Subpart F—Release Response and Corrective Action for UST Systems Containing Petroleum or Hazardous Substances

§280.60 General.

Owners and operators of petroleum or hazardous substance UST systems must, in response to a confirmed release from the UST system, comply with the requirements of this subpart except for USTs excluded under \$280.10(b) and UST systems subject to RCRA Subtitle C corrective action requirements under section 3004(u) of the Resource Conservation and Recovery Act. as amended.

§ 280.61 Initial response.

Upon confirmation of a release in accordance with §280.52 or after a release from the UST system is identified in any other manner, owners and operators must perform the following initial response actions within 24 hours of a release or within another reasonable period of time determined by the implementing agency:

- (a) Report the release to the implementing agency (e.g., by telephone or electronic mail);
- (b) Take immediate action to prevent any further release of the regulated substance into the environment; and
- (c) Identify and mitigate fire, explosion, and vapor hazards.

§ 280.62 Initial abatement measures and site check.

- (a) Unless directed to do otherwise by the implementing agency, owners and operators must perform the following abatement measures:
- (1) Remove as much of the regulated substance from the UST system as is necessary to prevent further release to the environment;
- (2) Visually inspect any aboveground releases or exposed belowground releases and prevent further migration of the released substance into surrounding soils and ground water;
- (3) 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 sub-

surface structures (such as sewers or basements);

- (4) Remedy hazards posed by contaminated soils 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 must comply with applicable State and local requirements;
- (5) 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 \$280.52(b) or the closure site assessment of \$280.72(a). In selecting sample types, sample locations, and measurement methods, the owner and operator must 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
- (6) Investigate to determine the possible presence of free product, and begin free product removal as soon as practicable and in accordance with §280.64.
- (b) Within 20 days after release confirmation, or within another reasonable period of time determined by the implementing agency, owners and operators must submit a report to the implementing agency summarizing the initial abatement steps taken under paragraph (a) of this section and any resulting information or data.

§ 280.63 Initial site characterization.

- (a) Unless directed to do otherwise by the implementing agency, owners and operators must 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 §§ 280.60 and 280.61. This information must include, but is not necessarily limited to the following:
- (1) Data on the nature and estimated quantity of release;
- (2) Data from available sources and/ or site investigations concerning the

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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:

- (3) Results of the site check required under § 280.62(a)(5); and
- (4) Results of the free product investigations required under §280.62(a)(6), to be used by owners and operators to determine whether free product must be recovered under §280.64.
- (b) Within 45 days of release confirmation or another reasonable period of time determined by the implementing agency, owners and operators must submit the information collected in compliance with paragraph (a) of this section 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.

§280.64 Free product removal.

At sites where investigations under §280.62(a)(6) indicate the presence of free product, owners and operators must remove free product to the maximum extent practicable as determined by the implementing agency while continuing, as necessary, any actions initiated under §§280.61 through 280.63, or preparing for actions required under §§280.65 through 280.66. In meeting the requirements of this section, owners and operators must:

- (a) 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;
- (b) Use abatement of free product migration as a minimum objective for the design of the free product removal system:
- (c) Handle any flammable products in a safe and competent manner to prevent fires or explosions; and
- (d) Unless directed 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:

- (1) The name of the person(s) responsible for implementing the free product removal measures;
- (2) The estimated quantity, type, and thickness of free product observed or measured in wells, boreholes, and excavations:
- (3) The type of free product recovery system used;
- (4) Whether any discharge will take place on-site or off-site during the recovery operation and where this discharge will be located;
- (5) The type of treatment applied to, and the effluent quality expected from, any discharge;
- (6) The steps that have been or are being taken to obtain necessary permits for any discharge; and
- (7) The disposition of the recovered free product.

§ 280.65 Investigations for soil and ground-water cleanup.

- (a) 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 must conduct investigations of the release, the release site, and the surrounding area possibly affected by the release if any of the following conditions exist:
- (1) There is evidence that groundwater wells have been affected by the release (e.g., as found during release confirmation or previous corrective action measures);
- (2) Free product is found to need recovery in compliance with § 280.64;
- (3) There is evidence that contaminated soils may be in contact with ground water (e.g., as found during conduct of the initial response measures or investigations required under §§ 280.60 through 280.64); and
- (4) 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.
- (b) Owners and operators must submit the information collected under

paragraph (a) of this section as soon as practicable or in accordance with a schedule established by the implementing agency.

§ 280.66 Corrective action plan.

- (a) At any point after reviewing the information submitted in compliance with §§ 280.61 through 280.63, the 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 must submit the plan according to a schedule and format established by the implementing agency. Alternatively, owners and operators may, after fulfilling the requirements of §§ 280.61 through 280.63, 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 must modify their plan as necessary to meet this standard.
- (b) The implementing agency will approve the corrective action plan only after ensuring that implementation of the plan will adequately protect human health, safety, and the environment. In making this determination, the implementing agency should consider the following factors as appropriate:

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

- (2) The hydrogeologic characteristics of the facility and the surrounding area.
- (3) The proximity, quality, and current and future uses of nearby surface water and ground water;
- (4) The potential effects of residual contamination on nearby surface water and ground water;
 - (5) An exposure assessment; and
- (6) Any information assembled in compliance with this subpart.
- (c) Upon approval of the corrective action plan or as directed by the implementing agency, owners and operators must implement the plan, including

- modifications to the plan made by the implementing agency. They must monitor, evaluate, and report the results of implementing the plan in accordance with a schedule and in a format established by the implementing agency.
- (d) 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:
- (i) Notify the implementing agency of their intention to begin cleanup;
- (2) Comply with any conditions imposed by the implementing agency, including halting cleanup or mitigating adverse consequences from cleanup activities; and
- (3) Incorporate these self-initiated cleanup measures in the corrective action plan that is submitted to the implementing agency for approval.

§280.67 Public participation.

- (a) For each confirmed release that requires a corrective action plan, the implementing agency must 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.
- (b) The implementing agency must ensure that site release information and decisions concerning the corrective action plan are made available to the public for inspection upon request.
- (c) 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.
- (d) The implementing agency must give public notice that complies with paragraph (a) of this section if implementation of an approved corrective action plan does not achieve the established cleanup levels in the plan and

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termination of that plan is under consideration by the implementing agency.

Subpart G—Out-of-Service UST Systems and Closure

§ 280.70 Temporary closure.

- (a) When an UST system is temporarily closed, owners and operators must continue operation and maintenance of corrosion protection in accordance with §280.31, and any release detection in accordance with subpart D. Subparts E and F must be complied with if a release is suspected or confirmed. However, release detection is not required as long as the UST system is empty. 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.
- (b) When an UST system is temporarily closed for 3 months or more, owners and operators must also comply with the following requirements:
- (1) Leave vent lines open and functioning; and
- (2) Cap and secure all other lines, pumps, manways, and ancillary equipment
- (c) When an UST system is temporarily closed for more than 12 months, owners and operators must permanently close the UST system if it does not meet either performance standards in §280.20 for new UST systems or the upgrading requirements in §280.21, except that the spill and overfill equipment requirements do not have to be met. Owners and operators must permanently close the substandard UST systems at the end of this 12-month period in accordance with §§ 280.71-280.74, unless the implementing agency provides an extension of the 12-month temporary closure period. Owners and operators must complete a site assessment in accordance with §280.72 before such an extension can be applied for.

§ 280.71 Permanent closure and changes-in-service.

(a) At least 30 days before beginning either permanent closure or a change-in-service under paragraphs (b) and (c)

of this section, or within another reasonable time period determined by the implementing agency, owners and operators must notify the implementing agency of their intent to permanently close or make the change-in-service, *unless* such action is in response to corrective action. The required assessment of the excavation zone under §280.72 must be performed after notifying the implementing agency but before completion of the permanent closure or a change-in-service.

- (b) To permanently close a tank, owners and operators must empty and clean it by removing all liquids and accumulated sludges. All tanks taken out of service permanently must also be either removed from the ground or filled with an inert solid material.
- (c) Continued use of an UST system to store a non-regulated substance is considered a change-in-service. Before a change-in-service, owners and operators must empty and clean the tank by removing all liquid and accumulated sludge and conduct a site assessment in accordance with §280.72.

NOTE: The following cleaning and closure procedures may be used to comply with this section:

- (A) American Petroleum Institute Recommended Practice 1604, "Removal and Disposal of Used Underground Petroleum Storage Tanks";
- (B) American Petroleum Institute Publication 2015, "Cleaning Petroleum Storage Tanks";
- (C) American Petroleum Institute Recommended Practice 1631, "Interior Lining of Underground Storage Tanks," may be used as guidance for compliance with this section; and
- (D) The National Institute for Occupational Safety and Health "Criteria for a Recommended Standard * * * Working in Confined Space" may be used as guidance for conducting safe closure procedures at some hazardous substance tanks.

§ 280.72 Assessing the site at closure or change-in-service.

(a) Before permanent closure or a change-in-service is completed, owners and operators must measure for the presence of a release where contamination is most likely to be present at the UST site. In selecting sample types, sample locations, and measurement methods, owners and operators must