

life of the UST system.

(Effective July 28, 1994)

Sec. 22a-449 (d)-105. Release reporting, investigation, and confirmation

(a) Reporting of suspected releases.

Owners and operators of UST systems shall report to the implementing agency within 24 hours, or any time period provided under applicable law, including, but not limited to, section 22a-450 of the general statutes, as amended and any implementing regulations, whichever is earliest, and follow the procedures in subsection 22a-449 (d)-105 (c) of these regulations for any of the following conditions:

(1) The discovery by owners and operators or others of released regulated substances at the UST site or in the surrounding area including, but not limited to, the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface water.

(2) Unusual operating conditions observed by owners and operators, including, but not limited to, the erratic behavior of product dispensing equipment, the sudden loss of product from the UST system, or an unexplained presence of water in the tank, unless system equipment is found to be defective but not leaking, and is immediately repaired or replaced; and,

(3) Monitoring results from a release detection method required under subsections 22a-449 (d)-104 (c) and (d) of these regulations that indicate a release may have occurred unless the monitoring device is found to be defective, and is immediately repaired, recalibrated or replaced, and additional monitoring does not confirm the initial result;

(4) The owner or operator of UST systems shall submit a written report to the commissioner within 3 working days of a release including, but not limited to, estimated amount of product lost, location of release and identification of leaking components of the UST system.

(b) Investigation due to off-site impacts.

When required by the implementing agency, owners and operators of UST systems shall follow the procedures in subsections 22a-449 (d)-105 (c) of these regulations to determine if the UST system is the source of off-site impacts. These impacts include the discovery of regulated substances including, but not limited to, the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface and drinking waters that has been observed by the implementing agency or brought to its attention by another party.

(c) Release investigation and confirmation steps.

Unless corrective action is initiated in accordance with section 22a-449 (d)-106 of these regulations, owners and operators shall immediately investigate and confirm all suspected releases of regulated substances requiring reporting under subsections 22a-449 (d)-105 (a) of these regulations within 7 days, or another time period specified in writing by the implementing agency, using either the following steps or another procedure given prior written approval by the implementing agency:

(1) System test. Owners and operators shall conduct tests according to the requirements for tightness testing in subdivisions 22a-449 (d)-104 (e) (3) and (f) (2) of these regulations that determine whether a leak exists in any portion of the tank, or the attached piping other than vent and vapor recovery piping that does not routinely contain product unless the commissioner requests that such piping be tested, or any combination of such tank and piping.

(A) Owners and operators shall repair, replace or upgrade the UST system, and begin corrective

action in accordance with section 22a-449 (d)-106 of these regulations if the test results for the system, tank, or delivery piping indicate that a leak exists.

(B) Further investigation shall not be required if the test results for the system, tank, and delivery piping do not indicate that a leak exists and if environmental contamination is not the basis for suspecting a release.

(C) Owners and operators shall conduct a site check as described in subdivision 22a-449 (d)-105 (c) (2) of these regulations if the test results for the system, tank, and delivery piping do not indicate that a leak exists but environmental contamination is the basis for suspecting a release.

(2) Site check. Owners and operators shall measure for the presence of a release where contamination is most likely to be present at the UST site and such measurements shall include but not be limited to the selection of samples for analysis to determine the presence of a release where contamination is most likely to be present at the UST site. Such samples and measurements shall be conducted in a manner to determine compliance with all applicable laws and regulations. In selecting sample types, sample locations, and measurement methods, owners and operators shall consider the nature of the stored substance, the type of initial alarm or cause for suspicion, the type of backfill, the depth of ground water, and other factors appropriate for identifying the presence and source of the release. Sample collection and analysis shall comply with the appropriate chain-of-custody procedures to ensure sample integrity and all samples shall be analyzed by a laboratory certified by the Connecticut Department of Health Services to perform such analyses.

(A) If the test results for the excavation zone or the UST site indicate that a release has occurred, owners and operators shall begin corrective action in accordance with section 22a-449 (d)-106 of these regulations;

(B) If the test results for the excavation zone or the UST site do not indicate that a release has occurred, further investigation shall not be required.

(d) Reporting and cleanup of spills and overfills.

(1) Owners and operators of UST systems shall immediately contain and immediately clean up a spill or overfill and report to the implementing agency within 24 hours, or any time period provided under applicable law including, but not limited to, section 22a-450 of the general statutes, as amended, and any implementing regulations, whichever is earliest, and begin corrective action in accordance with section 22a-449 (d)-106 of these regulations in the following cases:

(A) Spill or overfill of petroleum that results in a release to the environment, and

(B) Spill or overfill of a hazardous substance that results in a release to the environment that equals or exceeds its reportable quantity under CERCLA (40 CFR part 302).

(2) Owners and operators of UST systems shall immediately contain and immediately clean up a spill or overfill of a hazardous substance that is less than the reportable quantity. If cleanup cannot be accomplished within 24 hours, or another time period established in writing by the implementing agency, owners and operators shall immediately notify the implementing agency.

(3) Pursuant to 40 CFR sections 302.6 and 355.40, a release of a hazardous substance equal to or in excess of its reportable quantity shall also be reported immediately (rather than within 24 hours) to the National Response Center under sections 102 and 103 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and to appropriate state and local authorities under Title III of the Superfund Amendments and Reauthorization Act of 1986.

(Effective July 28, 1994)

Sec. 22a-449 (d)-106. Release response and corrective action for ust systems containing petroleum or hazardous substances

(a) General.

Owners and operators of petroleum or hazardous substance UST systems shall, in response to a confirmed release from the UST system, comply with the requirements of this section except for USTs excluded under subdivision 22a-449 (d)-101 (a) (2) of these regulations and UST systems subject to the Resource Conservation and Recovery Act Subtitle C corrective action requirements under section 3004 (u) of the Resource Conservation and Recovery Act, as amended.

(b) Additional Requirements.

The following requirements shall apply in addition to those in this section:

(1) Discharges prohibited. No owner or operator shall discharge any water, substance or material, including, but not limited to, regulated substances, from any UST system to the waters of the state without first obtaining a permit for such discharge pursuant to section 22a-430 of the general statutes, as amended.

(2) Corrective action. The owner or operator of an UST system which discharges regulated substances without a permit issued pursuant to section 22a-430 of the general statutes, as amended, shall immediately cease such discharge and reclaim, recover and properly dispose of the discharged liquid and any other substance contaminated by it, restore the environment to a condition and quality acceptable to the commissioner, and repair damage caused by the discharge, and comply with the requirements in subdivision 22a-449 (d)-106 (d) (1) and (b) (3) of these regulations, all to the satisfaction of the commissioner.

(3) Failures.

(A) The owner or operator of an UST system at which a failure occurs shall immediately empty and discontinue the use of the failed component and:

(i) Remove or abandon it within ninety days in accordance with the applicable procedures in NFPA 30 and in accordance with sections 22a-449 (d)-101 to 22a-449 (d)-113, inclusive, of these regulations; or

(ii) Repair it within sixty days in accordance with sections 22a-449 (d)-101 to 22a-449 (d)-113, inclusive, of these regulations; or

(iii) Replace all damaged components in accordance with sections 22a-449 (d)-101 to 22a-449 (d)-113, inclusive, of these regulations.

(B) When a failure occurs at an UST system, all of such UST system's components shall be evaluated within thirty days to determine whether similar conditions to that which caused the failure exist. Within ten (10) days following such evaluation, the owner or operator shall notify the commissioner in writing of the methods and results of each such evaluation. If an additional failure is detected, the owner or operator shall act in accordance with sections 22a-449 (d)-101 to 22a-449 (d)-113, inclusive, of these regulations.

(c) Initial response.

Upon confirmation of a release in accordance with subsection 22a-449 (d)-105 (c) of these regulations or after a release from the UST system is identified in any other manner, owners and operators shall perform the following initial response actions within 24 hours of a release or within another reasonable period of time determined by applicable law or the implementing agency:

(1) Report the release to the implementing agency by telephone, or electronic mail; and notify the

appropriate emergency fire response and public safety and health personnel;

(2) Take immediate action to prevent any further release of the regulated substance into the environment including emptying and discontinuing use of any leaking UST system component and any UST system component which has been subject to a failure; and

(3) Identify and mitigate fire, explosion, and vapor hazards.

(d) Initial abatement measures and site check.

(1) Unless directed in writing to do otherwise by the implementing agency, owners and operators shall perform the following abatement measures:

(A) Remove all of the regulated substance from the UST system to prevent further release to the environment;

(B) Visually inspect any aboveground releases or exposed belowground releases and prevent further migration of the released substance into surrounding soils and ground water;

(C) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors or free product that have migrated from the UST excavation zone and entered into subsurface structures including, but not limited to, sewers or basements;

(D) Remedy hazards posed by contaminated soils and other materials that are excavated or exposed as a result of release confirmation, site investigation, abatement, or corrective action activities. If these remedies include treatment or disposal of soils, the owner and operator shall comply with applicable State and local requirements;

(E) Measure for the presence of a release where contamination is most likely to be present at the UST site, unless the presence and source of the release have been confirmed in accordance with the site check required by subdivision 22a-449 (d)-105 (c) (2) of these regulations or the closure site assessment of subdivision 22a-449 (d)-107 (c) (1) of these regulations. Such measurements shall include but not be limited to the selection of samples for analysis to determine the presence of a release where contamination is most likely to be present at the UST site. Such samples and measurements shall be conducted in a manner to determine compliance with all applicable laws and regulations. Sample collection and analysis shall comply with appropriate chain-of-custody procedures to ensure sample integrity and all samples shall be analyzed by a laboratory certified by the department of public health and addiction services to perform such analyses. In selecting sample types, sample locations, and measurement methods, the owner and operator shall consider the nature of the stored substance, the type of backfill, depth to ground water and other factors as appropriate for identifying the presence and source of the release; and

(F) Investigate to determine the possible presence of free product, and begin free product removal as soon as practicable and in accordance with subsection 22a-449 (d)-106 (f) of these regulations.

(2) Within 20 days after release confirmation, or within another reasonable period of time specified in writing by the implementing agency, owners and operators shall submit a report to the implementing agency summarizing the initial abatement steps taken under subdivision 22a-449 (d)-106 (d) (1) of these regulations and any resulting information or data.

(e) Initial site characterization.

(1) Unless directed in writing to do otherwise by the implementing agency, owners and operators shall assemble information about the site and the nature of the release, including information gained while confirming the release or completing the initial abatement measures in subsections 22a-449 (d)-106 (a) and (c) of these regulations. This information shall include, but shall not necessarily be limited to the following:

(A) Data on the nature and estimated quantity of release;

(B) Data from available sources and/or site investigations concerning the following factors: surrounding populations, water quality, use and approximate locations of wells potentially affected by the release, subsurface soil conditions, locations of subsurface sewers, climatological conditions, and land use;

(C) Results of the site check required under subdivision 22a-449 (d)-106 (d) (1) (E) of these regulations; and

(D) Results of the free product investigations required under subdivision 22a-449 (d)-106 (d) (1) (F) of these regulations, to be used by owners and operators to determine whether free product shall be recovered under subsection 22a-449 (d)-106 (f).

(2) Within 45 days of release confirmation or another reasonable period of time specified in writing by the implementing agency, owners and operators shall submit the information collected in compliance with subdivision 22a-449 (d)-106 (e) (1) of these regulations to the implementing agency in a manner that demonstrates its applicability and technical adequacy, or in a format and according to the schedule required by the implementing agency.

(f) Free product removal.

At sites where investigations under subdivision 22a-449 (d)-106 (d) (1) (F) of these regulations indicate the presence of free product, owners and operators shall remove free product to the maximum extent practicable as determined by the implementing agency while continuing, as necessary, any actions initiated under subsections 22a-449 (d)-106 (c), (d) and (e) of these regulations, or preparing for actions required under subsections 22a-449 (d)-106 (g) and (h) of these regulations. In meeting the requirements of this section, owners and operators shall:

(1) Conduct free product removal in a manner that minimizes the spread of contamination into previously uncontaminated zones by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site, and that properly treats, discharges or disposes of recovery byproducts in compliance with applicable local, State and Federal regulations;

(2) Use abatement of free product migration as a minimum objective for the design of the free product removal system;

(3) Handle any flammable products in a safe and competent manner to prevent fires or explosions; and

(4) Unless directed in writing to do otherwise by the implementing agency, prepare and submit to the implementing agency, within 45 days after confirming a release, a free product removal report that provides at least the following information:

(A) The name of the person(s) responsible for implementing the free product removal measures;

(B) The estimated quantity, type, and thickness of free product observed or measured in wells, boreholes, and excavations;

(C) The type of free product recovery system used;

(D) Whether any discharge shall take place on-site or off-site during the recovery operation and where this discharge shall be located;

(E) The type of treatment applied to, and the effluent quality expected from, any discharge;

(F) The steps that have been or are being taken to obtain necessary permits for any discharge; and

(G) The disposition of the recovered free product.

(g) Investigations for soil and ground-water cleanup.

(1) In order to determine the full extent and location of soils contaminated by the release and the

presence and concentrations of dissolved product contamination in the ground water, owners and operators shall conduct investigations of the release, the release site, and the surrounding area possibly affected by the release if any of the following conditions exist:

(A) There is evidence that ground-water wells have been affected by the release, including, but not limited to, evidence found during release confirmation or during previous corrective action measures;

(B) Free product is found to need recovery in compliance with subsection 22a-449 (d)-106 (f) of these regulations;

(C) There is evidence that contaminated soils may be in contact with ground water, including, but not limited to, evidence found during conduct of the initial response measures or investigations required under subsections 22a-449 (d)-106 (a), (c), (d), (e) and (f) of these regulations; and

(D) The implementing agency requests an investigation, based on the potential effects of contaminated soil or ground water on nearby surface water and ground-water resources.

(2) Owners and operators shall submit the information collected under subdivision 22a-449 (d)-106 (g) (1) of these regulations as soon as practicable or in accordance with a schedule established by the implementing agency.

(h) Corrective action plan.

(1) At any point after reviewing the information submitted in compliance with subsections 22a-449 (d)-106 (c), (d), and (e) of these regulations implementing agency may require owners and operators to submit additional information or to develop and submit a corrective action plan for responding to contaminated soils and ground water. If a plan is required, owners and operators shall submit the plan according to a schedule and format established by the implementing agency. Alternatively, owners and operators may, after fulfilling the requirements of subsections 22a-449 (d)-106 (c), (d) and (e) of these regulations, choose to submit a corrective action plan for responding to contaminated soil and ground water. In either case, owners and operators are responsible for submitting a plan that provides for adequate protection of human health and the environment as determined by the implementing agency, and shall modify their plan as necessary to meet this standard.

(2) The implementing agency shall approve the corrective action plan only after ensuring that implementation of the plan shall adequately protect human health, safety, and the environment. In making this determination, the implementing agency shall consider the following factors as appropriate:

(A) The physical and chemical characteristics of the regulated substance, including its toxicity, persistence, and potential for migration;

(B) The hydrogeologic characteristics of the facility and the surrounding area;

(C) The proximity, quality, and current and future uses of nearby surface water and ground water;

(D) The potential effects of residual contamination on nearby surface water and ground water;

(E) An exposure assessment; and

(F) Any information assembled in compliance with section 22a-449 (d)-106 of these regulations.

(3) Upon approval of the corrective action plan or as directed by the implementing agency, owners and operators shall implement the plan, including modifications to the plan made by the implementing agency. They shall monitor, evaluate, and report the results of implementing the plan in accordance with a schedule and in a format established by the implementing agency.

(4) Owners and operators may, in the interest of minimizing environmental contamination and

promoting more effective cleanup, begin cleanup of soil and ground water before the corrective action plan is approved provided that they:

(A) Notify the implementing agency of their intention to begin cleanup;

(B) Comply with any conditions imposed by the implementing agency, including halting cleanup or mitigating adverse consequences from cleanup activities; and

(C) Incorporate these self-initiated cleanup measures in the corrective action plan that is submitted to the implementing agency for approval.

(i) Public participation.

(1) For each confirmed release that requires a corrective action plan, the implementing agency shall provide notice to the public by means designed to reach those members of the public directly affected by the release and the planned corrective action. This notice may include, but is not limited to, public notice in local newspapers, block advertisements, public service announcements, publication in a state register, letters to individual households, or personal contacts by field staff.

(2) The implementing agency shall ensure that site release information and decisions concerning the corrective action plan are made available to the public for inspection upon request.

(3) Before approving a corrective action plan, the implementing agency may hold a public meeting to consider comments on the proposed corrective action plan if there is sufficient public interest, or for any other reason.

(4) The implementing agency shall give public notice that complies with subdivision 22a-449 (d)-106 (i) (1) of these regulations if implementation of an approved corrective action plan does not achieve the established cleanup levels in the plan and termination of that plan is under consideration by the implementing agency.

(Effective July 28, 1994)

Sec. 22a-449 (d)-107. Out-of-service Ust systems and closure

(a) Temporary closure.

(1) When an UST system is temporarily closed, owners and operators shall continue operation and maintenance of corrosion protection in accordance with subsections 22a-449 (d)-103 (b) of these regulations, and any release detection in accordance with section 22a-449 (d)-104 of these regulations. Section 22a-449 (d)-105 and section 22a-449 (d)-106 of these regulations shall be complied with if a release is suspected or confirmed. However, release detection other than monthly measurement recording for residue and water level in the UST system in accordance with section 22a-449 (d)-104 of these regulations shall not be required as long as the UST system is empty and has never been subject to a failure. The UST system is empty when all materials have been removed using commonly employed practices so that no more than 2.5 centimeters (one inch) of residue, or 0.3 percent by weight of the total capacity of the UST system, remain in the system.

(2) When an UST system is temporarily closed for 3 months or more, owners and operators shall also comply with the following requirements:

(A) Leave vent lines open and functioning; and

(B) Cap and secure all other lines, pumps, manways, and ancillary equipment.

(3) When an UST system is temporarily closed for more than 12 months, owners and operators shall permanently close the UST system if it does not meet either performance standards in subsection 22a-449 (d)-102 (a) of these regulations for new UST systems or the upgrading requirements in section 22a-449 (d)-110 of these regulations, except that the spill and overflow