

## **Environmental Health Division • Public Information**

County of Ventura • Resource Management Agency • http://www.ventura.org/rma/envhealth 800 S. Victoria Ave, Ventura, CA. 93009-1730 • 805 654-2813 • 805 654-2480 Fax

# TOP TEN UNDERGROUND STORAGE TANK PLAN CHECK ERRORS

During Underground Storage Tank (UST) Construction Permit (Installation, Modification/ Repair, and Permanent Closure UST Applications) Plan Check, the Environmental Health Division (EHD) has observed many common errors. To avoid resubmittals and project delays, carefully read these common plan errors before submitting your application. Project plans may also be submitted and reviewed electronically to help expedite the plan check process. Contact the plan check staff listed below for information about electronic plan review.

#### 1. Site plans are not site specific.

Generic plans or details are not acceptable. VCEHD requires project specific and site specific information. Crossout or delete information not pertinent to the project. Site plans must: state the proposed work (Scope of Work), show exactly what will be done, show all parts of the tank system (this includes **piping**, tanks, dispenser, monitoring locations, and monitoring panel). Site plans must be in a blue print format (no work plan reports), use a scale of equal to or greater than 1"=10", and a maximum blue print size of 24 inches by 36 inches.

#### 2. Inadequate parts description.

ALL proposed parts and alternate proposed parts must be adequately described (MANUFACTURER, TYPE, AND MODEL NUMBER) and shown within the site plan. If the site plan uses a Materials (Parts) List, parts must be identified with numbers or letters that correspond with the part location within the site plan. Manufacturer cut sheets are not acceptable. Don't forget that sensors, boots, sumps, flex connectors, couplings, nipples, 90s, elbows, reducers, etc. require complete parts description. All parts of the primary piping must be identified, properly described, and for steel parts you must provide either the ASF or ASTM number. Only parts on the approved plans may be installed at the site (do not list optional parts). Part substitution requires a plan resubmittal and new plan check. SEPARATE FROM THE PLANS PROVIDE SPECIFICATION SHEETS FOR ALL PARTS (USED FOR THIRD PARTY INFORMATION AND COMPATIBILITY ONLY).

#### 3. Abbreviations and acronyms.

Most site plans use abbreviations and acronyms to describe parts or procedures. **Spell out or use a legend to describe ALL abbreviations and ALL acronyms**. Examples: DW (double wall), ESO (emergency shutoff), and FG (fiberglass).

#### 4. No Buoyancy Calculations and Tank anchors.

The UST Installation Application requires buoyancy calculations for USTs if <u>HISTORICAL</u> high groundwater level is less than 20 feet below ground surface or within ten feet of tank bottom. It is the applicant's responsibility to provide adequate documentation on <u>HISTORICAL</u> high groundwater level at the facility (taking one groundwater measurement at the site is usually insufficient information). Most of Ventura County has shallow groundwater levels, so be prepared to include, within the site plan, California Professional Engineer stamped and approved UST buoyancy calculations. Also, tank anchors (deadman or saddles) if required per buoyancy calculations must be included within the site plan (provide adequate parts description for all anchor components).

### **CONTINUED ON REVERSE SIDE**

#### 5. Lack of Uniform Fire Code information in site plan.

Under a Memorandum of Understanding with the Ventura County Fire Protection District the EHD oversees Uniform Fire Code (UFC) requirements for UST installation and operation (except for the cities of Santa Paula and Fillmore). Therefore, site plans must address UFC requirements - including, but not limited to the following: emergency shutdown devices (formerly called emergency shutoff switch); dispenser protection (curbing, bollard, posts); fire extinguisher; signage; and dispenser nozzles and hoses (provide adequate parts descriptions).

#### 6. Use details and cross-sections to show complex areas.

Provide detailed project specific information. Details and cross-sections are required for complex areaspiping sumps; fill sumps; tank excavation; product piping layout (lateral and vertical separation distances, sloping, and flex connectors); dispensers; dispenser containment; vent riser piping; abovegrade piping; and underground piping transitions (backup generator tanks, solvent tanks).

#### 7. Unreadable and unclear site plans.

Submit readable and clean plans. Check the plans to see if all text is readable (during copying, enlarging, or shrinking plans may be become unreadable). Don't submit plans with elevation marks and written dimensions scrawled across the plans - the plans are unclear and cannot be reviewed. Use bar scales instead of written dimensions.

#### 8. Existing and Proposed UST systems.

Site plans must show the <u>existing</u> UST systems - including all piping, tanks, dispensers, and monitoring locations. If you don't show all parts of the UST systems the plans **will not** be approved. To reduce clutter, submit proposed UST systems on a different sheet from existing UST systems. Site plans must show and describe any proposed changes to the UST systems. Also, show the UST system as it will be installed.

#### 9. Incorrect paperwork.

Submit original forms (no fax copies) with ink signature and date. Forms must be complete and accurate. Unified Program Agency Facility and Tank forms marked with "unknown" or with empty spaces will not be accepted – it is the tank owner's obligation to know the layout and parts of their UST system. Do not use abbreviations or acronyms on the Monitoring / Response Plan form.

Read the form completely, and answer the questions fully.

#### 10. Contractor information.

For all construction permit applications, you must provide copies of the state contractor's license card with expiration date, International Code Council (ICC) certifications, all manufacturer training certifications, and a copy of the Certificate of Worker's Compensation Insurance Certificate.

If you have any questions, please contact:

Bob Hartley	805-662-6564	bob.hartley@ventura.org
Alicia Morales	805-662-6553	alicia.morales@ventura.org