

**Navajo Nation EPA Storage Tank/Leaking Storage Tank Programs
Program Guidance No. 6
Phase II Environmental Site Assessments**

A. Introduction and Authority

There are two situations when a Phase II Environmental Site Assessment (“ESA”) may be required in connection with storage tanks regulated by the Navajo Nation EPA (“NNEPA”): first, as part of a property transfer or other disposition of property involving storage tanks; and second, when there is a release or suspected release of a regulated substance from a storage tank. However, while a Phase I ESA means roughly the same thing to property owners, buyers, lenders, and regulators, the same is not true of a Phase II ESA. Investigations under the Phase II label have been highly diverse, and may involve sampling and testing of the soil, groundwater, and other media. Attempts to define the scope of investigation have been particularly problematic because of the diversity of circumstances encountered at different types of facilities. This guidance document provides uniform and consistent procedures for conducting Phase II ESAs that are subject to review by the NNEPA Storage Tank Programs. It is being issued pursuant to NNEPA’s general authority to issue guidance under **Navajo Nation Underground and Aboveground Storage Tank Act (“NNSTA”) § 1506(a)(9)**. NNEPA also has the specific authority to promulgate regulations containing requirements for performing an environmental assessment, NNSTA § 1541(B)(5), and may do so in the future after assessing the effectiveness of this guidance.

B. Situations Triggering Phase II ESAs

1. *Property Transfer or Other Disposition of Lease*

As explained above, the first situation triggering a Phase II ESA is the proposed transfer or other disposition of a business site lease involving storage tanks. Such transfers, terminations, and other lease dispositions are overseen by the Regional Business Development Offices (“RBDOs”) within the Navajo Nation Division of Economic Development, and take place pursuant to the **Navajo Nation Business Site Lease Regulations**. These regulations require a Phase II ESA to be performed before a lessee deposits regulated substances into or dispenses them from a storage tank at the leased site, but no later than 90 days after a lease is approved, § 2.4(A). They also require an existing lessee to perform the Phase II ESA prior to leaving a site, and prior to termination or expiration of the lease, §§ 2.4(A) & (B), 2.5(C).

Under the NNSTA, the Division of Economic Development/RBDO may request NNEPA to provide technical assistance in reviewing an ESA and to ensure compliance with NNSTA requirements, **NNSTA §§ 1542(C)(13) and 1545(B)**. NNEPA also may review ESAs associated with the property transfer process “to determine liability for a release or as a follow-up to a reported release, **NNSTA § 1542(C)(13)**.”

In addition, **40 C.F.R. § 280.72** requires an environmental site assessment to be performed before an underground storage tank is permanently closed or before there is a change in ownership or operation of the tank, if it cannot be shown pursuant to 40 C.F.R. § 280.43(e) or (f) (vapor or groundwater monitoring) that no release has occurred. NNSTA § 1542(A) incorporates this regulation by reference, making it a requirement of both federal and Navajo law that is separate from the requirements in the Navajo Nation Business Site Lease

Regulations. This Guidance addresses changes in ownership or operation, in Paragraph C.1 below. However, NNSTA § 1542(C)(1) requires removal of storage tanks to achieve permanent closure, and in that situation the Storage Tank Program’s Tank Pull Guidelines (Guidance No. 5), which specify the location of samples, analytical methods, and reporting requirements, will apply.

2. *Report of Release or Suspected Release; Confirmed Release*

A Phase II ESA also may be required if a storage tank release is reported or suspected, as discussed above and indicated in **NNSTA § 1544(D)**:

The [NNEPA] Director shall prescribe by regulation the reporting, investigation and confirmation actions to be taken in the event of a release or suspected release of a regulated substance from a storage tank. Any regulations adopted pursuant to this Section shall be no less stringent than the comparable federal regulations. Until regulations adopted pursuant to this Subsection are in effect, reporting, investigation and confirmation actions shall be accomplished in a manner consistent with 40 CFR §§ 280.50 through 280.53.

If a release or suspected release has been reported at a site, a *release investigation* is required pursuant to **40 C.F.R. § 280.52**, unless *corrective action* under **40 C.F.R. Part 280, Subpart F (§§ 280.60 – 280.67)** has been initiated, *see* 40 C.F.R. § 280.52. Also, NNEPA may require an investigation pursuant to § 280.52 to determine if a storage tank is the source of *off-site impacts*, such as the discovery of regulated substances in soil or nearby surface or ground water, *see* 40 C.F.R. § 280.51. Note that a release or suspected release may be reported when a storage tank is closed or when there is a property transfer or other disposition of a lease, in which case NNSTA § 1544(D) and 40 C.F.R. §§ 280.50 through 280.53 will apply in that situation as well; that is, there can be an overlap between the situation described in Section (B)(1) above and the situation described here in Section (B)(2).

Corrective action is required if a release is confirmed, *see* 40 C.F.R. §§ 280.52(b)(1) and 280.60. Corrective action may require additional activities, including further investigation to define the vertical and lateral extent of the release, § 280.62(a)(5); submittal of a report summarizing these activities within 20 days of confirmation of the release, § 280.62(b); submittal of a report detailing initial site characterization activities within 45 days of confirmation of the release, § 280.63(b); and further investigations related to the possible need for soil and groundwater cleanup, § 280.65.

The text of the Business Site Lease Regulations and NNSTA provisions discussed above, as well as the text of **40 C.F.R. §§ 280.50 through 280.72**, which are the relevant portions of the federal Part 280 regulations, is included as an Appendix to this Guidance for reference. (NNSTA § 1542(A) requires compliance with all of Part 280 pending the promulgation of Navajo regulations under NNSTA § 1541.)

C. Content of Phase II ESA

A Phase I ESA looks at all conditions presenting the possibility for a release to have occurred. A Phase II ESA focuses on whether contamination is present from any historic event on the property including aboveground or underground storage tank system leakage. The American Society for Testing and Materials, (ASTM) originally issued standard E1903, “Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process,” in 1997. It was reissued in 2002 without change. It was superseded in 2011 by E1903-11,

“Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process,” which is still in effect.

This Guidance is based on ASTM E1903-11, and is intended to establish controlled, enforceable, investigative techniques that will demonstrate the presence or likely presence of any petroleum products in soil and/or surface or groundwater that indicate an existing release or a past release at fueling facilities across the Navajo Nation. The scope of a Phase II ESA is related to the objectives of each individual investigation. NNEPA and all parties concerned must have a mutual understanding of the context in which the Phase II ESA is to be performed and the objectives to be met by the investigation.

1. *Property Transfer or Other Disposition of Lease*

The Phase II ESA is the responsibility of the current lessee, *see* Business Site Lease Regulations § 2.4(A). The lessee shall hire an independent third-party consultant to perform the Phase II ESA. The name of the consultant shall be provided to NNEPA for approval, and once approved the consultant should coordinate with NNEPA in developing a work plan prior to any Phase II work beginning at the site. The consultant should contact NNEPA to arrange for a date to conduct the Phase II ESA, and should notify NNEPA in writing of the arranged-for date at least thirty (30) days prior to commencement of the activity.

The Phase II ESA contractor shall exercise professional judgment based on knowledge of the manner in which releases at fueling facilities commonly occur in connection with activities and operations similar to those currently or historically conducted at the property. Target Analytes are determined by the history of fuels stored at the facility and can include lead and MTBE. The mechanisms of potential release include but are not limited to incidental spills, overfills, leaks from the tank(s), remote fill areas, vent pipes, dispenser piping, and pipe connections. If a tank is being removed, the investigation should also evaluate conditions in the tank pit and will refer to the NNSTA and the NNEPA Tank Pull Guidance referenced in Paragraph B.1 above. Target Analytes become Contaminants of Concern (“COCs”) when released into the environment. If COCs are discovered to be in the environment, the physical characteristics of the site that would influence the persistence and distribution of the COCs, how and where they first contacted environmental media, their fate, and the transport characteristics of the particular COCs and/or the compounds or mixtures of which they are a part, must be discussed.

The Phase II ESA overview

1. Purpose.
2. Scope of work/work plan.
3. History of the site.
4. Identify target analytes.
5. Determine how the target analytes likely would have first entered the environment.
6. Infer the sampling locations and depths most likely to have the highest concentrations of the target analytes given the possible mechanisms of first entry into the environment, the site’s physical conditions, and the behavior, fate, and transport characteristics of the target analytes.
7. Plan the sampling and laboratory analysis strategy. At a minimum, the sampling plan must be devised to allow collection of the media associated with each area where target analytes are present or likely to be present at the highest concentrations.
8. The sampling plan must include a quality assurance/quality control (QA/QC) plan.
9. Carry out the sampling and laboratory analysis.
10. Develop the conclusions based on an interpretation of all results and findings.

A written Phase II ESA report should have three general characteristics:

1. Good technical writing;
2. Accurate and complete presentation of the results and conclusions;
3. All the supporting components of a scientific report.

At a minimum, a Phase II ESA report must include the following major components:

1. An introduction stating the objective (i.e., the question to be addressed), and including a verbatim statement of the final "Statement of Objectives in the Scope of Work;
2. A summary of relevant background information sufficient to explain and support the approach to the problem;
3. A description of the work performed and the rationale for it;
4. A description of the methods used;
5. A presentation of the information and data acquired;
6. Evaluation of the information and data;
7. Interpretation of the results in relation to the objective(s) and question(s) to be answered and the conceptual site model for the assessment;
8. Tables, figures and appendices as appropriate to provide a clear and complete picture of the assessment;
9. The signature of the Phase II Assessor, together with any professional seal, license type and license number, if/when required by NNEPA.

General guidelines for investigative soil borings where tanks are to remain in situ:

1. Advance borings a minimum of 25 feet or until groundwater is reached.
2. Finish all borings where groundwater is encountered as monitoring wells if there is any indication, however slight, of hydrocarbon contamination.
3. One boring at each short end of each tank outside of the tank pit or berm, regardless of under or above ground situation.
4. One boring in the center of the long side of each tank outside of the tank pit or berm unless two or more tanks are nested together.
5. One boring in the center of the long edge of each side of the tank pit Outside of the tank pit in the case of two or more tanks nested together.
6. One boring at each joint of dispenser supply and/or filler pipe unless said filler piping is within secondary containment in the case of some aboveground installations
7. One boring adjacent to each dispenser.
8. Soil sampling with PID at five-foot intervals.
9. Two samples from each boring sent to the lab for the analysis of contaminants of potential concern; highest PID reading and bottom of boring.
10. Grab sample of groundwater sent to the lab for analysis.
11. Compare results of analysis to Navajo Nation Soil and Groundwater Standards.

2. *Report of Release or Suspected Release; Confirmed Release*

[Fill in requirements for Phase II ESA in this situation]

They will be somewhat different from above but not greatly because they will be delineation in nature instead of investigative. There are depth requirements like drill to 40 feet or until clean soil is reached, etc.

Appendix:

Selected Provisions of the Navajo Nation Business Site Lease Regulations and NNSTA and 40 C.F.R. §§ 280.50 – 280.72

Appendix

Navajo Nation Business Site Lease Regulations

§§ 2.4(A) & (B), 2.5(C)

[reserved]

Navajo Nation Underground and Aboveground Storage Tank Act

NNSTA §§ 1542(C)(13):

NNEPA shall operate independently from the Division of Economic Development and other tribal departments and shall enforce against all entities equally. The NNEPA shall not review ESA's, land use documents, contractor bid, purchase requisitions, or other documents which are part of the property transfer process or for which review poses a conflict of interest, unless the review is necessary in order to determine liability for a release or as a follow-up to a reported release. Should the Division of Economic Development, another Navajo department, or the Bureau of Indian Affairs need assistance in reviewing an ESA or other document, the NNEPA may do so only as a third party on technical matters.

NNSTA §§ 1544(D):

The Director shall prescribe by regulation the reporting, investigation and confirmation actions to be taken in the event of a release or suspected release of a regulated substance from a storage tank. Any regulations adopted pursuant to this Section shall be no less stringent than the comparable federal regulations. Until regulations adopted pursuant to this Subsection are in effect, reporting, investigation and confirmation actions shall be accomplished in a manner consistent with 40 CFR §§ 280.50 through 280.53.

NNSTA §§ 1545(B):

Environmental site assessments are generated as part of a property transfer and as such are generally not reviewed by the Navajo Nation EPA. Nonetheless, the Navajo Nation EPA shall have the right to review such documents upon request to ensure compliance with this Chapter and regulations promulgated hereunder.

United States 40 Code of Federal Regulations, (CFR) Part 280

§ 280.50 Reporting of suspected releases.

Owners and operators of UST systems must report to the implementing agency within 24 hours, or another reasonable period specified by the implementing agency, and follow the procedures in § 280.52 for any of the following conditions:

- (a) The discovery by owners and operators or others of released regulated substances at the UST site or in the surrounding area (such as the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface water).
- (b) Unusual operating conditions observed by owners and operators (such as the erratic behavior of product dispensing equipment, the sudden loss of product from the UST system, an unexplained presence of water in the tank, or liquid in the interstitial space of secondarily contained systems), unless:

- (1) The system equipment or component is found not to be releasing regulated substances to the environment;
 - (2) Any defective system equipment or component is immediately repaired or replaced; and
 - (3) For secondarily contained systems, except as provided for in § 280.43(g)(2)(iv), any liquid in the interstitial space not used as part of the interstitial monitoring method (for example, brine filled) is immediately removed.
- (c) Monitoring results, including investigation of an alarm, from a release detection method required under §§ 280.41 and 280.42 that indicate a release may have occurred unless:
- (1) The monitoring device is found to be defective, and is immediately repaired, recalibrated or replaced, and additional monitoring does not confirm the initial result;
 - (2) The leak is contained in the secondary containment and:
 - (i) Except as provided for in § 280.43(g)(2)(iv), any liquid in the interstitial space not used as part of the interstitial monitoring method (for example, brine filled) is immediately removed; and
 - (ii) Any defective system equipment or component is immediately repaired or replaced;
 - (3) In the case of inventory control described in § 280.43(a), a second month of data does not confirm the initial result or the investigation determines no release has occurred; or
 - (4) The alarm was investigated and determined to be a non-release event (for example, from a power surge or caused by filling the tank during release detection testing).

§ 280.51 Investigation due to off-site impacts.

When required by the implementing agency, owners and operators of UST systems must follow the procedures in § 280.52 to determine if the UST system is the source of off-site impacts. These impacts include the discovery of regulated substances (such as 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.

§ 280.52 Release investigation and confirmation steps.

Unless corrective action is initiated in accordance with subpart F, owners and operators must immediately investigate and confirm all suspected releases of regulated substances requiring reporting under § 280.50 within 7 days, or another reasonable time period specified by the implementing agency, using either the following steps or another procedure approved by the implementing agency:

- (a) *System test.* Owners and operators must conduct tests (according to the requirements for tightness testing in §§ 280.43(c) and 280.44(b) or, as appropriate, secondary containment testing described in § 280.33(d)).
- (1) The test must determine whether:
 - (i) A leak exists in that portion of the tank that routinely contains product, or the attached delivery piping; or
 - (ii) A breach of either wall of the secondary containment has occurred.
 - (2) If the system test confirms a leak into the interstice or a release, owners and operators must repair, replace, upgrade, or close the UST system. In addition, owners and operators must begin corrective action in accordance with subpart F of this part if the test results for the system, tank, or delivery piping indicate that a release exists.
 - (3) Further investigation is not required if the test results for the system, tank, and delivery piping do not indicate that a release exists and if environmental contamination is not the basis for suspecting a release.
 - (4) Owners and operators must conduct a site check as described in paragraph (b) of this section if the test results for the system, tank, and delivery piping do not indicate that a release exists but environmental contamination is the basis for suspecting a release.

(b) *Site check.* 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 consider the nature of the stored substance, the type of initial alarm or cause for suspicion, the type of backfill, the depth of groundwater, and other factors appropriate for identifying the presence and source of the release.

- (1) If the test results for the excavation zone or the UST site indicate that a release has occurred, owners and operators must begin corrective action in accordance with subpart F of this part;
- (2) If the test results for the excavation zone or the UST site do not indicate that a release has occurred, further investigation is not required.

§ 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 subsurface 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 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 ground-water 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:
- (1) 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 termination of that plan is under consideration by the implementing agency.

280.68 – 280.70 = Reserved

§ 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: be removed from the ground, filled with an inert solid material, or closed in place in a manner approved by the implementing agency.
- (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 TO § 280.71.

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

- (A) American Petroleum Institute Recommended Practice RP 1604, “Closure of Underground Petroleum Storage Tanks”;
- (B) American Petroleum Institute Standard 2015, “Safe Entry and Cleaning of Petroleum Storage Tanks, Planning and Managing Tank Entry From Decommissioning Through Recommissioning”;
- (C) American Petroleum Institute Recommended Practice 2016, “Guidelines and Procedures for Entering and Cleaning Petroleum Storage Tanks”;
- (D) American Petroleum Institute Recommended Practice RP 1631, “Interior Lining and Periodic Inspection of Underground Storage Tanks,” may be used as guidance for compliance with this section;

- (E) National Fire Protection Association Standard 326, “Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair”; and
- (F) National Institute for Occupational Safety and Health Publication 80-106, “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 consider the method of closure, the nature of the stored substance, the type of backfill, the depth to groundwater, and other factors appropriate for identifying the presence of a release. The requirements of this section are satisfied if one of the external release detection methods allowed in § 280.43(e) and (f) is operating in accordance with the requirements in § 280.43 at the time of closure, and indicates no release has occurred.
- (b) If contaminated soils, contaminated groundwater, or free product as a liquid or vapor is discovered under paragraph (a) of this section, or by any other manner, owners and operators must begin corrective action in accordance with subpart F of this part.