

UST Monitoring Plan – Page 1 Instructions

Complete a separate UST Monitoring Plan for each UST monitoring system at the facility. This form must be submitted with your initial UST Operating Permit Application and within 30 days of changes in the information it contains. Please note that your local agency may require you to obtain approval prior to installing or modifying monitoring equipment. (Note: Numbering of these instructions follows the data element numbers on the form.)

- 490-1. TYPE OF ACTION – Check the appropriate box to indicate why this plan is being submitted.
- 490-2. PLAN TYPE – Check the appropriate box to indicate whether this plan covers all, or merely some, of the USTs at the facility. If the plan covers only some of the tanks, identify those tanks in the space provided [e.g., by using the Tank ID #(s) in item 432 of the UST Operating Permit Application – Tank Information Form(s)].
1. FACILITY ID NUMBER – This space is for agency use only.
 3. BUSINESS NAME – Enter the complete Facility Name.
103. BUSINESS SITE ADDRESS – Enter the street address where the facility is located, including building number, if applicable. Post office box numbers are not acceptable. This information must provide a means to locate the facility geographically.
104. CITY – Enter the city or unincorporated area in which the facility is located.
- 490-3a MONITORING EQUIPMENT IS SERVICED – Check the appropriate box to specify the frequency of monitoring equipment testing/certification.
- 490-3b Specify Other frequency for monitoring equipment servicing.
- 490-4 SITE PLAN - Indicate if a site plan/map is submitted with this monitoring plan or if it was submitted previously and is current for the facility. Monitoring plans must include a Site Plot Plan/Map showing the tank and piping layouts and the locations where monitoring is performed (i.e., location of sensors, probes, line leak detectors, monitoring system control panel, etc.).
- 490-5 IV-1 CONTINUOUS ELECTRONIC MONITORING-Indicate if this monitoring method is being used to monitor the tanks.
- 490-6 SECONDARY CONTAINMENT– If IV-1 is checked, check the appropriate box to describe the environment inside the tank secondary containment.
- 490-7 PANEL MANUFACTURER – If IV-1 is checked, enter the name of the manufacturer of the monitoring system control panel (console).
- 490-8 MODEL # – If IV-1 is checked, enter the model number for the monitoring system control panel.
- 490-9 LEAK SENSOR MANUFACTURER – If IV-1 is checked, enter the name of the manufacturer of the sensor(s). If additional space is needed, use Section X.
- 490-10 MODEL #(S) – If IV-1 is checked, enter the model number for each type of sensor installed. If additional space is needed, use Section X.
- 490-11 IV-2 AUTOMATIC TANK GAUGING-Indicate if this method is used for monitoring the UST's.
- 490-12 PANEL MANUFACTURER – If IV-2 is checked, enter the name of the manufacturer of the monitoring system control panel (console).
- 490-13 MODEL # – If IV-2 is checked, enter the model number for the monitoring system control panel.
- 490-14 IN-TANK PROBE MANUFACTURER – If IV-2 is checked, enter the name of the manufacturer of the probe(s).
- 490-15 MODEL #(S) – If IV-2 is checked, enter the model number for each type of in-tank probe installed. If additional space is needed, use Section X.
- 490-16. LEAK TEST FREQUENCY – If IV-2 is checked, check the appropriate box to describe the in-tank leak test frequency.
- 490-17. SPECIFY – If 490-16e is checked, enter the frequency of programmed leak tests.
- 490-18. PROGRAMMED TESTS – If IV-2 is checked, check the appropriate box to describe the tests programmed into the ATG system.
- 490-19. SPECIFY – If 490-18c is checked, enter the frequency of in-tank leak testing.
- 490-20. IV-3 INVENTORY RECONCILIATION – Check the box if statistical inventory reconciliation is performed.
- 490-21. IV-4 WEEKLY MANUAL TANK GAUGING. Indicate if this method is used to monitor the tanks.
- 490-22. TESTING PERIOD – If IV-4 is checked, check the appropriate box to describe the MTG testing period.
- 490-23. IV-5 TANK INTEGRITY TESTING: Indicate if this method is used to monitor the tanks.
- 490-24. TEST FREQUENCY – If IV-5 is checked, check the appropriate box to describe the frequency of tank integrity testing.
- 490-25. OTHER: If 490-24c is checked, specify other test frequency.
- 490-26. IV-99 OTHER: Indicate if monitoring of the tanks occurs that is not indicated in any other category.
- 490-27. If IV-99 is checked, enter a brief description of the other tank monitoring method(s) used (e.g., vadose zone monitoring per 23 CCR §2647, groundwater monitoring per 23CCR §2648). Include the monitoring frequency (e.g., Continuous, Weekly). If additional space is needed, use Section X.
- 490-28. V-1 CONTINUOUS MONITORING OF PIPE/PIPING SUMP(S) AND OTHER SECONDARY CONTAINMENT WITH AUDIBLE AND VISUAL ALARMS: Indicate if this is the monitoring method used for the piping.
- 490-29. SECONDARY CONTAINMENT: If V-1 is checked, Check the appropriate box to describe the environment inside piping secondary containment.
- 490-30. PANEL MANUFACTURER – If V-1 is checked, enter the name of the manufacturer of the monitoring system control panel (console).
- 490-31. MODEL # – If V-1 is checked, enter the model number for the monitoring system control panel.
- 490-32. LEAK SENSOR MANUFACTURER – If V-1 is checked, enter the name of the manufacturer of the sensor(s).
- 490-33. MODEL #(S) – If V-1 is checked, enter the model number for each type of sensor installed. If additional space is needed, use Section X.
- 490-34. PIPING LEAK ALARM TRIGGERS AUTOMATIC PUMP SHUTDOWN – If V-1 is checked, check Yes or No.
- 490-35. FAILURE/DISCONNECTION OF THE MONITORING SYSTEM TRIGGERS AUTOMATIC PUMP SHUTDOWN – If V-1 is checked, check Yes or No.
- 490-36. V-2 PIPE MECHANICAL LINE LEAK DETECTORS PERFORM 3 GPH LEAK TESTS: Indicate if this monitoring method is used to monitor the pipelines.
- 490-37. MLLD MANUFACTURER(S) – If V-2 is checked, enter the name(s) of the manufacturer(s) of the mechanical line leak detector(s). If additional space is needed, use Section X.
- 490-38. MODEL #(s) - If V-2 is checked, Enter the model number for each type of mechanical line leak detector installed. If additional space is needed, use Section X.
- 490-39. V-3 PIPE ELECTRONIC LINE LEAK DETECTORS: Indicate if this monitoring method is used to monitor the pipelines.
- 490-40. ELLD MANUFACTURER – If V-3 is checked, Enter the name of the manufacturer of the electronic line leak detector(s).
- 490-41. MODEL #(S)n - If V-3 is checked, enter the model number for each type of electronic line leak detector installed. If additional space is needed, use Section X.
- 490-42. PROGRAMMED LINE INTEGRITY TESTS –If V-3 is checked, check the appropriate box to describe the type of tests programmed into the monitoring system.
- 490-43. ELLD DETECTION OF A PIPING LEAK ALARM TRIGGERS PUMP SHUTDOWN – If V-1 is checked, check Yes or No.
- 490-44. ELLD DETECTION OF A PIPING LEAK FAILURE/DISCONNECTION TRIGGERS PUMP SHUTDOWN. – If V-1 is checked, check Yes or No.
- 490-45. V-4 PIPE INTEGRITY TESTING - Indicate if this monitoring method is used to monitor the pipelines.
- 490-46. TEST FREQUENCY – If V-4 is checked, check the appropriate box to describe the frequency of pipe integrity testing.
- 490-47. SPECIFY – If 490-46-99 is checked, enter the frequency of pipe integrity testing.
- 490-48. V-5 VISUAL PIPE MONITORING - Indicate if this monitoring method is used to monitor the pipelines.
- 490-49. If V-5 is checked, check the appropriate box to describe the frequency of visual monitoring.
- 490-50. SUCTION PIPING MEETS EXEMPTION CRITERIA - Indicate if this monitoring method is used to monitor the pipelines.
- 490-51. NO REGULATED PIPING PER HEALTH AND SAFETY CODE, DIVISION 20, CHAPTER 6.7 IS CONNECTED TO THE TANK SYSTEM - Check this box if no piping in the tank system is regulated under the UST law, or there is no piping.
- 490-52. V-99 OTHER - Indicate if another method is used for pipeline monitoring.
- 490-53. SPECIFY – Enter a brief description of the other line monitoring method(s) used. If additional space is needed, see Section X. Be sure to clearly describe monitoring method(s) and frequency.

This monitoring plan must include a Site Plan showing the general tank and piping layouts and the locations where monitoring is performed (i.e., location of each sensor, line leak detector, monitoring system control panel, etc.). If you already have a diagram (e.g., current UST Monitoring Site Plan from a Monitoring System Certification form, Hazardous Materials Business Plan map, etc.) that shows all required information, include it with this plan.

**UNIFIED PROGRAM CONSOLIDATED FORM
UNDERGROUND STORAGE TANK
MONITORING PLAN (Page 2 of 2)**

VI. UNDER DISPENSER CONTAINMENT (UDC) MONITORING

1. UDC MONITORING IS PERFORMED USING THE FOLLOWING METHOD

1. CONTINUOUS ELECTRONIC MONITORING 2. FLOAT AND CHAIN ASSEMBLY 3. ELECTRONIC STAND-ALONE
 4. NO DISPENSERS 99. OTHER (Specify):

490-54a
490-54b

PANEL MANUFACTURER:

490-55

MODEL #:

490-56.

LEAK SENSOR MANUFACTURER:

490-57

MODEL #(S):

490-58

DETECTION OF A LEAK INTO THE UDC TRIGGERS AUDIBLE AND VISUAL ALARMS

a. YES b. NO

490-59

UDC LEAK ALARM TRIGGERS AUTOMATIC PUMP SHUTDOWN

a. YES b. NO

490-60.

FAILURE / DISCONNECTION OF UDC MONITORING SYSTEM TRIGGERS AUTOMATIC PUMP SHUTDOWN.

a. YES b. NO

490-61

UDC MONITORING STOPS THE FLOW OF PRODUCT AT THE DISPENSER.

a. YES b. NO

490-62

2. UDC CONSTRUCTION IS 1. SINGLE-WALLED 2. DOUBLE-WALLED

490-63

IF DOUBLE WALLED:

490-64a

UDC INTERSTITIAL SPACE IS MONITORED BY: 1. LIQUID 2. PRESSURE 3. VACUUM

A LEAK WITHIN THE SECONDARY CONTAINMENT OF THE UDC TRIGGERS AUDIBLE AND VISUAL ALARMS a. YES b. NO

490-64b

VII. PERIODIC SYSTEM TESTING

1. **ELD TESTING:** THIS FACILITY HAS BEEN NOTIFIED BY THE STATE WATER RESOURCES CONTROL BOARD THAT ENHANCED LEAK DETECTION (ELD) MUST BE PERFORMED. PERIODIC ELD IS PERFORMED EVERY 36 MONTHS AS REQUIRED. (23 CCR §2644.1)

490-65.

2. **SECONDARY CONTAINMENT COMPONENTS ARE TESTED EVERY 36 MONTHS.**

490-66

3. **SPILL BUCKETS ARE TESTED ANNUALLY.**

490-67

VIII. RECORDKEEPING

The following monitoring/maintenance records are kept for this facility:

- Alarm logs 490-68a Visual Inspection Records 490-68b Tank integrity testing results 490-68c
 SIR testing results (and supporting documentation records). 490-68d Tank gauging results (and supporting documentation records). 490-68e
 ATG Testing results (and supporting documentation records). 490-68f Corrosion Protection 60-day logs 490-68g
 Equipment maintenance and calibration records. 490-68h

IX. TRAINING

Personnel with UST monitoring responsibilities are familiar with all of the following documents relevant to their job duties. 490-69a

REFERENCE DOCUMENTS MAINTAINED AT FACILITY (Check all that apply)

- THIS UNDERGROUND STORAGE TANK MONITORING PLAN (Required) 490-69b
 OPERATING MANUALS FOR ELECTRONIC MONITORING EQUIPMENT (Required) 490-69c
 CALIFORNIA UNDERGROUND STORAGE TANK REGULATIONS 490-69d
 CALIFORNIA UNDERGROUND STORAGE TANK LAW 490-69e
 STATE WATER RESOURCES CONTROL BOARD (SWRCB) PUBLICATION: "HANDBOOK FOR TANK OWNERS - MANUAL AND STATISTICAL INVENTORY RECONCILIATION" 490-69f
 SWRCB PUBLICATION: "UNDERSTANDING AUTOMATIC TANK GAUGING SYSTEMS" 490-69g
 OTHER (Specify): M69h, M69i

This facility has a "Designated UST Operator" who has passed the California UST System Operator Exam administered by the International Code Council (ICC). The "Designated UST Operator" will train facility employees in the proper operation and maintenance of the UST systems annually, and within 30 days of hire. This training will include, but is not limited to, the following:

- Operation of the UST systems in a manner consistent with the facility's best management practices
- The facility employee's role with regard to the monitoring equipment as specified in this UST Monitoring Plan
- The facility employee's role with regard to spills and overfills as specified in the UST Response Plan
- Names of contact person(s) for emergencies and monitoring alarms. 490-70

X. COMMENTS/ADDITIONAL INFORMATION

Provide additional comments here or indicate how many pages with additional information on specific monitoring procedures are attached to this plan. 490-71

XI. PERSONNEL RESPONSIBILITIES

The UST Owner/Operator is responsible for ensuring that: 1) the daily/routine UST monitoring activities and maintenance of UST leak detection equipment covered by this plan occurs, 2) all conditions that indicate a possible release are investigated, and 3) all monitoring records are maintained properly.

The following person(s) are responsible for performing the monitoring and equipment maintenance:

NAME	490-72	TITLE	490-73
NAME	490-74	TITLE	490-75

The Designated Operator shall perform a monthly visual inspection of the facility, provide a report to the owner/operator, and inform the owner/operator of any conditions that need follow-up action.

XII. OWNER/OPERATOR SIGNATURE

CERTIFICATION: I certify that the information provided herein is true and accurate to the best of my knowledge.

APPLICANT SIGNATURE	490-76	DATE:	490-77
REPRESENTING: <input type="checkbox"/> 1. Tank Owner/Operator <input type="checkbox"/> 2. Facility Owner/Operator <input type="checkbox"/> 3. Authorized Representative of Owner			
APPLICANT NAME (print):	490-78	APPLICANT TITLE:	490-79

(Agency Use Only)

This plan has been reviewed and:

Approved

Approved With Conditions

Local Agency Signature: _____

Date: _____

Comments or Special Conditions:

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490-54a. MONITORING OF THE UNDER DISPENSER CONTAINMENT- Indicate the method used for UDC monitoring.

490-54b. SPECIFY-IF 99 "Other" is checked, describe other method used.

If VI-1-1, VI-1-2 or VI-1-3 or VI-1-99 is checked, complete 490-55 to 490-64b.

490-55. PANEL MANUFACTURER –Enter the name of the manufacturer of the monitoring system control panel (console). If there is no control panel (e.g., only an electrical relay box is installed) leave this space blank.

490-56. MODEL # - Enter the model number for the monitoring system control panel (console). If there is no control panel (e.g., only an electrical relay box is installed) leave this space blank.

490-57. LEAK SENSOR MANUFACTURER – Enter the name of the manufacturer of the sensor(s).

490-58. MODEL #(S) – Enter the model number of the sensor(s) installed. If additional space is needed, use Section X.

490-59. DETECTION OF A LEAK INTO THE UDC TRIGGERS AUDIBLE AND VISUAL ALARMS. Indicate Yes or No

490-60. UDC LEAK ALARM TRIGGERS PUMP SHUTDOWN - Indicate Yes or No

490-61. FAILURE/DISCONNECTION OF UDC MONITORING SYSTEM TRIGGERS AUTOMATIC PUMP SHUTDOWN - Indicate Yes or No

490-62. UDC MONITORING STOPS THE FLOW OF PRODUCT AT THE DISPENSER - Indicate Yes or No.

490-63. UDC CONSTRUCTION - Indicate if the construction of the UDC is single-walled, or double-walled.

490-64a. DOUBLE-WALLED INTERSTITIAL SPACE MONITORING - Indicate what is used to monitor the interstitial space.

490-64b. LEAK WITHIN THE SECONDARY CONTAINMENT OF UDC TRIGGERS AUDIBLE AND VISUAL ALARMS - Indicate Yes or No

490-65. VII-1 ELD TESTING - Check the box if you have been notified by the State Water Resources Control Board (SWRCB) that the UST(s) covered by this plan is/are subject to Enhanced Leak Detection Requirements (i.e., UST has any single-wall component and is located within 1,000 feet of a public drinking water well).

490-66. TESTING OF SECONDARY CONTAINMENT COMPONENTS EVERY 36 MONTHS - Check the box if you have secondary containment that requires testing.

490-67. SPILL BUCKET TESTING - Check the box if you have spill buckets.

490-68a-h. VIII RECORDKEEPING -Indicate which monitoring and equipment maintenance records are maintained for this facility.

490-69a IX TRAINING STATEMENT - Check the box to verify that the statement is true.

REFERENCE DOCUMENTS MAINTAINED AT FACILITY – Check the appropriate boxes to describe reference documents maintained at the facility. Note that the first two items on the list must be kept at the facility.

490-69b. MONITORING PLAN: Indicate that this plan is kept as a reference document.

490-69c. OPERATING MANUALS FOR ELECTRONIC EQUIPMENT: Indicate that this plan is kept as a reference document.

490-69d. CA UST REGULATIONS - Indicate that this is kept as a reference document.

490-69e. CA UST LAW - Indicate that this is kept as a reference document.

490-69f. STATE WATER RESOURCES CONTROL BOARD (SWRCB) PUBLICATION - "HANDBOOK FOR TANK OWNERS - MANUAL AND STATISTICAL INVENTORY RECONCILIATION - Indicate that this is kept as a reference document.

490-69g. SWRCB PUBLICATION: "UNDERSTANDING AUTOMATIC TANK GAUGING SYSTEMS": Indicate that this is kept as a reference document.

490-69h. OTHER - Indicate that other reference documents are kept.

490-69i. SPECIFY-IF "OTHER" is checked, enter a brief description of the other document(s) maintained at the facility. If additional space is needed, see Section X.

490-70. DESIGNATED OPERATOR TRAINING - Check this box to verify that this statement is true.

490-71. COMMENTS/ADDITIONAL INFORMATION – Make additional comments or you may attach and identify the number of additional pages of information to describe any additional UST system monitoring-related information (e.g., additional information required by your local agency). Attach any monitoring logs that you will be using for the monitoring of your tank system.

490-72. NAME – Enter the name of the person who routinely conducts the monitoring and equipment maintenance under this plan.

490-73. TITLE - Enter the title of the person.

490-74. NAME – Enter the name of the second person, if applicable, who routinely conducts the monitoring and equipment maintenance under this plan.

490-75. TITLE - Enter the title of the second person.

OWNER/OPERATOR SIGNATURE – The tank owner/operator, facility owner/operator, or an authorized representative of the owner shall sign in the space provided. This signature certifies that the signer believes that all information submitted is true, accurate, and complete, and that the training program specified in Section IX has been implemented.

490-76. REPRESENTING -- Check the appropriate box to indicate whether the signer is the UST owner/operator, the UST facility owner/operator, or an authorized representative of the owner.

490-77. DATE – Enter the date the plan was signed.

490-78. APPLICANT NAME – Print or type the name of the person signing the plan.

490-79. APPLICANT TITLE – Enter the title of the person signing the plan.