UNDERGROUND STORAGE TANK MONITORING PLAN
ALAMEDA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH CUPA

Authority Cited: Title 23 CCR, Sections 2632(d)(1), 2634(d)(2), and 2641(h)

TYPE OF ACTION  □ 1. NEW PLAN  □ 2. CHANGE OF INFORMATION

Plan Type  □ MONITORING IS IDENTICAL FOR ALL USTs AT THIS FACILITY.

(1) THIS PLAN COVERS ONLY THE FOLLOWING UST SYSTEM(S):

I. FACILITY INFORMATION

FACILITY ID # (Agency Use Only) 0 1 — 0 0 0 —
FACILITY NAME
FACILITY SITE ADDRESS  M04. CITY

II. EQUIPMENT TESTING AND PREVENTIVE MAINTENANCE

State law requires that testing, preventive maintenance, and calibration of monitoring equipment (e.g., sensors, probes, line leak detectors, etc.) be performed in accordance with the equipment manufacturers’ instructions, or annually, whichever is more frequent. Such work must be performed by qualified personnel.

MONITORING EQUIPMENT IS SERVICED  □ 1. ANNUALLY  □ 99. OTHER (Specify):

III. MONITORING LOCATIONS

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.) which shows all required information, include it with this plan.

IV. TANK MONITORING

MONITORING IS PERFORMED USING THE FOLLOWING METHOD(S): (Check all that apply)

□ 1. CONTINUOUS ELECTRONIC MONITORING OF TANK ANNULAR (INTERSTITIAL) SPACE(S) OR SECONDARY CONTAINMENT VAULT(S)

SECONDARY CONTAINMENT IS: □ a. DRY  □ b. LIQUID FILLED  □ c. UNDER PRESSURE  □ d. UNDER VACUUM

PANEL MANUFACTURER: ________________________ MODELS: ________________________
LEAK SENSOR MANUFACTURER: ________________________ MODEL (S): ________________________

□ 2. AUTOMATIC TANK GAUGING (ATG) SYSTEM USED TO MONITOR SINGLE WALL TANK(S)

PANEL MANUFACTURER: ________________________ MODELS: ________________________
IN-TANK PROBE MANUFACTURER: ________________________ MODEL (S): ________________________
LEAK TEST FREQUENCY: □ a. CONTINUOUS  □ b. DAILY/NIGHTLY  □ c. WEEKLY
□ d. MONTHLY  □ e. OTHER (Specify):

PROGRAMMED TESTS:
□ a. 0.1 g.p.h.  □ b. 0.2 g.p.h.
□ c. OTHER (Specify):

□ 3. INVENTORY RECONCILIATION

□ a. MANUAL PER 23 CCR §2646  □ b. STATISTICAL PER 23 CCR §2646.1

□ 4. WEEKLY MANUAL TANK GAUGING (MTG) PER 23 CCR §2645

TESTING PERIOD: □ a. 36 HOURS  □ b. 60 HOURS

□ 5. INTEGRITY TESTING PER 23 CCR §2643.1

TEST FREQUENCY: □ a. ANNUALLY  □ b. BIENNIALLY  □ c. OTHER (Specify):

□ 6. VISUAL MONITORING DONE: □ a. DAILY  □ b. WEEKLY (Requires agency approval)

□ 99. OTHER (Specify):

V. PIPE MONITORING

MONITORING IS PERFORMED USING THE FOLLOWING METHOD(S): (Check all that apply)

□ 1. CONTINUOUS ELECTRONIC MONITORING OF PIPING SUMP(S)/TRENCH(ES) AND OTHER SECONDARY CONTAINMENT

SECONDARY CONTAINMENT IS: □ a. DRY  □ b. LIQUID FILLED  □ c. UNDER PRESSURE  □ d. UNDER VACUUM

PANEL MANUFACTURER: ________________________ MODELS: ________________________
LEAK SENSOR MANUFACTURER: ________________________ MODEL (S): ________________________

WILL A PIPING LEAK ALARM TRIGGER AUTOMATIC PUMP (i.e., TURBINE) SHUTDOWN? □ a. YES □ b. NO

WILL FAILURE/DISCONNECTION OF THE MONITORING SYSTEM TRIGGER AUTOMATIC PUMP SHUTDOWN? □ a. YES □ b. NO

□ 2. MECHANICAL LINE LEAK DETECTOR (MLLD) THAT ROUTINELY PERFORMS 3.0 g.p.h. LEAK TESTS AND RESTRICTS OR SHUTS OFF PRODUCT FLOW WHEN A LEAK IS DETECTED

MLLD MANUFACTURER(S): ________________________ MODEL (S): ________________________

□ 3. ELECTRONIC LINE LEAK DETECTOR (ELLD) THAT ROUTINELY PERFORMS 3.0 g.p.h. LEAK TESTS

ELLD MANUFACTURER: ________________________ MODEL #: ________________________
PROGRAMMED LINE INTEGRITY TESTS:
□ a. MINIMUM MONTHLY 0.2 g.p.h.  □ b. MINIMUM ANNUAL 0.1 g.p.h.
□ c. OTHER (Specify):

WILL ELLD DETECTION OF A PIPING LEAK TRIGGER AUTOMATIC PUMP SHUTDOWN? □ a. YES □ b. NO

WILL ELLD FAILURE/DISCONNECTION TRIGGER AUTOMATIC PUMP SHUTDOWN? □ a. YES □ b. NO

□ 4. INTEGRITY TESTING

TEST FREQUENCY: □ a. ANNUALLY  □ b. EVERY 3 YEARS  □ c. OTHER (Specify):

□ 5. VISUAL MONITORING DONE: □ a. DAILY  □ b. WEEKLY*  □ c. MIN. MONTHLY & EACH TIME SYSTEM OPERATED**

* Requires agency approval ** Allowed for monitoring of unburied emergency generator fuel piping only per HSC §25281.5(b)(3)

□ 6. PIPING IS SUCTION PIPING MEETING ALL REQUIREMENTS FOR EXEMPTION FROM MONITORING PER 23 CCR §2636(a)(3)

□ 7. NO PRODUCT OR REMOTE FILL PIPING IS CONNECTED TO THE UST(s)

□ 99. OTHER (Specify)
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.)

M01. TYPE OF ACTION – Check the appropriate box to indicate why this plan is being submitted.

M02. 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 Form(s)].

M03. FACILITY ID NUMBER – This space is for agency use only.

M04. FACILITY NAME – Enter the complete Facility Name.

M05. CITY – Enter the city or unincorporated area in which the facility is located.

M06. MONITORING EQUIPMENT IS SERVICED – Check the appropriate box to specify the frequency of monitoring equipment testing/certification.

M07. SPECIFY – If item II-99 is checked, enter the frequency of monitoring equipment testing/certification.

M08. SECONDARY CONTAINMENT IS – Check the appropriate box to describe the environment inside tank secondary containment.

M09. ELLE D MANUFACTURER – If item V-3 is checked, enter the name of the manufacturer of the electronic line leak detector(s).

M10. WILL EDD FAILURE/DISCONNECTION TRIGGER PUMP SHUTDOWN? – If item V-1 is checked, check Yes or No.

M11. Panel manufacturer – If item IV-1 is checked, enter the name of the manufacturer of the monitoring system control panel (console).

M12. PANEL MANUFACTURER – If item IV-2 is checked, enter the model number for each type of sensor installed. If additional space is needed, use Section IX.

M13. MODEL # – If item IV-1 is checked, enter the model number for the monitoring system control panel.

M14. LEAK SENSOR MANUFACTURER – If item IV-1 is checked, enter the name of the manufacturer of the sensor(s). If additional space is needed, use Section IX.

M15. MODEL # – If item V-1 is checked, enter the model number for each type of sensor installed. If additional space is needed, use Section IX.

M16. PANEL MANUFACTURER – If item IV-2 is checked, enter the name of the manufacturer of the monitoring system control panel (console).

M17. MODEL # – If item IV-2 is checked, enter the model number for the monitoring system control panel.

M18. IN-TANK PROBE MANUFACTURER – If item IV-2 is checked, enter the name of the manufacturer of the probe(s).

M19. MODEL # – If item IV-2 is checked, enter the model number for each type of in-tank probe installed. If additional space is needed, use Section IX.

M20. LEAK TEST FREQUENCY – If item IV-2 is checked, check the appropriate box to describe the leak test frequency.

M21. SPECIFY – If item MV-2-e is checked, enter the frequency of programmed leak tests.

M22. PROGRAMMED TESTS – If item IV-2 is checked, check the appropriate box to describe the tests programmed into the ATG system.

M23. SPECIFY – If item MV-2-c is checked, enter the frequency of in-tank leak testing.

M24. INVENTORY RECONCILIATION – If item IV-3 is checked, check the appropriate box to describe the type of inventory reconciliation performed (i.e., Manual or Statistical).

M25. TESTING PERIOD – If item IV-4 is checked, check the appropriate box to describe the test frequency.

M26. TEST FREQUENCY – If item IV-5 is checked, check the appropriate box to describe the frequency of tank integrity testing.

M27. SPECIFY – If item IV-5-e is checked, enter the frequency of tank integrity testing.

M28. SPECIFY – If item 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 23 CCR §2648). Include the monitoring frequency (e.g., Continuous, Weekly). If additional space is needed, use Section IX.

M30. PIPE MONITORING METHOD(S) – Check the appropriate box(es) in Section V to identify all required methods used for monitoring piping of the UST system(s) covered by this plan.

M31. SECONDARY CONTAINMENT IS – Check the appropriate box to describe the environment inside piping secondary containment.

M32. PANEL MANUFACTURER – If item V-1 is checked, enter the name of the manufacturer of the monitoring system control panel (console).

M33. MODEL # – If item V-1 is checked, enter the model number for the monitoring system control panel.

M34. LEAK SENSOR MANUFACTURER – If item V-1 is checked, enter the name of the manufacturer of the sensor(s).

M35. MODEL # – If item V-1 is checked, enter the model number for each type of sensor installed. If additional space is needed, use Section IX.

M36. WILL PIPING LEAK ALARM TRIGGER PUMP SHUTDOWN? – If item V-1 is checked, check Yes or No.

M37. WILL FAILURE/DISCONNECTION OF MONITORING SYSTEM TRIGGER PUMP SHUTDOWN? – If item V-1 is checked, check Yes or No.

M38. MLLE D MANUFACTURER(S) – If item 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 IX.

M39. MODEL # – If item V-2 is checked, enter the model number for each type of mechanical line leak detector installed. If additional space is needed, use Section IX.

M40. MLLE D MANUFACTURER – If item V-3 is checked, enter the name of the manufacturer of the electronic line leak detector(s).

M41. MODEL # – If item V-3 is checked, enter the model number for each type of electronic line leak detector installed. If additional space is needed, use Section IX.

M42. PROGRAMMED LINE INTEGRITY TESTS – If item V-3 is checked, check the appropriate box to describe the tests programmed into the monitoring system.

M43. WILL EDD DETECTION OF A PIPING LEAK ALARM TRIGGER PUMP SHUTDOWN? – If item V-3 is checked, check Yes or No.

M44. WILL EDD FAILURE/DISCONNECTION TRIGGER PUMP SHUTDOWN? – If item V-1 is checked, check Yes or No.

M45. TEST FREQUENCY – If item V-4 is checked, check the appropriate box to describe the frequency of pipe integrity testing.

M46. SPECIFY – If item V-4-c is checked, enter the frequency of pipe integrity testing.

M47. VISUAL MONITORING DONE – If item V-5 is checked, check the appropriate box to describe the frequency of visual monitoring.

M48. SPECIFY – If item V-99 is checked, enter a brief description of the other line monitoring method(s) used. If additional space is needed, use Section IX. 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.) which shows all required information, include it with this plan.
VI. DISPENSER MONITORING

MONITORING OF AREAS BENEATH DISPENSER(S) IS PERFORMED USING THE FOLLOWING METHOD(S) (Check all that apply) M50.

1. CONTINUOUS ELECTRONIC MONITORING OF UNDER DISPENSER CONTAINMENT (UDC)
   
   PANEL MANUFACTURER: ____________________________ M51.
   MODEL #: ____________________________ M52.
   LEAK SENSOR MANUFACTURER: ____________________________ M53.
   MODEL #: ____________________________ M54.
   WILL DETECTION OF A LEAK INTO THE UDC TRIGGER AUDIBLE AND VISUAL ALARMS?  
   a. YES b. NO M55.
   WILL A UDC LEAK ALARM TRIGGER AUTOMATIC PUMP SHUTDOWN?  
   a. YES b. NO M56.
   WILL FAILURE/DISCONNECTION OF UDC MONITORING SYSTEM TRIGGER AUTOMATIC PUMP SHUTDOWN?  
   a. YES b. NO M57.

2. MECHANICAL ASSEMBLY (e.g., FLOAT AND CHAIN ASSEMBLY) IN UDC TRIPS SHEAR VALVE IN CASE OF LEAK
   
   ASSEMBLY MANUFACTURER: ____________________________ M58.
   MODEL #: ____________________________ M59.

3. VISUAL MONITORING DONE:  
   a. DAILY b. WEEKLY (Requires agency approval) M60.

4. NO DISPENSERS 99. OTHER (Specify) M61.

VII. ENHANCED LEAK DETECTION

1. WE HAVE BEEN NOTIFIED BY THE STATE WATER RESOURCES CONTROL BOARD THAT WE MUST IMPLEMENT ENHANCED LEAK DETECTION (ELD) FOR THE UST(S) COVERED BY THIS PLAN. PER 23 CCR §2644.1, ELD IS PERFORMED EVERY 36 MONTHS AS REQUIRED M70.

VIII. TRAINING

REFERENCE DOCUMENTS MAINTAINED AT FACILITY (Check all that apply) M80.

1. THIS UNDERGROUND STORAGE TANK MONITORING PLAN (Required)  
2. OPERATING MANUALS FOR ELECTRONIC MONITORING EQUIPMENT (Required)  
3. THE FACILITY’S BEST MANAGEMENT PRACTICES (Required as of January 1, 2005)  
4. CALIFORNIA UNDERGROUND STORAGE TANK REGULATIONS  
5. CALIFORNIA UNDERGROUND STORAGE TANK LAW  
6. STATE WATER RESOURCES CONTROL BOARD (SWRCB) PUBLICATION: “HANDBOOK FOR TANK OWNERS - MANUAL AND STATISTICAL INVENTORY RECONCILIATION”  
7. SWRCB PUBLICATION: “WEEKLY MANUAL TANK GAUGING FOR SMALL UNDERGROUND STORAGE TANKS” M81.

99. OTHER (Specify): ____________________________

IX. COMMENTS/ADDITIONAL INFORMATION

Please use this section to include any additional UST system monitoring-related information (e.g., additional information required by your local agency): M85.

Note regarding Section X. Pending certification of a Designated UST Operator, the following person has authority for performing the monitoring activities and maintaining leak detection equipment covered by this plan. NAME: ____________________________ JOB TITLE: ____________________________

X. PERSONNEL RESPONSIBILITIES


XI. OWNER/OPERATOR SIGNATURE

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

OWNER/OPERATOR SIGNATURE ____________________________ REPRESENTING  
[ ] Owner M90. [ ] Operator M90.

DATE: ____________________________ M91.

OWNER/OPERATOR NAME (print): ____________________________ M92.

OWNER/OPERATOR TITLE: ____________________________ M93.

(Agency Use Only) This plan has been reviewed and:  
[ ] Approved  [ ] Approved With Conditions  [ ] Disapproved

Local Agency Signature: ____________________________ Date: ____________________________

Comments/Special Conditions: ____________________________
UST Monitoring Plan – Page 2 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.)

M50. DISPENSER MONITORING METHOD(S) – Check the appropriate box(es) in Section IV to identify all required methods used for monitoring the area(s) beneath the dispenser(s). If no dispensers are installed (e.g., USTs supplying standby generators), check item VI-5.

M51. PANEL MANUFACTURER – If item VI-1 is checked, enter the name of the manufacturer of the monitoring system control panel (console).

M52. MODEL # – If item VI-1 is checked; enter the model number for the monitoring system control panel. If there is no control panel (e.g., only an electrical relay box is installed) leave this space blank.

M53. LEAK SENSOR MANUFACTURER – If item VI-1 is checked, enter the name of the manufacturer of the sensor(s).

M54. MODEL #(S) – If item VI-1 is checked; enter the model number for each type of sensor installed. If additional space is needed, use Section IX.

M55. WILL DETECTION OF A LEAK INTO UDC TRIGGER AUDIBLE AND VISUAL ALARMS? – If item VI-1 is checked, check Yes or No.

M56. WILL A UDC LEAK ALARM TRIGGER PUMP SHUTDOWN? – If item VI-1 is checked, check Yes or No.

M57. WILL FAILURE/DISCONNECTION OF UDC MONITORING TRIGGER SHUTDOWN? – If item VI-1 is checked, check Yes or No.

M58. ASSEMBLY MANUFACTURER – If item VI-2 is checked, enter the name of the manufacturer of the mechanical leak detection assembly.

M59. MODEL #(S) – If item VI-2 is checked; enter the model number for each type of mechanical leak detection assembly installed. If additional space is needed, use Section IX.

M60. VISUAL MONITORING DONE  – If item VI-3 is checked, check the appropriate box to describe the frequency of visual monitoring.

M61. SPECIFY – If item VI-99 is checked, enter a brief description of the other method(s) used to monitor the UDC. If additional space is needed, use Section IX.

M70. ENHANCED LEAK DETECTION – 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).

M80. REFERENCE DOCUMENTS MAINTAINED AT FACILITY – Check the appropriate boxes to describe reference documents maintained at the facility. Note that items 1, 2, and 3 must be kept at the facility.

M81. SPECIFY – If item VIII-99 is checked, enter a brief description of the other document(s) maintained at the facility. If additional space is needed, use Section IX.

M85. COMMENTS/ADDITIONAL INFORMATION – You may use this section to describe any additional UST system monitoring-related information (e.g., additional information required by your local agency). If using Section IX as additional space for items required elsewhere in this plan, reference the item number (e.g., “Item M35 - Model 2468 and 3579 Leak Sensors”).

OWNER/OPERATOR SIGNATURE – The owner/operator 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 VIII has been implemented.

M90. REPRESENTING – Check the appropriate box to indicate whether the signer is representing the UST owner or UST operator.

M91. DATE – Enter the date the plan was signed.

M92. OWNER/OPERATOR NAME – Print or type the name of the person signing the plan.

M93. OWNER/OPERATOR TITLE – Enter the title of the person signing the plan.
If you already have a diagram (e.g. your Hazardous Materials Business Plan Site Plan/Storage Map) which shows all required information, you may include it, rather than this page, with this monitoring plan. On your site plan, show the general layout of tanks and piping in relation to nearby buildings or other structures. Clearly identify locations of the following equipment, if installed: monitoring system control panels; mechanical or electronic line leak detectors; sensors monitoring tank annular spaces, sumps, trench systems, under-dispenser containment, or other secondary containment areas; and, if ATG is required, in-tank liquid level probes. In the space provided, note the date the drawing was prepared.