ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RO915

ENVIRONMENTAL HEALTH SERVICES
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

StID 911

August 23, 1999

Mr. Rob Aldenhuysen
RMC Lonestar
P.O.Box 5252
Pleasanton, CA 94566

SUBJECT: INTENT TO MAKE A DETERMINATION THAT NO FURTHER ACTION IS REQUIRED *OR* ISSUE A CLOSURE LETTER FOR *9315 SAN LEANDRO STREET, OAKLAND, CA*

Dear Mr. Aldenhuysen:

This letter is to inform you that Alameda County Environmental Protection (LOP) intends to make a determination that no further action is required at the above site or to issue a closure letter. Please notify this agency of any input and recommendations you may have on these proposed actions within 20 days of the date of this letter.

In accordance with section 25297.15 of Ch. 6.7 of the Health & Safety Code, you must provide certification to the local agency that all of the current record fee title owners have been informed of the proposed action. Please provide this certification to this office within 20 days of the date of this letter.

If you have any questions about these proposed actions, please contact me at (510) 567-6762.

Sincerely,

eva chu
Hazardous Materials Specialist

c: Chuck Headlee, RWQCB
Leroy Griffin, Oakland Fire Department

quikrete-9

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RO#915

ENVIRONMENTAL HEALTH SERVICES
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

StID 911

February 19, 1999

Mr. Rob Aldenhuysen
RMC Lonestar
P.O. Box 5252
Pleasanton, CA 94566

RE: Well Decommission at 9315 San Leandro St, Oakland, CA

Dear Mr. Aldenhuysen:

This office and the San Francisco RWQCB have reviewed the case closure summary for the above referenced site and concur that no further action related to the underground tank release is required at this time. Before a remedial action completion letter is sent, the onsite monitoring wells (LF-2 through LF-4) and extraction wells (EW-1 and EW-2) should be decommissioned, if they will no longer be monitored. Please notify this office upon completion of well destruction so a closure letter can be issued.

Well destruction permits may be obtained from Alameda County Public Works. They can be reached at (510) 670-5575.

If you have any questions, I can be reached at (510) 567-6762.

Sincerely,

eva chu
Hazardous Materials Specialist

quikrete-8

5/4/98

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RO#915

ENVIRONMENTAL HEALTH SERVICES
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

StID 911

Mr. Bradd Statley
RMC Lonestar
P.O. Box 5252
Pleasanton, CA 94566

RE: Risk Management Plan for 9315 San Leandro Street, Oakland, CA

Dear Mr. Statley:

I have completed review of the file for the above referenced site to determine if case closure can be recommended at this time. Subsurface investigations in the vicinity of the former USTs identified elevated levels of petroleum hydrocarbons in soil and groundwater. Groundwater monitoring well LF-1, which was installed immediately downgradient of the USTs, contained free product which was characterized as diesel fuel. In 1994 well LF-1 was destroyed during overexcavation and groundwater pumping activities. A replacement well immediately downgradient of the former tank excavation has not been installed. Two monitoring wells which are located approximately 50' to 75' downgradient of the tank excavation do not appear to contain petroleum hydrocarbons.

It appears residual contamination is limited to the vicinity of the former USTs and dispenser. A risk management plan (RMP) should, therefore, be submitted to this office for review. The RMP should include at a minimum the following:

1. Strategy to address the risk posed to construction workers during any earth moving activities, foundation and utility trenching, etc.

2. A risk assessment may be required if land use changes or a building structure is planned to be constructed over the area of residual contamination.

When the RMP is found acceptable, I will continue to pursue closure for the site. If you have any questions, I can be reached at (510) 567-6762.

eva chu
Hazardous Materials Specialist

quikrete-7

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6700

R0915

StID 911

June 29, 1995

Mr. Bradd Statley
RMC Lonestar
P.O. Box 5252
Pleasanton, CA 94566

RE: Workplan Approval for Quikrete, 9315 San Leandro, Oakland

Dear Mr. Statley:

I have completed review of All West's May 1995 Workplan for Corrective Action and Site Closure for the above referenced site. The proposal to advance eight soil borings and collect soil samples from the capillary frings to evaluate the progress of passive bio-remediation of residual contaminated soil is acceptable. However, the borings should be advanced to groundwater to collect grab groundwater samples, too. Should the soil and water samples exhibit low levels of petroleum hydrocarbons, I will review the case for possible site closure. If this is the case, a replacement well near former well LF-1 is not necessary.

If the above recommendations are acceptable to you, please submit a letter to acknowledge the changes intended. Field work should commence within 60 days of the date of this letter, or **by August 31, 1995.** Please notify me at least 72 hours prior to the start of field activities.

If you have any questions, I can be reached at (510) 567-6762.

eva chu
Hazardous Materials Specialist

cc: files

quikrete.4

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6777

R0915

StID 911

November 20, 1995

Mr. Bradd Statley
RMC Lonestar
P.O. Box 5252
Pleasanton, CA 94566

RE: Reduced Sampling at Quikrete, 9315 San Leandro St, Oakland

Dear Mr. Statley:

I have completed review of All West's Third Quarter 1995 Quarterly Groundwater Monitoring report for the above referenced site. It appears only well EW-1 is exhibiting low levels of TPH-D. TPH-G, BTEX, TPH-MO and PNAs have not been detected. At this time, the following change in sampling frequency may be implemented at the site:

1. Discontinue sampling of wells EW-2, LF-2, and LF-3; and
2. Sample annually, in the first quarter of each year, wells EW-1 and LF-4.

Groundwater should be analyzed for TPH-G, TPH-D, and BTEX.

If you have any questions, I can be reached at (510) 567-6762.

eva chu
Hazardous Materials Specialist

cc: Keith Graig, AllWest, 1 Sutter, #600, San Francisco 94104
files

quikrete.5

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

R0915

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

StID 911

May 3, 1994

Mr. Bradd Statley
RMC Lonestar
P.O. Box 5252
Pleasanton, CA 94566

Subject: Stockpiled Soil at Quikrete, 9315 San Leandro Blvd, Oakland 94603

Dear Mr. Statley:

I have completed review of RMC Lonestar's March 1994 Progress Report for the above referenced site. This report summarized the results of bioremediation of diesel contaminated stockpiled soil. It appears the soil has been adequately bioremediated and can be used to backfill the opened pit.

In a recent conversation, you stated that diesel contamination at this site has not been delineated. The actual groundwater may be at 10' depth and floating product was discovered when further excavation was recently initiated. It is now anticipated that overexcavation or other feasible remediation alternatives will not be implemented until the extent of soil and ground water contamination has been delineated by use of soil borings and monitoring wells. You also wanted to install recovery wells in the former UST pit.

Please submit a workplan for this phase of the investigation **within 45 days of the date of this letter.** Also continue with quarterly monitoring of the existing wells. The next sampling event should be in July 1994. If you have any questions, I can be reached at (510) 271-4530.

Sincerely,

eva chu
Hazardous Materials Specialist

cc: files

quikrete.2

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

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StID 911

July 1, 1994

Mr. Bradd Statley
RMC Lonestar
P.O. Box 5252
Pleasanton, CA 94566

Subject: QMR at Quikrete, 9315 San Leandro, Oakland 94603

Dear Mr. Statley:

I have completed review of RMC Lonestar's June 1994 Progress Report for the above referenced site. The report summarizes the destruction of well LF-1, the installation of two groundwater recovery wells, EW-1 and EW-2, and groundwater sampling results from the two recovery wells.

At this time, quarterly sampling of wells LF-2 and LF-4 may be discontinued, but groundwater elevation measurements from LF-2, 3, and 4 should continue to verify groundwater flow direction. Quarterly groundwater sampling should continue for wells LF-3, and EW-1 or EW-2. Water samples should be analyzed for TPH-G, TPH-D, BTEX, and polynuclear aromatic hydrocarbons.

If you have any questions, I can be reached via (510) 271-4330. Since we are in the midst of relocating our office, a new phone number is not yet available.

Sincerely,

eva chu
Hazardous Materials Specialist

cc: files

quikrete.3

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

R0915

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

StID 911

October 4, 1993

Mr. Bradd Statley
RMC Lonestar
P.O.Box 5252
Pleasanton, CA 94566

Subject: QMR for Quikrete, 9315 San Leandro Blvd., Oakland 94603

Dear Mr. Statley:

I have completed review of Pacific Rim Environmental Services' Tank Closure Report, dated May 10, 1993, for the above referenced site. Laboratory analyses of soil samples collected from the side walls around the underground storage tank pit indicated up to 340 ppm TPH-D left in place. The integrity of monitoring well LF-1 may have been affected at the time of the UST removal. If this is the case, another monitoring well will need to be installed in the verified downgradient direction, and within 10-20 feet of the pit excavation.

This office is not in receipt of any groundwater monitoring and sampling data since May 1991. At that time polychlorinated biphenyls (PCBs) were detected in monitoring well LF-1 at concentrations of up to 50 ppm, and benzene at 440 ppb.

At this time, you are directed to reinstate a quarterly schedule of well sampling and monitoring. Groundwater should be analyzed for TPH-G, TPH-D, BTEX, and PCBs. Technical summary reports documenting each well sampling and monitoring episode are also due quarterly. This schedule shall continue until further notice.

Please be advised that this is a formal request for technical reports pursuant to Title 23, CCR, Section 2722(c). Any extensions of the stated deadlines, or modifications of the required tasks, must be confirmed in writing by either this agency.

Should you have any questions about the content of this letter, please contact me at (510) 271-4530.

eva chu
Hazardous Materials Specialist

cc: files

quikrete.1

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, Assistant Agency Director

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DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
80 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4320

Certified Mailer # P 367 604 520

December 16, 1992

Mr. Bradd Statley,
Environmental Engineer
RMC Lonestar
P.O. Box 5252
Pleasanton, CA 94566

Re: UST Test Failure
Quikrete, 9315 San Leandro St., Oakland, CA 94603

Dear Mr. Statley:

In response to your letter dated November 17, 1992 and our telephone conversation on December 5, 1992, I have enclosed two copies of the Underground Storage Tank Unauthorized Release (Leak) report forms that must be completed and returned to me as soon as possible. Due to the two precision underground storage tank integrity test failures at the above facility by Champion Tank Testing Company on November 3, 1992, you are now required to submit a plan of correction (to either repair or remove the underground storage tanks) to this office within ten days of the receipt of this letter as per section 2652, Article 5, Chapter 16, Division 3, Title 23 of the California Code of Regulations. This plan must include, but shall not be limited to the following:

1. Name of your environmental consultant
2. Method(s) to determine the lateral and vertical extent of contamination
3. Name of your licensed hazardous waste hauler
4. Location of the approved disposal site
5. Proposed time schedule for your investigation and remediation.

I have also enclosed a copy of an underground storage tank closure plan along with a form letter that outlines the underground storage tank removal process in Alameda County.

A review of your underground storage tank file indicated that there was a similar problem with the diesel underground storage tank in February of 1989, but there was no indication of any follow-up corrective action taken. Please send me copies of the Phase I and II Site Assessment Reports done by Levine-Fricke in 1991 and any subsequent quarterly monitoring reports from the groundwater monitoring wells that were installed at the site.

If you have any questions, please contact me at 271-4320.

Sincerely,

Ronald J. Owcarz

Ronald J. Owcarz, R.E.H.S.
Hazardous Materials Specialist

Enclosures

cc: Gil Jensen, Alameda County District Attorney's Office
Gregory Robinson, Quikrete
Richard Hiett, RWQCB
Ed Howell - file

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

R0915

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

April 17, 1991

Mr. Gregory Robinson
Operations Manager
Quikrete Northern California, Inc.
9315 San Leandro St.
Oakland CA 94603

Re: Quikrete Northern California, Inc., 9315 San Leandro St., Oakland CA 94603

NOTICE OF VIOLATION

Dear Mr. Robinson:

On March 22, 1991 Barney Chan, Hazardous Materials Specialist, from this office performed an inspection at the above property. During the inspection, a number of violations were noted of the California Code of Regulations, Title 22, Division 4 (22CCR) and of the California Health and Safety Code, Division 20 (CH&SC). The violation of 22CCR are:

1. Section 67245- Secondary containment should be provided for all containers containing free liquids. As recommended, during the inspection, some type of secondary containment should be provided for the waste oil containers located in the truck repair shop.

Violations of the California Health and Safety Code :

1. Section 25189.5- The disposal of any hazardous waste at an unpermitted facility is subject to civil fines. Considerable spillage of gasoline, diesel and oil was noticed particularly near the fuel dispenser island and in the overfill catch basin for the diesel fuel tank. Any hydrocarbon spillage soaked up by absorbant must be handled as hazardous material. In addition, it appears that seven drums of soil borings generated by the installation of monitoring wells have been left in the rear of the property.

In accordance with Section 66328 of CCR, T22 a plan of correction must be submitted to our office within 30 days. The plan should specify the actions Quikrete Northern California, Inc. will take to address the above violations.

In addition, please note that Section 25505 (c) requires that a handler of hazardous material at or above the reportable amounts, at least once every two years, review their business plan to ensure its accuracy. To this end, you should resubmit the Hazardous Materials Management Plan (HMMP) given to you at the time of the inspection within agreed upon time constraints.

Also, enclosed please find the elements of a response plan in the event inventory reconciliation indicates unaccountable variations beyond allowable limits. These are from Title 23 section 2644 of the California Code of Regulations.

If you have any questions concerning this letter, please contact the undersigned, at 271-4320.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

enclosures: Mr. Robinson only

cc: Gil Jensen, Alameda County District Attorney, Consumer and Environmental Protection Division
Edgar Howell, Chief, Hazardous Materials Division
Howard Hatayama, DOHS

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Adopt new section to read

2643. Underground Storage Tank Testing

(a) All owners of existing underground storage tanks implementing a monitoring alternative in Section 2641 of this article which specifies underground storage tank testing shall implement a testing program pursuant to Subsections (b) through (g) of this section.

(b) Testing of underground storage tanks shall utilize a method capable of detecting a release of a hazardous substance at a rate of 0.05 gallons per hour. These methods are limited to those tests that make adjustments for all of the following, if applicable:

(1) The presence of vapor pockets;

(2) Thermal expansion or contraction of the hazardous substance, which include any density considerations;

(3) Temperature stratification in the underground storage tank;

(4) Evaporation;

(5) Pressure variations in the underground storage tank; and

(6) Deflection of the underground storage tank ends.

(c) Testing of pipelines which have been isolated may utilize a hydrostatic pressure test in lieu of the test required in Subsection (b) of this section. This hydrostatic pressure test shall be conducted at a pressure of 50 psi (2600 mm Hg) or greater. The test shall be performed for at least 5 minutes. A pressure drop of more than 5 psi (260 mm Hg) per minute indicates the probability of a leaking pipeline. A pressure drop of less than 5 psi (260 mm Hg) but greater than zero is inconclusive, and a test pursuant to Subsection (b) of this section shall be performed.

(d) The tests required in this section shall be performed by personnel who have received training in appropriate test procedures. The person performing the test described in Sub- section (b) of this section shall certify that the test procedure utilized takes into account the variables specified and is capable of measuring leaks of 0.05 gallons per hour. Additionally, 1 year after the development of a listing or certification procedure by a nationally

recognized independent testing organization which evaluates the accuracy of the test for the type of test described in Subsection (b) of this section, only listed or certified tests shall be accepted.

(e) Within 30 days of completion of either of the leak detection test described in Subsection (b) or (c) of this section, the underground storage tank owner shall provide the local agency with a report which includes the following information, if applicable:

(1) The procedures used (including any deviations from those recommended by the developer of the underground storage tank test procedure) for the leak detection method;

(2) The test results used in determining the volumetric rate of product loss;

(3) The volumetric rate of product loss; and

(4) The information shall be presented in written and/or tabular format as appropriate and shall be at a level of detail appropriate for the test procedure used.

(f) Underground storage tanks which are found to lose product shall be repaired or replaced as specified in Articles 6 and 7 of this subchapter, respectively.

(g) The results of any tests, other than those required by this article, performed on the underground storage tank to determine if the underground storage tank is leaking shall be reported by the underground storage tank owner to the local agency within 30 days of completion of the test.

Authority: H&SC 25299.3
Reference: H&SC 25291, 25292, 25293

Adopt new section to read:

2644. Inventory Reconciliation

(a) All owners of existing underground storage tanks implementing a monitoring alternative in Section 2641 of this article which specifies inventory reconciliation shall implement an inventory reconciliation program as described in Subsections (b) through (f) of this section. This requirement may be transferred to the operator pursuant to the appropriate provisions of Chapter 6.7 of Division 20 of

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the Health and Safety Code.

(b) All underground storage tanks shall be individually monitored utilizing a daily inventory reconciliation system that takes into account: separate daily underground storage tank quantity measurements for both the stored hazardous substance and any water layer, and daily meter readings for underground storage tank input and withdrawals. Underground storage tanks that are connected by a manifold may be monitored as a unit instead of individually. Underground storage tank input and withdrawal meters shall comply with California Administrative Code, Title 4, Chapter 9, Subchapter 1, "Tolerances and specifications for commerical weighing and measuring devices". Meters shall be inspected by the county department of weights and measures or a device repairman as defined in the California Business and Professions Code, Division 5, Chapter 5.5

(c) For the purpose of this section, "daily" shall be defined as at least 5 days per week. This minimum may be reduced during weeks that a public holiday occurs on Monday through Friday. Local agencies may reduce the frequency of monitoring to no less than once every 3 days at facilities that are not staffed on a regular basis provided that the monitoring is performed on every day the facility is staffed or that inputs or withdrawals are made from the underground storage tank.

(d) Underground storage tank quantity measurements shall be based on liquid elevation measurements which are:

(1) Performed during periods when no additions or withdrawals are being made to the underground storage tank;

(2) Performed by the underground storage tank owner, operator, or other designated personnel who have had appropriate training;

(3) Based on the average of two readings if stick or tape measurements are used;

(4) Capable of detecting a water layer at the bottom of the underground storage tank, if possible. If the underground storage tank is not level, then the measurement should occur at the lowest end of the underground storage tank;

(5) Measured at the center of the longitudinal axis of the underground storage tank if access is available or

measured at the lowest end of the underground storage tank with a calibration measurement at both ends, if possible, to determine if any underground storage tank tilt exists and, if so, its magnitude; and

(6) Converted to volume measurements based on a calibration chart for the underground storage tank. This chart shall, if possible, take into account the actual tilt of the underground storage tank as determined initially as described in Subsection (5) above.

(e) The owner or operator shall, on a quarterly basis, submit a statement to the local agency, under penalty of perjury, that either: the data is within allowable variations or a listing of the dates and variations that exceed the allowable variations.

(f) If inventory reconciliation indicates a loss of the hazardous substance greater than that specified, the operator or permittee shall implement the following. If inventory reconciliation indicates an increase in volume greater than that specified, the operator or permittee shall implement Subsections (1), (2), (3), and (5) of this section. The steps may be implemented sequentially or concurrently; however, they must be completed within the specified time periods. Reporting as required in Article 5 of this subchapter shall be followed.

If completion of the steps described in Subsections (2), (3), or (5) of this subsection indicates inventory reconciliation error that, when corrected cause the levels specified, not to be exceeded, then the remainder of the steps need not be completed. If completion of the steps described in Subsections (4) or (6) through (8) of this subsection reveal the source of the loss, then the remainder of the steps need not be completed.

The transfer of hazardous substances into and out of the underground storage tank may continue during implementation of the steps provided that the steps are completed within the specified periods and any loss or gain did not exceed two times the specified levels. Daily reconciliation shall continue during implementation of the steps.

(1) The operator shall notify the owner verbally or in writing of the fact that inventory reconciliation indicates a loss of hazardous substances or gain of water within 24 hours of the completion of the daily reconciliation which indicates the loss or gain.

R0015

(2) The operator shall review the inventory records within 2 hours to determine if an error exists which would cause the gain or loss to be less than that specified.

(3) The operator shall have performed, by a qualified person, a complete review of all inventory records from the last time a zero loss or gain condition existed. This shall include a new inventory reconciliation which was taken at least 8 hours after the inventory reconcilition which triggered this evaluation. This shall be completed within 24 hours of the conclusion of Subsection (f)(2) of this section.

(4) The readily accessible physical facilities shall be carefully inspected for leakage. This shall be completed by trained personnel within 24 hours of completion of Subsection (f)(3) of this section.

(5) All dispenser meters associated with hazardous substance withdrawal shall be checked for calibration within 24 hours of completion of Subsection (f)(4) of this section.

(6) All piping shall be tested within 24 hours of completion of Subsection (f)(5) of this section. The piping shall be isolated and hydrostatically pressure tested at 50 psi (2600 hmm Hg) or greater. If the pressure drops more than 5 psi (260 mm Hg) per minute, it indicates the probability of a leak in the line. Repeat the test at least once to ensure against compression of entrained air. Any pressure drop less than 5 psi (260 mm Hg) per minute is inconclusive as it may be caused by cooling. This step may be completed after the step described in *Subsection(f)*(7) of this section if excavation is necessary to perform the tests and if the step described in Subsection (f)(7) of this section is completed within 48 hours of the completion of Subsection (f)(5) of this section. If this occurs, then this subsection shall be completed within 24 hours of the completion of Subsection (f)(7) of this section.

(7) The underground storage tank shall be tested using the tests described in Section 2643 of this article within 48 hours of completion of Subsection (f)(6) of this section.

(8) Additional tests or investigations as required by the local agency.

Authority: H&SC 25299.3

Reference: H&SC 25291, 25292

Adopt new section to read:

2645. Soil Testing

(a) All owners of existing underground storage tanks implementing one of the monitoring alternatives described in Section 2641 of this article which requires borings for vadose zone or ground water monitoring shall implement soil testing pursuant to Subsections (b) through (n) of this section.

(b) Undisturbed (intact) soil samples shall be recovered from all borings used for the installation. This requirement may be waived by the local agency when borings cannot be drilled and sampled using accepted techniques that do not introduce liquids into the boring.

(c) Soil samples shall be taken at intervals of 5 feet or less beginning at the ground surface, but sampling shall not be required below the water table nor in unweathered bedrock which has little or no primary permeability.

(d) A soil sample shall also be obtained at the termination depth of a dry boring regardless of the spacing interval.

(e) Borings shall be drilled and sampled by techniques that do not introduce liquids into the boring and that allow the accurate detection of perched and saturated zone ground water. If this cannot be accomplished using accepted techniques, the requirement for soil sampling may be waived by the local agency; however, the vadose zone or ground water monitoring system shall still be installed. Furthermore, once below the water table, it is not required that the wells be advanced using the same method that was used in the vadose zone.

(f) Borings shall be described in accordance with the provisions of Subsections 2648(t) and (u) of this article.

(g) Soil samples shall be of sufficient volume to perform the designated analyses including soil vapor and soil extract analyses and to provide replicate analyses, if specified.

(h) If more than one boring is utilized, composite samples consisting of soil from the same depth from each boring may be used for laboratory analysis if such samples can be made without loss of constituents prior to analysis and any