



# **BASIC UST PLAN CHECK 101: YOU NEED PLANS FOR THAT?**

## **February 3, 2021**



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Training Conference  
February 2 – March 18, 2021

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This presentation is directed at new UST inspectors who may or may not have UST Plan Check as a responsibility.

Often, the new inspectors identify issues that may have been previously overlooked...  
Thank you new inspectors!!



# Why Train?

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Increase in new UST Staff means that many are being asked about plan check topics long before they acquire that area of responsibility.

Many agencies have UST Plan Check staff who are not the annual UST Inspector in the field.

Non-CUPA requirements present annually that affect the UST monitoring plan.



# Does your agency require a permit?

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Disclaimer: This presentation is given by an inspector from an agency that acts as BOTH the CUPA and Fire Code Authority.

Take the information provided and compare it with your agencies current inspection and enforcement plan prior to use.



# Before you answer that; consider:

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A common scenario is that an inspector is out with a technician/contractor and the question comes up;

“We are planning to do/change \_\_\_\_\_ next week due to a required upgrade. Your agency doesn’t need anything, right?”



# How to Verify UST Monitoring Plan

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I have created a simple self-guided procedure on how to verify a UST Monitoring Plan while out inspecting a facility.

Unexpected changes or differences may be a typo error made by the CERS updater or they may indicate a change has occurred onsite.

Please email me and I am happy to share.



# Before you answer that; ask questions:

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Will the proposed modification require a change to the UST monitoring plan?

Is there fuel in the tank? How will they monitor the UST?

Will they disconnect and/or move the monitoring panel?

Will the work trigger a software upgrade and cold start?

Will it change the way the product piping is monitored or tested?



# Non-CUPA Requirements

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Non-CUPA Agencies with new requirements that may affect the UST Monitoring Plan:

- Air Resources Board (CARB, AQMD, APCD)
- California Weights and Measures
- Any Others that you know of?
  - Email me and I will share out with the class.
    - [Angela.samayoa@longbeach.gov](mailto:Angela.samayoa@longbeach.gov)





# What are we seeing in 2021?

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Dispenser replacement due to required upgrade to card reader to be a chip-reader at the pump.

What can it affect?

Dispenser fit – meaning the new dispenser does not fit the existing UDC so that any release is directed into the UDC and sensor at the bottom.

Piping monitoring if they decide to manifold product piping.



# What are we seeing in 2021?

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Many non-fire CUPAs do not require permit for dispenser replacement; “it’s fire code only”.

What would we look at with the stated scenario?

Discuss.



# What are we seeing in 2021?

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- ARB required upgrades to In-Station Diagnostics (ISD) can trigger a cold-start.

This one is on-going as changes may be triggered at various times.  
Many agencies allow a cold-start at the time of the annual UST Inspection.

Let's discuss when and if you would require a permit.

What would you check to verify it was done correctly?



# What are we seeing in 2021?

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Upgrade to the Point-Of-Sale system at the dispenser.

This one might not always trigger a cold-start. Some contractors will let the agency know ahead of time.

Let's discuss when and if you would require a permit.

What would you check to verify it was done correctly?



# What are we seeing in 2021?

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Overfill Prevention Equipment (OPE) Inspection failed and something needs to be replaced to make it compliant.

Let's discuss when and if you would require a permit.

What would you check to verify it was done correctly?



# What we see as urgent/unplanned repairs?

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Something failed, like a turbine pump or flex line. They may or may not contact you ahead of this. Not new to the year, but it is good for you to consider if you know what your agency would request as far as notification.

Let's discuss when and if you would require a permit.

What would you check to verify it was done correctly?



# Completing a UST Plan Check

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A successful plan check starts with knowing you have good data to check against. During plan check, the Plan Checker should have the facility inspection and testing information to cross check that the facility is accurately described and that the scope of work includes all outstanding compliance work.

*Ex) SOW is to replace dispenser, but file says they haven't repaired SB 989 test failures yet.*



# Completing a UST Plan Check

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This is a valuable conversation to have with your management. Will your agency treat each project separately or require that any permitted project leave the UST system in full compliance?

*Ex) SOW is to correct some of the SB 989 failures but not all listed on the last test report.*

This one is more straight forward – Their SOW should address all failures of the test they are making repairs for.





# Completing a UST Plan Check

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Good practice to start with:

**Only approve/accept what you understand to be compliant.**

You will learn one project at a time. As you learn, you will see your review time reduce. You should understand what a project is fixing/doing and how it maintains UST compliance before you issue approval.



# Completing a UST Plan Check

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Scope of Work (SOW):

What are they doing?

What are they changing?

Contractor/Technician Qualifications:

How are they qualified to do what they want to do?

Establish Inspection Milestones:

How would you inspect to verify that it was done correctly for final approval of project?



# Completing a UST Plan Check

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Follow your agency guidelines to determine how the project should be packaged and submitted.

**Minimally:**

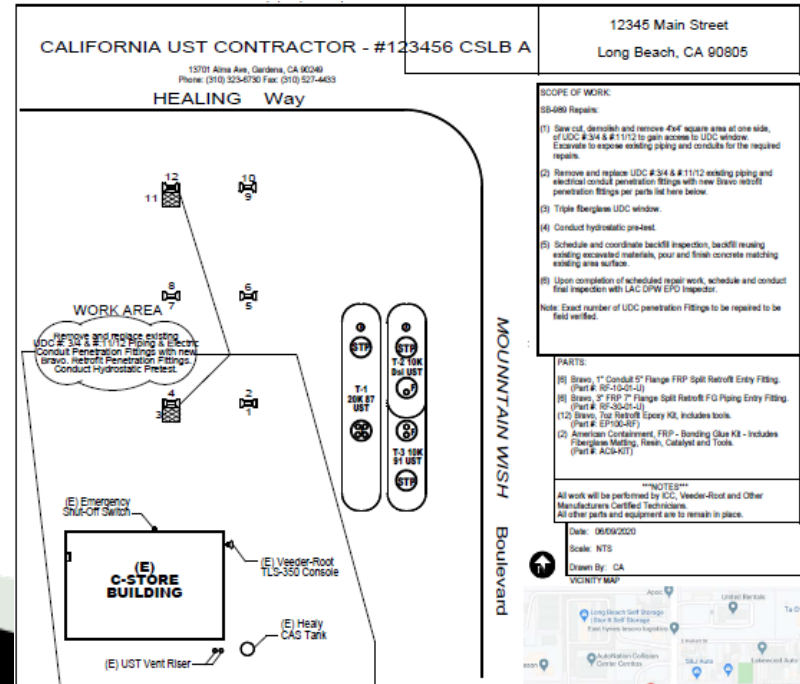
- At least 2-3 sets of plans (unless by PDF) for review.

Many agencies have adjusted their plan intake workflow to meet COVID-19 safety protocols in the past year.



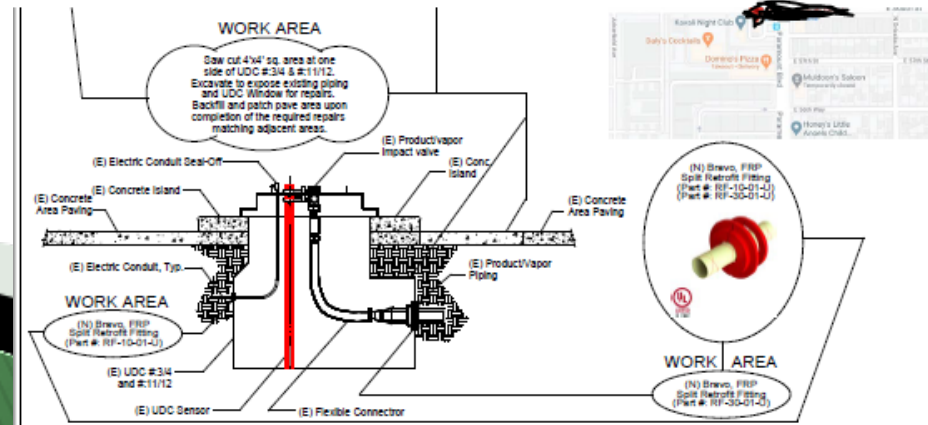
# Completing a UST Plan Check

- Cover page with clear/detailed scope of work.
- No “To Be Determined in the Field” or general/typical details; must be site/system specific.
- Correct address
- Contractor information
- Site layout and site map.



# Completing a UST Plan Check

- General notes as required per your department. I always ask for a list of reference codes. For you, if you see fire code and are not the Fire Code agency, figure out who is and at least notify them. Some agencies rely on the CUPA review for more than environmental, but you should know what you are being expected to review per your agency MOU.
- **Detail Pages:** this can be several pages or just a few pages depending on the scope of work. Never assume something is included if it is not stated on the plans. The contractor should update the plans if anything is missing.



# Completing a UST Plan Check

Parts List: I like a detailed parts list so that I know exactly the manufacturer, parts number, and number of parts for the scope of work that is proposed.

- You request copies of required manufacturer approvals and any required statements of compatibility. Per 23 CCR
- I take this parts list and look at the site plan to check that the materials match the identified locations on the scope of work.
- The site details must be accurate; type of tanks, type of sumps, UDC construction

When I say “type of construction”; I mean the manufacturer if known, and minimally the type of material used to construct the component.

Frequently seen types of construction (without a known manufacturer):

Fiberglass; sometimes listed as FRP, Plastic (I’ve seen green Environ, Blue OPW, old White OPW, and White NES).



EQUIPMENT LEGEND			
NO	EQUIPMENT DESCRIPTION	MANUFACTURER	PART NUMBER
①	DBL WALL FRP UNDERGROUND TANK	XERVES	20,000 GAL. DWT-6-DWB-2 (10') 13/7
②	42" DBL WALL FRP SUMP W/O COVER	XERVES	42X48 8 SIDES BRINE FILLED
③	48" DBL WALL FRP SUMP W/COVER	XERVES	48X48 8 SIDES BRINE FILLED
④	GEO-TEXTILE FILTER FABRIC	TYPAR	3401
⑤	BRASS GROUNDING ROD & CLAMPS	BRAVO	F-07-GR-R
⑥	IN LINE CHECK VALVE	MORRISON BRO.	958-1200 1V
⑦	STAINLESS STEEL SWING CHECK VALVE	MORRISON	233E-4240
⑧	TANK BOTTOM PROTECTOR	OPW	6111-1400
⑨	DROP TUBE	OPW	61-T
⑩	DBL WALL VENT TRANSITION SUMP	BRAVO (AB2481) - DBL WALL	B-601-D-220
⑪	4"/3" SUMP ENTRY/TERMINATION FITTING	BRAVO	F-43S-T-F
⑫	3"/2" SUMP ENTRY/TERMINATION FITTING	BRAVO	F-42S-T-F

# Completing a UST Plan Check

- Parts Continued;
  - Parts should include all parts being changed or added.
  - Even Sensors, Leak Detectors, penetration fittings, electrical penetration fittings that penetrate the sump/UDC wall, turbine, Jomar valves, flex connectors... anything that may come in contact with the fuel stored by the UST system is fair to disclose and verify approval and compatibility.

EQUIPMENT LEGEND			
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③	48" DBL. WALL FRP SUMP W/COVER	XERXES	48X48 8 SIDES BRINE FILLED
④	GEO-TEXTILE FILTER FABRIC	TYPAR	3401
⑤	BRASS GROUNDING ROD & CLAMPS	BRAVO	F-07-GR-R
⑥	IN LINE CHECK VALVE	MORRISON BRO.	958-1200 1V
⑦	STAINLESS STEEL SWING CHECK VALVE	MORRISON	233E-4240
⑧	TANK BOTTOM PROTECTOR	OPW	6111-1400
⑨	DROP TUBE	OPW	61-T
⑩	DBL. WALL VENT TRANSITION SUMP	BRAVO (AB2481) - DBL. WALL	B-601-D-220
⑪	4"/3" SUMP ENTRY/TERMINATION FITTING	BRAVO	F-43S-T-F
⑫	3"/2" SUMP ENTRY/TERMINATION FITTING	BRAVO	F-42S-T-F



# Completing a UST Plan Check

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So we understand what they are doing;

- How they are doing it?

Now, let's figure out what we should request as proof of a job well done in compliance with all the applicable standards and guidelines.





# Completing a UST Plan Check

When determining what you need to see to verify the project is completed properly;

- 1) Look at the manufacturer guidelines for any required installation test.
- 2) If there is a failed test; a reasonable expectation is a certified re-test of all previously failed, new, or repaired components.
- 3) You want to witness testing that is used for your sign-off. Remember that the majority of UST inspections are outdoors and can be safely completed using the CDC guidelines.
- 4) I write the required inspections either on the job card issued for the permit along with my best direct contact for inspection requests (EMAIL).



## INSPECTION PERMIT UNDERGROUND TANK PERMIT

Permit # FTNK000000

PROJECT NAME: DSL/87 Sump penetration fitting - VPH  
JOB SITE ADDRESS: HAPPY STATION- LONG BEACH, CA 90805  
DESCRIPTION OF WORK: DSL/87 Sump penetration fitting - VPH - Demonstrate Communication

	DATE	APPROVED
<input checked="" type="checkbox"/> UNDERGROUND TANK FINAL - CONFIRMATION TEST REQUIRED		

INSPECTION INFORMATION



# Any Questions?

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