

## Appendix VI

(Copies of Monitoring System Certification form and UST Monitoring Plot Plan available at <http://www.waterboards.ca.gov>.)

# MONITORING SYSTEM CERTIFICATION

*For Use By All Jurisdictions Within the State of California*

**Authority Cited: Chapter 6.7, Health and Safety Code; Chapter 16, Division 3, Title 23, California Code of Regulations**

This form must be used to document testing and servicing of monitoring equipment. A separate certification or report must be prepared for each monitoring system control panel by the technician who performs the work. A copy of this form must be provided to the tank system owner/operator. The owner/operator must submit a copy of this form to the local agency regulating UST systems within 30 days of test date.

**A. General Information**

Facility Name: \_\_\_\_\_ Bldg. No.: \_\_\_\_\_

Site Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_

Facility Contact Person: \_\_\_\_\_ Contact Phone No.: (\_\_\_\_) \_\_\_\_\_

Make/Model of Monitoring System: \_\_\_\_\_ Date of Testing/Serviceing: \_\_\_\_/\_\_\_\_/\_\_\_\_

**B. Inventory of Equipment Tested/Certified**

**Check the appropriate boxes to indicate specific equipment inspected/serviced:**

<b>Tank ID:</b> _____ <input type="checkbox"/> In-Tank Gauging Probe. Model: _____ <input type="checkbox"/> Annular Space or Vault Sensor. Model: _____ <input type="checkbox"/> Piping Sump / Trench Sensor(s). Model: _____ <input type="checkbox"/> Fill Sump Sensor(s). Model: _____ <input type="checkbox"/> Mechanical Line Leak Detector. Model: _____ <input type="checkbox"/> Electronic Line Leak Detector. Model: _____ <input type="checkbox"/> Tank Overfill / High-Level Sensor. Model: _____ <input type="checkbox"/> Other (specify equipment type and model in Section E on Page 2).	<b>Tank ID:</b> _____ <input type="checkbox"/> In-Tank Gauging Probe. Model: _____ <input type="checkbox"/> Annular Space or Vault Sensor. Model: _____ <input type="checkbox"/> Piping Sump / Trench Sensor(s). Model: _____ <input type="checkbox"/> Fill Sump Sensor(s). Model: _____ <input type="checkbox"/> Mechanical Line Leak Detector. Model: _____ <input type="checkbox"/> Electronic Line Leak Detector. Model: _____ <input type="checkbox"/> Tank Overfill / High-Level Sensor. Model: _____ <input type="checkbox"/> Other (specify equipment type and model in Section E on Page 2).
<b>Tank ID:</b> _____ <input type="checkbox"/> In-Tank Gauging Probe. Model: _____ <input type="checkbox"/> Annular Space or Vault Sensor. Model: _____ <input type="checkbox"/> Piping Sump / Trench Sensor(s). Model: _____ <input type="checkbox"/> Fill Sump Sensor(s). Model: _____ <input type="checkbox"/> Mechanical Line Leak Detector. Model: _____ <input type="checkbox"/> Electronic Line Leak Detector. Model: _____ <input type="checkbox"/> Tank Overfill / High-Level Sensor. Model: _____ <input type="checkbox"/> Other (specify equipment type and model in Section E on Page 2).	<b>Tank ID:</b> _____ <input type="checkbox"/> In-Tank Gauging Probe. Model: _____ <input type="checkbox"/> Annular Space or Vault Sensor. Model: _____ <input type="checkbox"/> Piping Sump / Trench Sensor(s). Model: _____ <input type="checkbox"/> Fill Sump Sensor(s). Model: _____ <input type="checkbox"/> Mechanical Line Leak Detector. Model: _____ <input type="checkbox"/> Electronic Line Leak Detector. Model: _____ <input type="checkbox"/> Tank Overfill / High-Level Sensor. Model: _____ <input type="checkbox"/> Other (specify equipment type and model in Section E on Page 2).
<b>Dispenser ID:</b> _____ <input type="checkbox"/> Dispenser Containment Sensor(s). Model: _____ <input type="checkbox"/> Shear Valve(s). <input type="checkbox"/> Dispenser Containment Float(s) and Chain(s).	<b>Dispenser ID:</b> _____ <input type="checkbox"/> Dispenser Containment Sensor(s). Model: _____ <input type="checkbox"/> Shear Valve(s). <input type="checkbox"/> Dispenser Containment Float(s) and Chain(s).
<b>Dispenser ID:</b> _____ <input type="checkbox"/> Dispenser Containment Sensor(s). Model: _____ <input type="checkbox"/> Shear Valve(s). <input type="checkbox"/> Dispenser Containment Float(s) and Chain(s).	<b>Dispenser ID:</b> _____ <input type="checkbox"/> Dispenser Containment Sensor(s). Model: _____ <input type="checkbox"/> Shear Valve(s). <input type="checkbox"/> Dispenser Containment Float(s) and Chain(s).
<b>Dispenser ID:</b> _____ <input type="checkbox"/> Dispenser Containment Sensor(s). Model: _____ <input type="checkbox"/> Shear Valve(s). <input type="checkbox"/> Dispenser Containment Float(s) and Chain(s).	<b>Dispenser ID:</b> _____ <input type="checkbox"/> Dispenser Containment Sensor(s). Model: _____ <input type="checkbox"/> Shear Valve(s). <input type="checkbox"/> Dispenser Containment Float(s) and Chain(s).

\*If the facility contains more tanks or dispensers, copy this form. Include information for every tank and dispenser at the facility.

**C. Certification - I certify that the equipment identified in this document was inspected/serviced in accordance with the manufacturers' guidelines. Attached to this Certification is information (e.g. manufacturers' checklists) necessary to verify that this information is correct and a Plot Plan showing the layout of monitoring equipment. For any equipment capable of generating such reports, I have also attached a copy of the report; (check all that apply):**     System set-up     Alarm history report

Technician Name (print): \_\_\_\_\_ Signature: \_\_\_\_\_

Certification No.: \_\_\_\_\_ License No.: \_\_\_\_\_

Testing Company Name: \_\_\_\_\_ Phone No.:(\_\_\_\_) \_\_\_\_\_

Testing Company Address: \_\_\_\_\_ Date of Testing/Serviceing: \_\_\_\_/\_\_\_\_/\_\_\_\_

**D. Results of Testing/Serviceing**

Software Version Installed: \_\_\_\_\_

**Complete the following checklist:**

<input type="checkbox"/> Yes	<input type="checkbox"/> No*	Is the audible alarm operational?
<input type="checkbox"/> Yes	<input type="checkbox"/> No*	Is the visual alarm operational?
<input type="checkbox"/> Yes	<input type="checkbox"/> No*	Were all sensors visually inspected, functionally tested, and confirmed operational?
<input type="checkbox"/> Yes	<input type="checkbox"/> No*	Were all sensors installed at lowest point of secondary containment and positioned so that other equipment will not interfere with their proper operation?
<input type="checkbox"/> Yes	<input type="checkbox"/> No* <input type="checkbox"/> N/A	If alarms are relayed to a remote monitoring station, is all communications equipment (e.g. modem) operational?
<input type="checkbox"/> Yes	<input type="checkbox"/> No* <input type="checkbox"/> N/A	For pressurized piping systems, does the turbine automatically shut down if the piping secondary containment monitoring system detects a leak, fails to operate, or is electrically disconnected? If yes: which sensors initiate positive shut-down? <i>(Check all that apply)</i> <input type="checkbox"/> Sump/Trench Sensors; <input type="checkbox"/> Dispenser Containment Sensors. Did you confirm positive shut-down due to leaks <u>and</u> sensor failure/disconnection? <input type="checkbox"/> Yes; <input type="checkbox"/> No.
<input type="checkbox"/> Yes	<input type="checkbox"/> No* <input type="checkbox"/> N/A	For tank systems that utilize the monitoring system as the primary tank overflow warning device (i.e. no mechanical overflow prevention valve is installed), is the overflow warning alarm visible and audible at the tank fill point(s) and operating properly? If so, at what percent of tank capacity does the alarm trigger? _____%
<input type="checkbox"/> Yes*	<input type="checkbox"/> No	Was any monitoring equipment replaced? If yes, identify specific sensors, probes, or other equipment replaced and list the manufacturer name and model for all replacement parts in Section E, below.
<input type="checkbox"/> Yes*	<input type="checkbox"/> No	Was liquid found inside any secondary containment systems designed as dry systems? <i>(Check all that apply)</i> <input type="checkbox"/> Product; <input type="checkbox"/> Water. If yes, describe causes in Section E, below.
<input type="checkbox"/> Yes	<input type="checkbox"/> No*	Was monitoring system set-up reviewed to ensure proper settings? Attach set up reports, if applicable
<input type="checkbox"/> Yes	<input type="checkbox"/> No*	Is all monitoring equipment operational per manufacturer's specifications?

\* In Section E below, describe how and when these deficiencies were or will be corrected.

**E. Comments:**

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**F. In-Tank Gauging / SIR Equipment:**

- Check this box if tank gauging is used only for inventory control.
- Check this box if no tank gauging or SIR equipment is installed.

This section must be completed if in-tank gauging equipment is used to perform leak detection monitoring.

**Complete the following checklist:**

<input type="checkbox"/> Yes	<input type="checkbox"/> No*	Has all input wiring been inspected for proper entry and termination, including testing for ground faults?
<input type="checkbox"/> Yes	<input type="checkbox"/> No*	Were all tank gauging probes visually inspected for damage and residue buildup?
<input type="checkbox"/> Yes	<input type="checkbox"/> No*	Was accuracy of system product level readings tested?
<input type="checkbox"/> Yes	<input type="checkbox"/> No*	Was accuracy of system water level readings tested?
<input type="checkbox"/> Yes	<input type="checkbox"/> No*	Were all probes reinstalled properly?
<input type="checkbox"/> Yes	<input type="checkbox"/> No*	Were all items on the equipment manufacturer's maintenance checklist completed?

\* In the Section H, below, describe how and when these deficiencies were or will be corrected.

**G. Line Leak Detectors (LLD):**

- Check this box if LLDs are not installed.

**Complete the following checklist:**

<input type="checkbox"/> Yes	<input type="checkbox"/> No* <input type="checkbox"/> N/A	For equipment start-up or annual equipment certification, was a leak simulated to verify LLD performance? (Check all that apply) Simulated leak rate: <input type="checkbox"/> 3 g.p.h.; <input type="checkbox"/> 0.1 g.p.h ; <input type="checkbox"/> 0.2 g.p.h.
<input type="checkbox"/> Yes	<input type="checkbox"/> No*	Were all LLDs confirmed operational and accurate within regulatory requirements?
<input type="checkbox"/> Yes	<input type="checkbox"/> No*	Was the testing apparatus properly calibrated?
<input type="checkbox"/> Yes	<input type="checkbox"/> No* <input type="checkbox"/> N/A	For mechanical LLDs, does the LLD restrict product flow if it detects a leak?
<input type="checkbox"/> Yes	<input type="checkbox"/> No* <input type="checkbox"/> N/A	For electronic LLDs, does the turbine automatically shut off if the LLD detects a leak?
<input type="checkbox"/> Yes	<input type="checkbox"/> No* <input type="checkbox"/> N/A	For electronic LLDs, does the turbine automatically shut off if any portion of the monitoring system is disabled or disconnected?
<input type="checkbox"/> Yes	<input type="checkbox"/> No* <input type="checkbox"/> N/A	For electronic LLDs, does the turbine automatically shut off if any portion of the monitoring system malfunctions or fails a test?
<input type="checkbox"/> Yes	<input type="checkbox"/> No* <input type="checkbox"/> N/A	For electronic LLDs, have all accessible wiring connections been visually inspected?
<input type="checkbox"/> Yes	<input type="checkbox"/> No*	Were all items on the equipment manufacturer's maintenance checklist completed?

\* In the Section H, below, describe how and when these deficiencies were or will be corrected.

**H. Comments:**

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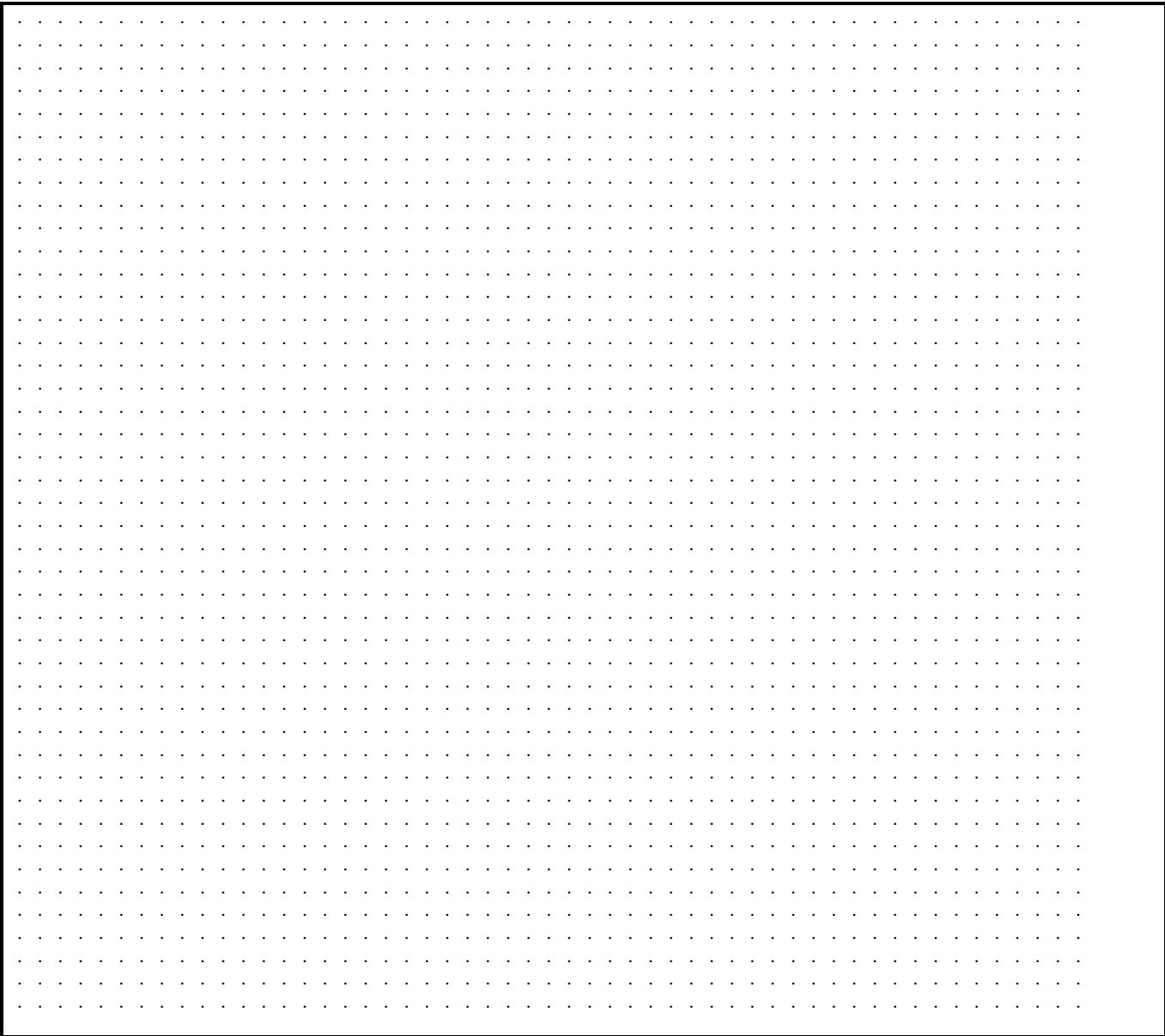
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### UST Monitoring Site Plan

Site Address: \_\_\_\_\_



Date map was drawn: \_\_\_\_/\_\_\_\_/\_\_\_\_.

**Instructions**

If you already have a diagram that shows all required information, you may include it, rather than this page, with your Monitoring System Certification. On your site plan, show the general layout of tanks and piping. Clearly identify locations of the following equipment, if installed: monitoring system control panels; sensors monitoring tank annular spaces, sumps, dispenser pans, spill containers, or other secondary containment areas; mechanical or electronic line leak detectors; and in-tank liquid level probes (if used for leak detection). In the space provided, note the date this Site Plan was prepared.