOU PLAN TO INSTALL (Design must be certified and inspected by a registered corrosion engineer) _____

G. UNDERGROUND STORAGE TANK LEAK DETECTION SYSTEM.

- ☐ Continuous leak detection device within the secondary containment, connected to an audible/visual alarm system.
 Manufacturer/Model No. _____
☐ Other, briefly describe _____

H. UNDERGROUND STORAGE TANK SPILL/OVERFILL PREVENTION SYSTEM

DEH-HM-9317 (Rev. 01-03)

VII-1

County of San Diego
 Department of Environmental Health

Catchment Basin surrounding the product fill pipe: Manufacturer _____

☐ Secondary containment for vent, vapor, and tank riser piping with Ball Float Valves or Product Level Sensing Device with High Level Alarm Manufacturer _____

☐ Positive shutoff device in fill pipe at 95% full Manufacturer _____

☐ Product Level Sensing Device with High Level Alarm and Ball Float Valves Manufacturer _____

I. CERTIFICATION: (Application will be disapproved without this information)
 Attach detailed information as to the methods used to retrofit the tank with a bladder and a certification from the manufacturer, or his authorized representative, of the bladder material's capability to store the proposed hazardous substances.

J. ATTACH THREE COPIES OF PLANS SHOWING THE FOLLOWING:

1. Property lines, site address, scale, north arrow.
2. Location of all existing structures.
3. Location of all existing underground storage tank facilities.
4. Location of underground storage tanks to be retrofitted with a bladder.
5. Location of underground utility lines and vaults.

K. DESCRIBE THE MONITORING ALTERNATIVE/PROPOSAL YOU PLAN TO IMPLEMENT AFTER THE REPAIRS ARE COMPLETED.

L. REQUIRED INSPECTIONS-PERMIT TO INSTALL A BLADDER:
 All tests and evaluations required by Chapter 6.7 of the California Health and Safety Code, Section 25296, and CCR Title 23, Article 6 are subject to inspection and review by the Department of Environmental Health.

1. FIRST INSPECTION: CERTIFICATION OF STRUCTURAL EVALUATION

- Provide documentation of structural certification and manifest for proper disposal of wastes generated during tank closure.

2. SECOND INSPECTION: CERTIFICATION OF BLADDER INSTALLATION

- The second inspection is upon completion of the bladder installation. Documents required at this time are: Integrity Test Data, Cathodic Protection Certification, Certification of Monitoring, Bladder Installation Certification. The Contractor shall certify that fill pipe striker plates have been installed and the Bladder installation process was conducted with the manufacturer's requirements and CCR Title 23, Article 6. The DEH Inspector shall verify the installation of the monitoring system, Cathodic protection and spill/overflow protection. All documents must be submitted before a final operating permit will be issued.

M. DECLARATION

I declare that to the best of my knowledge and belief the statements and information provided are correct and true. I understand that information in addition to that provided above may be needed in order to obtain a permit from the Department of Environmental Health (DEH) and that no work is to begin on this project until a permit has been issued.

I understand that any changes in design, materials, or equipment will void my permit to modify if prior approval is not obtained.

ANY UNAUTHORIZED RELEASE (LEAK) DISCOVERED DURING THE BLADDER INSTALLATION PROCESS MUST BE REPORTED TO DEH AND WILL BE SUBJECT TO SITE ASSESSMENT/MITIGATION ACTIVITIES BY SAM AND OTHER RESPONSIBLE AGENCIES.

I will notify DEH at least two working days (48 hours) before work on this tank interior coating is to begin in order to schedule each required inspection. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that the responsibility is not shared or assumed by the County of San Diego.

SIGNATURE AND TITLE: _____

PRINT NAME: _____

TELEPHONE: () _____ DATE: _____

DEH:HM-9317 (Rev. 01-03) VII-2 County of San Diego
 Department of Environmental Health

II. Workplan for UST Closure



EST. H# _____
PLAN CHECK # _____

**WORKPLAN
FOR
UNDERGROUND STORAGE TANK CLOSURE**

1. Site Name _____
2. Site Address _____

3. Describe the existing land use in the surrounding area (residential, commercial, schools). Describe the locations of nearest receptors and the prevailing wind.

4. Explain how the excavation will be secured. Describe fencing/site security and other methods that ensure public safety.

5. If soil is to be stockpiled, describe the location on the Plan Check map. Describe method of soil containment (berming/covers, run-off control).

6. Do you plan to conduct site assessment or remedial work beyond what is necessary to remove the underground storage tank(s) and perform the mandatory soil sampling required by the Site Assessment and Mitigation Program (SAM) of the Department of Environmental Health?

☐ Yes
☐ No

If Yes, a Workplan for Post-Tank Removal Investigation must be completed under the direction of a registered professional.

Signature _____

Title _____

Telephone _____ Date _____

DEH:SAM-9176 (Rev. 6/99)

County of San Diego
Department of Environmental Health

III. Workplan for Post Tank Removal Investigations

**INSTRUCTION SHEET
FOR A
POST-TANK REMOVAL INVESTIGATION**

A Post-Tank Removal Investigation generally involves the use of a backhoe to conduct a subsurface site investigation of petroleum hydrocarbon contamination within 72 hours of underground storage tank (UST) removal. Department of Environmental Health (DEH) considers the Post-Tank Removal Investigation to be an effective method of subsurface investigation only in situations where the volume of excavated contaminated soil is limited (approximately 50 cubic yards or a volume that can be properly managed as per Section 7.VI of the Site Assessment & Mitigation (SAM) Manual and not cause a nuisance). A DEH guideline for conducting an acceptable post-tank removal investigation is attached for your reference.

Complete in detail the attached Workplan for Post-Tank Removal Investigation if you plan to commence a subsurface site investigation immediately after removal of the UST(s). Please note the following conditions.

- The Workplan must be submitted with the UST closure application. The field investigation cannot be started until the UST closure permit and Workplan are approved by DEH.
- The Workplan must be implemented under the direction of the project's Registered Geologist, Certified Engineering Geologist or Registered Civil Engineer.
- The Workplan must provide assurance that the public (neighbors, pedestrians, etc.) is protected from contact with the contaminated soil, fugitive vapors, and from risk of accidents resulting from the site investigation activities.
- A complete site assessment report, signed by the above referenced registered professional, must be submitted to DEH within 60 days of the investigation.
- The investigation must be implemented in accordance with the SAM Manual.

Completion of the attached Workplan is **not required** by DEH under the following circumstances:

- The contractor's plan for site excavation is limited to the removal of the UST and surrounding backfill material and the contractor has no plans to excavate into and/or remove native soil for site investigation closure purposes.
- The DEH inspector directs the excavation of native soil to obtain representative soil samples in support of the UST closure requirements.
- An "Unauthorized Release" of hydrocarbons has previously occurred at the UST removal site and a Workplan has been pre-approved by the DEH caseworker.
- Activities associated with immediate removal of free product from an open tank excavation. Reference Sections 3.II.A of the SAM Manual to review free product abatement and reporting requirements.

**** Office Use Only ****
 Establishment No. #H
 Plan Check #
 DEH Inspector

WORKPLAN FOR POST-TANK REMOVAL INVESTIGATION

Complete this Workplan only if you intend to utilize a backhoe to investigate the extent of hydrocarbon contamination within 72 hours of the removal of an underground storage tank (UST). This site investigation work must be implemented in accordance with the DEH-SAM Manual and under the direction of an appropriately Registered Geologist (RG), Certified Engineering Geologist (CEG) or Registered Civil Engineer (RCE). A complete site assessment report, signed by the above referenced registered professional, must be submitted to DEH within 60 days of the date of the field investigation. This workplan must be signed by the above referenced registered professional.

1. Establishment Name/Address

2. Contractor, Contact & Phone No.

Environmental Consultant, Contact & Phone No.

Registered Professional (defined above) & Phone No.

3. Describe how the backhoe will be utilized to conduct the site investigation (ie. potholing, trenching, etc.) and estimate the maximum quantity of soil to be excavated.

4. Describe the soil sample collection methods and laboratory to be used (reference Section 5.III of the SAM Manual). Soil analysis must be performed by a California DTSC Certified Laboratory.

5. Attach a site drawing (to scale) which includes at a minimum: site structures, subsurface utility lines and fuel lines, UST(s) location, site investigation area, stockpiled soil area, prevailing wind direction, adjacent street and property uses, surface water and wells.

6. Describe methods to monitor and control hydrocarbon vapor emissions at the excavation site.

7. Describe the procedures for the management of excavated soil, i.e. soil, segregation, engineering controls for the stockpile soil (reference Section 7.VI of the SAM Manual), soil characterization, on-site soil management, off-site disposal, on-site treatment, etc. Describe the Best Management Practices (BMPs) to be used in the event of rainfall to control erosion from stockpiled soil.

8. A Public Notification Program must be implemented prior to commencing the site investigation. Attach a copy of the public notice and provide a written description of the program (reference Section 4.IV of the SAM Manual). Identify the targeted population and the method of public notice distribution.

Please Note:

- ρ The investigation trench or excavation must be logged under the direction of a RG, CEG or RCE and include a complete description of the subsurface soil and/or rock.
- ρ All contaminated soil should either be removed from the site or be treated on-site (with agency approval) within 45 days of site excavation.
- ρ The site excavation must be secured with fencing, site security and other methods as required to ensure public safety. DEH recommends backfilling the excavation site for safety reasons within 72 hours of the post-tank removal investigation.

Prepared by:

(Name, print or type)	(Company)	(Signature)	(date)
-----------------------	-----------	-------------	--------

Approved by Tank/Property Owner:

(Name, print or type)	(Signature)	(date)
-----------------------	-------------	--------

Approved by DEH, SAM Program:

(Name, print or type)	(Signature)	(date)
-----------------------	-------------	--------

Stormwater Management Plan for Underground Storage Tank Permits



Stormwater Management Plan for Underground Storage Tank Permits

(Required for all Permits within the unincorporated County)



Under authority of the County of San Diego's Watershed Protection, Stormwater Management and Discharge Control Ordinance (No. 9424 and 9426) and Grading Ordinances, the County requires that construction proponents submit a Stormwater Management Plan in conjunction with all Underground Storage Tank Permits (installation, removal and modification) issued in the Unincorporated County. The Stormwater Management Plan is used to document basic project information, as well as certify that the project proponent is aware of the County's minimum Best Management Practices (BMPs) requirements. This will include the following:

Section 1: Required Information - Each of the items in this section must be completed. This section is used to provide the County with basic information necessary to evaluate and prioritize project activities.

Please Note: Excavations greater than 200 cubic yards and cuts greater than 5 ft. in height require a Grading Permit from the County Department of Planning and Land Use (858-565-5920).

Section 2: Best Management Practices - BMPs must be selected and implemented to prevent erosion and construction-related materials, sediment, wastes and spills from entering stormwater conveyances and receiving waters.

Minimum Best Management Practice Requirements:

- Adequate perimeter protection BMPs must be installed and maintained. The perimeter of the cleared/graded area must be protected to prevent the discharge of stormwater pollutants. At least one of the following BMPs must be installed: Silt Fence; Straw Wattles; and/or Gravel Bags.
- Adequate BMPs to control off site sediment tracking must be installed and maintained. These BMPs include stabilized construction entrances/exits and construction road stabilization.
- Areas for material storage shall be either under roof or be able to be covered with plastic or tarp prior to a rain event.
- Waste materials must be properly managed to prevent discharge into stormwater. Each of the following BMPs shall be implemented and maintained if the waste is present on site: Concrete Waste Management; Solid Waste Management; Sanitary Waste Management; Hazardous Waste Management.
- All contaminated or potentially contaminated soil must be managed to prevent it from being discharged into a stormwater conveyance or receiving water. All contaminated soil must be placed on an impervious surface, bermed and completely covered with plastic sheeting.
- All storm drain inlets on site must be either sealed with an impervious material during construction activities or protected using inlet protection BMPs.

Note: It is the responsibility of project proponents to determine the types of BMPs that will be used, as well as the levels of application necessary to comply with the County's Stormwater and Grading Ordinances. Failure to prevent soil erosion and discharges of sediment and other pollutants from underground storage tank construction sites may result in enforcement by the County.

Section 3: Certification - The project proponents must sign this section. In doing so, they acknowledge the following:

- They understand the County's minimum requirements for stormwater management of underground storage tank construction activities,
- They will implement the selected BMPs to effectively minimize the potentially negative impacts of this project's construction activities on stormwater quality,
- They will monitor, maintain or revise these BMPs to ensure their effectiveness throughout the duration of the grading and/or construction activities, and
- They understand that non-compliance with the County's Stormwater and Grading Ordinances may result in enforcement by the County, including fines and/or cease and desist orders.

Compliance verification will occur during routine and/or unscheduled site visits by County inspection staff. County inspectors will use the information contained in the Stormwater Management Plan and supporting materials to verify compliance with the County's Stormwater and Grading ordinances.

HM: 9302 (09-02)

	COUNTY OF SAN DIEGO STORMWATER MANAGEMENT PLAN FOR UNDERGROUND STORAGE TANK PERMITS (For All Permits Issued In The Unincorporated County)	
---	--	---

SECTION 1. Required Information

Permit Number: _____	Plan Check # _____
Site Name: _____	Name of project contact: _____
Site Address: _____	Phone # of project contact: _____

Estimated excavation area: _____ Cu. Yds. **Please Note: Excavations greater than 200 cubic yards and cuts greater than 5 ft. in height require a Grading Permit from the County Department of Planning and Land Use (858-565-5920)**

Grading Permit # _____ (If applicable)

SECTION 2. Best Management Practices

The goal of stormwater management planning is to reduce pollution to the maximum extent practicable using Best Management Practices (BMPs). Erosion of disturbed soil must be prevented. Construction-related materials, sediment, wastes, spills, and residues must be retained on site to minimize transport from the site to streets, drainages, receiving waters, and adjacent properties by wind or runoff. It is the responsibility of project proponents to determine the types of BMPs that will be used, as well as the levels of application necessary to comply with the County's Stormwater and Grading Ordinances. For more information regarding BMPs, please call (888) 846-0800.

Minimum Best Management Practice Requirements.

1. Adequate perimeter protection BMPs must be installed and maintained. The perimeter of the cleared/graded area must be protected to prevent the discharge of stormwater pollutants. At least one of the following BMPs must be installed: Silt Fence; Straw Wattles; and/or Gravel Bags.
2. Adequate sediment control BMPs must be installed and maintained
3. Adequate BMPs to control off site sediment tracking must be installed and maintained. These BMPs include stabilized construction entrances/exits and construction road stabilization.
4. Areas for material storage shall be either under roof or be able to be covered with plastic or tarp prior to a rain event and also must be elevated to prevent contact with stormwater run-off.
5. Waste materials must be properly managed to prevent discharge into stormwater. Each of the following BMPs shall be implemented and maintained if the waste is present on site: Concrete Waste Management; Solid Waste Management; Sanitary Waste Management and Hazardous Waste Management.
6. All contaminated or potentially contaminated soil must be managed to prevent it from being discharged into a stormwater conveyance or receiving water. All contaminated soil must be placed on an impervious surface, bermed and completely covered with plastic sheeting.
7. All storm drain inlets on site must be either sealed with an impervious material during construction activities or protected using inlet protection BMPs.
8. Any minor slopes created incidental to construction and not covered by a major or minor grading permit shall be protected by covering with plastic or tarp prior to a rain event, and shall have vegetative cover reestablished within 180 days and prior to final building approval.

SECTION 3. Certification

You must read and sign the certification below before an Underground Storage Tank Construction Permit is issued in the Unincorporated County.

I have read and understand that the County of San Diego has adopted minimum requirements for stormwater management of underground storage tank construction activities. I certify that the BMPs I have selected will be implemented to effectively minimize the potentially negative impacts of this project's activities on stormwater quality. I am aware that the selected BMPs must be installed, monitored, maintained or revised to ensure their effectiveness. I understand that non-compliance with the County's Stormwater and Grading Ordinances may result in enforcement by the County, including fines and/or cease and desist orders.

_____ Contractor	_____ Date:
_____ Property owner	_____ Date:

HM: 9302 (09-02)