

Tennessee Underground Storage Tank Owner Compliance Manual



Department of
**Environment &
Conservation**

Tennessee Department of Environment & Conservation
Division of Underground Storage Tanks
in partnership with the
Environmental Protection Agency

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Tennessee Division of Underground Storage Tanks Tank Owner Compliance Manual

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Chapter 1: Does This Manual Apply To Your Facility?

This manual is designed to help owners and operators of underground storage tanks comply with Tennessee Petroleum Underground Storage Tank regulations. These tanks, along with any connected underground piping, are called USTs in this manual. The manual uses the term tank when the underground tank is the only thing being discussed. This manual describes requirements and best management practices (BMPs) for your USTs and helps you determine whether they are in compliance with the law.

- If you have underground storage tanks at your facility that meet the criteria described below, this manual applies to you.
- After reading this section, you may determine that the manual does not apply to you.

Question 1. Do you have any UST's at your facility?	Yes	No
<p>An underground storage tank or UST is an:</p> <ul style="list-style-type: none"> ➤ Underground tank and underground piping. ➤ Underground tank and aboveground piping (if at least 10% of the total volume of the tank and piping are underground). ➤ Aboveground tank and underground piping (if at least 10% of thotal volume of the tank and piping are underground). This scenario is not common. <p>An underground storage tank is not an aboveground tank and aboveground piping.</p>		
<p>* If you answered yes, continue to Question 2. * If you answered no, this manual does not apply to you.</p>		
Question 2. How many USTs at your facility meet at least one of the following criteria?	#of USTs	
<ul style="list-style-type: none"> ➤ Contain petroleum or used oil (that will be recycled) at public gasoline stations or repair shops. ➤ Contain heating oil that is not used (or consumed) on the premises where it is stored. ➤ Are farm or residential motor fuel tanks greater than 1,100 gallons used for non-commercial purposes. ➤ Are petroleum tanks owned by a federal, state, or local entity. ➤ Are private petroleum used for fueling of business vehicles. ➤ Contain a hazardous substance listed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). An example of a hazardous substance is antifreeze. Contact the Dvision if you are not sure if you have a hazardous substance tank. ➤ Store product for use by emergency power generators. 		
<p>* If you have at least one UST that meets the criteria above, continue to Question 3. * If you have no USTs that meet the criteria above, you do not have any USTs covered by the Tennessee Petroleum Underground Storage Tank rules. This manual does not apply to you.</p>		

Question 3. Out of those UST's you identified in Question 2, do any meet the following criteria?	Number of USTs
--	----------------

USTs are not included in this manual if they meet one of the following:

- Total tank and piping volume is 110 gallons or less.
- UST with a tank that was constructed or built in the field (field-constructed). This does not include the tank portion of an oil water separator.
- Tank situated in an underground area, but situated on or above the surface of the floor.
- Heating oil tank that is used (or consumed) on the premises where it is stored.
- Hazardous waste tank (in general, a hazardous waste is a hazardous chemical that can not be reused in some way.)
- Tank containing radioactive materials.
- Flow-through process tank (a tank that forms an integral part of a production process where there is a steady, variable, recurring, or intermittent flow.)
- Airport hydrant fuel distribution system.
- Tank located at pipeline facility regulated under the Natural Gas Pipeline Safety Act of 1968 or the Hazardous Liquid Pipeline Safety Act of 1979 [or an intrastate pipeline facility regulated under comparable state laws].
- Tank that is a part of machinery that contains product for operational purposes such as a hydraulic lift tank or electrical equipment tank.
- Emergency spill or overflow containment tank that is quickly emptied after use.
- Tank located at a nuclear power generation facility used for an emergency power generator.

* If you have no USTs that meet the criteria in Question 3, this manual applies to you. Begin using this manual by reading Chapter 2.

* If you answered no, this manual does not apply to you.

Question 4. What is the difference between the total number of USTs in Question 2 and Question 3?

A. Insert the number of tanks from Question #2 above:

B. Insert the number of tanks from Question #3 above:

Subtract B from A and Insert:

* If the difference between Question 2 and Question 3 is "1 or greater," this manual applies to you. Begin using the manual by reading Chapter 2.

* If the difference between Question 2 and Question 3 is "zero," you do not have any USTs covered by the Tennessee Petroleum Underground Storage Tank rules. This manual does not apply to you.

Chapter 2: Introduction

What is the Purpose of This Manual?

This manual is designed to:

- Help explain Tennessee's environmental, record keeping, operation and maintenance requirements for USTs and
- Explain rule changes that occurred in 2013 and
- Explain and suggest best management practices and voluntary actions that you can take to improve environmental performance and reduce financial risk regarding your USTs and
- Help owners and operators of regulated USTs determine if they are in compliance with existing Tennessee UST regulations.

How does using this Manual benefit you, help maintain the environment and benefit the public?

- This manual will help you understand the Tennessee requirements, suggest best management practices, and help you determine the compliance status for USTs at your facility.
- You are helping to protect public health and the environment. Releases from USTs – spills, overfills, leaking tanks and piping can contaminate groundwater. Your local community may depend on that groundwater as a source of drinking water. In addition, leaks from USTs can result in fires or explosions, which threaten public safety.
- You are protecting your economic investment. It is important to quickly detect, report, and clean up releases, as required by the UST regulations. Preventing releases protects your real estate investment. Any product that is lost in a release will cost you in costs to clean up contamination, potential penalties, business down time, lost revenue of product not sold, and affect the resale value of your property. By responding quickly and containing a release, you may be able to reduce cleanup costs and environmental damage.
- You are required to follow environmental laws by complying with UST regulations. If you are the owner or operator of one or more USTs, you are legally responsible for preventing and quickly detecting releases from your USTs. You are also responsible for reporting and cleaning up any releases that occur. You will be held accountable if your UST leaks. Therefore, you should make sure releases do not occur.

This document is not a substitute for Tennessee law and regulations, nor is it a law or regulation itself. For a comprehensive and complete understanding of the law and regulations, please refer to Tennessee Petroleum Underground Storage Tank Act T.C.A. 68-215-101 and the Rules, Chapter 0400-18-01. These documents can be accessed from the Division website:

<http://www.tennessee.gov/environment/section/ust-underground-storage-tanks>

This publication was compiled and written by Michelle Pruett, with the assistance of Lamar Bradley and OUST. This publication was updated and edited by Carl Carlson in December 2017. If you have questions or need additional information, please refer to the Division website, or call the Underground Storage Tank Field Office nearest you by dialing 1-888-891-TDEC.

Chapter 3: How To Use This Manual

Symbols

You will see symbols next to some parts of this Manual. The symbols are used to highlight key information. Below are the symbols and the meaning of each.



Important Steps

- This symbol will guide you to important steps that should be followed for each section.



Best Management Practice

- What you should do to help prevent leaks, actions or activities you, as an owner or operator, are encouraged to take in order to reduce the potential of leaks.



General Requirement

- These are general requirements needed to be in compliance with regulations.



Specific Ongoing Requirement

- Ongoing testing and record keeping requirements.



Refers to a Requirement Located in A Different Section

- Refers you to a different page for ongoing testing and record keeping.

A quick guide is located in Appendix A, to help you while you go through this manual.

Chapter 4: New Rule & Policy Changes



There was no major rule or statute change finalized in 2017.

New EPA rules for UST systems do not affect Tennessee Tank Owners or Operators at this time. The Division is currently in the process of changing the rules to comply with EPA rules enacted in October 2015 and effective October 2018. Draft Rules are attached to this document in appendix G.

For the most up to date information on public participation opportunities and proposed rule and statute changes, please visit our website:

<http://www.tn.gov/environment/program-areas/ust-underground-storage-tanks.html>

Proposed Changes To Rules

The Division is currently in the process of making amendments to the rules. Although most rules with have an implimentation date sometime in 2021, the following changes will go into effect immediately upon approval:



Tank Owners/Operators must comply with the new Notification requirement regarding spill bucket replacement. The Division must be notified 72 hour prior to the replacement of spill bucket(s) at their facility.

Chapter 4: New Rule & Policy Changes

The following items will have an implementation date of 2021 for existing tank owners. New installations will go into effect immediately:

- ➔  UST Airport Hydrant Systems will no longer be exempt from regulation and must meet the requirements as set in the new Rule 0400-18-01-.17. Aboveground Hydrant systems are still exempt
- ➔  USTs for emergency power generators will no longer be exempt from regulation.
UST systems that are part of an emergency generator system at nuclear power generation facilities that are licensed and regulated by the Nuclear Regulatory Commission are still exempt.
- ➔  Overfill Prevention equipment must be inspected at least once every three (3) years.
- ➔  Operators of UST systems must conduct a walkthrough inspection of their facility monthly. Records of these inspections must be maintained and provided at the time of the regular compliance inspection.
- ➔  This does not constitute a complete list of the changes to the rules. For the most up to date information on rule changes please go to the Division of Underground Storage Tanks website at :

<https://www.tn.gov/environment/program-areas/ust-underground-storage-tanks.html>

Most Commonly Found Violations



Release Detection

Failure to provide release detection that is capable of detecting a release from any portion of the tank that routinely contains product

Failure to install, calibrate, operate and maintain release detection in accordance with Manufacturer's instructions

Failure to have monthly release detection results available

Failure to conduct monthly monitoring correctly

Failure to monitor lines annually

Failure to test line leak detectors annually

Failure to have spill bucket and/or dispenser logs

Cathodic Protection & Over-fill

Failure to test Cathodic Protection every 3 years

Failure to inspect the IC rectifier every 60 days

Failure to operate and maintain corrosion protection systems by providing continuous monitoring

Failure to provide an adequate overfill prevention mechanism

Failure to Cooperate

Failure to report a suspected release within 72 hours.

The majority of these violations occurred due to failure to respond or submit documentation after requested

Chapter 5: Operator Training

Operator Training



Steps you need to take to be in compliance with the new operator training requirements can now be found at the following website.

<https://apps.tn.gov/ustop/>

These requirements were necessary in order to meet new laws created by the Federal Energy Policy Act of 2005.

Every facility should have registered & trained Class A and Class B Operators as of August 8, 2012. If not, navigate to the above website to create accounts, login and finish the required designations and/or training. Below is a brief description of the operator classes.

Class A Operators will:

- Have a general knowledge of spill prevention, overfill prevention, release detection, corrosion protection, emergency response, release and suspected release reporting, product compatibility, notification requirements, and temporary/permanent closure requirements.
- Manage resources and personnel, ensure appropriate individuals are trained.
- Establish work assignments
- Ensure proper operation and maintenance of the underground storage tank system
- Ensure appropriate records are maintained
- Be able to make informed decisions

Class B Operators:

- Are responsible for the day to day aspects of operating, maintaining, record keeping, and informing the proper persons when repairs or maintenance is needed.
- Typically they monitor, maintain, and ensure:
 - Release detection method, record keeping, and reporting requirements are met.
 - Release prevention equipment, record keeping, and reporting requirements are met.
 - All relevant equipment complies with performance standards.
 - Appropriate individuals are trained to properly respond to emergencies caused by releases or spills from underground storage tank systems at the facility.

Class C Operators

If a UST facility has a person(s) on site, at least one person on site must be a Class C Operator whenever the facility is operating. A sign or instruction manual must be placed where the Class C operator would be expected to see it during the normal course of their work.

At a minimum, it must include the following:

1. Employee's role in responding to spills and overfills, and
2. Procedures for handling warnings, alarms, and response from leak detection console (if applicable), and
3. Name and number of contact person for emergencies and monitoring equipment alarms, and
4. Local emergency numbers, and
5. An instruction to maintain a safe distance from any potential hazards.

This selection process may seem complicated at first but it was designed to allow flexibility for different types of owners. For example a large company may choose several different people for one or multiple facilities. A single station owner may choose to be the only operator.

Chapter 6: Red Tag Policy

On July 1, 2004, the Tennessee Petroleum Underground Storage Tank Act (UST Act) began providing authority to affix a notice or tag to a dispenser and/or fill port for any tank without a current certificate. The Federal Energy Policy Act of 2005 required states receiving Federal funding to have a delivery prohibition program. Consequently, the Division of Underground Storage Tanks developed and implemented a process to comply with the laws.

New amendments to the UST Act simplified whether or not fuel could be placed into an UST and effective July 1, 2008:

- The Division no longer issues a certificate to each facility
- The Division will issue a receipt for the annual tank fees that is not tied to the ability to receive fuel
- The ability to receive fuel will be tied to the presence or absence of a red tag on the fill port and listing on the Division's web site

The Division will continue to red tag (affix a red tag to each fill port) all USTs at a facility for:

- Failure to pay annual tank fees and associated late penalties – no change in process
- Violations that result in a Final Order and civil penalties – no change in process

The "Sites Under Delivery Prohibition" section of the Division's website will also be kept for distributors to review.

The Red Tag Process will apply to all tanks at a facility, and authorization to remove the tag(s) will not be given until all corrections are complete.

T.C.A. § 68-215-106(c) has been amended to state:

"(c) For any petroleum underground storage tank for which any annual fees or penalties have not been paid when due or that is in violation of requirements of the rules as evidenced by an order issued pursuant to this part that has become final, the commissioner may take one or more of the following actions:

- (1) Affix a notice to a dispenser;
- (2) Affix a tag to a fill port; or
- (3) Give notice on the department web site.
- (4) Removal of such tag or notice shall be a Class C misdemeanor."**

A picture of the Red Tag is shown below.



Chapter 7: Spill Protection

- Spill protection devices are used at fill pipes to catch drips and small spills that may occur when the delivery hose is disconnected from the fill pipe. Many spill protection devices are called “spill buckets” or “catchment basins”.
- Spill protection is typically not designed to contain product for long periods of time.
- Some spill protection devices are equipped with a drain valve or manual pump that allows you to drain accumulated product into your tank. Be aware that when you drain the contents of a spill bucket into your tank, water and debris may also enter the tank. If spill protection is not equipped with a drain valve or pump, then any product or water in your spill bucket must be removed manually and disposed of properly.



Consider using spill protection for USTs that never receive deliveries of more than 25 gallons of product at one time, like waste oil tanks. Overfill protection is part of good UST system management.

Take the following steps to figure out what type of spill protection is being used at your facility.



1. Lift each fill port lid (see pictures on next page) and look to see if you have spill protection around your fill pipe.
2. Look through your old records to check if you had spill protection installed.
3. Ask the contractor who installed your UST.

Requirements For Spill Protection



You must have spill protection for every UST that is filled with more than 25 gallons of product at one time.



Spill protection must prevent the release of product to the environment when the transfer hose is detached from the fill pipe. The spill protection cannot meet this requirement if it is not able to contain liquid. It must be free of water, dirt, debris and any other substance that would interfere with the ability to prevent spills.



Effective November 17, 2009 all spill buckets will be required to have a lid in good condition that does not come in contact with the fill cap.



As of June 19, 2007 spill containment buckets must be visually inspected each month ensuring the above requirements are met. A log of these inspections must be kept for the last 12 months.



Spill Bucket



Sample Fill Ports



Sample Fill Area



Chapter 8: Overfill Protection

- Overfill protection is equipment installed on the UST to help prevent your tanks from being overfilled during product delivery.
- Overfill protection is designed to stop product flow, reduce product flow, or alert the delivery person during delivery before the tank becomes full and begins releasing product into the environment.

There are three common types of overfill protection:

- overfill alarms
- ball float valves
- automatic shutoff devices



Consider using overfill protection for USTs that never receive deliveries of more than 25 gallons of product at one time like waste oil tanks. Overfill protection is part of good UST system management.

General Requirements For Overfill Protection



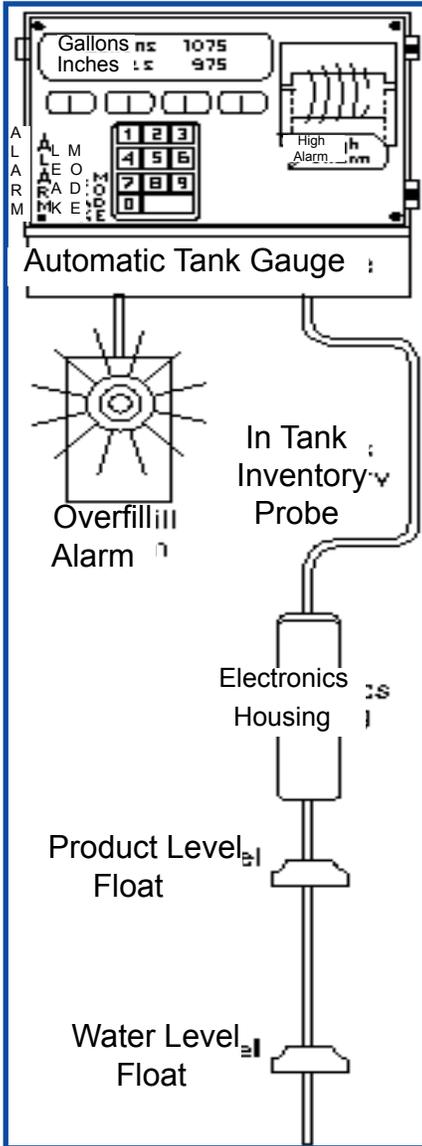
You must have overfill protection (for example, an overfill alarm) for every UST that is filled with more than 25 gallons of product at one time.

Take the following steps to figure out what type of overfill is being used at your facility.



1. Read the descriptions below to determine what type of overfill is at your facility.
2. Look through your old records to see if they match any of the names in the descriptions.
3. Ask the contractor who installed your underground storage tank.
4. Find out what was reported on the last inspection if nothing has been changed.

Overfill Alarms - An overfill alarm has a sensor in the tank. The sensor is typically connected to a monitoring device such as an automatic tank gauge (or ATG). An overfill alarm provides a warning that must be seen or heard (or both) by the person delivering the product when the tank is close to being full. The warning activates when the UST is approaching tank capacity and warns the delivery person to stop delivery. When the alarm activates, the delivery person should immediately stop the flow of product to the tank.



✓ A qualified UST contractor should periodically check your overfill alarm to make sure it is functioning properly.

✓ You should inform your delivery person you have an overfill alarm.

✓ You could place a durable sign near each fill pipe. The sign should be in clear view of the delivery person. It should say there is an overfill alarm for this tank, what occurs when the alarm activates, and indicate the necessary actions to take. See the sample sign in Appendix as a reference.



Sample Overfill Alarm

Requirements For Overfill Alarms



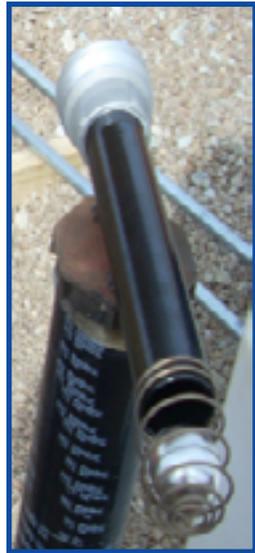
The overfill alarm must activate when the product in the tank reaches 90 percent of the tank capacity or is within one minute of being overfilled.



The overfill alarm must be located so it can be seen and/or heard from where the UST is filled. This ensures that the person responsible for monitoring the delivery will know when the tank is almost full.



Ball Float Valves - A ball float valve (also called a flow vent valve) is located inside the tank where the vent line exits the tank. The ball float valve restricts vapor flow from the UST as the tank gets close to full. As the tank fills, the ball in the valve rises, restricting the flow of vapors out of the UST during delivery. The flow rate of the delivery will decrease noticeably and should alert the person responsible for monitoring the delivery to stop the delivery. You might find it difficult to determine whether or not you have this device because of where it is located. You might be able to find an extractor port for the ball float valve (see picture below). Otherwise, you will need to look through your paperwork to determine whether your tank has this device or ask the contractor who installed your tanks.



A qualified UST contractor should periodically check ball float valves to make sure they are functioning properly.



You should inform your delivery person you have a ball float valve.



You could place a durable sign near each fill pipe saying there is a ball float valve for this tank, what occurs when the device activates, and indicate the necessary actions to take. See the sample sign in Appendix as a reference.



You should not use a ball float valve for overfill protection if any of the following conditions apply because you could create overfills or dangerous situations (such as pressure building up in the tank) resulting in gasoline spraying onto the delivery person or into the environment.

Do not use ball float valves if:

- Your UST receives pressurized deliveries,
- Your UST has suction piping, or
- The UST has coaxial stage I vapor recovery.
- Deliveries are made not using tight fit connections

Requirements For Ball Float Valves

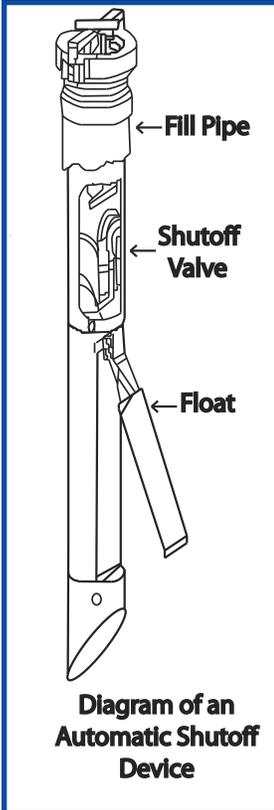


Ball float valves must begin restricting vapor flow out of the tank when product in the tank reaches 90 percent of tank capacity or at least 30 minutes before the tank will be overfilled. For ball float valves to work properly:

- The air hole in the ball float valve must be open,
- The ball cage must be intact,
- The ball must move freely in the cage,
- The ball must seal tightly on the pipe, and
- The top of the tank must be air tight during delivery so vapors cannot escape from the tank. Everything in the tank (such as other tank access ports, fittings, and drain mechanisms on spill buckets) must be tight and able to hold the pressure created when the ball float valve engages.

➤ **Automatic Shutoff Devices** - An automatic shutoff device is located at the fill pipe of your tank. Look down your fill pipe to see part of this device. You will see what appears to be a line cutting through your fill pipe (or a half moon shape in your fill pipe).

The automatic shutoff device slows down and stops the flow of product during delivery when the product has reached a certain level in the tank.



✓ A qualified UST contractor should periodically check your automatic shutoff device to make sure it is functioning properly.

✓ You should inform your delivery person you have an automatic shutoff device.

✓ You could place a durable sign near each fill pipe. The sign should be in clear view of the delivery person. It should say there is an automatic shutoff device for this tank, what occurs when the device activates, and indicate the necessary actions to take. See the sample sign in Appendix as a reference.

✓ You should not use an automatic shutoff device for overfill protection if your tank receives pressurized deliveries because it might create dangerous situations (such as pressure building up in the tank) and result in gasoline spraying onto the delivery person or into the environment.

Requirements For Automatic Shut Off Devices



Automatic shutoff devices must activate when the product in the tank reaches 95 percent of the tank capacity or before the fittings at the top of the tank are exposed to product.

- There must not be anything in the fill pipe that would keep the shutoff mechanism from working properly.
- The automatic shutoff device must be placed so the float arm is not blocked and can move through its full range of motion.

Chapter 9: Corrosion Protection

This Chapter is broken down into 3 sections:

- A. Corrosion Protection for Tanks
- B. Corrosion Protection for Piping
- C. Cathodic Protection

Use this information to determine what tank and piping types you have at your facility.

Note: When you see this symbol after your tank or piping type you will need to go to the instructed page for additional requirements. If you do not meet these requirements, your tank or piping is **not in compliance**.



Section 9A: Corrosion Protection For Tanks

- All of your regulated tanks that are underground and routinely contain product must be protected from corrosion. This includes metal components that are in contact with standing water, as well as the ground.
- All underground tanks installed after December 22, 1988, need to meet all appropriate construction standards and must be installed according to a standard code of practice and manufacturer's instructions.
- All tanks must be made of or lined with materials that are compatible with the substance stored in the UST.
- Lined tanks without additional corrosion protection must be permanently closed by December 22, 2012.



Keep all paperwork related to your corrosion protected tanks. Examples include paperwork related to: installation, cathodic protection, integrity assessment, repair, and internal lining.

Take the following steps to figure out what is at your facility.



1. Read the following descriptions to determine which tank types you have.
2. Look through your old records to see if you have tank installation information. Check for the names of the tank types.
3. Ask the contractor who installed your underground storage tank.
4. Find out what was reported on the last inspection if nothing has been changed.

Tank Type Descriptions

There are three types of tanks that meet corrosion protection requirements without additional equipment, operation, or maintenance:

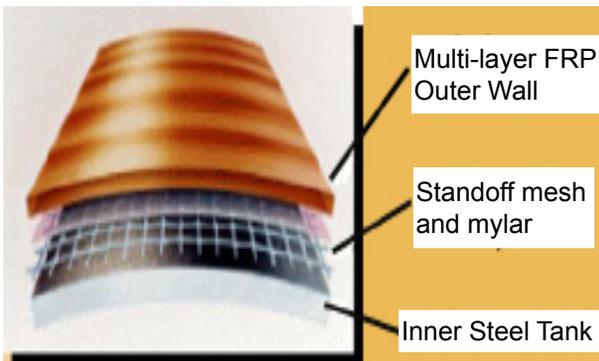
- **Fiberglass Reinforced Plastic (FRP) Tank** - This tank is made of fiberglass reinforced plastic. Examples of current and past FRP tank makers include Owens Corning, Xerxes, Cardinal, Fluid Containment, and Containment Solutions.



Sample FRP Tanks

✓ Have your fiberglass reinforced plastic tanks periodically checked for deflection (deflection is a measure of the roundness of your tank). Since these tanks are made from materials considered to be sensitive to flexing, over deflection may result in cracking and a leak. Allowable deflections vary with tank diameters and may be measured by following the manufacturer's installation checklist.

- **Jacketed Steel Tank** - This is a steel tank that is encapsulated (or jacketed) in a non-corrodible, nonmetallic material such as fiberglass or polyethylene. This tank is secondarily contained. There is a space between the steel wall and the jacket material. This space may be monitored for a breach of either the inner wall or outer jacket. Examples of jacketed tank brands include: Permatank®, Glasteel II®, Titan®, Total Containment®, and Elutron®.



Sample Piece Of A Jacketed Tank

✓ Have your jacketed steel tanks periodically tested by a qualified contractor to make sure the space between the steel tank and secondary jacket is tight. This space is known as the interstitial space or secondary containment area. If your primary tank wall would leak and the secondary containment jacket was not tight, a release could get into the environment and result in cleanup that could be costly and time-consuming.

➤ **Clad Steel Tank** - This tank is a steel tank that has a thick layer of non-corrodible material such as fiberglass or urethane that is mechanically bonded (clad) to the outside of the steel tank. This cladding helps protect the outside of the steel wall from corroding. Examples of clad tank brands include: ACT-100®, ACT-100-U®, Glasteel®, and Plasteel.



Sample Clad Tank

✓ Some clad steel tanks may also have cathodic protection. If you have clad steel tanks that have cathodic protection, then consider having your cathodic protection system tested periodically to make sure it is operating properly.

The following are types of tanks that have additional equipment, operation, or maintenance requirements in order to be in compliance with state and federal regulations:

➤ **Metal Tank With No Additional Corrosion Protection** - This is a tank made of metal such as steel or copper. It does not have cathodic protection, internal lining, or any non-corrodible material that encapsulates or bonds to the outside of the tank.

It is highly unlikely that buried metal tanks with no additional corrosion protection could be used in Tennessee to meet the tank corrosion protection requirements, however, if your tanks meet the criteria below, this option may be used.

Requirements For Metal Tanks With No Additional Corrosion Protection

➤  If you have a regulated underground metal tank without additional corrosion protection, you must either:

- Have the record of a corrosion expert's determination that your UST site is not corrosive enough to cause the tank to have a release due to corrosion during the operating life of the tank;
- or
- Have evidence to indicate that the Division made a determination that the tank construction and corrosion protection were designed to prevent the release or threatened release of any stored product.



Coated And Cathodically Protected Steel Tank - This is a steel tank that has both an external coating and cathodic protection on the outside wall of the tank. The coating is typically applied to the tank at the factory. An example of a coated and cathodically protected tank brand is the sti-P3® tank. This type of tank is usually installed with galvanic (sacrificial) anodes for cathodic protection. However, these tanks may have an impressed current cathodic protection system if the galvanic (sacrificial) anodes no longer protect the tank from corrosion. If you are not sure whether you have a cathodic protection system, see the Cathodic Protection section.

An example of a commonly used coated and cathodically protected steel tank is the sti-P3® tank. This tank has a dielectric coating on the outside and has galvanic (sacrificial) anodes attached to the outside of the tank. You may have had impressed current added to your sti-P3® tank at some time in the past – this tank is still considered to be coated and cathodically projected.



Sample Coated And Cathodically Protected Tank

Requirements For Coated And Cathodically Protected Steel Tanks



The coating must be made of a suitable dielectric material (a material that isolates the tank from the surrounding soil and does not conduct electricity). Coal tar epoxy, urethane, and isophthalic polyester resins are examples of generic types of coatings used on coated and cathodically protected steel tanks;

AND



You must comply with specific testing and record keeping requirements for cathodic protection. See Section 9C: Cathodic Protection.



Cathodically Protected Steel Tank - This is a steel tank that has a cathodic protection system on the outside of the tank but does not have an external coating. The cathodic protection is most likely by an impressed current system. If you are not sure whether you have a cathodic protection system, see Section 9C: Cathodic Protection.

Typically, this type of tank was originally installed as a bare steel tank before December 22, 1988, and had cathodic protection installed at some later date. Tanks installed after December 22, 1988, are required to be both coated and cathodically protected. Bare steel tanks that were not upgraded prior to December 22, 1999, may no longer be upgraded.

Upgrade Requirements for Cathodically Protected Steel Tanks



Only steel tanks that were installed on or before December 22, 1988, may use cathodic protection without a dielectric coating to comply with the corrosion protection requirements.

AND

The tank has been installed for less than 10 years and is monitored monthly for releases with one of the methods described in Chapter 10 beginning on page 34,

OR



An integrity assessment of the tank was conducted before adding cathodic protection. Examples of methods of integrity assessment of a steel tank include:

- An internal inspection of the tank – a trained professional enters a tank to determine if it is structurally sound and free of corrosion holes.
- A video camera inspection of the tank combined with checking soil characteristics around the tank. The tank is emptied and a trained professional places a video camera into the fill ports of a tank to determine if the tank has any holes.
- A detailed site evaluation is performed at your facility – a trained professional evaluates the site characteristics and places the information into a model that statistically determines the time it would take a steel tank to corrode through at that specific location. This information is compared to the age of the tank to statistically determine whether the tank is structurally sound and free of corrosion holes.

OR



The tank was assessed for corrosion holes by a method that was approved by the Division. This method was known as the Tennessee Alternative Method and consisted of conducting tightness testing and monthly monitoring. The first tightness test was conducted within 120 days prior to installation of cathodic protection. If the system was tight, cathodic protection was added, and a second tightness test was conducted between three and six months following the first operation of the cathodic protection system. Once cathodic protection was added, the tank must have been monitored monthly for releases with one of the methods described in Chapter 8.

Continuing Requirements for Cathodically Protected Steel Tanks



You must comply with specific testing and record keeping requirements for cathodic protection. These requirements can be found in Section 9C: Cathodic Protection.

Section 9B: Corrosion Protection For Piping

- All regulated piping that is in contact with the ground and routinely contains product must be protected from corrosion – this piping is often underground or buried.

Note: fill pipes fitted with a drop tube and vent lines do not need corrosion protection because these components do not routinely contain product.

- All piping that is in contact with the ground and routinely contains product that was installed after December 22, 1988, needs to meet all appropriate construction standards and be installed according to a standard code of practice and the manufacturer's instructions.
- All underground piping must be made of or lined with materials that are compatible with the substance that is stored in the UST.



Keep all paperwork related to your corrosion protected piping (examples include paperwork related to: installation, cathodic protection, and repair).

Take the following steps to figure out what is at your facility.



1. Read the descriptions below to determine which types of piping you have.
2. Look in your dispenser sumps and turbine sumps (these are areas under your dispenser and above your tank where piping and other equipment are located) to see if you can identify the piping. Some piping may have metal flexible connectors in these areas. Look for the piping beyond the metal flexible connectors.
3. Look through your old records to see if they match any of the names in the descriptions.
4. Ask the contractor who installed your piping.

Piping Type Descriptions

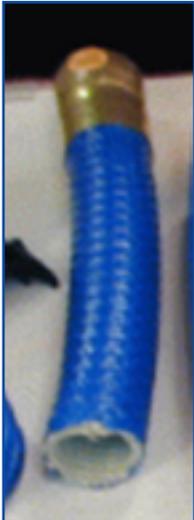
Types of piping that meet corrosion protection requirements without additional equipment, operation, or maintenance:

- **Fiberglass Reinforced Plastic (FRP) Piping** - This piping is nonmetallic and is made of fiberglass reinforced plastic. It is a rigid piping (not flexible). Examples of FRP piping makers include Ameron and Smith Fiberglass Products, Inc. This piping type may also have metal connectors associated with it.



Sample FRP Piping

- **Flexible Plastic Piping** - This type of piping is made of plastic that is flexible. Examples of nonmetallic flexible piping brand names include: Poly-Tech, Dualoy 3000, EnviroFlex, GeoFlex, Perma-Flexx, Omniflex, and Co-FlexTMTitan®, Total Containment®, and Elutron®. This piping type may also have metal connectors associated with it.



Sample Flexible Piping in and out of a sump



 **Fiberglass reinforced plastic (FRP)** piping and flexible plastic piping are made of non-corrodible materials and both meet the corrosion protection requirements without additional equipment or operation and maintenance. However, these types of piping may have metal joints and connectors that are in contact with the ground and routinely contain product. These metal components must be protected from corrosion.

Requirements for metal joints and connectors that are in contact with the ground

 Any metal piping components associated with these types of piping that are in contact with the ground and routinely contain product, such as turbine pump heads, metal flexible connectors, and metal swing joints must be protected from corrosion by one of the following:

- Isolating the metal component from direct contact with the ground (for example: by putting a protective covering or boot on a flexible connector or by moving the soil so it is not in contact with the metal component);

OR

-  ■ Cathodically protecting metal components in contact with the ground. If you cathodically protect the metal component, you must meet the cathodic protection requirements.

 **Metal Piping With No Additional Corrosion Protection - This is metal piping that does not have any additional corrosion pro-**

It is highly unlikely that buried metal piping with no additional corrosion protection could be used in Tennessee to meet the corrosion protection requirements, however, if your metal piping meets the criteria below, this option may be used.

Requirements for metal piping with no additional Corrosion Protection

 If you have metal piping without additional corrosion protection that is in contact with the ground and routinely contains product, you must either:

- Have the record of a corrosion expert's determination that your UST site is not corrosive enough to cause the piping to have a release due to corrosion during the operating life of the piping;

OR

- Have evidence to indicate that the Division made a determination that the piping construction and corrosion protection was designed to prevent the release or threatened release of any stored product.

The following are types of piping that have additional equipment, operation, or maintenance requirements in order to be in compliance with state and federal regulations:

➤ **Coated And Cathodically Protected Steel Piping** - This is steel piping that has both an external coating and cathodic protection. If you are not sure whether you have a cathodic protection system, see the cathodic protection section.

This type of piping has a coating on the outside of the piping and cathodic protection on the outside of the piping. Cathodic protection may be either impressed current or galvanic (sacrificial) anodes. See the cathodic protection section.

Requirements for coated and cathodically protected steel piping

 The coating is on the outside of the piping and must be made of a suitable dielectric material (a material that isolates the piping from the surrounding soil and does not conduct electricity);

AND

 Make sure that metal piping components such as pump heads, flexible connectors and swing joints are either isolated from the soil or are cathodically protected;

AND

 You must comply with specific testing and record keeping requirements for cathodic protection. Descriptions of cathodic protection, requirements and best management practices are in the cathodic protection section beginning.



Cathodically Protected Metal Piping - This is metal piping without an external coating that has a cathodic protection system. Typically, this type of piping was originally installed as a bare metal before December 22, 1988, and had cathodic protection installed at some later date. Piping installed after December 22, 1988, must be both coated and cathodically protected. If you are not sure whether you have a cathodic protection system, see the cathodic protection section.

This type of piping is metal with cathodic protection on the outside of the piping. There is no coating (or no known coating) on this piping. Cathodic protection may be either impressed current or galvanic (sacrificial) anodes. See the cathodic protection section.

Requirements for cathodically protected metal piping



Only metal piping that was installed on or before December 22, 1988, may use cathodic protection without a dielectric coating to comply with the corrosion protection requirements;

AND



Make sure that metal piping components such as pump heads, flexible connectors and swing joints are either isolated from the soil or are cathodically protected;

AND



You must comply with specific testing and record keeping requirements for cathodic protection. Descriptions of cathodic protection, requirements and best management practices, for cathodic protection are in the cathodic protection section.

Section 9C: Cathodic Protection

Cathodic protection is one option for meeting the corrosion protection requirements for metal tank and piping components that are in contact with the ground and routinely contain product. Components of your UST that may have cathodic protection include: metal tanks, piping, and piping components such as turbine pump heads, flexible connectors, and swing joints.

There are two types of cathodic protection:

- impressed current,
- AND
- galvanic (or sacrificial) anodes.



Keep all paperwork related to your cathodic protection system.



Have cathodic protection tests conducted more frequently than required. The more often you have these tests conducted, the more likely you are to detect cathodic protection problems before releases occur.

Take the following steps to figure out what types of cathodic protection you use at your facility:



1. Read the descriptions on the next page to determine the types of cathodic protection you use.
2. Look through your old records to see if they match any of the names in the descriptions.
3. Ask the contractor who installed your cathodic protection system.
4. Find out what was reported on the last inspection if nothing has been changed.

Cathodic Protection Descriptions

Impressed Current Systems

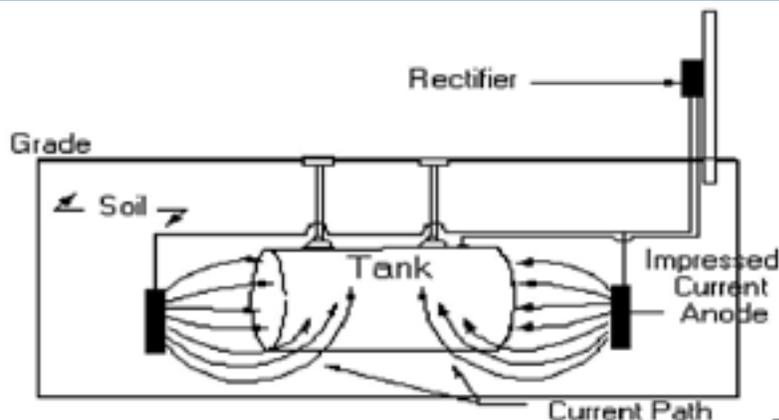
An impressed current system uses a rectifier (a device that converts alternating current to direct current) to provide direct current through anodes to the metal tank, piping, or other underground components to achieve corrosion protection.

The diagram below illustrates impressed current cathodic protection.

How to tell if you have an impressed current system:

You should have a rectifier located somewhere at your facility.

Impressed current cathodic protection systems are typically installed in the field.



Galvanic (Sacrificial) Anode Systems

A galvanic (sacrificial) anode system uses anodes that are buried and attached to metal UST components for corrosion protection. The anode is more electrically active and will sacrifice itself (corrode) to protect the metal component from corrosion.

A sample picture of an anode attached to a tank is shown below.

How to tell if you have a galvanic (sacrificial) anode system:

It is more difficult to tell if you have a galvanic anode system because you typically cannot see the anodes and there is no rectifier. The anodes are attached to the underground component they are protecting and are buried. These anodes are usually installed on tanks at the factory (such as on the sti-P3® tank) and can be installed on piping and other underground metal components in the field.

In order to determine whether you have a galvanic system, look at any installation paperwork you might have or contact the contractor who installed the cathodic protection system.



Sample of Galvanic (Sacrificial) Anode



Sample of Galvanic Anode Test Points

General Requirements For Galvanic Anode and Impressed Current Cathodic Protection



Your cathodic protection system must operate continuously to protect the metal tank and piping components in direct contact with the ground. If your cathodic protection system is disconnected or turned off, your underground UST components are not protected from corrosion. Never turn off your rectifier and never disconnect a galvanic anode, unless contractors need to turn off or disconnect your cathodic protection for short periods during testing or for repairs;

AND



Effective November 17, 2009 all tanks with impressed current cathodic protection that is turned off or inoperable for 12 months or more must be properly closed.

AND



All cathodic protection systems installed in the field must be designed by a corrosion expert. Field installed means the cathodic protection system was not installed when the tank or piping was in the factory. An example of a tank that has a factory installed cathodic protection system is the sti-P3® tank;

AND



All cathodic protection systems used to upgrade tanks must have been installed following the upgrade requirements listed in the cathodic protection section beginning on page 21;

AND



You must have your cathodic protection system tested periodically to make sure it is working properly. The test must be conducted by a qualified cathodic protection tester within six months of installation and then at least every three years. In addition, if you have any repairs conducted to your cathodically-protected UST, you must have a cathodic protection test conducted within six months of that repair.

Test results must be on the appropriate form provided by the Division.

A **cathodic protection tester** is a person who can demonstrate an understanding of the principles of all common types of cathodic protection systems as applied to buried or submerged metal piping and tank systems.

A **corrosion expert** must meet specific qualifications. That person must be either:

- Certified by NACE International as a Corrosion Specialist or Cathodic Protection Specialist;

or

- A Registered Professional Engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks.

Specific Requirements For Galvanic Anode and Impressed Current Cathodic Protection



Both galvanic anode and impressed current cathodic protection systems must be tested periodically to ensure they are working properly.



A test must be conducted within six months of installation and then at least every three years. Keep records of the last two cathodic protection tests.

Note: if your cathodic protection system does not pass the test, have your cathodic protection system evaluated and repaired by a corrosion expert. Keep all records of the corrosion expert's evaluation and repairs to your cathodic protection system.



If you have an impressed current cathodic protection system:



You must inspect the rectifier at least every 60 days to make sure it is on and operating properly. Keep records of the last three inspections.

See the following page for a list of things to do during a rectifier inspection. If your rectifier is not operating properly, contact a corrosion expert to evaluate and repair your cathodic protection system.

Things To Do During Rectifier Inspections

1. Make sure the rectifier is turned on.

Rectifiers always need to be on to protect your tank and piping from corrosion.

Never turn off your rectifier.

- Your rectifier may have a light to indicate that it is turned on
- Your rectifier may have an on/off switch

Your rectifier should be directly wired to a dedicated circuit and not plugged into a wall outlet or wired to a light switch.

2. Record the values from any meters on the rectifier. If you have a meter and voltmeter readings, compare them to operating ranges established by the corrosion expert when the system was first activated.

Some rectifiers may have one or more of the following meters:

- Direct current ammeter
- Direct current voltmeter
- Hour meter

The person who installed your impressed current system should have provided you with paperwork to indicate what the normal operating voltage and amperage values are for your cathodic protection system.

If you do not have values for the normal operating voltage and amperage, contact the person who installed the system and obtain that information.

The person who installed your impressed current system should have provided you with paperwork to indicate what the normal operating voltage and amperage values are for your cathodic protection system.

If you do not have values for the normal operating voltage and amperage, contact the person who installed the system and obtain that information.

3. If your rectifier does not appear to be operating properly (such as the rectifier or rectifier light is not on, or meter readings are not within established values), contact a qualified person to find and correct the problem. Remember, only a corrosion expert can make changes to the design of your cathodic protection system.

Warning: You should not attempt to fix any problems with your rectifier. The rectifier poses an electrical shock hazard.

Remember to keep all records of repairs and have a cathodic protection test conducted within six months of any repair.

Make sure the cathodic protection system passes the test.

Chapter 10: Release Detection

This Chapter is divided into two sections:

- A. Release Detection for Tanks
- B. Release Detection for Piping

Use this information to determine what types of release detection you are using at your

Section 10A: Release Detection For Tanks

General Requirements and Best Management Practices For All Tank Release Detection Methods



You are not required to have release detection on emergency generator tanks unless they were installed or replaced after July 24, 2007. Tanks installed or replaced after July 24, 2007 must meet requirements for secondary containment and interstitial monitoring. All other regulated tanks must have release detection.

- ✓ Make sure your vendor or installer provides you with the information and training necessary to make sure your release detection equipment works effectively to detect leaks.
- ✓ Keep all of your installation and repair records and paperwork for the life of the tank.
- ✓ Periodically have a qualified UST contractor, such as the vendor who installed your release detection system, service your leak detection equipment according to the manufacturer's service instructions. Components can wear out and must be checked periodically. Many vendors recommend or require this maintenance activity at least once annually.
- ✓ Make sure employees who operate, monitor, or maintain the release detection system are trained and know whom to report problems. Develop and maintain regular training programs for all employees.
- ✓ As of January 1, 2010, Vapor Monitoring may no longer be used as a leak detection method for tanks and piping. See other alternative methods in this chapter.

Requirements For Release Detection Methods



You must keep records of release detection testing for at least the most recent 12 months.

AND



Your method of release detection must meet specific performance requirements.

You must keep documentation from the manufacturer, vendor, or installer for at least five years which shows your release detection equipment can meet performance requirements.

- One way to obtain copies of this documentation is to access the National Work Group for Leak Detection Evaluations list.

This list may be found at: <http://www.nwglde.org>



Your release detection must be installed, calibrated, operated, and maintained according to the manufacturer's instructions.

- Keep all schedules of required calibration and maintenance provided by the equipment manufacturer for at least five years.
- Keep all records of calibration, maintenance, and repair for at least one year after the activity occurred.

AND



If you ever suspect or confirm a release, you must take appropriate action and, if necessary, report the release. See pages 52 and 53 for information on what to do.

Never ignore release detection alarms or failed leak detection tests. Treat them as potential leaks.

Take the following steps to figure out what methods of release detection are being used at your facility.

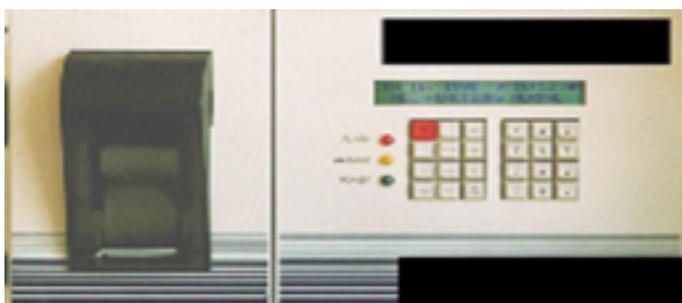


1. Read the descriptions that follow to determine which tank release detection method you use.
2. Look through your old records to see if they match any of the names in the descriptions.
3. Ask the contractor who installed your release detection system.

Automatic Tank Gauging (ATG) Systems - An ATG system is a sensor probe permanently installed in a tank and a console which provides information such as product level and temperature. This console (sometimes called an ATG) will be mounted somewhere at your facility. ATG system monitors automatically calculate the changes in product volume that can indicate a leaking tank and can be set to activate an alarm when there is a suspected problem with your tank.



ATG Monitors



✓ Test your tanks more frequently than required in order to catch leaks sooner. Testing more frequently will also help you ensure a valid test result each month.

✓ Frequently test your ATG system according to the manufacturer's instructions to make sure it is working properly.

✓ Read your owner's manual and run the appropriate tests to see if your ATG system is set up and working properly. Most ATG systems have a test or self-diagnosis mode that may run these checks.

✓ Periodically have a qualified UST contractor, such as the vendor who installed your ATG, service all the ATG system components according to the manufacturer's service instructions.

- Tank sensors and other components can wear out and must be checked periodically.
- Many vendors recommend or require this maintenance activity at least once annually.

Requirements For Automatic Tank Gauging



Use your ATG system to test for leaks at least once every 30 days for each tank and keep a record of the result for at least one year. Your ATG system must be able to detect a 0.2 gallon per hour leak rate with at least a 95 percent probability of detection and no more than 5 percent probability of false alarm.

- Remember to test each tank at least once per month and maintain result for at least one year.
- Make sure you are properly testing the portion of the tank that routinely contains product.
- Make sure the amount of product in your tank is sufficient to run the ATG leak test. The tank must contain a minimum amount of product to perform a valid leak detection test. (This information should be on the performance certification for your leak detection equipment.)



Secondary Containment With Interstitial Monitoring -

Secondary containment is an additional barrier between the portion of an UST that contains product and the outside environment. Examples of secondary containment include the outer tank wall of a double-walled system, an excavation liner, and a bladder inside a tank (excavation liners and bladders are no longer acceptable as methods of secondary containment in Tennessee). The area between the inner and outer barriers is called the interstitial space and is monitored automatically. You may have interstitial monitoring ports on the pavement at your facility.

Interstitial Monitors are used to check the area between the inner and outer wall of the tank for leaks and alert the operator if a leak is suspected. Some monitors indicate the physical presence of the leaked product, either liquid or gaseous. Other monitors check for a change in condition that indicates a hole in the tank, such as a loss of vacuum or a change in the level of a monitoring liquid between the walls of a double-walled tank.



If you have an electronic system, you should frequently test your interstitial monitoring system according to the manufacturer's instructions to make sure it is working properly.



If you have an electronic interstitial monitoring system, periodically have a qualified UST contractor, such as the vendor who installed it, service all the system components according to the manufacturer's service instructions.

Requirements For Secondary Containment with Interstitial Monitoring



Use your Interstitial monitoring system to test for leaks at least once every 30 days for each tank and keep a record of the result for at least one year.



Interstitial monitoring systems must be designed, constructed and installed to detect a leak from any part of the tank that routinely contains product.

For double-walled tanks, the test method must be able to detect a release through the inner wall.



As of November 17, 2009, Interstitial Monitoring when used as a form of release detection must provide continuous monitoring.

Visual observations of the interstitial space are not considered to be continuous monitoring.

Continuous monitoring methods include electronic sensors, electronic hydrostatic monitoring, pressure/vacuum monitoring methods.

Requirements For Secondary Containment with Interstitial Monitoring Continued

Effective July 24, 2007 , another set of rules were necessitated by the federal Energy Policy Act of 2005. The new requirements include:

- All new tanks must be double-walled or jacketed and must have an interstitial space;
- Interstitial monitoring must be performed monthly on all new tanks;
- All new pressurized piping must be double-walled or secondarily contained;
- Interstitial monitoring must be performed monthly on all new pressurized piping
- All new motor fuel dispensers must have a liquid tight containment sump, designed to allow for visual inspections;
- If a tank, a piping run or a motor fuel dispenser is being replaced the tank owner must install secondary containment and interstitial monitoring for the replaced tanks and pressurized lines and secondary containment for the replaced dispenser.



Manual Tank Gauging - Manual tank gauging alone may be used only for tanks of 1,000 gallons or less capacity. It involves taking your tank out of service for the testing period each week, during which the contents of the tank are measured at the beginning and end of the test period. Typically, a measuring stick is used to take the measurements. The measurements are then compared to weekly and monthly standards to determine if the tank is tight.

Requirements For Manual Tank Gauging

<u>Tank Size</u>	<u>Minimum Period of Test</u>	<u>Weekly Standard (One Test)</u>	<u>Monthly Standard (Four Test Average)</u>
up to 550 gallons (any tank diameter)	36 hours	10 gallons	5 gallons
551 - 1,000 gallons (any tank diameter)	44 hours	9 gallons	4 gallons
551 - 1,000 gallons (when tank diameter is 48")	58 hours	12 gallons	6 gallons



You must perform weekly testing as follows:

- Take your tank out of service for the period of the test to ensure no product is added or removed.
- Record two inventory readings at the beginning and end of the test period.
- Reconcile the numbers weekly and keep records. For the tank to pass, the difference between the beginning and ending measurements cannot exceed the weekly standard value listed in the third column of the table above. Sample instructions and a record keeping form are provided in Appendix.



You must reconcile your records every 4 weeks to obtain monthly numbers. For the tank to pass, the difference between the average of the four weekly beginning and ending measurements cannot exceed the monthly standard value listed in the fourth column of the table above. Instructions and a record keeping form are provided in Appendix G.



Your equipment (e.g., your measuring stick) must be capable of measuring to the nearest one-eighth inch and be able to measure the level of product over the full range of the tank's height.

Check your measuring stick periodically to make sure you can read the markings and numbers, that the bottom of the stick is not worn, and that the stick is not broken, bowed, or warped.



A leak is suspected if the difference between beginning and ending measurements exceeds weekly or monthly standards listed in table above.



Manual Tank Gauging And Tank Tightness Testing - This method is for tanks of 2,000 gallons or less capacity. Manual tank gauging involves taking your tank out of service for the testing period each week, during which the contents of the tank are measured at the beginning and end of the test period. Typically, a measuring stick is used to take measurements. The measurements are then compared to weekly and monthly standards to determine if the tank is tight. This combined method also includes tightness testing every five years. This method may only be used for up to ten years after installing a new tank or upgrading an existing tank with corrosion protection.

Requirements For Manual Tank Gauging and Tank Tightness Testing

-  Manual tank gauging combined with tank tightness testing is a temporary release detection method that may be used for up to 10 years after installing a new UST or for up to 10 years after your existing tank met the corrosion protection requirements.
-  Only tanks of 2,000 gallons or less meeting the size and test requirements in the table below may use manual tank gauging combined with tank tightness testing.

<u>Tank Size</u>	<u>Minimum Period Of Test</u>	<u>Weekly Standard (One Test)</u>	<u>Monthly Standard (Four Test Average)</u>
551 - 1,000 gallons	36 hours	13 gallons	7 gallons
1,001 - 2,000 gallons	36 hours	26 gallons	13 gallons



See Page 38 for Manual Tank Gauging Requirements



You must have a tightness test conducted at least once every five years.

- The test may be conducted by a trained tester or by using a permanently installed electronic system.
- Make sure the method of tank tightness testing is certified for the types of tanks you have and for the product you store in those tanks.
- The tightness test must be capable of detecting a 0.1 gallon per hour leak rate from any portion of the tank that routinely contains product.
- Keep the results of your most recent tightness test.

Statistical Inventory Reconciliation (SIR) - SIR is a method of release detection where computer software is used to conduct a statistical analysis of inventory, delivery, and dispensing data collected every 30 days. A measuring stick or an ATG is commonly used to gather the inventory data. SIR must be able to detect a 0.2 gallon per hour leak rate with at least a 95 percent probability of detection and no more than 5 percent probability of false alarm. Depending on the vendor, you may either have to send your data to the vendor and receive a report or enter the data into a computer program that provides you with the results. The result of the analysis may be pass, inconclusive, or fail.

For more consistent measurements when using a stick, take measurements at the same time each day.

If you use an automatic tank gauge to gather inventory data, periodically have a qualified UST contractor, such as the vendor who installed it, service all the system components according to the manufacturer's service instructions. Know how to retrieve and read the

Requirements For Statistical Inventory Reconciliation



You must supply inventory data to your SIR vendor (or enter your inventory data into a computer software program and generate your leak detection results) at least once every 30 days. If you submit your data, a vendor will provide you with your leak detection results after the statistical analysis is completed. Keep your SIR results and raw data (inventory records) for at least one year.

- Make sure the vendor provides your results quickly so you know whether or not your tank is leaking every 30 days.
- Check with your SIR vendor or computer software to determine what specific inventory data is necessary.
- Take inventory and dispenser readings and record the numbers at least once each day that product is added to or removed from your tank. (Appendix F)
- Reconcile deliveries with delivery receipts by taking inventory readings before and after each delivery.
- You must make sure your product dispensers are calibrated according to local standards or to an accuracy of six cubic inches for every five gallons of product withdrawn, and all meters are calibrated at least annually.
- You must measure the water in your tank to the nearest one-eighth inch at least once a month. You can use a paste that changes color when it comes into contact with water.

Your equipment or electronic monitoring device must be capable of measuring to the nearest one-eighth inch and be able to measure the level of product over the full range of the tank's height.

- Check your measuring stick periodically to make sure that you can read the numbers, the bottom of the stick is not worn, the stick is not broken, bowed, or warped.

All Deliveries and stick readings must be made through a drop tube that extends to within one foot of the tank bottom.

If you receive an inconclusive result, you must correct the problem (the problem might be poor measurement techniques or something more serious such as a release) and document the results of the investigation.

- An inconclusive result means you have not received a passing leak detection result for that month.
- A release is suspected when you have 1 failing result, or 2 consecutive inconclusive results, unless monitoring device is defective and repaired immediately. (You must keep all repair records).

Section 10B: Release Detection For Piping

When looking at release detection requirements for piping, we must look at how product is delivered through the piping. There are several types of product delivery systems for piping that could be used with underground storage tanks. A product delivery system is piping that delivers product from one tank to another tank or from a tank to a dispenser. Product delivery systems may be either pressurized or operate by suction. In addition, piping could either be above ground or underground. The release detection requirements apply to piping delivery systems that are underground only. The release detection requirements are different depending on whether the piping delivery system is pressurized or suction. If you have piping associated with an emergency generator tank, then that piping is not required to have release detection.

Take the following steps to figure out what methods of release detection are being used at your facility.



1. Read the descriptions on the next pages to determine which types of piping you have.
2. Look through your old records to see if they match any of the names in the descriptions.
3. Ask the contractor who installed your piping system.
4. Find out what was reported on the last inspection if nothing has been changed.

Under Dispenser Inspections



Beginning June 19, 2007, you must visually inspect under-dispensers at least quarterly. A log of these inspections must be kept for the last 12 months.



Fix any dispenser leaks and investigate any unexplained product under the dispenser.



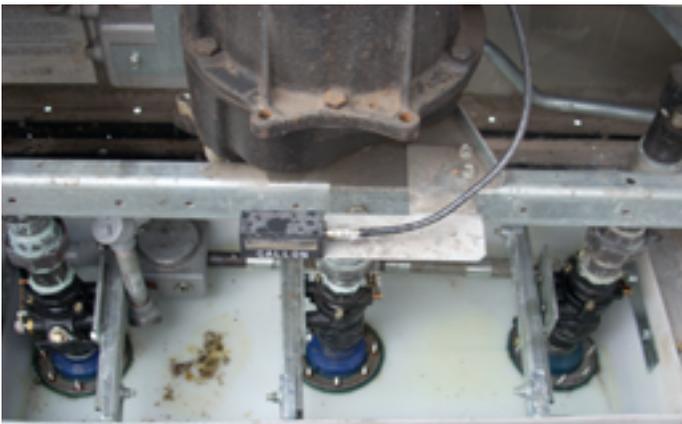
Remove any water or petroleum found in the sump.



Report any product that has leaked into the environment.



Underneath a dispenser
without a sump



Underneath a dispenser with a sump



Pressurized product delivery - pushes product from the tank to the dispenser through piping. Pressurized piping commonly uses a submersible turbine pump (STP) located inside the tank. You should be able to tell if you have a pressurized piping system by looking for a STP head in a sump above the tank. These sumps are usually covered with a lid and may also have a sump cover under the lid. In rare cases, pressurized piping delivery may be by gravity feed. Gravity feed has no pump and relies on the downward slope of the piping to transport product.



Sample STP Head In A Sump On Top A Tank



Sample Lid And Sump Cover



Sample STP Head In A Sump On Top Of A Tank

Requirements For Pressurized Piping Release Detection



Pressurized piping must have an automatic line leak detector (LLD) installed. You must meet specific requirements for your LLDs. See page 45 for information and checklists for LLDs.



Along with a LLD, each pressurized piping run must have one of the following:

- **monthly SIR** - monthly SIR results apply to tanks and piping systems.
- **monthly interstitial monitoring** - to use this method, your piping must be secondarily contained and you must be monitoring the interstitial space at least once every 30 days for releases.
- **Annual line tightness test** - you must have a line tightness test conducted at least every 12 months for pressurized piping. See line tightness testing for more information.



If you use double walled piping with interstitial monitoring (page 37 and 38), the requirements are the same for both tanks and piping. In addition, if you use sump sensors, you must ensure the following for interstitial monitoring for piping:

- Sensors are typically located in the turbine or dispenser sump areas for interstitial monitoring. These sumps must be tight and free of leaks for piping interstitial monitoring to operate correctly.
 - Piping must slope to the sump containing the monitoring sensor.
 - Make sure the rubber boot is pulled back from the outer wall of the piping so product will drain into the sump if a problem occurs.
 - Make sure the sump does not have any water in it.
 - Make sure the sensors located at the bottom of the sump so it activates quickly when a release occurs.



Suction product delivery - pulls product from the tank to the dispenser through the piping by using a suction pump located at the dispenser. You should be able to tell if you have suction piping by looking for a suction pump (you may see pulleys and belts) inside the dispenser. There will not be a STP pump head in a sump above the tank.

Release detection is **NOT** required for suction piping that meets the following conditions:

- The piping is sloped so product will drain back to the tank when suction is lost; and
- There is only one check valve located as close as practical to the suction pump beneath the dispenser.

Piping that meets these two criteria is sometimes called "safe suction" or European suction.

Piping that does not meet these conditions is sometimes called U.S. suction or American suction.



Example of A Suction Pump inside a dispenser

Requirements For Suction Piping Release Detection



If you have suction piping, you must meet one of the following:

- Monthly SIR - monthly SIR results apply to tanks and piping systems.
- Monthly interstitial monitoring - to use this method, your piping must be secondarily contained and you must be monitoring the interstitial space at least once every 30 days for releases.
- Line tightness test every three years - you must have a line tightness test conducted at least every three years for suction piping. See line tightness testing for more information.
- No release detection if you meet the criteria for safe suction described in the box above.



If you use monthly SIR, the requirements are the same for both tanks and piping.



If you use interstitial monitoring, the requirements are the same for both tanks and piping. In addition, if you use sump sensors, you must ensure the following for interstitial monitoring for piping:

Interstitial monitoring sensors are typically located in a sump above the tank or the dispense sump areas. These sumps must be tight and free of leaks for piping interstitial monitoring to operate correctly.

- Piping must slope to the sump containing the monitoring sensor.
- Make sure the rubber boot is pulled back from the outer wall of the piping so product will drain into the sump if a problem occurs.
- Make sure the sump does not have any water in it.
- Make sure the sensor is located at the bottom of the sump so it activates quickly when a release occurs.

Automatic Line Leak Detectors

Automatic line leak detectors (LLD) are devices designed to detect a catastrophic release from pressurized piping. Typically, they are located on the submersible turbine pump (STP) head in the sump above your tank.

There are two types of automatic LLDs:

- Mechanical LLDs are mechanically operated pressure valves that test for piping leaks each time the pump is turned on.
- Electronic LLDs have an electronic detection element that connects to an electronic control panel and monitors for piping releases.

Some interstitial monitoring devices may also serve as LLDs and many electronic LLDs are able to conduct line tightness tests.

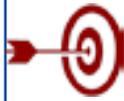


Make sure your LLDs are designed to operate with the type of product your UST stores. For example, some LLDs are designed to work with gasoline, while others are intended to work with diesel.



Specific Requirements For Automatic Line Leak Detectors

 Pressurized piping must have a LLD installed that can detect a release of three gallons per hour at a line pressure of 10 pounds per square inch within one hour.

 When a leak is detected, automatic LLDs must either:

- Shut off product flow;
- Restrict product flow; or
- Trigger an alarm that you can see or hear.

 You must have a test conducted that demonstrates proper functioning on each LLD at least every 12 months. The test must be performed according to the manufacturer's instructions.

You must keep a record of the LLD tests for at least one year.

 You must have all records of any calibration, maintenance, or repair of your LLDs that were performed in the last 12 months.

 If you have LLDs that are less than five years old, you must have all records of performance claims, as well as calibration and maintenance schedules.

Line Tightness Testing

A periodic line tightness test may be used to meet release detection requirements for your piping. Line tightness testing may be performed by either a qualified tester or by using a permanently installed electronic system. Line tightness testing must be able to detect a 0.1 gallon per hour leak rate at 1.5 times the operating pressure of the piping, or an equivalent pressure if an electronic line leak detector is used.



If you use a permanently installed electronic line leak detector, periodically have a trained contractor such as the vendor who installed the system service that system according to the manufacturer's instructions

Specific Requirements For Line Tightness Testing



You must keep records of line tightness testing results until the next tightness test is conducted.

- For pressurized piping, testing is required every 12 months.
- For suction piping, testing is required every three years, unless the piping has a "safe suction" system described earlier in this chapter.
- If electronic line leak detectors are used for line tightness testing, you must have documentation for one of the following:

An annual 0.1 gph leak test has been conducted in the last 12 months

or

A monthly 0.2 gph leak test has been conducted for the last 12 months.



If you use a permanently installed electronic system, you must keep records of any calibration, maintenance, or repair of your equipment that were conducted in the last 12 months.



If you have an electronic system which is less than five years old, you must have all records of performance claims, as well as calibration and maintenance schedules.

Chapter 11: Notification, Repairs, Temporarily Out of Service, and Suspected and Confirmed Releases

This Chapter is broken down into 6 sections:

- A. Notification
- B. Repairs
- C. Replacement
- D. Temporarily Out of Service
- E. Suspected and Confirmed Releases
- F. Financial Responsibility, Fund Eligibility, and Fund Coverage



Note: When you see this symbol after your tank or piping type you will need to go to the instructed page for additional requirements. If you do not meet these requirements your tank or piping is not in compliance.

Section 11A: Notification



You must notify the Division at least fifteen (15) days prior to installations of any tank by submitting the pre-installation notification form.



You must submit a complete notification form within (15) days of installation of newly installed tanks.



All tanks using a business name, must have that business name registered with the Tennessee Secretary of State.



You must also notify the Division anytime changes are made to any of your USTs. The following changes must be reported to the Division within 30 days of the change:

- Any change in Class A or Class B Operators must be reported on the Division's Web based training database located at:
<https://apps.tn.gov/ustop>



- Change in ownership; Change in Address of Owner and Operator; Upgrading or replacement of tanks or piping; Temporary or permanent closure of tank or tank compartment; Change in service or changing a tank contents from regulated to non-regulated.

You can print a notification from our Website:
<http://www.tennessee.gov/environment/article/ust-forms-and-guidance>

You can request a notification form or pick one up at any Environmental Field Office or at:

Tennessee Department of Environment and Conservation
Division of Underground Storage Tanks
William R. Snodgrass Tennessee Tower, 12th Floor
312 Rosa L. Parks Avenue
Nashville, Tennessee 37243
(615) 532-0945

Section 11B: Repairs

Requirements For Repairs



Repairs to UST systems must be made to effectively prevent releases for the life of the UST system.



If you have a fiberglass-reinforced plastic tank, repairs may be made by the manufacturer's authorized representative or according to manufacturer's specifications.



Metal piping sections and fittings that have released product must be replaced. Fiberglass pipe and fittings may be repaired according to manufacturer's specifications. New rules require piping repairs to be approved by the division not to be a replacement.



Repaired tanks and piping must meet one of the following:

- Be tightness tested within 30 days of the repair.
- The repaired portion is monitored for monthly releases using one of the following:
Automatic Tank Gauging,
Interstitial Monitoring,
Statistical Inventory Reconciliation,
Another method approved by the Division,
- Be internally inspected (Tanks Only).



Cathodically protected UST systems that are repaired must have a cathodic protection test performed within six months of the repair to make sure the cathodic protection system is working properly.



You must keep records of all repairs for the remaining operating life of the UST system.



Section 11C: Replacement

Requirements For Replacement

➤ Replacement of any tanks, piping and/or motor fuel dispensers after July 24, 2007 shall meet the following requirements:

Tanks and Pressurized Piping:



You must install secondary containment and use interstitial monitoring if tanks or pressurized piping is replaced.

- If piping is being replaced, all piping connected to that particular underground storage tank shall be removed and secondarily contained with interstitial monitoring.
- If piping meets the requirements for suction piping listed on page 45 piping does not have to be secondarily contained.



These requirements may not apply if and only if piping alteration is authorized by the division as a repair.

- A requests for division authorization of piping repairs shall be submitted in writing;

AND

- Be prepared to submit additional information upon request.

Motor Fuel Dispensers



You must have or install containment under dispensers.



Section 11D: Temporarily Out of Service

Requirements For Temporarily Out of Service



If your UST is not empty, it must continue to meet the leak detection requirements for both tank and piping.

Note: An empty tank means that no more than one inch of residue (including product, sludge, water, etc.) or 0.3 percent by weight of the total tank capacity, remain in the UST. Empty tanks do not require leak detection.



All corrosion protection systems must remain operational and must continue to be monitored. Vent lines should remain open.



If an UST remains temporarily closed for more than three months, you must leave vent lines open, but close all other lines, pumps, man ways, and ancillary equipment by capping and securing them.



You must respond to any releases from your temporarily closed UST, just as you would from an UST that you are currently using.

Section 11E: Permanently Out of Service

 It is very important that a tank owner close his tanks properly. This can only be done by working closely with the Environmental Field Office (EFO) staff .

 If you are a property owner, proper closure of tanks will help ensure that your property can have a No Further Action Required letter for prospective buyers if you decide to put it on the market.
Failure to properly close tanks could further expose any tank owner to liability should an accident or injury result in civil penalties or fines against the tank owner and/or operator.

 All forms and guidance are available on our Division website:

<http://www.tn.gov/environment/section/underground-storage-tanks/>

Requirements for Permanently Out of Service

 At least thirty days prior to a planned tank/compartments closure, owners and/or operators must complete UST Permanent Closure Application and submit it to the appropriate Field Office for review.

- Remember, this application must be approved by Division personnel before any tank closure action begins and the application is valid for only twelve months from the date of approval.

 Once tanks are removed and out of the ground, you must submit a UST Tank Notification Form to the Division placing the tanks in a Permanent Closure Status.

- Remember, this ensures that the closed tanks will be removed from the annual billing of tank fees.

 Within ninety days of tank closure, the owner/operator must submit a UST Permanent Closure Report to the appropriate Field Office in order to determine if contamination is present at the site.

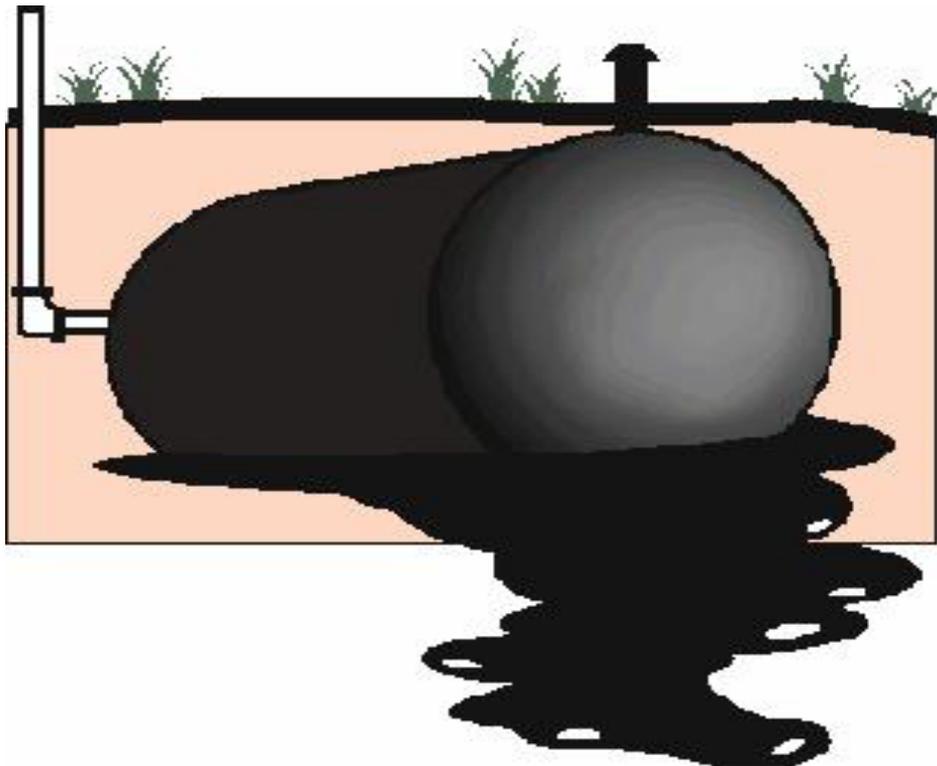
- Remember, a State Approved Corrective Action Contractor must be used when closing tanks if the site is fund eligible and you plan to recover costs of corrective action if contamination is found.

Section 11F: Suspected and Confirmed Releases

Personnel at your facility should be fully prepared to respond to releases before they occur. In addition, employees need to know what to do when release detection methods indicate a suspected or confirmed release.

Requirements For Suspected and Confirmed Releases

-  You must respond to, investigate, and report suspected or confirmed releases when they occur.
-  You must report a suspected or confirmed release to the Division within 72 hours of its discovery. This should include but not be limited to monitoring results that show possible leaks, unusual operating conditions such as sudden loss of product, unexplained presence of water in the tank, and presence of petroleum on or near your facility.
-  Two inconclusive results when using Statistical Inventory Reconciliation as a release detection method constitutes a suspected release.



Steps that will assist you in responding to suspected or confirmed releases



Step 1. Stop The Release

- Take immediate action to prevent the release of more product.
- Turn off the power to the dispenser and bag nozzle with appropriate equipment.
- Make sure you know where your emergency shutoff switch is located.
- If necessary, empty the tank. Be careful to avoid further contaminating the site. You may need the assistance of your supplier or distributor.

Step 2. Contain The Release

Contain, absorb, and clean up any surface release. You should keep enough absorbent material at your facility to contain a spill or overflow of petroleum products until emergency response personnel can respond to the incident.

The suggested supplies include, but are not limited to, the following:

- Containment devices, such as containment booms, dikes, and pillows.
- Absorbent material, such as kitty litter, chopped corn cobs, sand, and sawdust. Be sure you properly dispose of used absorbent materials.
- Mats or other material capable of keeping spill or overflow out of nearby storm drains.
- Spark-free flash light.
- Spark-free shovel.
- Buckets.
- Reels of caution tape, traffic cones, and warning signs.
- Personal protective gear.

Step 3. Identify Any Hazards

Identify any fire, explosion, or vapor hazards and take action to neutralize them.

Step 4. Call For Help

Contact your local fire or emergency response authority. Make sure you have these crucial telephone numbers prominently posted where you and your employees can easily see them.

Step 5. Report To Authorities

If you observe any of the following, contact the Division to report a suspected or confirmed release as soon as possible (within 72 hours):

- Any spill or overflow of petroleum that exceeds 25 gallons or causes a sheen on nearby surface water. Spills and overfills under 25 gallons that are contained and immediately cleaned up do not have to be reported. If they cannot be quickly cleaned up, they must be reported to your regulatory authority.
- Any released product at the UST site or in the surrounding area — such as the presence of liquid petroleum, soil contamination, surface water or groundwater contamination, or petroleum vapors in sewer, basement, or utility lines.
- Any unusual operating conditions you observe — such as erratic behavior of the dispenser, a sudden loss of product, or an unexplained presence of water in the tank. However, you are not required to report if the system equipment is found to be defective, but not leaking, and is immediately repaired or replaced.
- Results from your release detection system indicate a suspected release. However, you are not required to report this if:
 - The monitoring device is found to be defective and is immediately repaired, recalibrated, or replaced and further monitoring confirms the initial suspected release did not happen.
 - In the case of inventory control, a second month of data does not confirm the initial result.



Keep a list of emergency contacts and make sure everyone at your UST facility is familiar with the list of contacts. Appendix B contains a blank list for names and phone numbers of important contacts.

Section 11G: Financial Responsibility

This is an overview of Financial Responsibility, Fund Eligibility, and Fund Coverage.

Financial Responsibility

State and Federal regulations require owners of a regulated substance tank to maintain financial responsibility for their tanks. This ensures that an owner is able to pay for cleanup of damage caused to the environment and third party claims should he/she be sued for personal injury or property damage. The amount of Financial Responsibility required is \$1 million for marketers (retailers, resellers, and any UST system that handles 10,000 gallons or more per month) and \$500,000 for non-marketers (nonresellers).

Tank owners can use one or more of several mechanisms available to meet financial responsibility requirements. One mechanism available to Tennessee tank owners is a state fund (See Rule 0400-18-01-.08 for information on other mechanisms). Although the state fund is not insurance, it may be used to meet part of the tank owner's financial responsibility obligation. Like insurance, there is a deductible or a portion for which the tank owner is responsible.

Fund Eligibility

The fund is the Financial Responsibility mechanism for all registered tank owners as of July 1, 2008. Fund eligibility for a release prior to the effective date is based on the rules in place at the time of the release. Fund eligibility for a release after the effective date is contingent on tank registration prior to the release.

The State Fund is not an automatic or guaranteed entitlement once a tank is registered and fees paid; see Fund Coverage below.

Fund Coverage

In order to receive reimbursement from the Fund, a site must have Fund Eligibility and Fund Coverage.

A site cannot have Fund Coverage without having Fund Eligibility.

A release may not be covered by the Fund if a facility was not in compliance with release detection, corrosion protection, and spill and overfill requirements at the time of the release.

For more detailed information on any of the above, see a copy of the Tennessee Underground Storage Tank Rules Chapter 0400-18-01-.08 and -.09.

Remember!

In order to receive reimbursement from the state fund, tank owners must:

- 1. Report suspected/confirmed release to the Division within 72 hours.**
- 2. Submit a fund eligibility application within 60 days of the discovery of a confirmed release.**
- 3. Submit a fund eligibility application within 90 days of the discovery of a suspected release.**
- 4. Submit release detection records for the 12 months prior to the release as well as documentation to demonstrate compliance of corrosion protection, spill prevention, overfill prevention, and secondary containment within 30 days of release confirmation.**

Appendix A: Quick Guides

Pages	Guide – 1 Spill, Overfill, Notification, Repairs, Temporary Closures, and Suspected and Confirmed Releases	
10	<u>Spill Protection</u> Spill protection must be installed on all tanks that receive more than 25 gallons in a single delivery.	
12	<u>Overfill Protection</u> Overfill protection must be installed on all tanks that receive more than 25 gallons in a single delivery.	
45	<u>Notification</u> You must submit a pre-installation notification form and pay fees 15 days prior to the installation of any tank and/or new UST system construction activities at the site. You must report any changes to your UST system, facility information, or Owner/Operator information to the Division within 30 days of change.	
47	<u>Replacement</u> If tank, piping run or motor fuel dispenser is being replaced the tank owner must install secondary containment and interstitial monitoring for the replaced tanks and pressurized lines and secondary containment for the replaced dispenser.	
46	<u>Repairs</u> All repair records must be kept for the operating life of the UST.	
	Repaired tanks and piping must be tightness tested 30 days following completion of repair.	
	Cathodic protection systems are to be tested 6 months of repair.	
48	<u>Temporarily Out of Service Tanks</u>	
	Operation of cathodic protection must continue	
	Release detection must continue unless tank has been emptied of residue (empty = no more than 1" or 0.3% by weight of the total tank capacity).	
	If your tank is temporarily out of service for more than 3 months you must do the following:	
	File an amended notification form to the Division showing the tank system as Temporarily Out of Service.	
	Leave vent lines open and functioning.	
	Cap and secure all other lines, pumps, man-ways, and ancillary equipment.	
49	<u>Permanently Out of Service Tanks</u>	
	Thirty days prior to closure, you must submit a UST Permanent Closure Application.	
	Once tanks are removed, you must file an amended tank notification form to the Division showing the tank system as Permanently Out of Service.	
	Within ninety days of closure, you must submit a Permanent Closure Report to the Division.	

50	Suspected or Confirmed Releases	
	You must report a suspected or confirmed release to the Division within 72 hours of discovery.	
	Follow suspected release procedures as directed by the Division.	
	Follow corrective action procedures as directed by the Division.	

Pages	Guide – 2 Corrosion Protection	Minimum Frequency
16	<u>Corrosion Protection for Tank</u> All of your tanks must have corrosion protection. Your tanks must have one of the following 5:	
17	Tank meets requirement without additional equipment, operation, or maintenance.	
18	Tank has no corrosion protection but is determined by an expert or the Division to be protected from corrosion.	
26-30	Tank has cathodic protection. There are two types of cathodic protection listed below.	
28-29	<u>Impressed Current</u>	
	Tested by qualified cathodic protection tester within six months after installation and then at least every three years.	Within 6 months of installation/repairs and every 3 years
	Rectifier must be inspected at least every 60 days.	Every 60 days
28-30	<u>Galvanic (or sacrificial) anodes</u>	
	Tested by qualified cathodic protection tester six months of installation and then at least every three years.	Within 6 months of installation/repairs
21-25	<u>Corrosion Protection for Piping, Metal Joints and Connectors</u> All of your piping must have corrosion protection. Your piping must have one of the following 3:	
22-23	Piping meets requirement without additional equipment, operation, or maintenance.	
23	Piping has no corrosion protection but is determined by an expert or the Division to be protected from corrosion.	
24-30	Piping has cathodic protection. There are two types of cathodic protection listed below.	
28-30	<u>Impressed Current</u>	
	Tested by qualified cathodic protection tester within six months after installation and then at least every three years.	Within 6 months of installation/repairs
	Rectifier must be inspected at least every 60 days.	Every 60 days
28-29	<u>Galvanic (or sacrificial) anodes</u>	
	Tested by qualified cathodic protection tester months six of installation and then at least every three years.	Within 6 months of installation/repairs and every 3 years

Pages	Guide – 3 Release Detection	Minimum Frequency
31	<u>Release Detection for Tanks</u> All tanks except emergency generators are required to have release detection. Your tanks must have one of the following 8:	
33	Automatic Tank Gauging Must have the last 12 months of records.	Every 30 days
34-35	Secondary Containment with Interstitial Monitoring Must have the last 12 months of records.	Every 30 days
36	Manual Tank Gauging Must have the last 12 months of records.	Every 4 weeks
37	Manual Tank Gauging and Tank Tightness Testing Must have the last 12 months of records and last tank tightness test.	Every 4 weeks and (Tightness Test: every 5 years)
38	Statistical Inventory Reconciliation Must have the last 12 months of records.	Every 30 days
39-44	<u>Release Detection for Piping</u> All piping that is in contact with the ground and routinely contains product, except Safe/European Suction, is required to have release detection.	
41-44	Pressurized Piping	
41	<u>Is required to have an Automatic Line Leak Detector</u> Leak detector must be tested once every 12 months for proper function.	Every 12 months
44	<u>and One of the following methods of release detection:</u>	
44	Annual Line Tightness Test	Every 12 Months
44	Monthly Line Tightness Test Performed with an electronic line leak detector (if this method is used 12 months of records must be available).	Every 30 days
42	Suction Piping	
	<u>Safe or European Suction</u> (see page 44 for details) There are no requirements.	
	<u>U.S. or American Suction must have one of the following:</u>	
	Line Tightness Test Conducted once every 3 years.	Every 3 years
	SIR, or interstitial If you are using any of these methods the requirements are the same as for tanks.	Every 30 days
40	Quarterly Dispenser Checks	Every 3 months
11	Monthly Sump Checks	Every Month

Appendix B: Sample Emergency Numbers List

Important Contact Information

Contact Name	Phone #
State UST Agency:	_____
Local UST Agency:	_____
Fire Department:	_____
Ambulance:	_____
Police Department:	_____
Repair Contractor:	_____
Other Contacts:	_____
_____	_____
_____	_____
_____	_____
_____	_____

Release Response Checklist

Stop The Release: Take immediate action to prevent the release of more product. Turn off the power to the dispenser and wrap a plastic bag around the nozzle. Make sure you know where your emergency shutoff switch is located. Empty the tank, if necessary, without further contaminating the site.

Contain The Spill Or Overfill: Contain, absorb, and clean up any surface releases. Identify any fire, explosion, or vapor hazards and take action to neutralize these hazards.

Call For Help And Report Suspected Or Confirmed Releases: Contact your local fire or emergency response authority. Contact your state's underground storage tank regulatory authority within 24 hours.

Appendix C: For More Information

This section identifies UST program contacts and other resources that can help answer your questions and provide you with information about good UST management.

State Regulatory Agency Information

Tennessee Department of Environment And Conservation
Division of Underground Storage Tanks
William R. Snodgrass TN Tower
312 Rosa L. Parks Ave. 12th Floor
Nashville, Tennessee 37243

A map of the Tennessee Underground Storage Tank Field Offices with contacts can be found on the following page.

Internet Resources

State of Tennessee <http://www.tn.gov/environment/undergrund-storage-tanks/>

There are copies of the complete rules and regulations for Tennessee's underground storage tanks as well as copies of most forms.

Note: If you do not have internet access you may request a hardcopy of the rules from the address above.

You can submit any questions to the following email address - askust@state.tn.us

U.S. Government Links

- U.S. Environmental Protection Agency's (EPA) Office of Underground Storage Tanks Home Page: <http://www.epa.gov/oust>. To go directly to the compliance assistance section of the Home page go to: <http://www.epa.gov/swerust1/cmplasc/index.htm>. To go directly to EPA's listing of publications, go to: <http://www.epa.gov/swerust1/pubs/index.htm>.
- U.S. EPA Office of Enforcement and Compliance Assurance compliance assistance website: <http://www.epa.gov/compliance/assistance/index.html>

Professional And Trade Association Links

- American Petroleum Institute (API): <http://www.api.org/>
- American Society For Testing and Materials (ASTM): <http://www.astm.org/index.html>
- Fiberglass Tank and Pipe Institute (FTPI): <http://www.fiberglasstankandpipe.com>
- NACE International - The Corrosion Society: <http://www.nace.org/>
- National Fire Protection Association (NFPA) : <http://www.nfpa.org>
- Petroleum Equipment Institute (PEI): <http://www.pei.org>
- Steel Tank Institute (STI): <http://www.steeltank.com/>
- Underwriters Laboratories (UL): <http://www.ul.com>

Free Informative Publications Available From EPA

The publications listed on the next pages are free and available from the U.S. EPA. You can access these publications via EPA's website or you can call, write to, or fax EPA.

- You can download, read, or order documents from <http://www.epa.gov/swerust1/pubs/index.htm>.
- To order free copies or ask questions, call EPA's **toll-free** RCRA/Superfund Hotline at 800-424-9346 or call EPA's publication distributor's **toll-free** number at 800-490-9198 or fax 513-489-8695. You can also write and ask for **free** publications by addressing your request to EPA's publication distributor: National Service Center for Environmental Publications (NSCEP), Box 42419, Cincinnati, OH 45242.
- Fax-on-Demand allows you to call 202-651-2098 on your fax to access over 220 UST documents.

A list of documents that might be of interest are following

Document	Description
General Information About USTs And Your Requirements	
Operating And Maintaining Underground Storage Tank Systems: Practical Help And Checklists (September, 2005)	Contains brief summaries of the federal UST requirements for operation and maintenance, as well as practical help that goes beyond the requirements. Checklists prompt the user to look closely at what kinds of equipment are in use and how to keep equipment working properly over the lifetime of the UST. The manual provides record keeping forms to help the UST owner and operator keep equipment operating properly.
Musts For USTs: A Summary Of Federal Regulations For Underground Storage Tank Systems (July 1995)	Plain language summary of federal UST requirements for installation, release detection, spill, overfill, and corrosion protection, corrective action, closure, reporting and record keeping.
Underground Storage Tanks: Requirements And Options (June 1997)	Trifold leaflet alerts UST owners and operators who are nonmarketers (who do not sell stored petroleum) of their responsibilities and choices for complying with federal UST regulations.
Leak Detection Information	
Straight Talk On Tanks: Leak Detection Methods For Petroleum Underground Storage Tanks (September 1997)	Explains federal regulatory requirements for leak detection and briefly describes allowable leak detection methods.
Automatic Tank Gauging Systems For Release Detection: Reference Manual For Underground Storage Tank Inspectors (August 2000)	Contains detailed information on automatic tank gauging (ATG) systems, including information on various types of ATGs, information on certified detectable leak rate/threshold, test period duration, product applicability, calibration requirements, restrictions on the use of the device, vendor contact information, printing and interpreting reports, sample reports, and so on.
Getting The Most Out Of Your Automatic Tank Gauging System (March 1998)	Trifold leaflet provides UST owners and operators with a basic checklist they can use to make sure their automatic tank gauging systems work effectively and provide compliance with federal leak detection requirements.
Manual Tank Gauging: For Small Underground Storage Tanks (November 1993)	Booklet provides simple, step-by-step directions for conducting manual tank gauging for tanks 2,000 gallons or smaller. Contains record keeping forms.
List Of Leak Detection Evaluations For UST Systems, 9th Edition (November 2001)	A summary of specifications, based on third-party certifications, for over 275 systems that detect leaks from USTs and their piping. Each summary provides information on such items as certified detectable leak rate/threshold, test period duration, product applicability, calibration requirements, restrictions on the use of the device, and so on.
*Available through the EPA website	
Introduction To Statistical Inventory Reconciliation: For Underground Storage Tanks (September 1995)	Booklet describes how Statistical Inventory Reconciliation (SIR) can meet federal leak detection requirements.
Information On Closing Underground Storage Tanks	
Closing Underground Storage Tanks: Brief Facts (July 1996)	Trifold leaflet presents brief facts on properly closing USTs in order to comply with federal closure requirements.
Financial Responsibility Information	

Document	Description
Dollars And Sense: Financial Responsibility Requirements For Underground Storage Tanks (July 1995)	Booklet summarizes the financial responsibility required of UST owners and operators.
List Of Known Insurance Providers For Underground Storage Tanks (January 2000)	Booklet provides UST owners and operators with a list of insurance providers who may be able to help them comply with financial responsibility requirements by providing suitable insurance mechanisms.
Financial Responsibility For Underground Storage Tanks: A Reference Manual (January 2000)	This detailed, comprehensive manual provides UST inspectors with the restrictions, limitations, and requirements of each financial responsibility mechanism provided in the federal UST regulations.
*Available through the EPA website	

Appendix D: Examples of a Placard For Overfill Devices

Delivery Person – Avoid Overfills

- # An **overflow alarm** is used for overflow protection at this facility.
- # Do not tamper with this alarm in any attempt to defeat its purpose.
- # When the tank is 90 percent full or is within one minute of being overfilled, the overflow alarm sounds and/or a light comes on or flashes.
- # If you hear the alarm or see the light on or flashing,
Stop The Delivery Immediately!

Appendix E: Sample Manual Tank Gauging Record

MANUAL TANK GAUGING RECORD

Month _____ Year _____

Facility Name _____

Address _____

Circle your tank size, test duration, and weekly/monthly standards in the table below: **Person Completing Form** _____

Tank Size	Minimum Duration Of Test	<u>Weekly</u> Standard (1 test)	Monthly Standard (4-test average)
up to 550 gallons	36 hours	10 gallons	5 gallons
551-1,000 gallons (when tank diameter is 64")	44 hours	9 gallons	4 gallons
551-1,000 gallons (when tank diameter is 48")	58 hours	12 gallons	6 gallons
551-1,000 gallons (also requires periodic tank tightness testing)	36 hours	13 gallons	7 gallons
1,001-2,000 gallons (also requires periodic tank tightness testing)	36 hours	26 gallons	13 gallons

Compare your weekly readings and the monthly average of the 4 weekly readings with the standards shown in the table on the left.

If the calculated change exceeds the weekly standard, the UST may be leaking. Also, the monthly average of the 4 weekly test results must be compared to the monthly standard in the same way.

If either the weekly or monthly standards have been exceeded, the UST may be leaking. As soon as possible, call your implementing agency to report the suspected leak and get further instructions.

Start Test (month, day, and time)	First Initial Stick Reading	Second Initial Stick Reading	Average Initial Reading	Initial Gallons (convert inches to gallons) [a]	End Test (month, day, and time)	First End Stick Reading	Second End Stick Reading	Average End Reading	End Gallons (convert inches to gallons) [b]	Change In Tank Volume In Gallons + or (-) [a- b]	Tank Passes Test circle Y or N
Date: _____ AM/PM Time: _____					Date: _____ AM/PM Time: _____						Y N
Date: _____ AM/PM Time: _____					Date: _____ AM/PM Time: _____						Y N
Date: _____ AM/PM Time: _____					Date: _____ AM/PM Time: _____						Y N
Date: _____ AM/PM Time: _____					Date: _____ AM/PM Time: _____						Y N

To see how close you are to the monthly standard, divide the sum of the 4 weekly readings by 4 and enter result here >

KEEP THIS PIECE OF PAPER ON FILE FOR AT LEAST 1 YEAR

Y N

Appendix F: Definitions

This appendix contains definitions found in the Rules for Tennessee Division of Underground Storage Tanks chapter 0400-18-01 and definitions developed specifically for Tennessee not found in this chapter.

Aboveground release means any release to the surface of the land or to surface water. This includes, but is not limited to, releases from the above-ground portion of an UST system and aboveground releases associated with overfills and transfer operations as the petroleum moves to or from an UST system.

Access means the ability and opportunity to gain knowledge of proprietary information in any manner whatsoever.

Accidental release means any sudden or non-sudden release of petroleum from an underground storage tank that results in a need for corrective action and/or compensation for bodily injury or property damage neither expected nor intended by the tank owner and/or operator.

Ancillary equipment means any devices including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps used to distribute, meter, or control the flow of petroleum to and from an UST.

Below ground release means any release to the subsurface of the land or to ground water. This includes, but is not limited to, releases from the belowground portions of an underground storage tank system and belowground releases associated with overfills and transfer operations as the petroleum moves to or from an underground storage tank.

Beneath the surface of the ground means beneath the ground surface or otherwise covered with earthen materials.

Cathodic protection is a technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell. For example, a tank system can be cathodically protected through the application of either galvanic anodes or impressed current.

Cathodic protection tester means a person who can demonstrate an understanding of the principles and measurements of all common types of cathodic protection systems as applied to buried or submerged metal piping and tank systems. At a minimum, such persons shall have education and experience in soil resistivity, stray current, structure-to-soil potential, and component electrical isolation measurements of buried metal piping and tank systems.

CERCLA means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended.

Class A Operator means any person having primary responsibility for on-site operation and maintenance of underground storage tank systems and has successfully completed training requirements for this operator class in accordance with paragraph (2) of Rule 0400-18-01-.16.

Class B Operator means any person having daily on-site responsibility for the operation and maintenance of underground storage tank systems and has successfully completed training requirements for this operator class in accordance with paragraph (2) of Rule 0400-18-01-.16.

Class C Operator means any on-site employee having primary responsibility for addressing emergencies presented by a spill or release from an underground storage tank system and has successfully completed training requirements for this operator class in accordance with paragraph (2) of Rule 0400-18-01-.16.

Coating means a layer of dielectric material (a material that does not conduct direct electrical current) that is applied to the outside wall of steel tanks and piping.

Compartmentalized tank means an underground storage tank that consists of two or more tank compartments, which are separated from each other by a wall or bulkhead.

Compatible means the ability of two or more substances to maintain their respective physical and chemical properties upon contact with one another for the design life of the tank system under conditions likely to be encountered in the UST.

Compliance means that a facility meets the minimum requirements as stated in the regulations.

Connected piping means all underground piping including valves, elbows, joints, flanges, and flexible connectors attached to a tank system through which petroleum flows. For the purpose of determining how much piping is connected to any individual UST system, the piping that joins two UST systems should be allocated equally between them.

Containment sump means a liquid-tight compartment that provides containment of any product releases. Containment sumps are typically used underneath product dispensers and/or for enclosing the submersible turbine pump and piping connections at the top of an underground storage tank.

Continuous in-tank leak detection system means a release detection system that allows an underground storage tank to operate continuously or nearly continuously without interruption for release detection tests. However, the system may default to a standard or shut down test, requiring the tank to be taken briefly out of service at the end of the month if sufficient good data has not been obtained over the month. These methods include continuous automatic tank gauging systems and continual reconciliation systems.

Corrective action means any activity, including but not limited to evaluation, planning, design, engineering, construction, and ancillary service, which is carried out in response to any discharge or release of petroleum.

Corrective action contractor or "CAC" means a person who is carrying out any corrective action, including a person retained or hired by such person to provide services relating to a corrective action.

Corrosion means the degradation of a material due to a reaction with its environment. An example of corrosion is the rusting of metal.

Corrosion expert means a person who, by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person shall submit documentation for review by the division that they have accreditation or certification as a corrosion specialist or senior corrosion technologist by the National Association of Corrosion Engineers (NACE) or have education and a minimum of four (4) years responsible charge work experience in the corrosion field. If it is determined by the division that a person has sufficient experience and education to be qualified to take responsible charge in corrosion control of buried or submerged metal piping systems and metal tanks, then that person shall be classified by the division as a corrosion expert for the purposes of this rule.

Date of release means the earliest date that proof of a release exists. This will be the date a release is reported to or discovered by the division unless an earlier date is determined during the investigation of the release.

Dielectric material means a material that does not conduct direct electrical current. Dielectric coatings are used to electrically isolate UST systems from the surrounding soils. Dielectric bushings are used to electrically isolate portions of the UST system (for example, tank from piping).

Dispenser means a device that discharges petroleum products from underground storage tanks into tanks in motorized vehicles, equipment tanks, or other containers, while simultaneously measuring the amount of petroleum dispensed.

Drinking water supply means any aquifer or water source whose chemical characteristics meet the primary and secondary drinking water standards as defined under Chapter 1200-05-01 and provides a yield of at least one-half gallon per minute. This shall also include any water supply used for drinking by the citizens of the state.

Empty means that all materials have been removed using commonly employed practices have been removed using commonly employed practices so that no more than 2.5 centimeters (one inch) of residue (including product, water, sludge, etc.) or 0.3 percent by weight of the total tank capacity of the UST system, remain in the system.

Excavation zone means the volume containing the tank system and backfill material bounded by the ground surface, walls, and floor of the pit and trenches into which the UST system is placed at the time of installation.

Farm tank is a tank located on a tract of land devoted to the production of crops or raising animals, including fish, and associated residences and improvements. A farm tank shall be located on the farm property. "Farm" includes fish hatcheries, rangeland and nurseries with growing operations.

Field Constructed Tank is a tank that was not constructed or built in a factory, but rather, constructed or built in the field (such as the location where it was installed). For example, very large tanks may be field constructed.

Fill Pipe is the pipe that extends from the surface to the tank that is used for filling the tank with substances.

Flow-through process tank means a tank whose principle use is not for storage but is primarily used in the manufacture of a product or in a treatment process. Flow-through process tanks form an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. Flow-through process tanks do not include tanks used for the storage of materials prior to their introduction into the production process or for the storage of finished products or by-products from the production process.

Free product refers to petroleum that is present as a nonaqueous phase liquid (that is, liquid not dissolved in water).

Fund means the petroleum underground storage tank fund established under T.C.A. § 68-215-101 et seq. unless the context clearly indicates otherwise.

Ground water means water below the land surface in a zone of saturation.

Hydraulic lift tank means a tank holding hydraulic fluid for a closed-loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and/or other similar devices.

Maintenance means the normal operational upkeep to prevent an underground storage tank system from releasing petroleum.

Motor fuel means petroleum or a petroleum-based substance that is motor gasoline, aviation gasoline, No. 1 or No. 2 diesel fuel, biodiesel, ultra low sulphur diesel, or any grade of gasohol, and is typically used in the operation of a motor engine.

Monitoring well means a hole drilled into the earth, by boring or otherwise, constructed for the primary purpose of obtaining information on the elevation or physical, chemical, radiological or biological characteristics of the ground water and/or for the recovery of ground water for treatment.

Non-corrodible material means a material that will not corrode or degrade in the environment where it is placed. For example, fiberglass material in the soil.

Non-marketing facility means a facility that does not sell or transfer petroleum to the public or any other facility that would sell the petroleum. Additionally, non-marketing facilities do not produce or refine petroleum. An example of a non-marketer is a bus terminal.

Operation means the use, storage, filling or dispensing of petroleum contained in a petroleum underground storage tank or an underground storage tank (UST) system.

Operational life refers to the period beginning when installation of the tank system has commenced until the time the tank system is properly closed under Rule 0400-18-01-.07.

Operator means any person in control of, or having responsibility for, the daily operation of the UST system.

Operator Training, for purposes of Rule 0400-18-01-.16, means a program recognized by the Division as meeting the specific requirements for each operator class as published by EPA in the Final Grant Guidelines To States For Implementing The Operator Training Provision Of The Energy Policy Act Of 2005, August, 2007.

Overfill release is a release that occurs when a tank is filled beyond its capacity, resulting in a discharge of the petroleum to the environment.

Owner means:

1. In the case of an UST system in use on November 8, 1984, or brought into use after that date, any person who owns an UST system used for storage, use, or dispensing of petroleum; and
2. In the case of any UST system in use before November 8, 1984, but no longer in use on that date, any person who owned such UST immediately before the discontinuation of its use.

Owner or operator, in the context of financial responsibility, when the owner or operator are separate parties, refers to the party that is obtaining or has obtained financial assurances.

Petroleum means crude oil or any fraction thereof that is liquid at standard temperature and pressure (sixty degrees (60°) Fahrenheit and 14.7 pounds per square inch absolute). The term petroleum includes but is not limited to petroleum and petroleum based substances comprised of a complex blend of hydrocarbons derived from crude oil through processes of separation, conversion, upgrading, and finishing, such as motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

Petroleum UST system means an underground storage tank system that contains petroleum or a mixture of petroleum with de minimis quantities of other hazardous substances. Such systems include those containing motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

Pipe or Piping means a hollow cylinder or tubular conduit that is constructed of non-earthen materials.

Pressurized Delivery is a delivery where product is pumped from the delivery truck to the tank.

Release means any spilling, overfilling, leaking, emitting, discharging, escaping, leaching or disposing of a petroleum substance from an UST including its associated piping, into groundwater, surface water, or subsurface soils.

Release detection means determining whether a release of petroleum has occurred from the UST system into the environment or into the interstitial space between the UST system and its secondary barrier immediately around or beneath it.

Repair means:

1. In the context of UST system operation, to restore the tank or UST system component that has caused the release of petroleum from the UST system;
2. In the context of replacement of piping on or after July 24, 2007, restoration of a portion of piping in lieu of replacement of an entire piping run authorized by the Division in writing; or
3. In the context of fund eligibility of property improvements, restoration of a property improvement to the position and condition it was in immediately prior to removal for the purpose of remediation of the contamination caused by a leaking petroleum underground storage tank system.

Residential tank is a tank located on property used primarily for dwelling purposes.

Retraining means any remedial training approach imposed by the Division when significant operational compliance violations are discovered at a facility. Retraining may be directed to any or all operator classes assigned to a facility and may include requirements to successfully complete additional education, testing, and/or training, or be subject to other administrative or enforcement options at the discretion of the Division.

Risk Based Cleanup Level” or “RBCL means the concentration of a chemical(s) of concern in soils or ground water in the source area(s) that will assure an acceptable risk at the point of exposure, based upon conservative non-site-specific assumptions and default parameters.

Routinely contains petroleum means those parts of the UST system designed to store, transport or dispense petroleum.

Secondary containment means a system designed and installed so that any material that is released from the primary containment is prevented from reaching the soil or ground water outside the system.

Source means the source of contamination. Sources may include, but are not limited to, a leaking tank, a leaking underground storage tank system, a spill, an overflow, free product or residual contaminated soil or ground water.

Stage 1 Vapor Recovery is a system that captures the vapors expelled from an underground storage tank as a result of being filled by a delivery truck. There are two primary types – coaxial and two point. Coaxial Stage 1 vapor recovery is two concentric channels, one inside of the other. The inner channel conveys product from the delivery truck to the tank while the outer channel conveys vapors from the tank to the delivery truck. Two point Stage 1 vapor recovery uses two separate connections, one to deliver product to the tank and the other to deliver vapors to the delivery truck.

Submersible turbine pump or “STP” means pump located inside a petroleum underground storage tank, positioned near the bottom of the tank, thereby “submerged” in the petroleum.

Sump means an underground area such as a hole or pit that is used to house equipment. Sumps may or not be contained.

- (a) In the case of a turbine sump, it is an area above the tank over which a cover is placed that houses the submersible turbine pump head, line leak detector, piping and other equipment.
- (b) In the case of a dispenser sump, it is the area beneath a dispenser that houses piping and other equipment.

Tank is a stationary device designed to contain an accumulation of petroleum and constructed of non-earthen materials (for example, wood, concrete, steel, fiberglass) that provide structural support.

Tank compartment means a portion of a UST that is separated from other portions of that UST by one or more walls, or bulkheads, creating two (2) or more individual storage spaces within the UST.

Underground area means an underground room, such as a basement, cellar, shaft or vault, providing enough space for physical inspection of the exterior of the tank situated on or above the surface of the floor.

Underground release means any below ground release.

Underground storage tank or “UST” means any one or combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of petroleum, and the volume of which (including the volume of underground pipes connected thereto) is ten percent (10%) or more beneath the surface of the ground. This term does not include any:

1. Farm or residential tank of eleven hundred (1,100) gallons or less capacity used for storing motor fuel for non-commercial purposes;
2. Tank used for storing heating oil for consumption on the premises where stored;

3. Septic tank;
4. Pipeline facility (including gathering lines) regulated under:
 - (i) The Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1671, et seq.), or
 - (ii) The Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App. 2001, et seq.), or
 - (iii) Which is an intrastate pipeline facility regulated under state laws comparable to the provisions of the law referred to in subparts 4(i) or (ii) of this definition;
5. Surface impoundment, pit, pond, or lagoon;
6. Storm-water or wastewater collection system;
7. Flow-through process tank;
8. Liquid trap or associated gathering lines directly related to oil or gas production and gathering operations; or
9. Storage tank situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

The term “underground storage tank” or “UST” does not include any pipes connected to any tank which is described in parts 1 through 9 of this definition.

Unmanned facility means an unattended emergency generator or a facility that dispenses fuel without the presence of an attendant who monitors the pumps, such as card lock facilities or an unattended service station.

UST facility means any location at which one or more regulated underground storage tank systems are located.

UST system or “tank system” means an underground storage tank, connected underground piping, underground ancillary equipment, and containment system, if any.

Wastewater treatment tank means a tank that is designed to receive and treat an influent wastewater through physical, chemical, or biological methods.

Appendix G

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Sequence Number: _____
 Notice ID(s): _____
 File Date: _____

Notice of Rulemaking Hearing

Hearings will be conducted in the manner prescribed by the Uniform Administrative Procedures Act, T.C.A. § 4-5-204. For questions and copies of the notice, contact the person listed below.

Agency/Board/Commission:	Environment and Conservation
Division:	Underground Storage Tanks
Contact Person:	Rhonda Key
Address:	William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 12th Floor Nashville, Tennessee 37243
Phone:	615-532-0989
Email:	Rhonda.Key@tn.gov

Any Individuals with disabilities who wish to participate in these proceedings (to review these filings) and may require aid to facilitate such participation should contact the following at least 10 days prior to the hearing:

ADA Contact:	ADA Coordinator
Address:	2nd Floor William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue Nashville, Tennessee 37243
Phone:	1-866-253-5827 (toll free) or (615) 532-0200 Hearing impaired callers may use the TN Relay Service at 1-800-848-0298.
Email:	Beverly.Evans@tn.gov

Hearing Location(s) (for additional locations, copy and paste table)

Address 1:	Conference Room Nashville Environmental Field Office		
Address 2:	711 R. S. Gass Blvd.		
City:	Nashville, Tennessee		
Zip:	37216		
Hearing Date :	12/14/17		
Hearing Time:	12:00 p.m.	<input checked="" type="checkbox"/> CST/CDT	<input type="checkbox"/> EST/EDT

Video Conferencing Locations

Address 1:	Conference Room Memphis Environmental Field Office		
Address 2:	8383 Wolf Lake Drive		
City:	Bartlett, Tennessee		
Zip:	38133-4119		
Hearing Date :	12/14/17		
Hearing Time:	12:00 p.m.	<input checked="" type="checkbox"/> CST/CDT	<input type="checkbox"/> EST/EDT

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Address 1:	Conference Room Jackson Environmental Field Office		
Address 2:	1625 Hollywood Drive		
City:	Jackson, Tennessee		
Zip:	38305		
Hearing Date :	12/14/17		
Hearing Time:	12:00 p.m.	<input checked="" type="checkbox"/> CST/CDT	<input type="checkbox"/> EST/EDT

Address 1:	Conference Room Columbia Environmental Field Office		
Address 2:	1421 Hampshire Pike		
City:	Columbia, Tennessee		
Zip:	38401		
Hearing Date :	12/14/17		
Hearing Time:	12:00 p.m.	<input checked="" type="checkbox"/> CST/CDT	<input type="checkbox"/> EST/EDT

Address 1:	Conference Room Cookeville Environmental Field Office		
Address 2:	1221 South Willow Avenue		
City:	Cookeville, Tennessee		
Zip:	38506		
Hearing Date :	12/14/17		
Hearing Time:	12:00 p.m.	<input checked="" type="checkbox"/> CST/CDT	<input type="checkbox"/> EST/EDT

Address 1:	Conference Room Chattanooga Environmental Field Office		
Address 2:	1301 Riverfront Parkway, Suite 206		
City:	Chattanooga, Tennessee		
Zip:	37402		
Hearing Date :	12/14/17		
Hearing Time:	1:00 p.m.	<input type="checkbox"/> CST/CDT	<input checked="" type="checkbox"/> EST/EDT

Address 1:	Conference Room Knoxville Environmental Field Office		
Address 2:	3711 Middlebrook Pike		
City:	Knoxville, Tennessee		
Zip:	37921		
Hearing Date :	12/14/17		
Hearing Time:	1:00 p.m.	<input type="checkbox"/> CST/CDT	<input checked="" type="checkbox"/> EST/EDT

Address 1:	Conference Room Johnson City Environmental Field Office		
Address 2:	2305 Silverdale Drive		
City:	Johnson City, Tennessee		
Zip:	37601-2162		
Hearing Date :	12/14/17		
Hearing Time:	1:00 p.m.	<input type="checkbox"/> CST/CDT	<input checked="" type="checkbox"/> EST/EDT

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Additional Hearing Information:

On July 15, 2015, the Environmental Protection Agency (EPA) made certain revisions to the federal 1988 underground storage tank (UST) regulations and to the 1988 state program approval (SPA) regulations. These changes established federal requirements that are similar to key portions of the Energy Policy Act of 2005; they also updated the 1988 UST and SPA regulations. Changes to the regulations include the following amendments:

- adding secondary containment requirements for new and replaced tanks and piping;
- adding operator training requirements;
- adding periodic operation and maintenance requirements for UST systems;
- addressing UST systems not included in the 1988 UST regulations;
- adding new release prevention and detection technologies;
- updating industry codes of practice references;
- making editorial corrections and technical amendments; and
- updating state program approval requirements to incorporate these new changes.

These federal changes are expected to protect human health and the environment by reducing the number of releases to the environment and quickly detecting releases, if they occur. Tennessee currently has state program approval, but to maintain that approval the Tennessee Petroleum Underground Storage Tanks regulations must be no less stringent than the federal regulations. Several years ago, the Underground Storage Tanks and Solid Waste Disposal Control Board amended the state regulations to contain many of the new federal rules but not all, and therefore, the state rules require additional amendments in order to support continuing state program approval. These additional changes include:

- monthly walkthrough inspections;
- periodic testing of spill and overfill equipment for calibration and tightness; and
- regulation of airport hydrant systems (these systems are not currently being used in Tennessee).

This rulemaking proposes to add two amendments to the state rules not included in the federal rules but believed to be critical to protecting the Petroleum Underground Storage Tank Fund. These amendments include:

- a requirement that owners or operators of a tank in temporary closure for greater than one (1) year determine if a petroleum release has occurred to the environment and provide these tanks with a tightness test before they are returned to service; and
- to clarify that an “other responsible party” may be responsible for a suspected and/or confirmed release and that the responsible party may or may not be an owner or operator of the petroleum UST system. Other responsible parties include:
 - the owner or operator of the petroleum site;
 - the owner or operator of the tank that caused the contamination;
 - any person who intentionally caused the petroleum release; and
 - any person not directly associated with the operation of the tank or site whose negligence caused the release.

The Department prepared an initial set of draft rules for public review and comment. Copies of these initial draft rules are available for review at the Tennessee Department of Environment and Conservation’s (TDEC’s) Environmental Field Offices.

Question and Answer Session

The Department is offering, by Video Conference, a Question and Answer session on these draft rules starting at 10:00 a.m. EST or 9:00 a.m. CST at the following locations:

Memphis Environmental Field Office
8383 Wolf Lake Drive
Memphis, TN 38133-4119
(901) 371-3000 / 1-888-891-8332

Cookeville Environmental Field Office
1221 South Willow Avenue
Cookeville, TN 38506
(931) 520-6688 / 1-888-891-8332

Jackson Environmental Field Office
1625 Hollywood Drive
Jackson, TN 38305
(731) 512-1300 / 1-888-891-8332

Chattanooga Environmental Field Office
Suite 206
1301 Riverfront Parkway
Chattanooga, TN 37402
(423) 634-5745 / 1-888-891-8332

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Columbia Environmental Field Office
1421 Hampshire Pike
Columbia, TN 38401
(931) 380-3371 / 1-888-891-8332

Knoxville Environmental Field Office
3711 Middlebrook Pike
Knoxville, TN 37921
(865) 594-6035 / 1-888-891-8332

Nashville Environmental Field Office
711 R. S. Gass Blvd.
Nashville, TN 37216
(615) 687-7000 / 1-888-891-8332

Johnson City Environmental Field Office
2305 Silverdale Road
Johnson City, TN 37601-2162
(423) 854-5400 / 1-888-891-8332

The "Draft" rules may also be accessed for review using <http://tn.gov/environment/topic/ppo-general>

Draft copies are also available for review at the following address:

Tennessee Department of Environment and Conservation
Division of Underground Storage Tanks
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 12th Floor
Nashville, Tennessee 37243-1541
(615) 532-0972

Office hours are from 8:00 AM to 4:30 PM, Monday through Friday (excluding holidays).

Oral or written comments are invited at the hearing. In addition, written comments may be submitted prior to or after the public hearing to: Tennessee Department of Environment and Conservation, Division of Underground Storage Tanks; Attention: Rhonda Key, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 12th Floor; Nashville, Tennessee 37243; telephone 615-532-0972 or fax 615-532-9759. However, such written comments must be received by 4:30 PM CDT, December 29, 2017, in order to assure consideration. For further information, please contact Rhonda Key at the above address or telephone number or by e-mail at Rhonda.Key@tn.gov.

Revision Type (check all that apply):

- Amendment
 New
 Repeal

Rule(s) (ALL chapters and rules contained in filing must be listed. If needed, copy and paste additional tables to accommodate more than one chapter. Please enter only **ONE** Rule Number/Rule Title per row.)

Chapter Number	Chapter Title
0400-18-01	Underground Storage Tank Program
Rule Number	Rule Title
0400-18-01-.01	Program Scope, Definitions and Proprietary Information
0400-18-01-.02	UST System: Installation and Operation
0400-18-01-.03	Notification, Reporting and Record Keeping
0400-18-01-.04	Release Detection
0400-18-01-.05	Release Reporting, Investigation, and Confirmation
0400-18-01-.06	Petroleum Release Response, Remediation and Risk Management
0400-18-01-.07	Out-of-Service UST Systems and Closure
0400-18-01-.08	Financial Responsibility
0400-18-01-.09	Petroleum Underground Storage Tank Fund
0400-18-01-.10	Fee Collection
0400-18-01-.11	Appeals
0400-18-01-.12	Indicia of Ownership
0400-18-01-.13	Voluntary Registry
0400-18-01-.14	Record Retention by the Division

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0400-18-01-.15	Petroleum Product Delivery
0400-18-01-.16	Certified Operator Program

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(Place substance of rules and other info here. Statutory authority must be given for each rule change. For information on formatting rules go to <http://state.tn.us/sos/rules/1360/1360.htm>)

Chapter 0400-18-01 Underground Storage Tank Program

Amendments

Chapter 0400-18-01 Underground Storage Tank Program is amended by deleting it in its entirety and substituting instead the following:

Chapter 0400-18-01 Underground Storage Tank Program

Table of Contents

- 0400-18-01-.01 Program Scope, Definitions and Proprietary Information
- 0400-18-01-.02 UST Systems: Installation and Operation
- 0400-18-01-.03 Notification, Reporting and Record Keeping
- 0400-18-01-.04 Release Detection
- 0400-18-01-.05 Release Reporting, Investigation, and Confirmation
- 0400-18-01-.06 Petroleum Release Response, Remediation and Risk Management
- 0400-18-01-.07 Out-of-Service UST Systems and Closure
- 0400-18-01-.08 Financial Responsibility
- 0400-18-01-.09 Petroleum Underground Storage Tank Fund
- 0400-18-01-.10 Fee Collection
- 0400-18-01-.11 Appeals
- 0400-18-01-.12 Indicia of Ownership
- 0400-18-01-.13 Reserved
- 0400-18-01-.14 Record Retention by the Division
- 0400-18-01-.15 Petroleum Product Delivery
- 0400-18-01-.16 Certified Operator Program
- 0400-18-01-.17 UST Systems with Field-Constructed Tanks and Airport Hydrant Systems

0400-18-01-.01 Program Scope, Definitions and Proprietary Information.

(1) Program scope: general.

(a) Purpose, scope, and applicability.

This rule provides definitions of terms, general standards and procedures, as well as overview information applicable to these rules.

(b) Use of number and gender.

As used in these rules:

1. Words in the masculine gender also include the feminine and neuter genders;
2. Words in the singular include the plural; and
3. Words in the plural include the singular.

(c) Rule structure.

These rules are organized, numbered, and referenced according to the following outline form:

(1) paragraph

(a) subparagraph

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1. part
 - (i) subpart
 - (I) item
 - I. subitem
 - A. section
 - (A) subsection
- (2) Program scope: applicability.
 - (a) The requirements of this chapter apply to all owners and/or operators of an UST system as defined in paragraph (4) of this rule except as otherwise provided in subparagraphs (b) and (c) of this paragraph. Any UST systems listed in part (b)1 of this paragraph shall meet the requirements of part (b)2 of this paragraph.
 1. UST systems that store fuel solely for use by emergency power generators must meet the following requirements:
 - (i) Those systems installed on or before the effective date of this rule must meet the requirements of this chapter on or before three (3) years after the effective date of this rule.
 - (ii) Those systems installed after the effective date of this rule must meet the requirements of this chapter at installation.
 2. Airport hydrant fuel distribution systems and UST systems with field-constructed tanks must meet the requirements in Rule 0400-18-01-.17
 - (b) Partial Exclusions.
 1. The following UST systems are excluded from Rules 0400-18-01-.02 through 0400-18-01-.05 and 0400-18-01-.07 through 0400-18-01-.10, 0400-18-01-.16, and 0400-18-01-.17:
 - (i) Wastewater treatment tank systems not covered under part (c)2 of this paragraph;
 - (ii) Aboveground storage tanks associated with airport hydrant fuel distribution systems regulated under Rule 0400-18-01-.17;
 - (iii) Aboveground storage tanks associated with UST systems with field-constructed tanks regulated under Rule 0400-18-01-.17;
 - (iv) Any UST systems containing radioactive material that are regulated under the Atomic Energy Act of 1954 (42 U.S.C. 2011 and following); and
 - (v) Any UST system that is part of an emergency generator system at nuclear power generation facilities licensed by the Nuclear Regulatory Commission and subject to Nuclear Regulatory Commission requirements regarding design and quality criteria, including but not limited to 10 CFR part 50.
 2. Installation requirements for partially excluded UST systems.
 - (i) No person may install an UST system for the purpose of storing petroleum unless the UST system (whether of single or double-wall construction):

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- (I) Will prevent releases due to corrosion or structural failure for the operational life of the UST system;
 - (II) Is cathodically protected against corrosion, constructed of non-corrodible material, steel clad with a non-corrodible material, or designed in a manner to prevent the release or threatened release of any petroleum; and
 - (III) Is constructed or lined with material that is compatible with the petroleum.
- (ii) Notwithstanding subpart (i) of this part, an UST system without corrosion protection may be installed at a site that is determined by a corrosion expert not to be corrosive enough to cause it to have a release due to corrosion during its operating life. Owners and/or operators shall maintain records that demonstrate compliance with the requirements of this subpart for the remaining life of the tank.
- (c) Exclusions. The following UST systems are excluded from the requirements of this chapter:
- 1. Any UST system holding hazardous wastes listed or identified under Subtitle C of the Solid Waste Disposal Act, or a mixture of such hazardous waste and petroleum substances;
 - 2. Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under Section 402 or 307(b) of the Clean Water Act;
 - 3. Equipment or machinery that contains petroleum for operational purposes such as hydraulic lift tanks and electrical equipment tanks;
 - 4. Any UST system whose capacity is 110 gallons or less;
 - 5. Any UST system that contains a de minimis concentration of petroleum; or
 - 6. Any emergency spill or overflow containment UST system that is expeditiously emptied after use.
- (3) Reserved.
- (4) Definitions.

“Aboveground release” means any release to the surface of the land or to surface water. This includes, but is not limited to, releases from the aboveground portion of an UST system and aboveground releases associated with overfills and transfer operations as the petroleum moves to or from an UST system.

“Access” means the ability and opportunity to gain knowledge of proprietary information in any manner whatsoever.

“Accidental release” means any sudden or nonsudden release of petroleum arising from operating an underground storage tank that results in a need for corrective action and/or compensation for bodily injury or property damage neither expected nor intended by the tank owner and/or operator.

“Airport hydrant fuel distribution system” (also called airport hydrant system) means an UST system which fuels aircraft and operates under high pressure with large diameter piping that typically terminates into one or more hydrants (fill stands). The airport hydrant system begins where fuel enters one or more tanks from an external source such as a pipeline, barge, rail car, or other motor fuel carrier.

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“Ancillary equipment” means any devices including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps used to distribute, meter, or control the flow of petroleum to and from an UST.

"Annual aggregate" means the total amount of financial responsibility available to cover all obligations that might occur in one year.

"Assets" means properties, tangible or intangible, owned by a business enterprise that have monetary value.

“Authorized person” means any person, including members of the board, authorized to receive proprietary information. Except for members of the board, such authorization shall be granted in writing by the commissioner.

“Bedrock” means any rock, solid and continuous, which is exposed at the surface of the earth or overlain by unconsolidated material.

“Below ground release” means any release to the subsurface of the land or to groundwater. This includes, but is not limited to, releases from the belowground portions of an underground storage tank system and belowground releases associated with overfills and transfer operations as the petroleum moves to or from an underground storage tank.

“Beneath the surface of the ground” means beneath the ground surface or otherwise covered with earthen materials.

“Board” means the Underground Storage Tanks and Solid Waste Disposal Control Board as established by T.C.A. § 68-211-111.

“Bodily injury” means those bodily injuries caused by a release of petroleum from an UST system for which Tennessee law allows recovery.

"Bond rating agency" means a financial service entity, such as Moody's and Standard and Poor's, which provide ratings with respect to the overall quality of corporately issued bonds as measured by the safety of the principal and the interest. The ratings are used as indicators of a business' ability to self-assure.

“Borrower”, “debtor” or “obligor” is a person whose petroleum underground storage tank or UST system is encumbered by a security interest. These terms are used interchangeably.

“Cathodic protection” is a technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell. For example, a tank system can be cathodically protected through the application of either galvanic anodes or impressed current.

“Cathodic protection tester” means a person who can demonstrate an understanding of the principles and measurements of all common types of cathodic protection systems as applied to buried or submerged metal piping and tank systems. At a minimum, such persons shall have education and experience in soil resistivity, stray current, structure-to-soil potential, and component electrical isolation measurements of buried metal piping and tank systems.

“Caused” in the context of third party claims means that degree of causation required by Tennessee law to allow recovery for damages caused by a release of petroleum from an UST system.

“CERCLA” means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended.

“Chemicals of concern” means those chemicals that have been designated as such by the division in a chemicals of concern list. The chemicals of concern shall be chemicals that are constituents of or result from the degradation of petroleum product(s) and/or additives released from regulated petroleum underground storage tanks. The list will include those chemicals with

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the highest risk to human health or the environment. The chemicals of concern for diesel fuel will be different from the chemicals of concern for gasoline.

"Chief executive officer" means:

1. In the case of a company or corporation, the highest ranking executive officer within a company or corporation who has responsibility for overall management of its day-to-day affairs under the supervision of a board of commissioners. The term chief executive officer may indicate an officer with dual responsibilities such as chief executive officer and president or chairman of the board and chief executive officer. The chief executive officer makes recommendations to the board on business policy and proposal but can also take specific actions on subsidiary matters. The chief executive officer also appoints most other officers of the corporation with the approval of the board of commissioners.
2. In the case of local government tank owners and operators or guarantors, the individual with the overall authority and responsibility for the collection, disbursement and use of funds by the local government.

"Class A Operator" means the individual having primary responsibility for operation and maintenance of underground storage tank systems and has successfully completed training requirements for this operator class in accordance with paragraph (2) of Rule 0400-18-01-.16.

"Class B Operator" means the individual having daily responsibility for the operation and maintenance of underground storage tank systems and has successfully completed training requirements for this operator class in accordance with paragraph (2) of Rule 0400-18-01-.16.

"Class C Operator" means any on-site employee having primary responsibility for addressing emergencies presented by a spill or release from an underground storage tank system and has successfully completed training requirements for this operator class in accordance with paragraph (2) of Rule 0400-18-01-.16.

"Commissioner" means Commissioner of Environment and Conservation, his authorized representatives, or in the event of his absence or a vacancy in the commissioner's office, the Deputy Commissioner.

"Compartmentalized tank" means an underground storage tank that consists of two or more tank compartments, which are separated from each other by a wall or bulkhead.

"Compatible" means the ability of two or more substances to maintain their respective physical and chemical properties upon contact with one another for the design life of the tank system under conditions likely to be encountered in the UST.

"Connected piping" means all underground piping including valves, elbows, joints, flanges, and flexible connectors attached to a tank system through which petroleum flows. For the purpose of determining how much piping is connected to any individual UST system, the piping that joins two UST systems should be allocated equally between them.

"Consumption" with respect to heating oil means consumed on the premises where stored.

"Containment sump" means a liquid-tight container that protects the environment by containing leaks and spills of petroleum from piping, dispensers, pumps, and related components in the containment area. Containment sumps may be single walled or secondarily contained and located at the top of tank (tank top or submersible turbine pump sump), underneath the dispenser (under-dispenser containment sump), or at the other points in the piping run (transition or intermediate sump).

"Continuous in-tank leak detection system" means a release detection system that allows an underground storage tank to operate continuously or nearly continuously without interruption for release detection tests. However, the system may default to a standard or shut down test, requiring the tank to be taken briefly out of service at the end of the month if sufficient good data

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has not been obtained over the month. These methods include continuous automatic tank gauging systems and continual reconciliation systems.

“Corrective action” means any activity, including but not limited to evaluation, planning, design, engineering, construction, and ancillary service, which is carried out in response to any discharge or release of petroleum.

“Corrective action contractor” or “CAC” means a person who is carrying out any corrective action, including a person retained or hired by such person to provide services relating to a corrective action.

“Corrosion expert” means a person who, by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person shall submit documentation for review by the division that they have accreditation or certification as a CP Specialist (CP-4 level) or Senior Corrosion Technologist by the National Association of Corrosion Engineers (NACE). If it is determined by the division that a person has sufficient experience and education to be qualified to take responsible charge in corrosion control of buried or submerged metal piping systems and metal tanks, then that person shall be classified by the division as a corrosion expert for the purposes of this rule.

“Damages” in the context of third party claims means the value or cost of bodily injury or property damage caused by the release of petroleum from an UST system as determined by using methods allowed under Tennessee law.

“Date of release” means the earliest date that proof of a release exists. This will be the date a release is reported to or discovered by the division unless an earlier date is determined during the investigation of the release.

“De minimis” means very low concentrations of petroleum.

“Department” means the Tennessee Department of Environment and Conservation.

“Dielectric material” means a material that does not conduct direct electrical current. Dielectric coatings are used to electrically isolate UST systems from the surrounding soils. Dielectric bushings are used to electrically isolate portions of the UST system (for example, tank from piping).

“Director” means the director of the division.

“Dispenser” means equipment located aboveground that dispenses petroleum products from underground storage tank systems.

“Dispenser system” means the dispenser and the equipment necessary to connect the dispenser to the underground storage tank system.

“Division” means the division designated by the commissioner of the Department of Environment and Conservation as the agency to implement the Underground Storage Tank Program in Tennessee.

“Document” means any recorded information regardless of its physical form or characteristics, including, but not limited to, written or printed material; processing cards and tapes; maps; charts; paintings; drawings; engravings; sketches; working papers and notes; reproductions of such things by any means or process; and sound, voice, or electronic recordings in any form.

“Document control number” means the unique number assigned by the document control officer to any document containing proprietary information.

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“Document control officer” means the individual authorized by the commissioner in writing to be responsible for all incoming and outgoing documents identified as containing proprietary information.

“Drinking water supply” means any aquifer or water source whose chemical characteristics meet the primary and secondary drinking water standards as defined under Chapter 0400-45-01 and provides a yield of at least one-half gallon per minute. This shall also include any water supply used for drinking by the citizens of the state.

“Electrical equipment” means underground equipment that contains dielectric fluid that is necessary for the operation of equipment such as transformers and buried electrical cable.

“Engineering control” means a modification to a site to reduce or eliminate the potential for migration of, and exposure to, chemicals of concern. An engineering control can be used to eliminate a pathway to reduce future risk. Engineering controls may include, but are not limited to: physical or hydraulic control measures, caps, liners, point-of-use treatments, slurry walls or vapor barriers.

“Excavation zone” means the volume containing the tank system and backfill material bounded by the ground surface, walls, and floor of the pit and trenches into which the UST system is placed at the time of installation.

“Exposure pathway” means the course a chemical(s) of concern takes from a source area(s) to a receptor. Each exposure pathway includes a source area(s), a point of exposure, and an exposure route, and usually a transport/exposure medium or media.

“Face amount” or “face value” means the total amount the insurer is obligated to pay under an insurance policy.

“Facility is operating”, for purposes of Rule 0400-18-01-.16, means normal or extended business hours when product can be dispensed from UST systems. This does not include periods when a facility is closed for business, nor when a facility is closed, but deliveries can be made to UST systems.

“Farm tank” is a tank located on a tract of land devoted to the production of crops or raising animals, including fish, and associated residences and improvements. A farm tank shall be located on the farm property. “Farm” includes fish hatcheries, rangeland and nurseries with growing operations.

“Field-constructed tank” means a tank constructed in the field. For example, a tank constructed of concrete that is poured in the field, or a steel or fiberglass tank primarily fabricated in the field is considered field-constructed.

“Financial reporting year” means the annual period for which a business compiles its performance data for the purpose of the assessment of the business as “a going concern” by its managers, investors, creditors, and government regulators.

“Financial statements” means financial performance data compiled by the subject business that have undergone the review and evaluation of an independent certified public accountant for the purpose of assessing the conformity of the business’ accounting practices with generally accepted accounting principles (GAAP). The independent Certified Public Accountant (CPA), issues a statement summarizing his/her assessment or findings.

“Financial strength ratios” mean a financial comparison of the relationship of any two or more performance indicators of a business with the industry standard for the relationship between such performance indicators. The calculation of these ratios and their subsequent comparison to industry norms can be helpful in assessing the ability of a business to provide self-assurance to meet the financial assurance requirements of this rule. These regulations utilize the following three ratios to evaluate a business’s ability to self assure:

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1. "Total liabilities to net worth" means a ratio that expresses the relationship between capital contributed by creditors and capital contributed by owners. If debt is substantial relative to equity, it means that a relatively small decrease in the value of assets could wipe out the owner's equity and remove protection from creditors who could force the business into bankruptcy.
2. "Net income, depreciation, depletion and amortization to total liabilities" means a ratio that expresses the ability of a business to service its debt, long term and short term, from cash flow from business operations without borrowing money for the repayment of debt.
3. "Current assets to current liabilities" means a ratio that is used to measure the short term solvency of a business. It is the most commonly used ratio and indicates the extent to which the claims of short-term creditors are covered by assets expected to be converted to cash in a period roughly corresponding to the maturity of the claim.

"Flow-through process tank" means a tank whose principle use is not for storage but is primarily used in the manufacture of a product or in a treatment process. Flow-through process tanks form an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. Flow-through process tanks do not include tanks used for the storage of materials prior to their introduction into the production process or for the storage of finished products or by-products from the production process.

"Foreclosure" or "foreclosure and its equivalent" means purchase at a foreclosure sale, acquisition or assignment of title in lieu of foreclosure, termination of a lease or other repossession, acquisition of right to title or possession, an agreement in satisfaction of the obligation, or any other formal or informal manner (whether pursuant to law under warranties, covenants, conditions, representations or promise from the borrower) by which the holder acquires title to or possession of secured property.

"Free product" refers to petroleum that is present as a nonaqueous phase liquid (that is, liquid not dissolved in water).

"Fund" means the petroleum underground storage tank fund established under T.C.A. § 68-215-101 et seq. unless the context clearly indicates otherwise.

"Gathering lines" means any pipeline, equipment, facility, or building used in the transportation of oil or gas during oil or gas production or gathering operations.

"Groundwater" means water below the land surface in a zone of saturation.

"Guidance" means written guidelines and/or guidance documents provided by the division. Such guidance is not mandatory, but provides information and instruction for achieving regulatory compliance. Other approaches to achieving regulatory compliance may be used in lieu of guidance provided by the division, if those other approaches are proposed, in writing, by tank owners and/or operators for review and approval by the division prior to implementation.

"Heating oil" means petroleum that is No. 1, No. 2, No. 4-light, No. 4-heavy, No. 5-light, No. 5-heavy, and No. 6 technical grades of fuel oil; other residual fuel oils (including Navy Special Fuel Oil and Bunker C); and other fuels when used as substitutes for one of these fuel oils. Heating oil is typically used in the operation of heating equipment, boilers, or furnaces.

"Holder" is a person who maintains indicia of ownership primarily to protect a security interest in a petroleum underground storage tank or UST system. A holder includes the initial holder or purchaser (such as a loan originator), any subsequent holder (such as a successor-in-interest or subsequent purchaser of the security interest on the secondary market), any subsequent assignee, transferee or purchaser from a holder, guarantor of an obligation, surety or any other person who holds ownership who acts on behalf of or for the benefit of a holder.

"Hydraulic lift tank" means a tank holding hydraulic fluid for a closed-loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and/or other similar devices.

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“Impacted drinking water” means a water supply that contains chemicals of concern at levels that do or potentially may place human health at risk and that is being used for human consumption, and/or other human domestic use including, but not limited to, bathing, cooking, and dishwashing.

“Indicia of ownership” means evidence of a security interest, evidence of an interest in a security interest or evidence of an interest in real or personal property securing a loan or other obligations, including any legal or equitable title to real or personal property acquired incident to foreclosure and its equivalents. Evidence of such interests includes, but is not limited to, mortgages, deeds of trust, liens, surety bonds and guarantees of obligations, title held pursuant to a lease financing transaction in which the lessor does not select initially the leased property (herein “lease financing transaction”), and legal or equitable title obtained pursuant to foreclosure, and its equivalents. Evidence of such interests also includes assignments, pledges or other rights to or other forms of encumbrances against property that are held primarily to protect a security interest. A person is not required to hold title or a security interest in order to maintain indicia of ownership.

“Information” means knowledge which can be communicated by any means.

“Installation” is the process of constructing a UST system for operation.

“Institutional control” means a legal means of limiting exposure to chemicals of concern at a petroleum site with a confirmed release of petroleum.

“Instruction” in the context of proprietary information means fully informing individuals in writing of their responsibilities for safeguarding proprietary information and the security procedures they shall follow.

“Legal defense cost” means any expense that an owner or operator, petroleum site owner, or provider of financial assurance incurs in defending against claims or actions brought:

1. By EPA or a state to require corrective action or to recover the costs of corrective action;
2. By or on behalf of a third party for bodily injury or property damage caused by an accidental release; or
3. By any person to enforce the terms of a financial assurance mechanism.

“Liquid trap” means sumps, well cellars, and other traps used in association with oil and gas production, gathering, and extraction operations (including gas production plants), for the purpose of collecting oil, water, and other liquids. These liquid traps may temporarily collect liquids for subsequent disposition or reinjection into a production or pipeline stream, or may collect and separate liquids from a gas stream.

“Maintenance” means the normal operational upkeep to prevent an underground storage tank system from releasing petroleum.

“Motor fuel” means a complex blend of hydrocarbons typically used in the operation of a motor engine, such as motor gasoline, aviation gasoline, No. 1 or No. 2 diesel fuel, biodiesel, ultra low sulphur diesel, or any blend containing one or more of these substances (for example: motor gasoline blended with alcohol).

“Month” means from the first day to the last day of the calendar month.

“Monthly” means at least once during a calendar month.

“Monitoring well” means a hole drilled into the earth, by boring or otherwise, constructed for the primary purpose of obtaining information on the elevation or physical, chemical, radiological or biological characteristics of the groundwater and/or for the recovery of groundwater for treatment.

“Noncommercial purposes”, with respect to motor fuel, means not for resale.

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“Occurrence” means the discovery of environmental contamination at a specific time and date, due to the release of petroleum from petroleum underground storage tanks.

“On the premises where stored” with respect to heating oil means UST systems located on the same property where the stored heating oil is used.

“Operation” means the use, storage, filling, or dispensing of petroleum contained in a petroleum underground storage tank or an underground storage tank (UST) system.

“Operational life” refers to the period beginning when installation of the tank system has commenced until the time the tank system is properly closed under Rule 0400-18-01-.07.

“Operator” means any person in control of, or having responsibility for, the daily operation of the UST system.

“Operator Training”, for purposes of Rule 0400-18-01-.16, means a program recognized by the division as meeting the specific requirements for each operator class as published by EPA in the Final Grant Guidelines To States For Implementing The Operator Training Provision Of The Energy Policy Act Of 2005, August, 2007.

“Overfill release” is a release that occurs when a tank is filled beyond its capacity, resulting in a discharge of the petroleum to the environment.

“Owner” means:

1. In the case of an UST system in use on November 8, 1984, or brought into use after that date, any person who owns an UST system used for storage, use, or dispensing of petroleum; and
2. In the case of any UST system in use before November 8, 1984, but no longer in use on that date, any person who owned such UST immediately before the discontinuation of its use.

“Owner or operator,” in the context of financial responsibility, when the owner or operator are separate parties, refers to the party that is obtaining or has obtained financial assurances.

“Penal sum” means a sum to be paid as a penalty especially under the terms of a bond.

“Person” means any and all persons, including individuals, firms, partnerships, associations, public or private institutions, state and federal agencies, municipalities or political subdivisions, or officers thereof, departments, agencies or instrumentalities, or public or private corporations or officers thereof, organized or existing under the laws of this state or any other state or country.

“Petroleum” means crude oil or any fraction thereof that is liquid at standard temperature and pressure (sixty degrees (60°) Fahrenheit and 14.7 pounds per square inch absolute). The term petroleum includes but is not limited to petroleum and petroleum based substances comprised of a complex blend of hydrocarbons, such as motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

“Petroleum marketing facilities” include all facilities at which petroleum is produced or refined and all facilities from which petroleum is sold or transferred to other petroleum marketers or to the public.

“Petroleum marketing firms” are all firms owning petroleum marketing facilities. Firms owning other types of facilities with USTs as well as petroleum marketing facilities are considered to be petroleum marketing firms.

“Petroleum UST system” means an underground storage tank system that contains petroleum or a mixture of petroleum with de minimis quantities of other hazardous substances. Such systems include those containing motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

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“Pipe” or “piping” means a hollow cylinder or tubular conduit that is constructed of non-earthen materials.

“Pipeline facilities (including gathering lines)” are new and existing pipe rights-of-way and any associated equipment, facilities, or buildings.

“Primarily to protect a security interest” means that the holder’s indicia of ownership are held primarily for the purpose of securing payment or performance of an obligation, but does not include indicia of ownership held primarily for investment purposes, nor ownership indicia held primarily for purposes other than as a protection of a security interest. A holder may have other, secondary reasons for maintaining indicia of ownership, but the primary reason why ownership indicia are held shall be for protection of a security interest.

“Property damage” means those type damages to property caused by the release of petroleum from an UST system for which Tennessee law allows recovery.

“Property improvements” in the context of fund reimbursement includes, but is not limited to, petroleum dispensing equipment, canopies, signage, buildings and outbuildings, underground storage tanks, asphalt, and concrete.

“Proprietary information” means any confidential information that relates to a trade secret, product, apparatus, process, operation, style of work, or financial information which is owned (not necessarily exclusively) by or licensed to a person and claimed by that person to be proprietary and confidential; provided that the claim is accompanied by a written statement from such person relating the reasons why such information should be held confidential. Such information may be submitted to the division by the owner/licensee of the trade secret, product, etc.; or by another governmental agency which has obtained the information. If submitted by the owner/licensee, the written statement accompanying the information claimed proprietary shall, at a minimum, answer the questions in parts 1 through 4 of this definition. If submitted by another governmental agency, the written statement need include only the accompanying statements/reasons obtained by that agency.

1. Will disclosure of the information be likely to substantially harm your competitive position? If so, what would the harm be, and why should it be viewed as substantial? What is the relationship between the disclosure and the harm?
2. What measures have you taken to guard against undesired disclosure of the information to others?
3. To what extent has the information been disclosed to others, and what precautions have you taken in connection with that disclosure?
4. Has the U.S. Environmental Protection Agency or any other Federal or State of Tennessee agency made a pertinent confidentiality determination? (If so, please include a copy of this determination, if available.)

“Provider of financial assurance” means an entity that provides financial assurance to an owner or operator of an underground storage tank through a mechanism or mechanisms allowed by subparagraph (4)(a) of Rule 0400-18-01-.08, including a guarantor, insurer, risk retention group, surety, issuer of a letter of credit, or the State of Tennessee.

“Reasonable cost” means that monetary amount or range, as determined by the division, to be commensurate with a corrective action. The division’s determination is based on an evaluation of typical costs expected for the particular corrective action under review considering the scope and complexity of the activities involved and/or hourly rates which are competitive among approved corrective action contractors.

“Receptor” means a person, structure, surface water body, or drinking water supply that receives or may potentially receive exposure to a chemical of concern as the result of a petroleum release.

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“Release” means any spilling, overfilling, leaking, emitting, discharging, escaping, leaching, or disposing of a petroleum substance from an UST including its associated piping, into groundwater, surface water, or subsurface soils.

“Release detection” means determining whether a release of petroleum has occurred from the UST system into the environment or a leak has occurred into the interstitial space between the UST system and its secondary barrier or secondary containment around it.

“Repair” means:

1. In the context of UST system operation, to restore to proper operating condition a tank or pipe, spill prevention equipment, overflow prevention equipment, corrosion protection equipment, release detection equipment, or other UST system component that has caused the release of petroleum from the UST system or has failed to function properly;
2. In the context of replacement of piping on or after July 24, 2007, restoration of a portion of piping in lieu of replacement of an entire piping run authorized by the division in writing; or
3. In the context of fund eligibility of property improvements, restoration of a property improvement to the position and condition it was in immediately prior to removal for the purpose of remediation of the contamination caused by a leaking petroleum underground storage tank system.

“Replaced” means:

1. For a tank – to remove a tank and install another tank.
2. For piping – to remove fifty percent (50%) or more of piping and install other piping, excluding connectors, connected to a single tank. For tanks with multiple piping runs, this definition applies independently to each piping run.

“Residential tank” is a tank located on property used primarily for dwelling purposes.

“Responsible party,” except as specified in part 2 of this definition, means:

1.
 - (i) The owner and/or operator of a petroleum site;
 - (ii) Any person who at the time of the release which caused the contamination was an owner and/or operator of a petroleum underground storage tank;
 - (iii) Any person whose intentional actions directly cause the release of petroleum at a petroleum site; or
 - (iv) Any person other than an employee, officer, director, principal, or shareholder of the owner or operator of the underground storage tank system or of the owner of the petroleum site, whose negligent actions directly cause the release of petroleum at a petroleum site.
2. A responsible party does not include a unit of state or local government which becomes an owner or operator of a petroleum site by acquiring ownership or control through bankruptcy, tax delinquency, abandonment, or other circumstances in which the government acquires title by virtue of its function as sovereign, unless such governmental entity has otherwise owned or operated a petroleum underground storage tank on the site or has caused or contributed to the release or threatened release from such a tank.

“Retraining” means any remedial training approach imposed by the division when significant operational compliance violations are discovered at a facility. Retraining may be directed to any or all operator classes assigned to a facility and may include requirements to successfully complete additional education, testing, and/or training, or be subject to other administrative or enforcement options at the discretion of the division.

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“Risk Based Cleanup Level” or “RBCL” means the concentration of a chemical(s) of concern in soils or groundwater in the source area(s) that will assure an acceptable risk at the point of exposure, based upon conservative non-site-specific assumptions and default parameters.

“Routinely contains petroleum” means those parts of the UST system designed to store, transport or dispense petroleum.

“SARA” means the Superfund Amendments and Reauthorization Act of 1986.

“Secondary containment” or “secondarily contained means a release prevention and release detection system for a tank and/or piping. This system has an inner and outer barrier with an interstitial space that is monitored for leaks. This term includes containment sumps when used for interstitial monitoring of piping.

“Security interest” means an interest in a petroleum underground storage tank or UST system or petroleum site which is created or established for the purpose of securing a loan or other obligation. Security interests include, but are not limited to, mortgages, deeds of trust, liens and title pursuant to lease financing transaction. Security interests may also arise from transactions such as sale and leasebacks, conditional sales, installment sales, trust receipt transactions, certain assignments, factoring agreements, accounts receivable financing arrangements, inventory and/or other personal property financing arrangements and consignments, if the transaction creates or establishes an interest in a petroleum underground storage tank or UST system or petroleum site for the purpose of securing a loan or other obligation.

“Septic tank” is a watertight covered receptacle designed to receive or process, through liquid separation or biological digestion, the sewage discharged from a building sewer. The effluent from such receptacle is distributed for disposal through the soil and settled solids and scum from the tank are pumped out periodically and hauled to a treatment facility.

“Site specific cleanup level” or “SSCL” means the concentration of a chemical(s) of concern in soils or groundwater in the source area(s) that will assure an acceptable risk at the point of exposure, based upon site specific conditions.

“Source” means the source of contamination. Sources may include, but are not limited to, a leaking tank, a leaking underground storage tank system, a spill, an overflow, free product or residual contaminated soil or groundwater.

“Stormwater or wastewater collection system” means piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water run-off resulting from precipitation, or domestic, commercial, or industrial wastewater to and from retention areas or any areas where treatment is designated to occur. The collection of storm water and wastewater does not include treatment except where incidental to conveyance.

“Submersible turbine pump” or “STP” means pump located inside a petroleum underground storage tank, positioned near the bottom of the tank, thereby “submerged” in the petroleum.

“Surface impoundment” is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials) that is not an injection well.

“Tank” is a stationary device designed to contain an accumulation of petroleum and constructed of non-earthen materials (for example, wood, concrete, steel, fiberglass) that provide structural support.

“Tank compartment” means a portion of a UST that is separated from other portions of that UST by one or more walls, or bulkheads, creating two (2) or more individual storage spaces within the UST.

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“Termination” in the context of financial responsibility means only those changes that could result in a gap in coverage as where the insured has not obtained substitute coverage or has obtained substitute coverage with a different retroactive date than the retroactive date of the original policy.

“Third party” means any person except: the owner or operator of an UST system from which a release of petroleum occurred; the owner of the petroleum site; any person in his or her capacity as an agent, servant or employee of such owner or operator or petroleum site owner; the division; the department; or the Environmental Protection Agency.

“Third party claim” means any civil action brought or asserted by a third party against any owner and/or operator for damages resulting in bodily injury or property damages which are caused by a release of petroleum from an UST system.

“Under-dispenser containment” or “UDC” means containment underneath a dispenser system designed to prevent leaks from the dispenser and piping within or above the UDC from reaching soil or groundwater.

“Underground area” means an underground room, such as a basement, cellar, shaft or vault, providing enough space for physical inspection of the exterior of the tank situated on or above the surface of the floor.

“Underground release” means any below ground release.

“Underground storage tank” or “UST” means any one or combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of petroleum, and the volume of which (including the volume of underground pipes connected thereto) is ten percent (10%) or more beneath the surface of the ground. This term does not include any:

1. Farm or residential tank of eleven hundred (1,100) gallons or less capacity used for storing motor fuel for non-commercial purposes;
2. Tank used for storing heating oil for consumption on the premises where stored;
3. Septic tank;
4. Pipeline facility (including gathering lines):
 - (i) Which is regulated under 49 U.S.C. chapter 601, or
 - (ii) Which is an intrastate pipeline facility regulated under state laws as provided in 49 U.S.C. chapter 601, and which is determined by the Secretary of Transportation to be connected to a pipeline, or to be operated or intended to be capable of operating at pipeline pressure or as an integral part of a pipeline;
5. Surface impoundment, pit, pond, or lagoon;
6. Storm-water or wastewater collection system;
7. Flow-through process tank;
8. Liquid trap or associated gathering lines directly related to oil or gas production and gathering operations; or
9. Storage tank situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

The term “underground storage tank” or “UST” does not include any pipes connected to any tank which is described in parts 1 through 9 of this definition.

“Unmanned facility” means an unattended emergency generator or a facility that dispenses fuel without the presence of an attendant who monitors the pumps, such as card lock fleet facilities or

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an unattended service station. A facility that is unmanned part of the time will be required to follow subparagraph (3)(c) of Rule 0400-18-01-.16 during the time the facility is manned and subparagraph (3)(d) of Rule 0400-18-01-.16 during the time the facility is unmanned.

“Upgrade” means the addition or retrofit of some systems such as cathodic protection, lining, or spill and overfill controls to improve the ability of an underground storage tank system to prevent the release of petroleum.

“UST facility” means any location at which one or more regulated underground storage tank systems are located.

“UST system” or “tank system” means an underground storage tank, connected underground piping, underground ancillary equipment, and containment system, if any.

“Wastewater treatment tank” means a tank that is designed to receive and treat an influent wastewater through physical, chemical, or biological methods.

“Waters” means any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through or border upon Tennessee or any portion thereof except those bodies of water confined to, and retained within, the limits of private property in single ownership which do not combine or effect a junction with natural surface or underground waters.

“Week” means any seven day period, provided that days run consecutively.

“Weekly”, in the context of manual tank gauging, means once per week, resulting in a minimum of four weekly tests per month.

(5) Proprietary information.

(a) General.

1. Purpose, scope and applicability.

Any information which is supplied to the division as required or necessitated by the Tennessee Petroleum Underground Storage Tank Act or the regulations promulgated pursuant thereto or which is supplied by other governmental agencies and which is designated proprietary information (as defined in paragraph (4) of this rule) shall be handled by the division as specified in this paragraph to assure that its confidentiality is maintained. Unless it is claimed or designated as proprietary at the time it is first delivered to the division together with the supporting information required by paragraph (4) of this rule, any claim that it is proprietary is waived and any information supplied to the division under or relating to these rules shall be available for public review at any time during the division’s normal business hours, subject to availability and scheduling limitations set by the division, without further notice to any person supplying the information or having an interest in the information.

2. Policy.

Division employees are prohibited from disclosing, in any manner and to any extent not authorized by law or regulations, any proprietary information coming to them in the course of their employment or official duties. Proprietary information is to be held in confidence, protected in accordance with the procedures described in this paragraph, and released to authorized persons.

(b) Responsibilities.

1. Commissioner.

The commissioner is responsible for:

(i) Designating a document control officer;

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- (ii) Assuring that all division employees receiving and handling proprietary information receive instruction as to their responsibility for controlling proprietary information;
- (iii) Maintaining a record which lists all employees who have authorized access to proprietary information;
- (iv) Obtaining a "Confidentiality Agreement" from all employees having access to proprietary information;
- (v) Obtaining a "Confidentiality Agreement upon Transfer or Termination" from all employees having access to proprietary information in the event such employees decide to terminate employment or are transferred to a position not requiring such access;
- (vi) Assuring that the appropriate requirements for storage and use are met, including control of access to keys and combination;
- (vii) Taking appropriate disciplinary action concerning any division employees who fail to comply with the requirements of this paragraph; and
- (viii) Notifying the person submitting proprietary information which has been disclosed in violation of the requirements of this paragraph of such occurrence.

2. Document control officer.

The document control officer is responsible for the maintenance, control and distribution of all proprietary information received by the division as follows:

- (i) Logging of all proprietary information as received by the division, both incoming and outgoing;
- (ii) Assigning a document control number to each document received containing proprietary information;
- (iii) Maintaining a system which identifies employees authorized to receive proprietary information;
- (iv) Releasing proprietary information only to persons from whom the confidentiality agreements of subparts 1(iv) and (v) of this subparagraph have been obtained;
- (v) Maintaining a system to insure that any proprietary information transmitted to field locations is received;
- (vi) Maintaining at division offices a system for retrieval of documents that are furnished to other program offices;
- (vii) Authorizing and supervising the reproduction and destruction of proprietary information; and
- (viii) Assuring that recipients of proprietary information have proper storage capability prior to release of such documents, or, if they do not, requiring return of the released proprietary information the same day.

3. Employees.

Employees are responsible for:

- (i) Controlling all proprietary information entrusted to them;

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- (ii) Only discussing proprietary information with authorized persons;
- (iii) Never leaving the proprietary information unattended when not properly stored;
- (iv) Never discussing the proprietary information over the telephone except upon approval of the document control officer should the proprietary information be needed in an emergency situation;
- (v) Storing the proprietary information as specified in part (c)5 of this paragraph when not in use and at the close of business;
- (vi) Not reproducing proprietary information documents. Additional copies shall be obtained through the document control officer; and
- (vii) Reporting immediately possible violations of these regulations to the commissioner.

(c) Procedures.

1. Receipt and handling.

The document control officer shall:

- (i) Receive all information claimed as proprietary and confidential which is submitted to the division;
- (ii) Log in all proprietary information received by the division;
- (iii) Assign a document control number to all proprietary information;
- (iv) Attach a proprietary information cover sheet to the document;
- (v) Release proprietary information only to authorized persons; and
- (vi) Review the claim and, using the written statement accompanying the information claimed proprietary, the answers to the questions in the definition of proprietary information in paragraph (4) of this rule and other information as may be required, determine whether to approve or deny it, in part or in whole.

2. Transmission.

- (i) Proprietary information shall be transmitted in a double envelope by Registered Mail, Return Receipt Requested. The inner envelope shall reflect the address of the recipient with the following wording on the front side of the inner envelope:

“Confidential Business – To Be Opened By Document Control Officer Only.”

The outer envelope shall reflect the normal address without the additional wording.

- (ii) All requests to the document control officer for proprietary information shall be in writing and signed by the requesting employee.
- (iii) Proprietary information may be hand carried to other division facilities by authorized persons provided the dispatching document control officer maintains a record and obtains a receipt from the receiving document control officer. Information being hand carried shall be packaged as described in subpart (i) of this part.

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- (iv) Proprietary information within a division office shall be hand delivered only by an authorized person. At no time shall proprietary information be transmitted through inner office mailing channels.

3. Reproduction.

Proprietary information shall not be reproduced except upon approval by and under the supervision of the document control officer. Any reproduction shall be limited by a document control system and be subject to the same control requirements as for the original.

4. Destruction.

Proprietary information shall not be destroyed except upon approval by and under the supervision of the document control officer. The document control officer shall keep a record of destruction in the appropriate log and notify the person submitting the proprietary information.

5. Storage.

- (i) Documents containing proprietary information shall be stored within a locked cabinet so as to limit access to authorized persons.
- (ii) Keys and/or combinations to cabinets and/or rooms where the data is stored shall be issued only to an authorized person.

(d) Transmittal outside division offices.

Proprietary information shall not be transmitted outside division offices without the approval of the commissioner and such information shall be transmitted by the document control officer in accordance with part (c)2 of this paragraph. The person submitting the proprietary information shall be notified when such occurs.

(e) Release to EPA.

Notwithstanding any requirement of this paragraph seemingly to the contrary, proprietary information may be released to the U.S. Environmental Protection Agency in connection with the commissioner's or board's implementation of his or its responsibilities pursuant to the Act or as necessary to comply with federal law. Any such release of proprietary information to EPA, however, may be made with a confidentiality claim and shall be accompanied by the written statement received by the division pursuant to the definition of proprietary information as set forth in paragraph (4) of this rule. Any transmittal of proprietary information to EPA shall be subject to the requirements of subparagraph (d) of this paragraph. The commissioner shall notify the submitter of proprietary information of the release of such information to EPA as soon as practicable, to be no later than five (5) days after such release, following receipt of EPA's request for the information.

Authority: T.C.A. §§ 68-215-101 et seq. and 4-5-201 et seq.

0400-18-01-.02 UST Systems: Installation and Operation.

(1) Installation.

- (a) At least fifteen (15) days prior to the installation of any tank and/or new UST system construction activities at the site, the tank owner shall notify the division in the following manner:

- 1. Submit a pre-installation notification form in accordance with part (1)(a)1 of Rule 0400-18-01-.03 for all the petroleum underground storage tanks and/or UST systems for which installation and/or construction is planned; and

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2. Submit annual tank fees for all tanks, tank compartments and/or UST systems, which are listed in the pre-installation notification form, in accordance with paragraph (3) of Rule 0400-18-01-.10.
 - (b) All tanks, piping, and ancillary equipment, and containment systems shall be installed in accordance with the manufacturer's installation instructions.
 - (c) All tanks, pressurized piping and/or suction piping that do not meet the requirements of subparts (2)(b)2(i) through (iii) of Rule 0400-18-01-.04, and/or motor fuel dispensers installed on or after July 24, 2007, shall be secondarily contained in accordance with paragraph (2) of this rule.
 - (d) The following requirements take effect when a petroleum product is being placed into a tank, tank compartment and/or UST system either during or following installation:
 1. Petroleum shall not be placed into an underground storage tank, tank compartment and/or UST system until such time as a notification form has been submitted to the division in accordance with part (a)1 of this paragraph.
 2. Prior to placing product into the tank, tank compartment and/or UST system, spill and overfill prevention measures shall be implemented in accordance with paragraph (3) of this rule.
 3. Begin release detection in accordance with Rule 0400-18-01-.04 immediately if the tank or tank compartment contains more than two and one-half (2.5) centimeters (one (1) inch) of product.
 4. Immediately protect against corrosion in accordance with paragraph (4) of this rule.
 5. A line tightness test in accordance with subparagraph (4)(b) of Rule 0400-18-01-.04 and a tank tightness test in accordance with subparagraph (3)(b) of Rule 0400-18-01-.04 shall be performed upon completion of the installation and prior to the dispensing of fuel from the UST system. The results of this tightness test shall be maintained for the operational life of the underground storage tank system. Such records shall be transferred in accordance with subparagraph (2)(d) of Rule 0400-18-01-.03 at the time of ownership transfer.
 - (e) Installation shall be certified in accordance with part (1)(d)1 of Rule 0400-18-01-.03 within fifteen (15) days following completion of the installation.
- (2) Secondary Containment.
- (a) Tanks.

Tanks that are required to be secondarily contained in accordance with subparagraph (1)(c) of this rule, or with paragraph (6) of this rule shall comply with the following:

 1. Tanks shall be double-walled or jacketed and shall have an interstitial space;
 2. Tanks shall meet the interstitial monitoring requirements of part (3)(d)1 of Rule 0400-18-01-.04;
 3. Tanks shall prevent the release of petroleum to the environment for the operational life of the underground storage tanks;
 4. Tanks shall contain a release until detected and removed; and
 5. Tanks shall be monitored for a release at least every thirty (30) days in accordance with part 2 of this subparagraph.
 - (b) Piping.

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Pressurized piping or suction piping that does not meet the requirements of subparts (2)(b)2(i) through (iii) of Rule 0400-18-01-.04 that is required to be secondarily contained in accordance with subparagraph (1)(c) of this rule, or with paragraph (6) of this rule shall comply with the following:

1. Piping shall comply with one of the following:
 - (i) Piping shall be one hundred percent (100%) double-walled; or
 - (ii) Piping shall be secondarily contained with single-walled piping ends that terminate in tank and dispenser sumps that meet the requirements of parts (c)1 through 3 of this paragraph;
2. Piping shall meet the interstitial monitoring requirements of part (3)(d)1 of Rule 0400-18-01-.04;
3. Piping shall prevent the release of petroleum to the environment for the operational life of the piping;
4. Piping shall contain a release until detected and removed; and
5. Piping shall be monitored for a release at least every thirty (30) days.

(c) Motor fuel dispensers.

Motor fuel dispensers that are required to be secondarily contained in accordance with subparagraph (1)(c) of this rule or with paragraph (6) of this rule shall comply with the following:

1. The containment sump shall be liquid tight on the sides, the bottom and at any penetrations;
2. The containment sump shall be compatible with the petroleum products stored in the UST system; and
3. The containment sump shall be designed to allow for a visual inspection and access to the components of containment systems, including that used for piping, and shall be monitored in accordance with subparagraph (1)(f) of Rule 0400-18-01-.04.

(3) Spill and overflow prevention.

(a) Equipment.

1. Except as provided in parts 2 and 3 of this subparagraph, to prevent spilling and overfilling associated with petroleum transfer to the UST system, owners and/or operators shall use the following spill and overfill prevention equipment:
 - (i) Spill prevention equipment that will prevent release of petroleum to the environment when the transfer hose is detached from the fill pipe (for example, a spill catchment basin); and
 - (ii) Overfill prevention equipment that will:
 - (I) Automatically shut off flow into the tank when the tank is no more than ninety-five percent (95%) full;
 - (II) Alert the transfer operator when the tank is no more than ninety percent (90%) full by restricting the flow into the tank or triggering a high-level alarm; or
 - (III) Restrict flow thirty (30) minutes prior to overfilling, alert the transfer operator with a high level alarm one (1) minute before overfilling, or

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automatically shut off flow into the tanks so that none of the fittings located on top of the tank are exposed to product due to overfilling.

2. Owners and/or operators are not required to use the spill and overfill prevention equipment specified in part 1 of this subparagraph if:
 - (i) Alternative equipment is used that is determined by the division to be no less protective of human health and the environment than the equipment specified in subpart 1(i) or (ii) of this subparagraph; or
 - (ii) The UST system is filled by transfers of no more than twenty-five (25) gallons at one time.
 3. Flow restrictors used in vent lines may not be used to comply with subpart 1(ii) of this subparagraph when overfill prevention is installed or replaced three (3) years after the effective date of this rule.
 4. Spill and overfill prevention equipment must be periodically tested or inspected in accordance with paragraph (8) of this rule.
- (b) Operating requirements.
1. For as long as the UST system is used to store petroleum, owners and/or operators shall ensure that releases due to spilling or overfilling do not occur. The owner and/or operator shall ensure that the volume available in the tank is greater than the volume of petroleum to be transferred to the tank before the transfer is made and that the transfer operation is monitored constantly to prevent overfilling and spilling.
 2. Each spill catchment basin shall be provided with a lid that is in good condition and is not in contact with the fill cap.
 3. Owners and/or operators shall keep spill catchment basins free of water, dirt, debris, and/or other substances that could interfere with the ability of the catchment basin to prevent spills.
 4. Spill catchment basins shall be visually inspected by the owner and/or operator at least once per month to assure the integrity of the storage space provided for spill containment. A log of these inspections showing at a minimum the last twelve (12) months shall be maintained by the owner and/or operator. Unless directed or allowed to do otherwise by the division the log shall be maintained in a format established by the division and in accordance with guidance provided by the division.
 5. The owner and/or operator shall notify the division at least seventy-two (72) hours prior to the replacement of a spill catchment basin.
 6. The owner and/or operator shall report, investigate, and clean up any spills and overfills in accordance with paragraph (4) of Rule 0400-18-01-.05.
 7. Overfill prevention equipment shall be in good working condition in accordance with manufacturer's specifications.
- (c) Periodic testing of spill prevention equipment and periodic inspection of overfill prevention equipment.
1. Monitoring. Spill prevention equipment (such as a catchment basin, spill bucket, or other spill containment device) must prevent releases to the environment by meeting one of the following:
 - (i) The equipment is double walled and the integrity of both walls is periodically monitored at a frequency not less than the frequency of the walkthrough inspections described in paragraph (8) of Rule 0400-18-01-.02. Owners and/or

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operators must begin meeting subpart (ii) of this part and conduct a test within thirty (30) days of discontinuing periodic monitoring of this equipment; or

- (ii) The spill prevention equipment is tested at least once every three (3) years to ensure the equipment is liquid tight by using vacuum, pressure, or liquid testing in accordance with one of the following criteria:
 - (I) Requirements developed by the manufacturer (Note: Owners and/or operators may use this option only if the manufacturer has developed requirements);
 - (II) Code of practice developed by a nationally recognized association or independent testing laboratory;
 - (III) Guidance provided by the division; or
 - (IV) Requirements determined by the division to be no less protective of human health and the environment than the options listed in items (I) through (III) of this subpart.
- 2. Inspections. Overfill prevention equipment must be inspected at least once every three (3) years. At a minimum, the inspection must ensure that overfill prevention equipment is set to activate at the correct level specified in subpart (a)1(ii) of this paragraph and will activate when petroleum reaches that level. Inspections must be conducted in accordance with one of the criteria in items 1(ii)(I) through (IV) of this subparagraph.
- 3. Owners and/or operators must begin meeting these requirements as follows:
 - (i) For UST systems in use on or before the effective date of this rule, the initial spill prevention equipment test, and overfill prevention equipment inspection must be conducted not later than three (3) years after the effective date of this rule.
 - (ii) For UST systems brought into use after the effective date of this rule, these requirements apply at installation.
- (d) Owners and/or operators must maintain records as follows (in accordance with subparagraph (2)(b) of Rule 0400-18-01-.03) for spill prevention equipment, and overfill prevention equipment:
 - 1. All records of testing or inspection must be maintained for three (3) years; and
 - 2. For spill prevention equipment not tested every three (3) years, documentation showing that the prevention equipment is double walled and the integrity of both walls is periodically monitored must be maintained for as long as the equipment is periodically monitored.
- (4) Corrosion protection.
 - (a) Tank construction.

Each tank shall have corrosion protection that is properly designed and constructed and/or properly upgraded. Any portion underground that routinely contains petroleum shall utilize one of the following methods of corrosion protection:

 - 1. The tank is constructed of fiberglass-reinforced plastic.
 - 2. The tank is constructed of steel which is cathodically protected in the following manner:
 - (i) The tank is coated with a suitable dielectric material unless cathodic protection has been added to the tank for the purpose of upgrading;
 - (ii) Field-installed cathodic protection systems are designed by a corrosion expert;

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- (iii) Impressed current systems are designed to allow determination of current operating status as required in part (c)4 of this paragraph;
 - (iv) Cathodic protection systems are operated and maintained in accordance with subparagraph (c) of this paragraph or in a manner determined by the division to provide equivalent protection against corrosion, provided that such determination is made by the division prior to installation and/or operation; and
 - (v) If cathodic protection was initially installed for the purpose of upgrading subsequent to UST system installation, the integrity of the tank has been ensured using one of the following methods:
 - (I) Internal inspection and assessment ensured that the tank was structurally sound and free of corrosion holes prior to installing the cathodic protection system.
 - (II) At the time of installation of the cathodic protection system, the tank had been installed for less than ten (10) years and monthly monitoring was being conducted in accordance with subparagraphs (3)(c) through (e) of Rule 0400-18-01-.04.
 - (III) The tank was assessed for corrosion holes by conducting two (2) tightness tests that met the requirements of subparagraph (3)(b) of Rule 0400-18-01-.04:
 - I. The first tightness test was conducted no more than one hundred twenty (120) days prior to installing the cathodic protection system.
 - II. The second tightness test was conducted between three (3) and six (6) months following the first operation of the cathodic protection system.
 - (IV) The tank was assessed for corrosion holes by a method determined by the division, prior to assessment, to be no less protective of human health and the environment than items (I) through (III) of this subpart.
3. The tank, which is constructed of steel and was installed on or before December 22, 1988, was lined subsequent to installation of the tank and has satisfied the following requirements:
- (i) The lining was installed in accordance with at least the following procedures and practices:
 - (I) The lining was installed so as to effectively prevent releases for the operational life of the tank;
 - (II) The lining material is compatible with the product to be stored;
 - (III) The tank shell was structurally sound prior to lining;
 - (IV) Lining manufacturers directions were followed during installation of lining;
 - (V) After the tank was lined and before the tank was returned to service, the tank was tank tightness tested according to subparagraph (3)(b) of Rule 0400-18-01-.04; and
 - (VI) Records that demonstrate compliance with this part shall be maintained for the remaining operational life of the tank. Such records shall be

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transferred in accordance with subparagraph (2)(d) of Rule 0400-18-01-.03 at the time of ownership transfer; and

- (ii) Within ten (10) years after lining, and every five (5) years thereafter, the lined tank is/was internally inspected and found to be structurally sound with the lining still performing in accordance with original design specifications. However, tanks which use lining in combination with cathodic protection systems operated in accordance with subparagraph (c) of this paragraph do not have to be internally inspected subsequent to addition of cathodic protection.
 - (iii) Lining may be used in combination with cathodic protection if the cathodic protection system meets the requirements of subparts 2(ii) through (v) of this subparagraph.
 - (iv) Unless directed to do otherwise by the division, a tank shall be permanently closed in accordance with Rule 0400-18-01-.07 if the internal inspection required in subpart (ii) of this part determines:
 - (I) The tank is not structurally sound; and/or
 - (II) The lining is not performing in accordance with original design specifications.
 - (v) Unless directed to do otherwise by the division, a tank constructed of steel that was lined on or before December 22, 1999, to which a cathodic protection system was not installed on or before December 22, 2012, shall be permanently closed by December 22, 2012.
4. The tank is constructed of steel and clad or jacketed with a non-corrodible material.
5. The tank is constructed of metal without additional corrosion protection measures provided that:
- (i) The tank is installed at a site that is determined by a corrosion expert not to be corrosive enough to cause it to have a release due to corrosion during its operational life; and
 - (ii) Owners and/or operators maintain records that demonstrate compliance with the requirements of subpart (i) of this part for the remaining operational life of the tank. Such records shall be transferred in accordance with subparagraph (2)(d) of Rule 0400-18-01-.03 at the time of ownership transfer.
6. The tank construction and corrosion protection are determined by the division to be designed to prevent the release or threatened release of any stored petroleum in a manner that is no less protective of human health and the environment than parts 1 through 5 of this subparagraph.
- (b) Piping construction.
- Piping that routinely contains petroleum and is in contact with the ground or with standing water or other liquids shall be properly designed and constructed and/or properly upgraded. However, the presence of condensate within a sump or containment area shall not constitute contact with standing water. Piping shall also utilize at least one of the following methods of corrosion protection:
- 1. Piping, whether rigid or flexible in design, that is constructed of nonmetallic materials, and was installed on or after November 1, 2005, shall meet or exceed the Standard for Safety established by Underwriters Laboratory in UL 971 - "Non-Metallic Underground Piping for Flammable Liquids", July 1, 2005. This requirement shall apply to all new and/or replacement piping.

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2. The piping, whether rigid or flexible in design, including flex connectors, is constructed of steel and cathodically protected in the following manner:
 - (i) The piping is coated with a suitable dielectric material unless cathodic protection was added for the purpose of upgrading;
 - (ii) Field-installed cathodic protection systems are designed by a corrosion expert;
 - (iii) Impressed current systems are designed to allow determination of current operating status as required in part (c)4 of this paragraph; and
 - (iv) Cathodic protection systems are operated and maintained in accordance with subparagraph (c) of this paragraph or in a manner determined by the division to provide equivalent protection against corrosion, provided that such determination is made by the division prior to installation and/or operation of the cathodic protection system.
3. The piping is constructed of metal without additional corrosion protection measures provided that:
 - (i) The piping is installed at a site that is determined by a corrosion expert to not be corrosive enough to cause it to have a release due to corrosion during its operational life; and
 - (ii) Owners and/or operators maintain records that demonstrate compliance with the requirements of subpart (i) of this part for the remaining operational life of the piping. Such records shall be transferred in accordance with subparagraph (2)(d) of Rule 0400-18-01-.03 at the time of ownership transfer.
4. The piping construction and corrosion protection are determined by the division to be designed to prevent the release or threatened release of any stored petroleum in a manner that is no less protective of human health and the environment than the requirements in parts 1 through 3 of this subparagraph.
5. Fill piping used for introducing petroleum into an underground storage tank system shall not be required to have cathodic protection if it is lined with a drop tube.

(c) Operation and maintenance of corrosion protection.

All owners and/or operators of metal UST systems with corrosion protection shall comply with the following requirements to ensure that releases due to corrosion are prevented until the UST system is permanently closed or undergoes a change-in-service in accordance with paragraph (4) of Rule 0400-18-01-.07:

1. All corrosion protection systems shall be operated and maintained in accordance with equipment manufacturer's specifications to continuously provide corrosion protection to the metal components of that portion of the tank, piping and underground ancillary equipment that routinely contains petroleum and is in contact with the ground or with standing water or other liquids. However, the presence of condensate within a sump or containment area shall not constitute contact with standing water.
2. All UST systems equipped with cathodic protection systems shall be inspected for proper operation by a qualified cathodic protection tester in accordance with the following requirements:
 - (i) Frequency. All cathodic protection systems shall be tested within six (6) months of installation and at least every three (3) years thereafter;
 - (ii) The cathodic protection system shall be functioning as designed and is effectively preventing corrosion; and

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- (iii) Test results shall be recorded in a format established by the division, completed in accordance with guidance provided by the division, and maintained by the owner and/or operator to demonstrate compliance with this subparagraph.
 - 3. All UST systems to which anodes have been added for the purpose of replacing or enhancing an existing cathodic protection system shall be tightness tested in accordance with subparagraphs (3)(b) and (4)(b) of Rule 0400-18-01-.04. The tightness test shall be conducted no later than six (6) months, but no sooner than three (3) months, following the addition of the anodes.
 - 4. UST systems with impressed current cathodic protection systems shall also be inspected every sixty (60) days to ensure the equipment is operating properly. The results of the inspection shall be recorded in a format established by the division and in accordance with the instructions provided by the division.
 - 5. For UST systems using cathodic protection, records of the operation of the cathodic protection shall be maintained, in accordance with part (2)(b)5 of Rule 0400-18-01-.03, to demonstrate compliance with this paragraph. These records shall be maintained in accordance with the following:
 - (i) The results of testing from the last two inspections required in part 2 of this subparagraph shall be retained;
 - (ii) A record of the addition of sacrificial anodes to an existing cathodic protection system shall be retained for the remaining operational life of the underground storage tank system and such records shall be transferred in accordance with subparagraph (2)(d) of Rule 0400-18-01-.03 at the time of ownership transfer;
 - (iii) The results of tightness testing required in part 3 of this subparagraph shall be retained for the remaining operational life of the underground storage tank system. Such records shall be transferred in accordance with subparagraph (2)(d) of Rule 0400-18-01-.03 at the time of ownership transfer; and
 - (iv) The results of the last three (3) inspections required in part 4 of this subparagraph shall be retained.
 - 6. UST systems with impressed current systems that have failed to provide continuous protection in accordance with part 1 of this subparagraph shall comply with this part in accordance with the following:
 - (i) For UST systems with impressed current systems which have been turned off or inoperable for a period of less than twelve (12) months, unless directed to do otherwise by the division, the tanks and lines shall be tightness tested in accordance with subparagraphs (3)(b) and (4)(b) of Rule 0400-18-01-.04. Another tightness test shall be conducted no later than six (6) months, but no sooner than three (3) months, following the return of the impressed current system to operation.
 - (ii) For UST systems with impressed current systems which have been turned off or inoperable for a period of twelve (12) months or more, unless directed to do otherwise by the division, the UST system shall be permanently closed.
- (5) Compatibility.
- (a) Owners and/or operators shall use an UST system made of or lined with materials that are compatible with the petroleum substance stored in the UST system.
 - (b) Owners and/or operators must notify the division at least thirty (30) days prior to switching to a petroleum substance containing greater than ten percent (10%) ethanol or greater than twenty percent (20%) biodiesel. In addition, owners and/or operators with UST systems storing these petroleum substances must demonstrate compatibility of the UST system (including the tank,

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pipng, containment sumps, pumping equipment, release detection equipment, spill equipment, and overfill equipment) using one of the following options:

1. Certification or listing of UST system equipment or components by a nationally recognized, independent testing laboratory for use with the petroleum substance stored;
 2. Equipment or component manufacturer approval. The manufacturer's approval must be in writing, indicate an affirmative statement of compatibility, specify the range of biofuel blends the equipment or component is compatible with, and be from the equipment or component manufacturer;
 3. In accordance with guidance provided by the division; or
 4. Another option determined by the division to be no less protective of human health and the environment than the options listed in parts 1 through 3 of this subparagraph.
- (c) Owners and/or operators must maintain records in accordance with paragraph (2) of Rule 0400-18-01-.03 documenting compliance with subparagraph (b) of this paragraph for as long as the UST system is used to store the petroleum substance.
- (6) Replacement.

Tank owners and/or operators replacing any tanks, piping and/or motor fuel dispensers on or after July 24, 2007, shall comply with the following:

- (a) Tank owners and/or operators replacing any tanks, piping and/or motor fuel dispensers shall install secondary containment and interstitial monitoring for the replacement tanks, pressurized piping, and suction piping that does not meet the requirements of subparts (2)(b)2(i) through (iii) of Rule 0400-18-01-.04 and secondary containment for replacement motor fuel dispensers in accordance with paragraph (2) of this rule.
- (b) In the case of the replacement of an existing underground storage tank or existing piping connected thereto, the requirements in subparagraph (a) of this paragraph shall apply only to the specific underground storage tank or piping being replaced, not to other underground storage tanks and connected pipes located at the underground storage tank facility.
- (c) Unless determined to be a piping repair by the division in accordance with subparagraph (d) of this paragraph, if piping is being replaced, all piping connected to that particular underground storage tank shall be removed and secondarily contained piping with interstitial monitoring shall be installed in accordance with paragraph (2) of this rule. However, if the replacement piping meets the requirements for suction piping set forth in subparts (2)(b)2(i) through (iii) of Rule 0400-18-01-.04, the piping does not have to be secondarily contained.
- (d) Piping repairs:
 1. The division may authorize a repair of underground piping, which shall not be considered a replacement;
 2. Requests for division authorization of piping repairs shall be submitted in writing. However, division authorization shall not be required and the repair shall not be considered replacement if:
 - (i) The repair does not involve replacement of any piping; or
 - (ii) The repair is limited to replacement of a flexible connector;
 3. The division may request additional information about the proposed repair as deemed necessary; and
 4. Requests for division authorization of piping repairs shall be approved or denied by the division.

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- (e) Replacement of a motor fuel dispenser has occurred and is subject to the provisions of this paragraph as well as the requirements in subparagraph (2)(c) of this rule if the existing dispenser is removed and replaced with another dispenser and the equipment used to connect the dispenser to the piping is replaced. Connecting equipment includes check valves, shear valves, unburied risers or flexible connectors, or other transitional components that are underneath the dispenser and connect the dispenser to the underground piping.
- (f) Records documenting the replacement of tanks, piping and/or dispensers shall be maintained for the operational life of the UST system. Such records shall document compliance with the design criteria set forth in paragraph (2) of this rule. However, if the replacement piping meets the requirements for suction piping set forth subparts (2)(b)2(i) through (iii) of Rule 0400-18-01-.04, the piping components do not have to be secondarily contained.

(7) Repairs.

Owners and/or operators of UST systems shall ensure that repairs will prevent releases due to structural failure or corrosion as long as the UST system is used to store petroleum. Owners and/or operators shall repair or replace any tanks or piping which have had a structural failure. The repairs shall meet the following requirements:

- (a) Repairs to UST systems shall be conducted so as to effectively prevent releases for the operational life of the tank system.
- (b) Repairs to fiberglass-reinforced plastic tanks shall be made by the manufacturer's authorized representatives or in accordance with the manufacturer's specifications.
- (c) Metal pipe sections and fittings that have released product as a result of corrosion or other damage shall be replaced in accordance with subparagraphs (6)(a) through (d) and (6)(f) of this rule. Non-corrodible pipes and fittings may be repaired in accordance with the manufacturer's specifications if division approval has been granted in accordance with subparagraph (6)(d) of this rule.
- (d) Repairs to secondary containment areas of tanks and piping used for interstitial monitoring and to containment sumps used for interstitial monitoring of piping must have the secondary containment tested for tightness according to the manufacturer's instructions or in accordance with guidance provided by the division within thirty (30) days following the date of completion of the repair. All other repairs to tanks and/or piping shall be tightness tested in accordance with subparagraphs (3)(b) and (4)(b) of Rule 0400-18-01-.04 within thirty (30) days following the date of the completion of the repair except as provided in part 1 or 2 of this subparagraph:
 - 1. The repaired portion of the UST system is monitored monthly for releases in accordance with a method specified in subparagraphs (3)(c) through (e) of Rule 0400-18-01-.04; however, on or after January 1, 2009, the monitoring methods in parts (3)(c)1 and (3)(d)2 of Rule 0400-18-01-.04 shall no longer meet the requirements of this rule; or
 - 2. Another test method is used, provided that prior to use in the State of Tennessee that method is determined by the division to be no less protective of human health and the environment than the method listed in part 1 of this subparagraph.
- (e) Within six (6) months following the repair of any cathodically protected UST system, the cathodic protection system shall be tested in accordance with parts (4)(c)2 and 3 of this rule to ensure that it is operating properly.
- (f) Within thirty (30) days following any repair to spill or overfill prevention equipment (except flow restrictors used in vent lines), the repaired spill or overfill prevention equipment must be tested or inspected, as appropriate, in accordance with subparagraph (3)(c) of this rule to ensure it is operating properly.
- (g) UST system owners and/or operators shall maintain records of each repair that demonstrate compliance with the requirements of this paragraph until the UST system is permanently closed

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or undergoes a change-in-service in accordance with paragraph (4) of Rule 0400-18-01-.07. Such records shall be transferred in accordance with subparagraph (2)(d) of Rule 0400-18-01-.03 at the time of ownership transfer.

- (8) Periodic operation and maintenance walkthrough inspections.
- (a) To properly operate and maintain UST systems, not later than three (3) years after the effective date of this rule, owners and/or operators must meet one of the following:
1. Conduct a walkthrough inspection that, at a minimum, checks the following equipment as specified below:
 - (i) Every thirty (30) days (Exception: spill prevention equipment at UST systems receiving deliveries at intervals greater than every thirty (30) days may be checked prior to each delivery):
 - (I) Spill prevention equipment – visually check for damage; remove liquid or debris; check for and remove obstructions in the fill pipe; check the fill cap to make sure it is securely on the fill pipe; and, for double walled spill prevention equipment with interstitial monitoring, check for a leak in the interstitial area, and
 - (II) Release detection equipment – check to make sure the release detection equipment is operating with no alarms or other unusual operating conditions present; and ensure records of release detection testing are reviewed and current; and
 - (ii) Annually:
 - (I) Containment sumps – visually check for damage, leaks to the containment area, or releases to the environment; remove liquid (in contained sumps) or debris; and, for double walled sumps with interstitial monitoring, check for a leak in the interstitial area, and
 - (II) Hand held release detection equipment – check devices such as tank gauge sticks or groundwater bailers for operability and serviceability;
 2. Conduct operation and maintenance walkthrough inspections according to a standard code of practice developed by a nationally recognized association or independent testing laboratory that checks equipment comparable to part (a)1 of this paragraph; or
 3. Conduct operation and maintenance walkthrough inspections in accordance with guidance provided by the division comparable to part (a)1 of this paragraph.
- (b) Owners and/or operators must maintain records (in accordance with subparagraph (2)(b) of Rule 0400-18-01-.03) of operation and maintenance walkthrough inspections for one (1) year. Records must include a list of each area checked, whether each area checked was acceptable or needed action taken, a description of actions taken to correct an issue, and delivery records if spill prevention equipment is checked less frequently than every thirty (30) days due to infrequent deliveries.

Authority: T.C.A. §§ 68-215-101 et seq. and 4-5-201 et seq.

0400-18-01-.03 Notification, Reporting and Record Keeping.

- (1) Notification requirements.
- (a) Any owner who intends to bring or brings a new underground storage tank system into use shall notify the division as follows:
1. Pre-installation notification form.

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Notification shall be made fifteen (15) days prior to commencement of installation of such underground storage tank systems by submitting a pre-installation notification form to the division. The pre-installation notification form shall include, but not be limited to, the following information: the property address; the business name; the tank owner's name and address; and the number of compartments in each tank. This information shall be submitted in a format established by the division and the pre-installation notification form shall be completed in accordance with instructions provided by the division.

2. Notification form for newly installed tanks.

The owner of a newly installed tank shall submit notification of the underground storage tank system installation to the division within fifteen (15) days in accordance with subparagraphs (b) through (d) of this paragraph. The owner shall use the notification form designated by the division.

- (b) Owners shall complete the notification form accurately and in its entirety for each tank, tank compartment, and the piping connected thereto, for which notice is required in accordance with part (a)2 of this paragraph. The form shall be completed in accordance with the instructions provided by the division.
- (c) Owners required to submit notification under part (a)2 of this paragraph shall provide notification to the division for each tank and tank compartment they own. Owners may provide notification for several tanks using one notification form, but owners who own tanks located at more than one place of operation shall file a separate notification form for each separate place of operation.
- (d) All owners of UST systems installed after December 22, 1988 shall certify in the notification form compliance with the following requirements:
 - 1. Installation of tanks and piping has been certified using one of the following methods:
 - (i) The installer has been certified by the tank and piping manufacturers;
 - (ii) The installation has been inspected and certified by a registered professional engineer with education and experience in UST system installation;
 - (iii) The installation has been inspected and approved by the division;
 - (iv) All work listed in the manufacturer's installation checklist has been completed; or
 - (v) The owner has complied with another method for ensuring compliance with paragraph (1) of Rule 0400-18-01-.02 that has been determined by the division prior to installation to be no less protective of human health and the environment;
 - 2. Cathodic protection of steel tanks and piping in accordance with paragraph (4) of Rule 0400-18-01-.02;
 - 3. Financial responsibility in accordance with Rule 0400-18-01-.08; and
 - 4. Release detection in accordance with Rule 0400-18-01-.04.
- (e) All owners of UST systems installed after December 22, 1988 shall ensure that the installer certifies in the notification form that the methods used to install the tanks and piping complies with the requirements in paragraph (1) of Rule 0400-18-01-.02.
- (f) Any person who sells a tank intended to be used as an underground storage tank shall notify the purchaser at the time of sale of such tank of the owner's obligations for notification prior to installation under subparagraph (a) of this paragraph.
- (g) Any change in the status of the tanks at a petroleum UST facility shall be reported within thirty (30) days of said change. This includes but is not limited to changes of ownership, upgrading or

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replacement of tanks, changes in mailing address, permanent closure of a tank compartment, and changes in service. Such reports shall be made using an amended notification form. In the case of a sale of tanks, the seller shall submit the notification form designated by the division, completed in accordance with instructions provided by the division, and shall also inform the buyer of the notification requirement.

- (h) Any change in Class A, or Class B Operators shall be reported to the division within thirty (30) days of said change in the division's web based training database.

(2) Reporting and record keeping.

Owners, operators, and/or other responsible parties of UST systems shall cooperate fully with inspections, monitoring and testing conducted by the division, as well as requests for document submission, testing, and monitoring by the owner, operator, and/or other responsible parties in accordance with the Tennessee Petroleum Underground Storage Tank Act T.C.A. §§ 68-215-101 et seq.

(a) Reporting.

Owners, operators, and/or other responsible parties shall submit the following information to the division:

1. Notification for all UST systems (paragraph (1) of this rule), which includes certification of installation for new UST systems (subparagraphs (1)(d) and (e) of this rule) and notification for any change in the status of the tanks at a petroleum UST facility (subparagraph (1)(g) of this rule);
2. Notification prior to switching UST systems to certain petroleum substances in accordance with subparagraph (5)(b) of Rule 0400-18-01-.02;
3. Reports of all releases including suspected releases (paragraph (1) of Rule 0400-18-01-.05), spills and overfills (paragraph (4) of Rule 0400-18-01-.05), and confirmed releases (Rule 0400-18-01-.06);
4. Corrective actions planned or taken including, but not limited to, initial response measures (paragraph (3) of Rule 0400-18-01-.06), hazard management measures (paragraph (4) of Rule 0400-18-01-.06), initial site characterization and exposure assessment (paragraph (5) of Rule 0400-18-01-.06), corrective action plan (paragraph (10) of Rule 0400-18-01-.06), and as otherwise directed by the division;
5. A notification before permanent closure or change-in-service (paragraphs (3) and (4) of Rule 0400-18-01-.07); and
6. Tank closure activities including site assessment results (paragraph (5) of Rule 0400-18-01-.07).

(b) Record keeping.

Owners, operators, and/or other responsible parties shall maintain the following information:

1. A log of the monthly spill catchment basin inspections showing at a minimum the last twelve (12) months of inspections (part (3)(b)4 of Rule 0400-18-01-.02);
2. Documentation of compliance for spill and overflow prevention equipment and containment sumps used for interstitial monitoring of piping (part (3)(d) of Rule 0400-18-01-.02);
3. Documentation of compliance with the lining requirements for a tank, which is constructed of steel and was installed on or before December 22, 1988 (subpart (4)(a)3(i) of Rule 0400-18-01-.02);
4. A corrosion expert's analysis of site corrosion potential if corrosion protection equipment is not used (part (4)(a)5 of Rule 0400-18-01-.02; part (4)(b)3 of Rule 0400-18-01-.02);

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5. Documentation of operation of corrosion protection equipment (subparagraph (4)(c) of Rule 0400-18-01-.02);
6. Documentation of compatibility for UST systems (subparagraph (5)(b) of Rule 0400-18-01-.02);
7. Documentation of the replacement of tanks, piping, and/or dispensers (subparagraph (6)(f) of Rule 0400-18-01-.02);
8. Documentation of UST system repairs (subparagraph (7)(g) of Rule 0400-18-01-.02);
9. Documentation of operation and maintenance walkthrough inspections (subparagraph (8)(b) of Rule 0400-18-01-.02);
10. A log of the quarterly dispenser inspections showing at a minimum the last twelve (12) months of inspections (subparagraphs (1)(e) and (f) of Rule 0400-18-01-.04);
11. Recent compliance with release detection requirements (paragraph (5) of Rule 0400-18-01-.04); and
12. Documentation of compliance with closure requirements and results of the site assessment conducted at permanent closure (paragraph (7) of Rule 0400-18-01-.07).

(c) Availability and maintenance of records.

1. Owners, operators, and/or other responsible parties shall keep the records required either:
 - (i) At the UST site and immediately available for inspection by the division; or
 - (ii) At a readily available alternative site and be provided for inspection to the division upon request; or
 - (iii) In the case of permanent closure records required under paragraph (7) of Rule 0400-18-01-.07, owners, operators, and/or other responsible parties are also provided with the additional alternative of mailing closure records to the division if they cannot be kept at the site or an alternative site as indicated in subparts (i) or (ii) of this part.
2. If an inspection is scheduled by the division in advance of the date of that inspection, all records shall be present and available for review during the scheduled inspection.

(d) Records transfer.

Upon transfer of ownership, including, but not limited to, sale of the UST systems, originals and/or copies of all documents required to satisfy the reporting and recordkeeping requirements of this paragraph shall be transferred to the new owner of the USTs at the time of ownership transfer.

Authority: T.C.A. §§ 68-215-101 et seq. and 4-5-201 et seq.

0400-18-01-.04 Release Detection.

(1) General requirements for release detection.

- (a) Owners and/or operators of UST systems shall provide a method, or combination of methods, of release detection that:
 1. Can detect a release from any portion of the tank and the connected underground piping that routinely contains petroleum;

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2. Is installed and calibrated in accordance with manufacturer's instructions and is operated and maintained in accordance with one of the following:
 - (i) Manufacturer's instructions;
 - (ii) A code of practice developed by a nationally recognized association or independent testing laboratory; or
 - (iii) Requirements determined by the division to be no less protective of human health and the environment than the two options listed in subparts (i) and (ii) of this part.
 3. Ensures that electronic and mechanical components are tested for proper operation in accordance with subparts 2(i) through (iii) of this subparagraph. The test must be performed at least annually, and at a minimum, as applicable to the facility, cover the following components and criteria:
 - (i) Automatic tank gauge and other controllers: test alarm; verify system configuration; test battery backup;
 - (ii) Probes and sensors: inspect for residual buildup; ensure floats move freely; ensure shaft is not damaged; ensure cables are free of kinks and breaks; test alarm operability and communication with controller;
 - (iii) Automatic line leak detector: test operation to meet criteria in subparagraph (4)(a) of this rule by simulating a leak; and
 - (iv) Vacuum pumps and pressure gauges: ensure proper communication with sensors and controller.
 4. Meets the performance requirements of paragraph (3) or (4) of this rule or subparagraph (2)(d) of Rule 0400-18-01-.17, as applicable, with any performance claims and their manner of determination described in writing by the equipment manufacturer or installer. In addition, the methods listed in paragraphs (3) and (4) of this rule and subparagraph (2)(d) of Rule 0400-18-01-.17, as applicable shall be capable of detecting the leak rate or quantity specified for that method in subparagraphs (3)(a), (b), and (c) or (4)(a) and (b) of this rule with a probability of detection of 0.95 and a probability of false alarm of 0.05.
 5. Has had a third party evaluation reviewed by the National Work Group on Leak Detection Evaluations (NWGLDE) and a listing of the leak detection equipment or method appears on the list maintained by the NWGLDE. However, any NWGLDE listed leak detection equipment or method for which there is no longer any technical support available may not be used to meet the requirements of this paragraph.
- (b) When a release detection method operated in accordance with paragraph (3) or (4) of this rule or subparagraph (2)(d) of Rule 0400-18-01-.17, as applicable, indicates a release may have occurred, owners and/or operators shall notify the division in accordance with Rule 0400-18-01-.05. If more than one method of release detection is operated on a UST system, a suspected release shall be reported to the division in accordance with Rule 0400-18-01-.05 if any one of the release detection methods indicates a release may have occurred.
 - (c) If a method of release detection that complies with the requirements of this rule cannot be applied to and/or operated for any UST system, the owner and/or operator of that UST system shall complete the closure procedures in Rule 0400-18-01-.07.
 - (d) If a release detection method selected by the owner and/or operator cannot meet the requirements in paragraphs (3) and (4) of this rule and subparagraph (2)(d) of Rule 0400-18-01-.17, as applicable, to the satisfaction of the division, then the owner and/or operator shall select another method of release detection.

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- (e) The dispenser cover shall be opened and a visual inspection for petroleum releases, including seeps and drips, shall be performed at least quarterly, that is, at least once every three (3) months. A log of these inspections showing at a minimum the last twelve (12) months shall be maintained by the owner and/or operator.
- (f) Under-dispenser containment sumps for motor fuel dispensers required by subparagraph (1)(c) or paragraph (6) of Rule 0400-18-01-.02 to be secondarily contained in accordance with subparagraph (2)(c) of Rule 0400-18-01-.02 shall be visually inspected at least quarterly, that is, at least once every three (3) months. A log of these inspections, showing at a minimum the last twelve (12) months, shall be maintained by the owner and/or operator. The visual inspection shall check for the presence of petroleum and/or water in the sumps. If liquid is observed in the dispenser sump, the liquid shall be removed from the sump in such a manner as to prevent the release of petroleum into the environment.

(2) Requirements for petroleum UST systems.

Owners and/or operators of petroleum UST systems shall provide release detection for tanks and piping as follows:

(a) Tanks.

Tanks shall be monitored at least monthly for releases using one of the methods listed in subparagraphs (3)(c) through (f) of this rule, except that tanks which meet the volume, diameter, and test duration requirements as set forth in subpart (3)(a)1(i) of this rule may use manual tank gauging (conducted in accordance with subparagraph (3)(a) of this rule).

(b) Piping.

Underground piping that routinely contains petroleum shall be monitored for releases in a manner that meets one of the following requirements:

1. Pressurized piping.

Underground piping that conveys petroleum under pressure shall:

- (i) Be equipped with an automatic line leak detector conducted in accordance with subparagraph (4)(a) of this rule; and
- (ii) Have an annual line tightness test conducted in accordance with subparagraph (4)(b) of this rule or have monthly monitoring conducted in accordance with subparagraph (4)(c) of this rule.

2. Suction piping.

Underground piping that conveys petroleum under suction shall either have a line tightness test conducted at least every three (3) years and in accordance with subparagraph (4)(b) of this rule, or use a monthly monitoring method conducted in accordance with subparagraph (4)(c) of this rule. No release detection is required for suction piping that is designed and constructed to meet the following standards:

- (i) The below-grade piping operates at less than atmospheric pressure;
- (ii) The below-grade piping is sloped so that the contents of the pipe will drain back into the storage tank if the suction is released;
- (iii) Only one check valve is included in each suction line;
- (iv) The check valve is located directly below and as close as practical to the suction pump; and

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- (v) A method is provided that allows compliance with subparts (ii) through (iv) of this part to be readily determined.

(3) Methods of release detection for tanks.

Each method of release detection for tanks used to meet the requirements of paragraph (2) of this rule shall be conducted in accordance with the following:

(a) Manual tank gauging.

1. Manual tank gauging shall only be applicable to tanks as set forth below:

- (i) Tanks which meet the volume, diameter and test duration requirements as set forth below may use manual tank gauging as the sole method of release detection:

Nominal Capacity	Tank Diameter	Minimum Duration Of Test
up to 550 gallons	*	36 hours
551 – 1000 gallons	64 inches	44 hours
551 – 1000 gallons	48 inches	58 hours

*Any diameter of tank up to 550 gallons may use manual tank gauging as the sole method of release detection if the duration of the test is at least 36 hours.

- (ii) Manual tank gauging shall not be used as the sole method of release detection for tanks of 551 to 1000 gallons nominal capacity which cannot meet the diameter or test duration requirements as set forth in subpart (i) of this part or for tanks of 1001 to 2000 gallon nominal capacity. These tanks shall use manual tank gauging in combination with tank tightness testing in accordance with subparagraph (2)(a) of this rule.
- (iii) Tanks of greater than 2000 gallons nominal capacity using this method shall not meet the requirements of this rule.

2. Manual tank gauging shall meet the following requirements:

- (i) Tank liquid level measurements are taken at the beginning and ending of a period of using the appropriate minimum duration of the test value in the table in subpart 1(i) of this subparagraph during which no liquid is added to or removed from the tank;
- (ii) Level measurements are based on an average of two (2) consecutive stick readings at both the beginning and ending of the required period;
- (iii) The equipment used is capable of measuring the level of petroleum over the full range of the tank's height to the nearest one-eighth of an inch;
- (iv) Petroleum levels are measured and recorded to an accuracy of at least the nearest one-eighth of an inch;
- (v) A release is suspected and subject to the requirements of Rule 0400-18-01-.05 if the variation between beginning and ending measurements exceeds the weekly or monthly standards in the following table:

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Nominal Capacity	Tank Diameter	Minimum Duration Of Test	Weekly Standard (One Test)	Monthly Standard (Average Of 4 Tests)
Up to 550 gallons		36 hours	10 gallons	5 gallons
551 – 1000 gallons		36 hours	13 gallons	7 gallons
551 – 1000 gallons	64 inches	44 hours	9 gallons	4 gallons
551 – 1000 gallons	48 inches	58 hours	12 gallons	6 gallons
1001 – 2000 gallons		36 hours	26 gallons	13 gallons

(b) Tank tightness testing.

1. Tank tightness testing shall be capable of detecting a 0.1 gallon per hour leak rate from any portion of the tank that routinely contains petroleum while accounting for the effects of thermal expansion or contraction of the petroleum, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.
2. Tank tightness testing devices, automatic tank gauging devices or other equipment may be used provided that the testing meets the performance criteria set forth in part 1 of this subparagraph.
3. The information relating to the tank tightness test shall be reported in a format established by the division. The tank tightness test report shall include, but is not necessarily limited to the following information:
 - (i) Information which identifies the tank and the facility;
 - (ii) Information which identifies the test method and test conditions established by the manufacturer's specifications and/or required by the third party certification of the method;
 - (iii) Information which identifies the person and/or company performing the test;
 - (iv) Data gathered during the performance of the test; and
 - (v) Results expressed as follows:
 - (I) Leak rate in gallons per hour and as "Pass" or "Fail" for volumetric test methods; or
 - (II) "Pass" or "Fail" for non-volumetric test methods.
4. A release is suspected and subject to the requirements of Rule 0400-18-01-.05 if the method detects a release rate greater than that established by the manufacturer's specifications and/or third party certification.

(c) Automatic tank gauging.

Equipment for automatic tank gauging shall be permanently installed in the tank and shall meet one of the following requirements:

1. For automatic tank gauging devices capable of detecting at least a 0.2 gallon per hour leak rate from any portion of the tank that routinely contains petroleum:
 - (i) The monitor shall be placed in the leak test mode at least once per month; and

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- (ii) A release is suspected and subject to the requirements of Rule 0400-18-01-.05 if the monitoring results indicate that the underground storage tank has had a release above the established threshold of the automatic tank gauging device as determined through third party certification.
- 2. For automatic tank gauging systems which are capable of detecting at least a 0.2 gallon per hour leak rate from any portion of the tank that routinely contains petroleum using continuous statistical release detection:
 - (i) The automatic tank gauging system shall be placed in the leak test mode at least once per month if a test cannot be obtained during any one month period, except for those systems which also use statistical inventory reconciliation in accordance with subparagraph (e) of this paragraph; and
 - (ii) A release is suspected and subject to the requirements of Rule 0400-18-01-.05 if the monitoring results indicate that the underground storage tank has had a release above the established threshold of the automatic tank gauging device as determined through third party certification, except that those systems also using statistical inventory reconciliation shall report suspected releases in accordance with subparagraph (e) of this paragraph.
- (d) Interstitial monitoring.

Interstitial monitoring between the UST system and a secondary barrier immediately around it may be used, but only if the system is designed, constructed and installed to detect a leak from any portion of the tank that routinely contains petroleum and also meets one of the following requirements:

- 1. For double-walled UST systems, the monitoring method shall:
 - (i) Be able to detect a leak through the inner wall in any portion of the UST system that routinely contains petroleum;
 - (ii) Provide continuous monitoring; and
 - (iii) Be installed, maintained and operated in accordance with guidance provided by the division.
- (e) Statistical inventory reconciliation.

Statistical analysis of inventory, delivery and dispensing data collected over a period of time shall meet the following requirements:

- 1. Inventory control shall be conducted in accordance with the following requirements:
 - (i) Inventory volume measurements for petroleum inputs, withdrawals, and the amount still remaining in the tank are recorded each operating day;
 - (ii) Petroleum levels are measured and recorded to an accuracy of at least the nearest one-eighth of an inch over the full range of the tank's height;
 - (iii) The petroleum inputs are reconciled with delivery receipts by measurement of the tank inventory volume before and after delivery;
 - (iv) Deliveries are made through a drop tube that extends to within one (1) foot of the tank bottom;
 - (v) Petroleum dispensing is metered and recorded within the local standards for meter calibration or an accuracy of six (6) cubic inches for every five (5) gallons of petroleum withdrawn, and the meters are calibrated at least annually; and

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- (vi) The measurement of any water level in the bottom of the tank is made and recorded to the nearest one-eighth of an inch at least once a month.
2. A report shall be generated monthly, after the end of the data collection for that time period. The report shall include, but is not limited to the following:
 - (i) The inventory records used, that is, the raw data (data consisting of daily product levels, deliveries and sales as determined by direct measurement or automatic tank gauges, and daily reconciliation of measured amounts in the tank compared with calculated amounts in the tank); and
 - (ii) The statistical inventory reconciliation determination;
 3. For quantitative statistical inventory reconciliation methods, the numerical leak rate shall be reported unless the statistical inventory reconciliation determination results in an "Inconclusive" under the provisions of subpart 4(iii) of this subparagraph;
 4. The statistical inventory reconciliation determination shall be reported using the term "Pass", "Fail" or "Inconclusive". For quantitative statistical inventory reconciliation methods the applicable term shall be used in accordance with subparts (i) through (iii) of this part:
 - (i) If the calculated leak rate does not exceed 0.10 gallons per hour, the results shall be reported as a "Pass";
 - (ii) If the calculated leak rate exceeds 0.10 gallons per hour, the results shall be reported as a "Fail";
 - (iii) If the leak rate cannot be calculated using the available data, the results shall be reported as an "Inconclusive";
 5. If there are too few operational days for statistical inventory reconciliation to successfully analyze during any month, then another method of release detection shall be utilized during that month; and
 6. The owner and/or operator shall report a suspected release in accordance with Rule 0400-18-01-.05:
 - (i) When the statistical inventory reconciliation determination is reported as a "Fail"; or
 - (ii) When two consecutive "Inconclusive" statistical inventory reconciliation determinations are reported.
- (f) Other methods of release detection.
1. Prior to use by the tank owner and/or operator, division approval shall be obtained in writing for any other type of release detection method, or combination of methods.
 - (i) The written approval shall be kept on file at the facility or at the place of business of the tank owner and/or operator while the method is being utilized for release detection and for at least twelve (12) months thereafter. If the owner and/or operator is unable to maintain the approval document due to closure of the facility, the approval document shall be submitted to the division with the closure records submitted in accordance with subparagraph (7)(c) of Rule 0400-18-01-.07.
 - (ii) The written approval shall be valid for two (2) years. The written approval must be renewed every two (2) years thereafter.

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2. The division may approve another method if that method has been third party certified to effectively and consistently detect releases. In reviewing methods for division approval, the division shall consider the size of release that the method can detect and the frequency and reliability with which it can be detected as set forth in the third party certification.
3. If the method has been approved in writing by the division, the owner and/or operator shall comply with any conditions imposed by the division on its use to ensure the protection of human health and the environment.

(4) Methods of release detection for piping.

Each method of release detection for piping used to meet the requirements of paragraph (2) of this rule shall be conducted in accordance with the following:

(a) Automatic line leak detectors.

Methods which alert the operator to the presence of a leak by restricting or shutting off the flow of petroleum through piping or triggering an audible or visual alarm may be used only if they detect leaks of three (3) gallons per hour at ten (10) pounds per square inch line pressure within one (1) hour. An annual test of the operation of the leak detector shall be conducted in accordance with guidance provided by the division.

(b) Line tightness testing.

A periodic test of piping may be conducted only if it can detect a 0.1 gallon per hour leak rate at one and one-half times the operating pressure.

(c) Interstitial monitoring.

Interstitial monitoring between the primary piping and the secondary barrier immediately around it may be used, but only if the system is designed, constructed and installed to detect a leak from any portion of the piping that routinely contains petroleum and also meets one of the following requirements:

1. For double-walled UST systems, the monitoring method shall:

- (i) Be able to detect a leak through the inner wall in any portion of the UST system that routinely contains petroleum;
- (ii) Provide continuous monitoring;
- (iii) Be installed, maintained and operated in accordance with guidance provided by the division; and
- (iv) If owners and/or operators of UST systems have containment sumps used for interstitial monitoring of piping, the containment sumps must meet the following requirements to ensure the equipment is operating properly and will prevent releases to the environment:
 - (I) Containment sumps used for interstitial monitoring of piping must prevent releases to the environment by meeting one of the following:
 - I. The equipment is double walled and the integrity of both walls is periodically monitored at a frequency not less than the frequency of the walkthrough inspections described in paragraph (8) of Rule 0400-18-01-.02. Owners and/or operators must begin meeting subitem II of this item and conduct a test within thirty (30) days of discontinuing periodic monitoring of this equipment; or

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II. The containment sumps used for interstitial monitoring of piping are tested at least once every three (3) years to ensure the equipment is liquid tight by using vacuum, pressure, or liquid testing in accordance with one of the following criteria:

- A. Requirements developed by the manufacturer (Note: Owners and/or operators may use this option only if the manufacturer has developed requirements);
- B. Code of practice developed by a nationally recognized association or independent testing laboratory;
- C. Guidance provided by the division; or
- D. Requirements determined by the division to be no less protective of human health and the environment than the options listed in sections A and B of this subitem.

(v) When electronic sensors are used to comply with this subparagraph in secondarily contained piping systems, sensors must be installed in every sump and must be placed at the lowest point in the sump and tested for proper operation at least once per year.

2. Reserved.

(d) Statistical inventory reconciliation.

Statistical analysis of inventory, delivery and dispensing data collected over a period of time shall meet the following requirements:

1. Inventory control shall be conducted in accordance with the following requirements:
 - (i) Inventory volume measurements for petroleum inputs, withdrawals, and the amount still remaining in the tank are recorded each operating day;
 - (ii) Petroleum levels are measured and recorded to an accuracy of at least the nearest one-eighth ($\frac{1}{8}$) of an inch over the full range of the tank's height;
 - (iii) The petroleum inputs are reconciled with delivery receipts by measurement of the tank inventory volume before and after delivery;
 - (iv) Deliveries are made through a drop tube that extends to within one (1) foot of the tank bottom;
 - (v) Petroleum dispensing is metered and recorded within the local standards for meter calibration or an accuracy of six (6) cubic inches for every five (5) gallons of petroleum withdrawn, and the meters are calibrated at least annually; and
 - (vi) The measurement of any water level in the bottom of the tank is made and recorded to the nearest one-eighth ($\frac{1}{8}$) of an inch at least once a month.
2. A report shall be generated monthly, after the end of the data collection for that time period. The report shall include, but is not limited to the following:
 - (i) The inventory records used, that is, the raw data (data consisting of daily product levels, deliveries and sales as determined by direct measurement or automatic tank gauges, and daily reconciliation of measured amounts in the tank compared with calculated amounts in the tank); and
 - (ii) The statistical inventory reconciliation determination;

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3. For quantitative statistical inventory reconciliation methods, the numerical leak rate shall be reported unless the statistical inventory reconciliation determination results in an "Inconclusive" under the provisions of subpart 4(iii) of this subparagraph;
 4. The statistical inventory reconciliation determination shall be reported using the term "Pass", "Fail" or "Inconclusive". For quantitative statistical inventory reconciliation methods the applicable term shall be used in accordance with subparts (i) through (iii) of this part:
 - (i) If the calculated leak rate does not exceed 0.10 gallons per hour, the results shall be reported as a "Pass";
 - (ii) If the calculated leak rate exceeds 0.10 gallons per hour, the results shall be reported as a "Fail";
 - (iii) If the leak rate cannot be calculated using the available data, the results shall be reported as an "Inconclusive";
 5. If there are too few operational days for statistical inventory reconciliation to successfully analyze during any month, then another method of release detection shall be utilized during that month; and
 6. The owner and/or operator shall report a suspected release in accordance with Rule 0400-18-01-.05:
 - (i) When the statistical inventory reconciliation determination is reported as a "Fail"; or
 - (ii) When two consecutive "Inconclusive" statistical inventory reconciliation determinations are reported.
- (5) Release detection record keeping.

All UST system owners and/or operators shall maintain records in accordance with paragraph (2) of Rule 0400-18-01-.03 demonstrating compliance with all applicable requirements of this rule. Release detection information shall be recorded in a format established by the division and in accordance with instructions provided by the division. These records shall include the following:

- (a) All written performance claims pertaining to any release detection system used, and the manner in which these claims have been justified or tested by the equipment manufacturer or installer, shall be maintained for five (5) years from the date of installation or until such time as the release detection method to which the performance claim pertains is no longer used at the facility, whichever is later; for a release detection method that has been approved by the division under the provisions of subparagraph (3)(f) of this rule, the division's written approval shall be maintained by the tank owner and/or operator while the method is being utilized for release detection and for at least twelve (12) months thereafter;
- (b) The results of any sampling, testing, or monitoring shall be maintained for at least one (1) year except as follows:
 1. The results of tank and/or line tightness testing conducted in accordance with subparagraphs (3)(b) or (4)(b) of this rule and subparagraph (2)(d) of Rule 0400-18-01-.17 shall be retained until the next test is conducted;
 2. The results of testing conducted in accordance with part (1)(a)3 of this rule shall be maintained for three (3) years. At a minimum, the results must list each component tested, indicate whether each component tested meets criteria in part (1)(a)3 of this rule or needs to have action taken, and describe any action taken to correct an issue; and
- (c) Written documentation of all calibration, maintenance, and repair of release detection equipment permanently located on-site shall be maintained for at least one (1) year after the servicing work

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is completed. Any schedules of required calibration and maintenance provided by the release detection equipment manufacturer shall be retained for five (5) years from the date of installation or until such time as the release detection method to which the schedule of required calibration and maintenance pertains is no longer used at the facility, whichever is later.

Authority: T.C.A. §§ 68-215-101 et seq. and 4-5-201 et seq.

0400-18-01-.05 Release Reporting, Investigation and Confirmation.

(1) Reporting Of Suspected Releases.

(a) Owners and/or operators of UST systems shall report to the division within seventy-two (72) hours and follow the procedures in paragraph (3) of Rule 0400-18-01-.05 for any of the following conditions:

1. The discovery by owners and/or operators or others of released petroleum 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).
2. Unusual operating conditions observed by owners and/or operators (such as the erratic behavior of petroleum dispensing equipment, the sudden loss of petroleum from the UST system, or an unexplained presence of water in the tank, or liquid in the interstitial space of secondary contained systems), unless:
 - (i) The system equipment or component is found not to be releasing petroleum into the environment;
 - (ii) Any defective system equipment or component is immediately repaired or replaced; and
 - (iii) For secondarily contained systems any liquid in the interstitial space not used as part of the interstitial monitoring method (for example, brine filled) is immediately removed.
3. Monitoring results, including investigation of an alarm, from a release detection method required under paragraph (2) of Rule 0400-18-01-.04 that indicate a release may have occurred unless:
 - (i) The monitoring device is found to be defective, and is immediately repaired, recalibrated or replaced, and additional monitoring within thirty (30) days does not confirm the initial result;
 - (ii) The leak is contained in the secondary containment and conditions of subparts 2(ii) and (iii) of this subparagraph are met;
 - (iii) The investigation determines no release has occurred; or
 - (iv) The alarm was investigated and determined to be a non-release event (for example, from a power surge caused by filling the tank during release detection testing).

(b) In order for the tank owner, tank operator or petroleum site owner to receive reimbursement from the fund, an Application for Fund Eligibility shall be filed within ninety (90) days of the discovery of evidence of a suspected release which is subsequently confirmed in accordance with this rule.

(c) To satisfy the requirements for fund coverage in subparagraph (10)(c) of Rule 0400-18-01-.09, an owner and/or operator shall submit release detection records as well as documentation to demonstrate compliance with corrosion protection and spill and overflow and secondary containment requirements within thirty (30) days of the discovery of a suspected release.

(2) Investigation due to environmental impacts.

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When required by the division, owners and/or operators of UST systems shall follow the procedures in paragraph (3) of this rule to determine if the UST system is the source of environmental impacts. These impacts include the discovery of petroleum escaping from the UST system, associated containment devices, or any component of a tank, line, dispenser, meter, or line leak detector, not designed for the purpose of dispensing petroleum as well as the discovery of petroleum in the environment (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 division or brought to its attention by another party.

(3) Release Investigation and Confirmation Steps.

Unless corrective action is initiated in accordance with Rule 0400-18-01-.06, owners and/or operators shall immediately investigate and confirm all suspected releases of petroleum requiring reporting under paragraph (1) of this rule within thirty (30) days in accordance with this paragraph.

(a) System test.

Owners and/or operators shall conduct tests (according to the requirements for tightness testing in subparagraphs (3)(b) and (4)(b) of Rule 0400-18-01-.04 or, as appropriate, secondary containment testing described in subparagraph (7)(d) of Rule 0400-18-01-.02).

1. The test must determine whether:
 - (i) A leak exists in that portion of the tank that routinely contains petroleum, 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/or operators shall repair, replace or close the UST system, and begin corrective action in accordance with Rule 0400-18-01-.06 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/or operators shall conduct a site check as described in subparagraph (b) of this paragraph 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/or operators shall 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/or operators must consider the nature of the stored petroleum, 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/or operators must begin corrective action in accordance with Rule 0400-18-01-.06;
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.

(c) Field activities and environmental data.

During the course of the release investigation and confirmation activities in subparagraphs (a) and (b) of this paragraph, a tank owner and/or operator shall comply with the following:

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1. Tank owners and/or operators shall notify the division at least one (1) working day in advance of systems test or site check activities.
2. Soil borings and/or monitoring wells shall be drilled, converted to monitoring wells and/or abandoned in accordance with guidance provided by the division.
3. Environmental samples.
 - (i) Samples shall be collected, labeled, handled, and transported in accordance with guidance and instructions provided by the division. Samples shall satisfy any requirements specific to the required laboratory method that is used to analyze the samples.
 - (ii) Samples shall be analyzed using a method recognized by the United States Environmental Protection Agency or another method that has been approved by the division prior to the analysis.
 - (iii) Sample analysis reports submitted to the division shall be original documents unless otherwise specified by the division. Such reports shall include, but not be limited to, the following information:
 - (I) The facility identification number assigned to the UST facility by the division;
 - (II) The sampling point, including depth and the unique combination of letters or numbers assigned to the boring or monitoring well at the time that boring or well was installed;
 - (III) The sample collection date;
 - (IV) The date the sample analysis was completed;
 - (V) The analytical method, including the detection limit for the method, utilized to analyze the sample;
 - (VI) The dilution factor used on the sample; and
 - (VII) The analytical results expressed as a concentration of the chemical(s) of concern.

(4) Reporting And Cleanup Of Spills And Overfills.

- (a) Owners and/or operators of UST systems shall contain and immediately clean up a spill or overfill and report to the division within seventy-two (72) hours and begin corrective action if a spill or overfill of petroleum results in a release to the environment that exceeds twenty-five (25) gallons or that causes a sheen on nearby surface water; or
- (b) Owners and operators of UST systems shall contain and immediately clean up a spill or overfill of petroleum that is less than twenty-five (25) gallons. If cleanup cannot be accomplished within seventy-two (72) hours owners and/or operators must immediately notify the division.

Authority: T.C.A. §§ 68-215-101 et seq. and 4-5-201 et seq.

0400-18-01-.06 Petroleum Release Response, Remediation and Risk Management.

(1) General requirements.

- (a) Owners, operators, and/or other responsible parties of petroleum UST systems shall, in response to a confirmed release from a UST system, comply with the requirements of this rule.

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(b) Field activities and environmental data.

During the course of responding to the release, conducting remediation, and/or managing risk, owners, operators, and/or other responsible parties of petroleum UST systems shall comply with the following:

1. Notice of Field Activities.

- (i) Owners, operators, and/or other responsible parties of petroleum UST systems shall notify the division at least one (1) working day in advance of any routine field activity. Routine field activities include, but are not limited to, placement of soil borings, construction of monitoring wells, sample collection events, field surveys, such as water use surveys or land use surveys, installation and/or start-up of treatment systems.
- (ii) Owners, operators, and/or other responsible parties of petroleum UST systems shall notify the division by no later than one (1) working day after any non-routine field activity, such as emergency response activities.

2. Soil borings and/or monitoring wells shall be drilled, converted to monitoring wells and/or abandoned in accordance with guidance provided by the division.

3. Environmental samples.

- (i) Samples shall be collected, labeled, handled, and transported in accordance with guidance and instructions provided by the division. Samples shall satisfy any requirements specific to the required laboratory method that is used to analyze the samples.
- (ii) Samples shall be analyzed using a method recognized by the United States Environmental Protection Agency or another method that has been approved by the division prior to the analysis.
- (iii) Sample analysis reports submitted to the division shall be original documents unless otherwise specified by the division. Such reports shall include, but not be limited to, the following information:
 - (I) The facility identification number assigned to the UST facility by the division;
 - (II) The sampling point, including depth and the unique combination of letters or numbers assigned to the boring or monitoring well at the time that boring or well was installed;
 - (III) The sample collection date;
 - (IV) The date the sample analysis was completed;
 - (V) The analytical method, including the detection limit for the method, utilized to analyze the sample;
 - (VI) The dilution factor used on the sample; and
 - (VII) The analytical results expressed as a concentration of the chemical(s) of concern.

(2) Applicability.

- (a) This rule shall apply to all newly reported and/or discovered releases from petroleum underground storage tanks.

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- (b) Unless directed otherwise by the division, this rule shall apply to all previously reported releases from petroleum underground storage tanks.
1. Data which has previously been gathered shall be utilized by the owner, operator, and/or other responsible party of the petroleum UST system to comply with this rule, provided that such data is valid and is representative of the site. The fund shall not reimburse the owner, operator, and/or other responsible party of petroleum UST system for the cost of generating duplicate data.
 2. Any requirements of this rule that have not previously been satisfied, shall be satisfied by the owner, operator, and/or other responsible party of the petroleum UST system unless directed otherwise by the division.

(3) Initial Response.

Upon confirmation of a release in accordance with paragraph (3) of Rule 0400-18-01-.05 or after a release from a UST system is identified in any other manner, the owner, operator, and/or other responsible party of the petroleum UST system shall, unless directed to do otherwise by the division, perform the following initial response actions:

- (a) Report the release to the division within seventy-two (72) hours (for example, by telephone, facsimile machine or electronic mail);
- (b) Take immediate actions to prevent any further release of the petroleum into the environment including, but not limited to:
 1. If the source of the release has not been determined and a systems test has not been performed under the authority of subparagraph (3)(a) of Rule 0400-18-01-.05, a systems test may be required by the division; if required, the test shall be conducted in accordance with subparagraphs (3)(b) and (4)(b) of Rule 0400-18-01-.04;
 2. Removing as much of the petroleum from the UST system as is necessary to prevent any further release;
 3. Taking the UST system out of service until piping or ancillary equipment associated with the release are replaced or repaired; and/or
 4. Preventing the placing of petroleum product into the leaking UST system;
- (c) Take immediate action to identify fire, explosion, and/or vapor hazards. Report and manage any hazards identified in accordance with paragraph (4) of this rule;
- (d) Visually inspect any aboveground releases or exposed belowground releases and prevent further migration of the petroleum into surrounding soils and/or groundwater;
- (e) Perform a water use survey in accordance with guidance provided by the division. All drinking water supplies, including both wells and springs, located within one-tenth (0.1) mile of the petroleum site shall be investigated and sampled for the presence of a release. The division may require additional investigation and sampling of drinking water supplies in the area, based on hydro-geological conditions or other physical characteristics in the area. Impacted drinking water shall be reported in accordance with subparagraph (4)(a) of this rule and addressed as required in part (4)(b)1 of this rule; and
- (f) In order for the owner, operator, and/or other responsible party of the petroleum UST system to receive reimbursement from the fund, an Application for Fund Eligibility shall be filed:
 1. Within ninety (90) days of the discovery of evidence of a suspected release which is subsequently confirmed in accordance with Rule 0400-18-01-.05; or
 2. Within sixty (60) days of a release which was identified in any manner other than the process for confirmation of a suspected release.

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(4) Hazard Management.

When human health hazards, such as impacted drinking water, petroleum vapors, and/or free product are discovered in the vicinity of the petroleum site, the following actions shall be taken to manage such hazards:

(a) Notification.

Report the discovery of impacted drinking water, petroleum vapors, free product, and/or other hazards to the division within seventy-two (72) hours using a Hazard Notification Report form established by the division. The form shall be completed in accordance with guidance provided by the division. The form may be submitted by facsimile machine or electronic mail.

(b) Abatement Measures.

1. Impacted Drinking Water. Upon discovery and/or confirmation of impacted drinking water, immediately provide an alternate drinking water supply to replace the impacted drinking water unless directed to do otherwise by the division.

(i) A temporary source of drinking water may be used in the short term to satisfy the requirement of this part, such as providing bottled water or installing a water filtration system. However, a proposal for providing a permanent source of alternate drinking water shall be supplied as required in subpart (ii) of this part unless otherwise directed by the division.

(ii) A proposal for providing a permanent source of potable drinking water, including a cost proposal, shall be submitted to the division. The proposal shall be in a format established by the division and shall recommend that one of the following methods be utilized:

(I) Install a connection to a public water supply system;

(II) Install a drinking water well into a deeper, non-impacted aquifer;

(III) Restore the impacted aquifer utilizing active remediation measures; or

(IV) Utilize another means of supplying a permanent source of potable drinking water.

(iii) Upon approval by the division of a proposal for providing a permanent source of potable drinking water, the owner, operator, and/or other responsible party of the petroleum UST system shall take such actions as are necessary to implement the approved proposal for providing a permanent source of potable drinking water.

2. Vapor hazards.

Upon discovery and/or confirmation of vapor hazards in a basement, sewer, utility or other confined space, immediate actions shall be taken to eliminate the vapor hazard in that area unless directed to do otherwise by the division.

(i) Vapor hazard control shall, at a minimum, prevent explosion and fire hazards as well as preventing the completion of a human health inhalation exposure pathway.

(ii) After confirmation of a vapor hazard or potential hazard, vapor levels shall be monitored in accordance with guidance provided by the division and in accordance with a schedule established by the division.

3. Free Product.

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(i) Upon confirmation of free product, interim free product removal measures shall be taken immediately to control the migration of the free product associated with recent releases or for free product present in excavations, unless directed to do otherwise by the division.

(ii) Free Product Investigation.

The division may require an investigation to be made in response to the discovery of free product at or in the vicinity of the petroleum site.

(I) Free Product Investigation Plan.

I. If required by the division, the Free Product Investigation Plan shall be submitted to the division in a format and with guidance provided by the division. The Free Product Investigation Plan shall be submitted in accordance with a schedule established by the division. The plan shall include, but not be limited to:

A. A proposal for monitoring well installation and placement; and

B. A cost proposal.

II. Upon division approval of the Free Product Investigation Plan, the owner, operator, and/or other responsible party of the petroleum UST system shall implement the approved plan in accordance with the provisions of the plan.

(II) Free Product Investigation Report.

A report shall be prepared and submitted to the division in a format and in accordance with a schedule established by the division. Unless directed otherwise by the division, the report shall include, but not be limited to the following:

I. Site characteristics;

II. The areal and vertical extent of free product;

III. An estimation of the volume of free product; and

IV. The feasibility of recovery of the free product.

(iii) Based on the results of the Free Product Investigation Report required under the authority of subpart (ii) of this part, the division may require an owner, operator, and/or other responsible party of the petroleum UST system to submit a Free Product Removal Plan (FPRP) in a format and in accordance with a schedule established by the division. The FPRP shall be completed in accordance with guidance provided by the division. Unless directed otherwise by the division, the FPRP shall include, but not be limited to, the following:

(I) Both the long term and the short term objectives of free product recovery at this site, for example, hydraulic containment, limited draw-down with limited smearing, or other objectives, as well as performance measures;

(II) The design of the free product recovery system or systems, if two or more types of systems are to be used during the course of free product recovery, and a strategy for future integration of the free product recovery system(s) with any soil and/or groundwater treatment determined to be necessary;

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- (III) An operation and maintenance schedule;
- (IV) Schedules for monitoring and reporting;
- (V) A list of actionable causes which would result in the re-evaluation of the continued need for and/or the redesign and/or termination of the free product recovery system;
- (VI) A schedule and conditions for post termination monitoring; and
- (VII) A cost proposal.

(iv) Upon approval of the Free Product Removal Plan, the owner, operator, and/or other responsible party of the petroleum UST system shall implement the approved plan in accordance with the provisions of the plan.

(v) All reporting requirements contained in the plan shall be followed and the reports shall be submitted to the division in accordance with the schedule contained in the approved plan.

4. Take appropriate actions, approved in advance by the division, to abate any other identified hazards.

(c) Reporting.

Owners, operators, and/or other responsible parties of petroleum UST systems shall submit a Hazard Management Report detailing the actions that have been taken to address the hazards discovered at or in the vicinity of the petroleum site. Hazard Management Reports shall be submitted in a format and in accordance with a schedule established by the division and shall be completed in accordance with guidance provided by the division. Such reports shall include, but not be limited to the following:

- 1. An Initial Response Hazard Management Report;
- 2. An Impacted Drinking Water Hazard Management Report;
- 3. A Vapor Hazard Management Report; or
- 4. A Free Product Hazard Management Report.

(5) Initial Site Characterization and Exposure Assessment.

Unless directed to do otherwise by the division, the owner, operator, and/or other responsible party of the petroleum UST system shall, in accordance with this paragraph, assess the characteristics of the site as well as the nature of the release and shall identify risk to human health, safety and the environment associated with the petroleum release.

(a) Site Assessment.

- 1. In accordance with guidance provided by the division, the owner, operator, and/or other responsible party of the petroleum UST system shall conduct an assessment of the petroleum site by installing four (4) soil borings completed as groundwater monitoring wells. The soil and the groundwater shall be sampled for laboratory evaluation to determine the presence and the levels of the chemicals of concern in each sample.
- 2. If the owner, operator, and/or other responsible party of the petroleum UST system concludes that more than four (4) soil borings and/or monitoring wells are necessary for site characterization and/or risk assessment, the owner, operator, and/or other responsible party of the petroleum UST system may submit a proposal. Such a proposal shall include a cost proposal and a justification statement for review and approval by the

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division. This may be done during the initial site characterization or at any time subsequent thereto.

3. The division may require the installation of more than four (4) soil borings and/or monitoring wells for site characterization and/or risk assessment. This may be done during the initial site characterization or at any time subsequent thereto.

(b) Initial Site Characterization Report.

A report shall be prepared and submitted to the division in a format and in accordance with a schedule established by the division. Data collection, risk analysis and report completion shall be done in accordance with guidance provided by the division. The Initial Site Characterization Report shall include but not be limited to the following:

1. A site history, including the types of petroleum products stored, used and/or dispensed on the site, set forth in a chronology of site events;
2. A release history, including any of the following that are known or can be obtained or determined:
 - (i) The source of the release;
 - (ii) The type(s) of petroleum product(s), including additives, released;
 - (iii) Records of release detection conducted at the site that, at a minimum, include the twelve (12) consecutive months immediately preceding the date of the release;
 - (iv) The date of the release;
 - (v) The volume of the release;
 - (vi) The cause of the release; and
 - (vii) Levels of chemicals of concern at or in the vicinity of the petroleum site;
3. Petroleum site conditions, including, but not limited to, the following:
 - (i) A site map;
 - (ii) Location of utilities;
 - (iii) Land conditions, including current land use, both inside and outside of the facility property boundaries;
 - (iv) Groundwater conditions and use, both inside and outside of the facility property boundaries, including the water use survey conducted in accordance with subparagraph (3)(e) of this rule; and
 - (v) Surface water conditions, including current surface water use, both inside and outside of the facility property boundaries;
4. Risk factors including, but not necessarily limited to, the following:
 - (i) Current and reasonably anticipated receptors shall be identified and located on a site map. Receptors shall include, but not necessarily be limited to:
 - (I) Human receptors: adult, child, residential, commercial/industrial worker;
 - (II) Ecological; and/or

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(III) Physical receptors, such as: drinking water wells and springs, buildings and basements, utilities, surface water; and

(ii) Current and reasonably anticipated exposure pathways between the source area(s) and the identified receptors shall be identified. The exposure pathways shall include ingestion and inhalation; and

5. A Risk Analysis Report (RAR) spreadsheet completed in accordance with guidance and instructions provided by the division and using computational software provided by the division. The RAR shall be used to determine cleanup levels, either Risk Based Cleanup Levels (RBCLs) or Site Specific Cleanup Levels (SSCLs), for the site based on risk to human health, safety and the environment.

(6) Contamination Case Closure or No Further Action.

If the maximum concentrations of the chemicals of concern at the site are at or below the RBCLs and/or the SSCLs for the site as determined in the Risk Analysis Report section of the Initial Site Characterization Report, then contamination case closure activities shall be completed in accordance with a schedule established by the division and in accordance with guidance provided by the division. Contamination case closure activities may include, but are not limited to, the following:

- (a) Closure monitoring;
- (b) Proper abandonment of monitoring wells; and/or
- (c) Report submittal.

(7) Consideration of Additional Corrective and/or Risk Management Measures.

If the maximum concentrations of the chemicals of concern at the site are above the RBCLs and/or the SSCLs for the site as determined in the Risk Analysis Report section of the Initial Site Characterization Report, then it may be necessary to consider additional remediation and/or risk management measures such as those outlined in paragraphs (8) through (10) of this rule.

- (a) If the owner, operator, and/or other responsible party of the petroleum UST system concludes that the use of specific additional measures will result in a more cost effective approach to case management and/or in faster contamination case closure, the owner, operator, and/or other responsible party of the petroleum UST system may submit a proposal. Such a proposal shall include a cost proposal and a justification statement.
- (b) If the division concludes that the use of specific additional measures will result in a more cost effective approach to case management and/or in faster contamination case closure, the tank owner shall, at the direction of the division, submit a proposal, including a cost proposal. However, an owner, operator, and/or other responsible party of the petroleum UST system who is not also the petroleum site owner shall not be required to establish institutional controls in accordance with subparagraph (8)(c) of this rule.
- (c) The cost of additional measures taken prior to division approval of a proposal will not be reimbursed by the fund.

(8) Interim Remediation and/or Risk Management.

In accordance with the provisions of paragraph (7) of this rule the division may require or allow the owner, operator, and/or other responsible party of the petroleum UST system to take interim remediation and/or risk management measures. After taking any interim remediation action or risk management measure, the owner, operator, and/or other responsible party of the petroleum UST system shall reevaluate the risk in accordance with guidance provided by the division. Interim remediation or risk management may include, but is not limited to:

- (a) Source removal.

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1. Source removal activities shall not spread contamination into previously uncontaminated or less contaminated areas through improper storage, improper treatment, untreated discharges, or improper disposal.

2. Soil removal.

The excavated soil shall be handled in a manner that prevents human exposure to contaminated soil and that prevents soil exposure to precipitation that may cause surface runoff. The excavation pit shall be secured in a manner that prevents accidental or intentional entry by the public;

(b) Risk reduction.

Actions that eliminate or reduce risk include, but are not limited to, the following activities:

1. Supplying a permanent source of potable water to replace impacted drinking water; and/or

2. Re-routing utility lines or replacing vulnerable portions of utility lines with materials that can withstand the impacts of petroleum;

(c) Establishing institutional controls in accordance with the following:

1. A Notice of Land Use Restrictions, which satisfies the requirements of T.C.A. § 68-212-225, shall be filed in the register of deeds office in the appropriate county.

2. The Notice of Land Use Restrictions may include, but is not limited to, restrictions on the current and future uses of the land, use of the property, current and future uses of groundwater, building, filling, grading and/or excavating; and/or

(d) Employing engineering controls.

(9) Advanced Risk-Based Modeling.

In accordance with the provisions of paragraph (7) of this rule, the division may require or allow advanced risk based modeling:

(a) The owner, operator, and/or other responsible party of the petroleum UST system shall submit predictive modeling information in a format and in accordance with a schedule established by the division and in accordance with guidance provided by the division.

(b) The modeling information shall be accompanied by or include a conclusion as to the course of action which should be taken to address the petroleum contamination at the site provided that such course of action takes into account both adequate risk management and cost effectiveness.

(10) Corrective Action Plan.

In accordance with the provisions of paragraph (7) of this rule, the division may require or allow the owner, operator, and/or other responsible party of the petroleum UST system to submit a Corrective Action Plan (CAP).

(a) The CAP shall be in a format established by the division and completed in accordance with guidance provided by the division. The corrective action plan shall be submitted in accordance with a schedule established by the division.

(b) The Corrective Action Plan shall include, but not be limited to, the following:

1. General requirements applicable to all Corrective Action Plans, unless the division specifically instructs the owner, operator, and/or other responsible party of the petroleum UST system that certain requirements do not apply to the petroleum site. The general requirements shall include, but not be limited to, the following:

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- (i) Corrective action system tasks, repairs, maintenance, record keeping, and/or evaluations;
 - (ii) Performance measurement of site remediation;
 - (iii) Monitoring events, monitoring tasks and/or monitoring results reporting; and
 - (iv) Causes for modification and/or termination; and
2. Site-specific requirements, which shall include, but not be limited to, the following:
- (i) The applicable site specific cleanup level for each chemical of concern in soil and/or groundwater;
 - (ii) The proposed corrective action(s) for soil and/or groundwater remediation;
 - (iii) A schedule for planned operation and maintenance as well as a contingency plan for unscheduled operation and maintenance activities;
 - (iv) A cost proposal; and
 - (v) Performance measures.
- (c) Upon approval of the Corrective Action Plan the owner, operator, and/or other responsible party of the petroleum UST system shall implement the approved plan in accordance with the provisions of the plan.
- (d) All reporting requirements contained in the plan shall be followed and the reports shall be submitted to the division in accordance with the schedule contained in the approved plan.
- (11) Public participation.
- (a) For each confirmed release for which a Corrective Action Plan has been required or allowed, the owner, operator, and/or other responsible party of the petroleum UST system 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.
 - (b) The division shall 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 division 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 owner, operator, and/or other responsible party of the petroleum UST system shall, at the direction of the division, give public notice that complies with subparagraph (a) of this paragraph 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 division.

Authority: T.C.A. §§ 68-215-101 et seq. and 4-5-201 et seq.

0400-18-01-.07 Out-Of-Service UST Systems And Closure.

- (1) Temporary closure.
- (a) When an UST system is temporarily closed, owners, operators, and/or other responsible parties shall continue operation and maintenance of corrosion protection in accordance with paragraph (4) of Rule 0400-18-01-.02, and any release detection in accordance with Rule 0400-18-01-.04

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and Rule 0400-18-01-.17. Rule 0400-18-01-.05 and Rule 0400-18-01-.06 shall be complied with if a release is suspected or confirmed. However, release detection and release detection operation and maintenance testing and inspections in Rule 0400-18-01-.02 and Rule 0400-18-01-.04 are 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 two and one-half (2.5) centimeters (one (1) inch) of residue remains in the system. In addition, spill and overflow operation and maintenance testing and inspections in Rule 0400-18-01-.02 are not required.

- (b) When an UST system is temporarily closed for three (3) months or more, owners, operators, and/or other responsible parties shall also comply with the following requirements:
 - 1. Leave vent lines open and functioning;
 - 2. Cap and secure all other lines, pumps, manways, and ancillary equipment; and
 - 3. File an amended notification form showing the tank system as temporarily out of use.
- (c) When a UST system is temporarily closed for twelve (12) months or more without release detection, as required by subparagraph (a) of this paragraph, owners, operators, and/or other responsible parties shall perform closure-in-place sampling in accordance with guidance provided by the division.
 - 1. For UST systems that have been temporarily closed for twelve (12) months or more without release detection prior to the effective date of this rule, sampling shall be conducted within three (3) months of the effective date of this rule.
 - 2. For all other UST systems, sampling shall be conducted within three (3) months after the UST system has been temporarily closed for twelve (12) months without release detection.
- (d) Prior to bringing a UST system back into use, a system test shall be conducted in accordance with subparagraph (3)(a) of Rule 0400-18-01-.05 for any UST system that has been temporarily closed without release detection records for twelve (12) months or more.

(2) Substandard UST systems.

Unless directed to do otherwise by the division, owners, operators, and/or other responsible parties of an UST system which does not meet the requirements in paragraphs (3) and (4) of Rule 0400-18-01-.02 shall permanently close the substandard UST system in accordance with paragraphs (4) and (5) of this rule, except that parts (4)(a)6 and 7 of this rule shall not apply to a substandard UST system. Owners, operators, and/or other responsible parties of a substandard UST system shall complete the permanent closure, including submittal of the Permanent Closure Report, within sixty (60) days of division approval of the Application for Permanent Closure of Underground Storage Tanks.

(3) Tank compartment closure.

For a tank that has more than one (1) tank compartment, one (1) or more of the tank compartments may be permanently closed in accordance with the provisions of this paragraph as well as paragraph (5) of this rule. If all the compartments in a tank are to be permanently closed, the requirements for permanent closure set forth in paragraphs (4) and (5) of this rule shall be followed by the tank owner, operator, and/or other responsible parties.

- (a) At least thirty (30) days before beginning tank compartment closure, owners, operators, and/or other responsible parties shall apply for tank compartment closure. Application for tank compartment closure shall meet the following requirements:
 - 1. An Application for Closure of Tank Compartment(s) shall be submitted in a format established by the division. The application shall be completed according to the instructions provided by the division.

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2. The Application for Closure of Tank Compartment(s) shall be accompanied by a written statement provided by either the tank manufacturer or a Registered Professional Engineer certifying the following:
 - (i) The planned closure of the tank compartment(s) will not cause structural damage to the tank; and
 - (ii) The corrosion protection system will continue to function as designed and will continue to effectively prevent corrosion of the tank following completion of the planned closure of the tank compartment(s).
 3. The tank owner, operator, and/or other responsible party shall obtain division approval of the Application for Closure of Tank Compartment(s) prior to closing the tank compartment(s).
 4. The application shall constitute a plan for tank compartment(s) closure.
 5. Tank compartment(s) closure activities shall be conducted in accordance with the plan contained in the approved Application for Closure of Tank Compartment(s). If alterations to the plan are required, an amended Application for Closure of Tank Compartment(s) shall be submitted to the division for approval.
 6. The approved Application for Closure of Tank Compartment(s) shall be available for inspection upon request at the petroleum site at the time of tank compartment closure.
 7. Division approval of the Application for Closure of Tank Compartment(s) shall be valid for twelve (12) months following such approval. However, such approval shall not be transferable to another person during that twelve (12) month approval time.
 8. If tank compartment(s) closure is not completed within twelve (12) months, the tank owner, operator, and/or other responsible parties shall submit a new Application for Closure of Tank Compartment(s) to the division for approval at least thirty (30) days before beginning tank compartment closure.
- (b) The required site assessment under paragraph (5) of this rule shall be performed after receipt of division approval of the Application for Tank Compartment(s) Closure, but before completion of the tank compartment closure. Results of all samples taken during the closure of the tank compartment must be reported to the department within sixty (60) days of collection. Samples may be taken while the compartments of the underground storage tank system that are not being permanently closed are in operation. However, samples may not be taken while the tank compartment that is being permanently closed is still in operation.
 - (c) To permanently close a tank compartment, owners, operators, and/or other responsible parties shall clean the compartment which is to be closed by removing all liquids and accumulated sludges. All tank compartments taken out of service permanently shall be filled with an inert solid material such as a cement compound, sand, gravel, etc. The inert solid material must have a specific gravity greater than one (1.0).
 - (d) Tank compartment closure activities shall not damage those portions of the underground storage tank system that are not being permanently closed.
 - (e) Tank compartment closure activities shall not cause or allow a release of petroleum from the underground storage tank system into the environment.
 - (f) Paragraphs (4) and (5) of this rule shall be followed when the final tank compartment is permanently closed.
- (4) Permanent closure and changes-in-service.
 - (a) At least thirty (30) days before beginning either permanent closure of any portion of an underground storage tank system or a change-in-service under subparagraphs (b) and (c) of this

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paragraph, owners, operators, and/or other responsible parties shall apply for permanent closure, unless such action is in response to corrective action. Application for permanent closure or change in service shall meet the following requirements:

1. An Application for Permanent Closure of Underground Storage Tank Systems shall be submitted in a format established by the division. The application shall be completed according to the instructions provided by the division.
 2. The tank owner, operator and/or other responsible party shall obtain division approval of the Application for Permanent Closure prior to permanently closing the UST system or any portion thereof or effecting a change in service of the UST system, unless tank compartment closure is conducted in accordance with paragraphs (3) and (5) of this rule.
 3. The application shall constitute a plan for closure or change in service of the UST system, or any portion thereof.
 4. Change in service or closure activities shall be conducted in accordance with the plan contained in the approved Application for Permanent Closure. If alterations to the plan are required, an amended Application for Permanent Closure shall be submitted to the division for approval.
 5. The approved Application for Permanent Closure of Underground Storage Tank Systems shall be available for inspection upon request at the petroleum site at the time of closure.
 6. Division approval of the Application for Permanent Closure shall be valid for twelve (12) months following such approval. However, such approval shall not be transferable to another person during that twelve (12) month approval time.
 7. If permanent closure or change-in-service is not completed within twelve (12) months, the tank owner, operator, and/or other responsible parties shall submit a new Application for Permanent Closure to the division for approval at least thirty (30) days before beginning underground storage tank system closure.
- (b) To permanently close a tank, owners, operators, and/or other responsible parties shall clean it by removing all liquids and accumulated sludges. All tanks taken out of service permanently shall also be either removed from the ground or filled with an inert solid material such as a cement compound, sand, gravel, etc. The inert solid material shall have a specific gravity greater than 1.0.
- (c) Use of a petroleum UST system to store a non-petroleum substance is considered a change-in-service. Before a change-in-service, owners, operators, and/or other responsible parties shall clean the tank by removing all liquids and accumulated sludges and conduct a site assessment in accordance with paragraph (5) of this rule.
- (d) Should an owner, operator, and/or other responsible parties elect to excavate and remove a tank from the site, such excavation and removal shall be done in accordance with Appendix 0400-18-01-.07-A.
- (e) Once a tank has been excavated, it may be stored on-site or transported off-site for storage or disposal. Excavated tanks which have not been cut into sections for disposal shall be considered in storage and shall at all times, while in storage, be maintained in a vapor-free state and stored in accordance with Appendix 0400-18-01-.07-A.
- (f) Tanks shall not be stored at a UST facility unless they are maintained in a vapor-free state, stored in accordance with Appendix 0400-18-01-.07-A, and one of the following conditions are met:
1. (i) Tanks have been cleaned by removal of all liquids and accumulated sludges; and
 - (ii) Tanks have been purged of vapors so that any explosive levels do not exceed twenty percent (20%) of the lower explosive limit for the petroleum substance; and

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- (iii) Tanks have an opening or openings installed which comprise a minimum of ten percent (10%) of the total tank surface area. Such openings will not be considered openings if they are in contact or contiguous with the ground or surface on which the tank may be resting; or
 - 2. Subparts 1(i) and (ii) of this subparagraph have been complied with and there are no remaining USTs either in use or in a temporarily closed condition at the facility; or
 - 3. Tanks which are removed from a UST facility and are intended for reuse at the same or another facility as USTs may be stored at a UST facility if the owner, operator, and/or other responsible parties meets the conditions described in subparts 1(i) and (ii) of this subparagraph, and either removes the tank off-site from a UST facility or puts it back into service within thirty (30) days of excavation.
- (g) Tanks shall be stored in a manner which does not pose safety hazards. Tanks shall be stored in a position with the tank's center of gravity closest to the ground. Tanks shall not be stacked. Tanks shall be secured so that they will not roll or slide across a level or sloping ground surface.

[NOTE: Transportation and disposal of tanks will be subject to all applicable Federal, State, and local laws and regulations concerning the safe transportation and proper disposal of such materials.]

- (5) Assessing the site at tank closure, tank compartment closure or change-in-service.

The required site assessment shall be performed after receipt of division approval of either an Application for Permanent Closure of Underground Storage Tank System(s) or an Application for Closure of Tank Compartment(s), but before completion of either the permanent closure, tank compartment closure or a change-in-service. The required site assessment shall be performed in accordance with guidance provided by the division.

- (a) Before permanent closure of a tank or a tank compartment or a change-in service is completed, owners, operators, and/or other responsible parties shall measure for the presence of a release where contamination is most likely to be present at the UST site. Sampling shall meet the following requirements:
 - 1. In selecting sample types, sample locations, and measurement methods, owners, operators, and/or other responsible parties shall 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.
 - 2. At least one day before samples are taken, the owner, operator, and/or other responsible parties shall notify the division concerning the schedule for sample collection.
- (b) Results of all samples taken during change in service or closure of the underground storage tank system or closure of a tank compartment shall be reported to the division within sixty (60) days of collection. Samples shall not be taken while the underground storage tank system is in operation, except when tank compartment closure is being conducted in accordance with paragraph (3) of this rule. Sample results shall be submitted as an attachment to either a Permanent Closure Report for Underground Storage Tank Systems or a Permanent Closure Report for Tank Compartments.
- (c) The Permanent Closure Report for Underground Storage Tank Systems and/or tank compartments shall be submitted in a format established by the division. The Permanent Closure Report for Underground Storage Tank Systems shall be completed in accordance with the instructions provided by the division.
- (d) The report, either the Permanent Closure Report for Underground Storage Tank Systems or the Permanent Closure Report for Tank Compartments, shall include, but not be limited to, the following information:

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1. The facility identification number assigned to the facility by the division;
 2. Facility name and address;
 3. An updated post-closure site map;
 4. Sampling, including field screening and laboratory analytical results;
 5. Information concerning the removal, storage and/or disposal of tanks, piping and other ancillary underground equipment; and
 6. Information concerning the removal, remediation and/or disposal of petroleum, petroleum waste, petroleum contaminated soil and/or groundwater.
- (e) If contaminated soils, contaminated groundwater, or free product as a liquid or vapor is discovered under subparagraph (a) of this paragraph, or by any other manner, owners, operators, and/or other responsible parties shall begin release response and corrective action in accordance with Rule 0400-18-01-.06.

(6) Applicability to previously closed UST systems.

When directed by the division, the owner, operator, and/or other responsible parties of an UST system permanently closed before December 22, 1988 shall assess the site and close the UST system in accordance with this rule if releases from the UST may, in the judgment of the division, pose a current or potential threat to human health and the environment.

(7) Closure records.

Owners, operators, and/or other responsible parties shall maintain records in accordance with paragraph (2) of Rule 0400-18-01-.03 that are capable of demonstrating compliance with closure requirements under this rule. The results of the site assessment required in paragraph (5) of this rule shall be maintained for at least three (3) years after completion of permanent closure or change-in-service in one of the following ways:

- (a) By the owners, operators, and/or other responsible parties who took the UST system out of service;
- (b) By the current owners, operators, and/or other responsible parties of the UST system site; or
- (c) By mailing these records to the division if they cannot be maintained at the closed facility.

APPENDIX 0400-18-01-.07-A

REMOVAL OF UNDERGROUND TANKS.

(1) Preparation.

- (a) Drain product piping into the tank, being careful to avoid any spillage. Cap or remove product piping.
- (b) Remove liquids and residues from the tank by using explosion-proof or air-driven pumps. Pump motors and suction hoses shall be bonded to the tank or otherwise grounded to prevent electrostatic ignition hazards. It may be necessary to use a hand pump to remove the last few inches of liquid from the bottom of the tank.

NOTE: (The Federal Resource Conservation and Recovery Act (RCRA) 42 U.S.C. Section 6901 et seq., and the Tennessee Hazardous Waste Management Act (HWMA) Part 1 T.C.A. § 68-212-101 et seq. place restrictions on disposal of certain residues that may be present in some underground storage tanks. Residues from tanks that have held leaded gasoline should be treated with extreme caution. Lead compounds and other residues in the tank may be classified as hazardous wastes).

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- (c) Excavate to the top of tank.
 - (d) Remove the fill pipe, gauge pipe, vapor recovery truck connection, submersible pumps, and other tank fixtures. Remove the drop tube, except when it is planned to vapor-free the tank by using an eductor. Cap or remove all non-product lines, such as vapor recovery lines, except the vent line. The vent line shall remain connected until the tank is purged. Temporarily plug all other tank openings so that all vapors will exit through the vent line during the vapor-freeing process.
- (2) Purging.
- (a) Remove flammable vapors by one of the methods described in subparagraphs (b) through (e) of this paragraph, or as required by local codes. These methods provide a means for temporary vapor-freeing of the tank atmosphere. However, it is important to recognize that the tank may continue to be a source of flammable vapors even after following the vapor-freeing procedures described in subparagraphs (b) through (e) of this paragraph. For this reason, caution shall always be exercised when handling or working around tanks that have stored flammable or combustible liquids. Before initiating work in the tank area or on the tank, a combustible gas indicator shall be used to assess vapor concentrations in the tank and work area. All work shall be done in accordance with Paragraph (3), "Testing".
 - (b) Vent all vapors from the tank at a minimum height of twelve (12) feet above grade and three (3) feet above any adjacent roof lines until the tank is purged of flammable vapors. The work area shall be free from sources of ignition.
 - (c) Flammable and combustible vapors may be purged with an inert gas such as carbon dioxide (CO₂) or nitrogen (N₂). This method is not to be utilized if the tank is to be entered for any reason, as the tank atmosphere will be oxygen deficient. The inert gas is to be introduced through a single tank opening at a point near the bottom of the tank at the end of the tank opposite the vent. When inert gases are used, they shall be introduced under low pressure to avoid the generation of static electricity. When using CO₂ or N₂, pressures in the tank shall not exceed five (5) pounds per square inch gauge.

Caution: The process of introducing compressed gases into the tank may create a potential ignition hazard as the result of the development of static electrical charges. The discharging device shall therefore be grounded. Explosions have resulted from the discharging of CO₂ fire extinguishers into tanks containing a flammable vapor-air mixture. CO₂ extinguishers shall not be used for inerting flammable atmospheres.
 - (d) If the method described in subparagraph (c) of this paragraph is not practical, the vapors in the tank may be displaced by adding solid carbon dioxide (dry ice) to the tank in the amount of at least one and one-half (1.5) pounds per one hundred (100) gallons of tank capacity. The dry ice should be crushed and distributed evenly over the greatest possible area in the tank to promote rapid evaporation. As the dry ice vaporizes, flammable vapors will flow out of the tank and may surround the area. Therefore, where practical, plug all tank openings except the vent after introducing the solid CO₂ and continue to observe all normal safety precautions regarding flammable or combustible vapors. Make sure that all of the dry ice has evaporated before proceeding.
 - (e) Flammable vapors may be exhausted from the tank by one of two methods of tank ventilation listed below:
 - 1. Ventilation using an eductor-type air mover usually driven by compressed air. The eductor-type air mover shall be properly bonded to prevent the generation and discharge of static electricity. When using this method, the fill (drop) tube shall remain in place to ensure ventilation at the bottom of the tank. Tanks equipped with fill (drop) tubes that are not removable should be purged by this method. An eductor extension shall be used to discharge vapors a minimum of twelve (12) feet above grade and at least three (3) feet above any adjacent roof line.

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2. Ventilation with a diffused air blower. When using this purging method, it is imperative that the air-diffusing pipe is properly bonded to prevent the discharge of a spark. Fill (drop) tubes shall be removed to allow proper diffusion of the air in the tank. Air supply should be from a compressor that has been checked to ensure a clean air supply and is free from volatile vapors. Air pressure in the tank shall not exceed five (5) pounds per square inch gauge.

(3) Testing.

- (a) The tank atmosphere and the excavation area are to be regularly tested for flammable or combustible vapor concentrations until the tank is removed from both the excavation and the site. Such tests are to be made with a combustible gas indicator which is properly calibrated according to the manufacturer's instructions and which is thoroughly checked and maintained in accordance with the manufacturer's instructions. Persons responsible for testing shall be completely familiar with the use of the instrument and the interpretation of the instrument's readings.
- (b) The tank vapor space is to be tested by placing the combustible gas indicator probe into the fill opening with the drop tube removed. Readings should be taken at the bottom, middle, and upper portions of the tank, and the instrument should be cleared after each reading. If the tank is equipped with a non-removable fill tube, readings are to be taken through another opening. Liquid product shall not enter the probe. Readings of twenty percent (20%) or less of the lower flammable limit shall be obtained before the tank is considered safe for removal from the ground.
- (c) Tanks purged with an inert gas shall be sampled with an oxygen indicator and the oxygen content shall be considered while interpreting combustible gas indicator results.

(4) Removal.

- (a) After the tank has been freed of vapors and before it is removed from the excavation, plug or cap all accessible holes. One plug shall have a one-eighth of an inch vent hole to prevent the tank from being subjected to excessive differential pressure caused by temperature changes. The tank shall always be positioned with this vent plug on top of the tank during subsequent transport and storage.
- (b) Excavate around the tank to uncover it for removal. Remove the tank from the excavation and place it on a level surface. Use wood blocks to prevent movement of the tank after removal and prior to loading on a truck for transportation. Use screwed (boiler) plugs to plug any corrosion holes in the tank shell.
- (c) Precautions shall be taken to assure any vapors left in the tank do not reach a combustible level. If this situation occurs, the tank shall be purged according to paragraph (2) of this appendix.
- (d) Before the tank is removed from the site, the tank atmosphere shall be checked with a combustible gas indicator to ensure that it does not exceed twenty percent (20%) of the lower flammable limit.
- (e) The tank shall be secured on a truck for transportation to the storage or disposal site with the one-eighth of an inch vent hole located at the uppermost point on the tank. Tanks shall be transported in accordance with all applicable local, state, and federal laws and regulations.
- (f) Tanks shall be labeled after removal from the ground but prior to removal from the site. Regardless of the condition of the tank, the label shall contain a warning against certain types of reuse. The former contents and present vapor state of each tank, including vapor-freeing treatment and data shall also be indicated. The label shall be similar to the following in legible letters at least two (2) inches high:

Tank Has Contained Leaded Gasoline*

Not Vapor Free

Not Suitable For Storage Of Food Or Liquids

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Intended For Human Or Animal Consumption

Date Of Removal: Month/Day/Year

*Or other flammable/combustible liquid. Use the applicable designation, for example, diesel.

Tanks that have held leaded motor fuels (or whose service history is unknown) shall also be clearly labeled with the following information:

Tank Has Contained Leaded Gasoline

Lead Vapors May Be Released If Heat

Is Applied To The Tank Shell

(5) Storage Of Used Tanks.

Storage Procedures.

- (a) Tanks shall be vapor-freed before being placed in storage. Tanks shall also be free of all liquids and residues. All tank openings shall be tightly plugged or capped, with one plug having a one-eighth of an inch vent hole to prevent the tank from being subjected to excessive differential pressure caused by temperature changes. Tanks shall be stored with the vented plug at the highest point on the tank. All tanks shall be labeled.
- (b) Used tanks shall be stored in secure areas where the general public will not have access.

Authority: T.C.A. §§ 68-215-101 et seq. and 4-5-201 et seq.

0400-18-01-.08 Financial Responsibility.

(1) Purpose.

A tank owner or operator is required to pay for corrective action and/or for compensating third parties for bodily injury or property damages caused by accidental releases arising from the operation of petroleum underground storage tank systems. Furthermore, a tank owner or operator is required to demonstrate financial responsibility or the ability to pay for corrective action and/or for compensating third parties for bodily injury or property damages caused by accidental releases arising from the operation of petroleum underground storage tank systems. The purpose of this rule is to authorize the use of certain financial assurance mechanisms to satisfy the requirement to demonstrate financial responsibility.

(2) Applicability.

- (a) This rule applies to owners and/or operators of all petroleum underground storage tank (UST) systems except as otherwise provided in this paragraph.
- (b) State and federal government entities whose debts and liabilities are the debts and liabilities of a state or the United States are deemed to meet financial responsibility requirements without having to meet the requirements of this rule.
- (c) The requirements of this rule do not apply to owners and/or operators of any UST system described in subparts (2)(b)1(i), (iv) and (v) and subparagraph (2)(c) of Rule 0400-18-01-.01.
- (d) UST systems listed in Rule 0400-18-01-.17 must comply with the requirements of this rule on or before three (3) years after the effective date of this rule.
- (e) If the owner and the operator of a petroleum underground storage tank system are separate persons, only one person is required to demonstrate financial responsibility; however, both parties are liable in the event of noncompliance.

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(3) Amount And Scope Of Required Financial Responsibility.

(a) Per occurrence amounts.

Owners or operators of petroleum underground storage tank systems shall demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks in at least the following per occurrence amounts:

1. For owners or operators of petroleum underground storage tank systems that are located at petroleum marketing facilities, or that handle an average of more than ten thousand (10,000) gallons of petroleum per month based on annual throughput for the previous calendar year: one million dollars (\$1,000,000).
2. For all other owners or operators of petroleum underground storage tank systems: five hundred thousand dollars (\$500,000).

(b) Annual aggregate amounts.

Owners or operators of petroleum underground storage tank systems shall demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tank systems in at least the following annual aggregate amounts:

1. For owners or operators of one (1) to one hundred (100) petroleum underground storage tank compartments: one million dollars (\$1,000,000).
2. For owner or operators of one hundred one (101) or more petroleum underground storage tank compartments: two million dollars (\$2,000,000).

(c) The amounts of financial assurance required under this paragraph exclude legal defense costs.

(d) The required per occurrence and annual aggregate coverage amounts do not in any way limit the liability of the owner or operator.

(4) Allowable Financial Assurance Mechanisms and Combinations of Mechanisms.

(a) A tank owner or operator may use one of following financial assurance mechanisms to satisfy the requirements of paragraph (3) of this rule:

1. Tennessee Petroleum Underground Storage Tank Fund in accordance with paragraph (5) of this rule and Rule 0400-18-01-.09;
2. Financial Test of Self-Assurance in accordance with paragraph (6) of this rule;
3. Corporate Parent Financial Test Guarantee in accordance with paragraph (7) of this rule;
4. Liability Insurance in accordance with paragraph (8) of this rule;
5. Surety Bond or Performance Bond in accordance with paragraph (9) of this rule;
6. Irrevocable Standby Letter of Credit in accordance with paragraph (10) of this rule;
7. Personal Bond Supported by Certificate of Deposit in accordance with paragraph (11) of this rule;
8. Trust Fund and Agreement in accordance with paragraph (12) of this rule;
9. Local Government Bond Rating Test in accordance with paragraph (13) of this rule; or

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10. Local Government Financial Test in accordance with paragraph (14) of this rule.

(b) Standby Trust Fund.

1. If a tank owner or operator uses one of the financial assurance mechanisms listed in this part to meet the requirements of paragraph (3) of this rule, a Standby Trust Fund and Agreement shall be established in accordance with paragraph (15) of this rule at the time the mechanism is established.

- (i) Liability Insurance in accordance with paragraph (8) of this rule;
- (ii) Surety Bond or Performance Bond in accordance with paragraph (9) of this rule; or
- (iii) Irrevocable Standby Letter of Credit in accordance with paragraph (10) of this rule.

2. If a tank owner or operator uses one of the financial assurance mechanisms listed in this part to meet the requirements of paragraph (3) of this rule, a Standby Trust Fund and Agreement shall be established in accordance with paragraph (15) of this rule if the requirements of the financial test can no longer be met and the owner or operator fails to provide an alternative financial assurance mechanism that meets the requirements of this rule.

- (i) Financial Test of Self-Assurance in accordance with paragraph (6) of this rule;
- (ii) Corporate Parent Financial Test Guarantee in accordance with paragraph (7) of this rule;
- (iii) Local Government Bond Rating Test in accordance with paragraph (13) of this rule; or
- (iv) Local Government Financial Test in accordance with paragraph (14) of this rule.

(c) Use of combinations of financial assurance mechanisms.

1. The following financial assurance mechanisms may be used in combination by a tank owner or operator to satisfy the requirements of subparagraphs (3)(a) and (b) of this rule:

- (i) Tennessee Petroleum Underground Storage Tank Fund in accordance with paragraph (5) of this rule and Rule 0400-18-01-.09;
- (ii) Liability insurance in accordance with paragraph (8) of this rule;
- (iii) Surety Bond or Performance Bond in accordance with paragraph (9) of this rule;
- (iv) Irrevocable Standby Letter of Credit in accordance with paragraph (10) of this rule;
- (v) Personal Bond Supported by Certificate of Deposit in accordance with paragraph (11) of this rule; and
- (vi) Trust Fund and Agreement in accordance with paragraph (12) of this rule.

2. The following financial assurance mechanisms shall not be used in combination by a tank owner or operator to satisfy the requirements of subparagraphs (3)(a) and (b) of this rule:

- (i) Financial Test of Self-Assurance in accordance with paragraph (6) of this rule;
- (ii) Corporate Parent Financial Test Guarantee in accordance with paragraph (7) of this rule;

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- (iii) Local Government Bond Rating Test in accordance with paragraph (13) of this rule; or
 - (iv) Local Government Financial Test in accordance with paragraph (14) of this rule.
- (d) The amount of assurance provided by each mechanism or combination of mechanisms shall be in the full amount specified in subparagraphs (a) and (b) of paragraph (3) of this rule if the owner or operator uses separate mechanisms or separate combinations of mechanisms in accordance with subparagraph (c) of this paragraph to demonstrate financial responsibility for:
- 1. Taking corrective action in accordance with Rule 0400-18-01-.06; or
 - 2. Compensating third parties for bodily injury and property damage caused by accidental releases.
- (e) The tank owner or operator using a financial assurance mechanism other than the Tennessee Petroleum Underground Storage Tank Fund shall not be considered to have satisfied the financial assurance requirements of this rule until the financial assurance mechanism has been received and approved by the Commissioner.
- (f) These financial assurance mechanisms are established for use by the division for taking corrective action or for paying third party claims in the event the owner or operator fails to take corrective actions or pay third party claims. The financial assurance mechanisms in this rule shall not be used by the owner or operator to satisfy the requirements of corrective action or third party liability claims with the exception of the Tennessee Petroleum Underground Storage Tank Fund authorized by paragraph (5) of this rule.
- (5) Tennessee Petroleum Underground Storage Tank Fund.

Tank owners or operators may satisfy the requirements of paragraphs (3) of this rule by establishing fund eligibility in accordance with paragraph (3) of Rule 0400-18-01-.09 and with the provisions of this paragraph.

- (a) Corrective action costs.

Tank owners or operators who are eligible for reimbursement from the fund shall demonstrate that they have incurred the amount of the applicable fund entry level or deductible amount for taking corrective action at the time an Application for Fund Eligibility is submitted to the division in accordance with subparagraph (3)(c) of Rule 0400-18-01-.09.

- 1. If a fund eligible tank owner or operator claims financial inability to pay the corrective action entry level or deductible set forth in paragraph (6) of Rule 0400-18-01-.09 at the time an Application for Fund Eligibility is submitted to the division, the fund may be utilized to pay the deductible for taking corrective action.
 - (i) The tank owner or operator shall supply documentation of inability to pay the fund entry level or deductible for taking corrective action to the Commissioner upon request.
 - (ii) Pursuant to T.C.A. § 68-215-115, the Commissioner may seek cost recovery against the tank owner or tank operator for the amount of the entry level or deductible paid by the fund for taking corrective action.
- 2. If a fund eligible tank owner or operator fails, without sufficient cause, to perform the release response, remediation and/or risk management actions required in Rule 0400-18-01-.06 on order of the Commissioner and fails, without sufficient cause to pay the amount of the applicable fund entry level or deductible amount for taking corrective action at the time an Application for Fund Eligibility is submitted to the division, the fund may be utilized to pay the deductible. Pursuant to T.C.A. § 68-215-115, the Commissioner may seek cost recovery against the tank owner or tank operator for the amount of the entry

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level or deductible paid by the fund for taking corrective action. In addition, pursuant to T.C.A. § 68-215-116, the Commissioner may seek a penalty in the amount of one hundred fifty percent (150%) of the costs expended by the fund as the result of the failure to take proper action.

3. If a fund eligible tank owner or operator has been denied fund coverage of corrective action costs under the provisions of subparagraph (10)(c) of Rule 0400-18-01-.09 and the owner or operator claims financial inability to pay for part or all of the necessary corrective action, the fund may be utilized to pay for taking corrective action.
 - (i) The tank owner or operator shall supply documentation of inability to pay for corrective action to the division upon request.
 - (ii) Pursuant to T.C.A. § 68-215-115, the Commissioner may seek cost recovery against the tank owner or tank operator for the amount paid by the fund for taking corrective action.

(b) Third party claims.

Owners or operators who are eligible for reimbursement from the fund shall demonstrate that they have incurred the amount of the applicable fund entry level or deductible amount for third party claims set forth in paragraph (6) of Rule 0400-18-01-.09 at the time the division receives an application for payment accompanied by the original or a certified copy of a final judgment in accordance with subparagraph (12)(h) of Rule 0400-18-01-.09.

1. If a fund eligible tank owner or operator cannot pay the amount of the applicable fund entry level or deductible amount for third party claims at the time an application for payment accompanied by the original or a certified copy of a final judgment is submitted to the division in accordance with subparagraph (12)(h) of Rule 0400-18-01-.09, the fund may be utilized to pay the deductible for satisfying the third party claim.
 - (i) The tank owner or operator shall supply documentation of their inability to pay the fund entry level or deductible for third party claims to the division upon request.
 - (ii) Pursuant to T.C.A. § 68-215-115, the Commissioner may seek cost recovery against the tank owner or tank operator for the amount of the entry level or deductible paid by the fund for satisfying the third party claim.
2. If a fund eligible tank owner or operator fails, without sufficient cause, to pay the amount of the applicable fund entry level or deductible amount for a third party claim, the fund may be utilized to pay the deductible. Pursuant to T.C.A. § 68-215-115, the Commissioner may seek cost recovery against the tank owner or tank operator for the amount of the entry level or deductible paid by the fund for third party damages.

(6) Financial Test Of Self-Assurance.

A tank owner or operator may satisfy the requirements of paragraph (3) of this rule by passing a Financial Test of Self-Assurance in accordance with the provisions of this paragraph.

- (a) A Financial Test of Self-Assurance shall not be used in combination with other financial assurance mechanisms, and shall not be used in cases where an owner or operator has a parent company or any other entity holding majority control of its voting stock.
- (b) The financial statements of the owner or operator shall be prepared in accordance with generally accepted accounting principles applicable to the United States, and an independent certified public accountant (CPA) shall verify the accuracy of the financial test data relative to the financial statements.
- (c) In order to demonstrate that the owner or operator meets the requirements of the Financial Test of Self-Assurance as set forth in this paragraph, the Chief Executive Officer or the Chief Financial

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Officer of the business firm of the owner or operator shall complete and submit a notarized letter, including a Financial Test of Self-Assurance as required in subparagraph (d) of this paragraph, both initially and within ninety (90) days following the date of the close of each successive financial reporting year. Wording in the Letter of the Chief Executive Officer or the Chief Financial Officer of the business firm of the owner or operator shall be in accordance with guidance provided by the division. The letter shall be in a format established by the division.

- (d) Both initially and annually, within ninety (90) days after the close of each succeeding fiscal year, the owner or operator shall demonstrate that the owner or operator has adequate financial strength to provide the guarantee required by subparagraphs (h) and (i) of this paragraph by passing the applicable financial test, that is, either Financial Test of Self-Assurance – Alternative I, completed in accordance with subparagraph (f) of this paragraph, or Financial Test of Self-Assurance – Alternative II, completed in accordance with subparagraph (g) of this paragraph.
- (e) The financial test alternatives, a comparison of business performance ratios, financial strength ratios, credit ratings, net worth, assets, operating revenues, and bond ratings relative to fixed criteria, shall be in a format established by the division and completed in accordance with guidance provided by the division.
- (f) To use the Financial Test of Self-Assurance - Alternative I as a financial assurance mechanism, the tank owner or operator shall meet the following conditions:
 - 1. The tank owner or operator shall have a tangible net worth of at least ten million dollars (\$10,000,000) plus the dollar amount of all financial assurance covered by a financial test.
 - 2. The tank owner or operator shall have a tangible net worth at least six (6) times the required annual aggregate amount for corrective action and compensation of third parties for bodily injury and property damage assured by this financial test and at least six (6) times the sum of all other amounts covered by a financial test of the owner or operator for all other environmental programs or agencies in the State of Tennessee, other states, and federal agencies.
 - 3. The tank owner or operator shall have assets located in the United States which shall amount to at least ninety percent (90%) of the total assets of the owner or operator or at least six (6) times the current amounts of financial assurance covered by the owner or operator through the use of the Financial Test of Self-Assurance - Alternative I.
 - 4. The tank owner or operator shall satisfy at least two (2) of the three (3) ratio standards in subparts (i) through (iii) of this part:
 - (i) The ratio of total liabilities to net worth shall equate to less than 1.5;
 - (ii) The ratio of the sum of net income plus depreciation, depletion, and amortization minus ten million dollars (\$10,000,000) to the total liabilities shall equate to greater than 0.10; and/or
 - (iii) The ratio of current assets to current liabilities shall equate to greater than 1.5.
 - 5. The tank owner or operator shall report the firm's financial position to Dun and Bradstreet annually and have a financial strength rating of 4A or 5A and a composite credit appraisal of 1 by Dun and Bradstreet.
 - 6. The tank owner or operator shall comply with one of the following:
 - (i) The owner or operator shall file financial statements with the U.S. Securities and Exchange Commission annually; or
 - (ii) The owner or operator shall file complete financial statements with the Energy Information Administration annually.

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7. The fiscal year-end financial statements of the owner or operator:
 - (i) Shall be examined by an independent certified public accountant (CPA);
 - (ii) Shall be accompanied by the CPA's report of the examination; and
 - (iii) Shall not include an adverse auditor's opinion, a disclaimer of opinion, or a "going concern" qualification.
 8. Annually the owner or operator shall submit a special report prepared by a CPA. The report shall include statements by the CPA that:
 - (i) The CPA has reviewed the data, specified as having been derived from the latest year-end financial statements of the owner or operator, in the Letter from the Chief Executive Officer or the Chief Financial Officer required by subparagraph (c) of this paragraph;
 - (ii) The CPA has compared the data in the Letter from the Chief Executive Officer or the Chief Financial Officer with the amounts in the latest year-end financial statements; and
 - (iii) The CPA's comparison of data in the Letter from the Chief Executive Officer or the Chief Financial Officer with the amounts in the latest year-end financial statements revealed nothing to cause the CPA to believe that the data in the Letter from the Chief Executive Officer or the Chief Financial Officer should be adjusted.
- (g) To use the Financial Test of Self Assurance - Alternative II as a financial assurance mechanism, the tank owner or operator shall meet each of the following conditions:
1. The tank owner or operator shall have a tangible net worth of at least ten million dollars (\$10,000,000) plus the dollar amount of all financial assurance covered by a financial test.
 2. The tank owner or operator shall have a tangible net worth of at least six (6) times the required annual aggregate amount for corrective action and compensation of third parties for bodily injury and property damage assured by this financial test and at least six (6) times the sum of all other amounts covered by a financial test of the owner or operator for other environmental programs or agencies of the State of Tennessee, other states, and/or federal agencies.
 3. Assets of the tank owner or operator located in the United States shall amount to at least ninety percent (90%) of the total assets of the owner or operator or at least six (6) times the current amounts of financial assurance covered by the owner or operator through the use of this Financial Test of Self-Assurance – Alternative II.
 4. The tank owner or operator shall have a current rating by a bond rating agency for its most recent bond issuance that meets or exceeds the level determined by the Commissioner to indicate a sound financial position. The Commissioner shall make this determination in writing.
 5. For purposes of the Financial Test of Self Assurance – Alternative II, bond ratings shall apply to outstanding, rated bonds that are not secured by insurance, a letter of credit, or other collateral or guarantee, and that have been issued directly by the owner or operator. Ratings on revenue bonds shall not be used in the financial test. In order to pass the Financial Test of Self-Assurance - Alternative II, the owner or operator shall have at least one class of equity securities registered under the Securities Exchange Act of 1934.
 6. The owner or operator shall file financial statements annually with the U.S. Securities and Exchange Commission.

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7. The fiscal year-end financial statements of the owner or operator shall be examined by an independent certified public accountant (CPA) and shall be accompanied by the CPA's report of the examination. The firm's year-end financial statements cannot include an adverse auditor's opinion, a disclaimer of opinion, or a "going concern" qualification.
 8. The owner or operator shall obtain and submit to the Commissioner a special report by a CPA stating that:
 - (i) The CPA has compared the data that the Letter from the Chief Executive Officer or the Chief Financial Officer specifies as having been derived from the latest year-end financial statements of the owner or operator with the amounts in such financial statements; and
 - (ii) In connection with the comparison in subpart (i) of this part, no matters came to the attention of the CPA which caused the CPA to believe that the specified data should be adjusted.
 - (h) In accordance with subparagraph (i) of this paragraph an owner or operator shall guarantee that the owner or operator can pay for and carry out corrective actions and/or compensate third parties for bodily injury and/or property damage caused by accidental releases arising from the operation of petroleum underground storage tank systems.
 - (i) Annually, the owner or operator shall complete and submit a notarized written guarantee stating that the said owner or operator shall comply with all of the terms set forth in this paragraph as requirements governing the use of the Financial Test of Self-Assurance. Such Financial Test of Self-Assurance Guarantee Agreement shall:
 1. Be in a format established by the Commissioner and completed in accordance with guidance provided by the Commissioner;
 2. Commit the owner or operator to carrying out the required corrective actions and/or compensation to third parties in response to a judgment enforceable in Tennessee;
 3. Commit the owner or operator to setting up and funding a standby trust in the amount required in an order issued by the Commissioner, up to the amount set forth in paragraph (3) of this rule;
 4. Commit the owner or operator to notifying the Commissioner within ten (10) days following a filing to seek bankruptcy protection from creditors under Title 11 U.S. Code; and
 5. Commit the owner or operator to notifying the Commissioner within seventy-two (72) hours following of any reasonable determination that the owner or operator can no longer satisfy the requirement of the Financial Test of Self-Assurance, whether Alternative I or Alternative II; and
 6. Commit the owner or operator to complying with one of the following within thirty (30) days of determination that the owner or operator no longer meets the requirement of the Financial Test of Self-Assurance, whether Alternative I or Alternative II:
 - (i) Submittal to the Department of an alternative financial assurance mechanism; or
 - (ii) Establishment of and funding of an irrevocable standby trust in accordance with paragraph (15) of this rule to assure the performance of corrective action and/or compensation of third parties for bodily injury and property damage due to accidental releases arising from the operation of petroleum underground storage tank.
- (7) Corporate Parent Financial Test Guarantee.

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An owner or operator may satisfy the requirements of paragraph (3) of this rule if a direct or higher tier corporate parent of that owner or operator, through a Corporate Parent Financial Test Guarantee, which complies with the requirements of this paragraph, assumes the responsibility of the owner or operator to fund and carry out corrective action and compensate third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tank systems.

- (a) A Corporate Parent Financial Test Guarantee shall not be used in combination with other financial assurance mechanisms, and shall not be used in cases where a corporate parent itself has a higher parent corporation holding majority control of its voting stock.
- (b) The financial statements of the corporate parent of the owner or operator shall be prepared in accordance with generally accepted accounting principles applicable to the United States, and an independent certified public accountant shall verify the accuracy of the financial test data relative to the financial statements.
- (c) In order to demonstrate that the corporate parent of the owner or operator meets the requirements of the Corporate Parent Financial Test Guarantee as set forth in this paragraph, the Chief Executive Officer or the Chief Financial Officer of the parent company of the owner or operator shall complete and submit a notarized letter, including a Corporate Parent Financial Test as required in subparagraph (d) of this paragraph, to the Department both initially and within ninety (90) days following the date of the close of each successive financial reporting year. Wording in the Letter of the Chief Executive Officer or the Chief Financial Officer shall be in accordance with guidance provided by the division and in a format established by the division.
- (d) Both initially and annually, within ninety (90) days after the close of each succeeding fiscal year, the corporate parent of the owner or operator shall demonstrate that the corporate parent guarantor has adequate financial strength to provide the guarantee required by subparagraph (i) of this paragraph by passing the applicable financial test, either the Corporate Parent Financial Test – Alternative I, completed in accordance with subparagraph (f) of this paragraph, or Corporate Parent Financial Test – Alternative II, completed in accordance with subparagraph (g) of this paragraph.
- (e) The financial test alternatives, a comparison of accounting ratios, net worth, assets, operating revenues, and bond ratings relative to fixed criteria, shall be in a format established by the division and completed in accordance with guidance provided by the division.
- (f) To use the Corporate Parent Financial Test - Alternative I as a financial assurance mechanism, the corporate parent guarantor shall meet the following conditions:
 - 1. The corporate parent guarantor shall have a tangible net worth of at least ten million dollars (\$10,000,000) plus the dollar amount of all financial assurance covered by a financial test.
 - 2. The corporate parent guarantor shall have a tangible net worth at least six (6) times the required annual aggregate amount for corrective action and compensation of third parties for bodily injury and property damage assured by this financial test and at least six (6) times the sum of all other amounts covered by a financial test of the corporate parent guarantor for all other environmental programs or agencies in the State of Tennessee, other states, and/or federal agencies.
 - 3. The corporate parent guarantor shall have assets located in the United States which shall amount to at least ninety percent (90%) of the total assets of the corporate parent or at least six (6) times the current amounts of financial assurance covered by the corporate parent guarantor through the use of the Corporate Parent Financial Test - Alternative I.
 - 4. The corporate parent guarantor shall satisfy at least two (2) of the three (3) ratio standards in subparts (i) through (iii) of this part:
 - (i) The ratio of total liabilities to net worth shall equate to less than 1.5;

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- (ii) The ratio of the sum of net income plus depreciation, depletion, and amortization minus ten million dollars (\$10,000,000) to the total liabilities shall equate to greater than 0.10; and/or
 - (iii) The ratio of current assets to current liabilities shall equate to greater than 1.5.
- 5. The corporate parent guarantor shall report the firm's financial position to Dun and Bradstreet annually and have a financial strength rating of 4A or 5A and a composite credit appraisal of 1 by Dun and Bradstreet.
- 6. The corporate parent guarantor shall comply with one of the following:
 - (i) The corporate parent guarantor shall file financial statements with the U.S. Securities and Exchange Commission annually; or
 - (ii) The corporate parent guarantor shall file complete financial statements with the Energy Information Administration annually.
- 7. The fiscal year-end financial statements of the corporate parent guarantor:
 - (i) Shall be examined by an independent certified public accountant (CPA);
 - (ii) Shall be accompanied by the CPA's report of the examination; and
 - (iii) Shall not include an adverse auditor's opinion, a disclaimer of opinion, or a "going concern" qualification.
- 8. Annually, the corporate parent guarantor shall submit a special report prepared by a CPA. The report shall include statements by the CPA that:
 - (i) The CPA has reviewed the data, specified as having been derived from the latest year-end financial statements of the corporate parent guarantor, in the Letter from the Chief Executive Officer or the Chief Financial Officer;
 - (ii) The CPA has compared the data in the Letter from the Chief Executive Officer or the Chief Financial Officer with the amounts in the latest year-end financial statements; and
 - (iii) The CPA's comparison of data in the Letter from the Chief Executive Officer or the Chief Financial Officer with the amounts in the latest year-end financial statements revealed nothing to cause the CPA to believe that the data in the Letter from the Chief Executive Officer or the Chief Financial Officer should be adjusted.
- (g) To use the Corporate Parent Financial Test - Alternative II as a financial assurance mechanism, the corporate parent guarantor shall meet each of the following conditions:
 - 1. The corporate parent guarantor shall have a tangible net worth of at least ten million dollars (\$10,000,000) plus the dollar amount of all financial assurance covered by a financial test.
 - 2. The corporate parent guarantor shall have a tangible net worth of at least six (6) times the required annual aggregate amount for corrective action and compensation of third parties for bodily injury and property damage assured by this financial test and at least six (6) times the sum of all other amounts covered by a financial test of the corporate parent guarantor for other environmental programs or agencies of the State of Tennessee, other states, and/or Federal agencies.
 - 3. Assets of the corporate parent guarantor located in the United States shall amount to at least ninety percent (90%) of the total assets of the corporate parent guarantor or at least

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six (6) times the current amounts of financial assurance covered by the corporate parent guarantor through the use of this Corporate Parent Financial Test – Alternative II.

4. The corporate parent guarantor shall have a current rating by a bond rating agency for its most recent bond issuance that meets or exceeds the level determined by the Commissioner to indicate a sound financial position. The Commissioner shall make this determination in writing.
 5. For purposes of the Corporate Parent Financial Test, bond ratings shall apply to outstanding, rated bonds that are not secured by insurance, a letter of credit, or other collateral or guarantee, and that have been issued directly by the corporate parent guarantor. Ratings on revenue bonds shall not be used in the financial test. In order to pass this Corporate Parent Financial Test - Alternative II, the corporate parent guarantor shall have at least one class of equity securities registered under the Securities Exchange Act of 1934.
 6. The corporate parent guarantor shall file financial statements annually with the U.S. Securities and Exchange Commission.
 7. The fiscal year-end financial statements of the corporate parent guarantor shall be examined by an independent certified public accountant (CPA) and shall be accompanied by the CPA's report of the examination. The firm's year-end financial statements cannot include an adverse auditor's opinion, a disclaimer of opinion, or a "going concern" qualification.
 8. The corporate parent guarantor shall obtain and submit to the Commissioner a special report by a CPA stating that:
 - (i) The CPA has compared the data that the Letter from the Chief Executive Officer or the Chief Financial Officer specifies as having been derived from the latest year-end financial statements of the corporate parent guarantor with the amounts in such financial statements; and
 - (ii) In connection with the comparison in subpart (i) of this part, no matters came to the attention of the CPA which caused the CPA to believe that the specified data should be adjusted.
- (h) In accordance with subparagraph (i) of this paragraph the corporate parent guarantor shall commit to paying for and carrying out the required corrective action and compensation to third parties for bodily injury and/or property damage caused by accidental releases arising from the operation of petroleum underground storage tank systems.
- (i) Annually, the corporate parent shall complete and submit a notarized written guarantee stating that the corporate parent will comply with all of the terms set forth in this paragraph as requirements governing the use of the Corporate Parent Financial Test Guarantee. Such Corporate Parent Financial Test Guarantee Agreement shall:
1. Be in a format established by the division and in accordance with guidance provided by the division;
 2. Commit the corporate parent guarantor to carrying out the required corrective actions and/or compensation of third parties in response to a judgment enforceable in Tennessee;
 3. Commit the corporate parent guarantor to setting up and funding a standby trust in the amount required in an order issued by the Commissioner, up to the amount set forth in paragraph (3) of this rule;
 4. Commit the corporate parent guarantor to notifying the Commissioner within ten (10) days following the filing to seek bankruptcy protection from creditors under Title 11 U.S. Code; and

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5. Commit the corporate parent guarantor to notifying the Commissioner within seventy-two (72) hours following of any reasonable determination that the corporate parent guarantor can no longer satisfy the requirement of the Corporate Parent Financial Test of Self-Assurance, whether Alternative I or Alternative II; and
6. Commit the corporate parent guarantor to complying with one of the following within thirty (30) days of determination that the corporate parent guarantor no longer meets the requirement of the Corporate Parent Financial Test of Self-Assurance, whether Alternative I or Alternative II:
 - (i) Submittal to the division of an alternative financial assurance mechanism; or
 - (ii) Establishment of and funding of an irrevocable standby trust in accordance with paragraph (15) of this rule to assure the performance of corrective action and/or compensation of third parties for bodily injury and property damage due to accidental releases arising from the operation of petroleum underground storage tank systems in the amount required in an order issued by the Commissioner; up to the amount set forth in paragraph (3) of this rule.

(8) Liability Insurance.

A tank owner or operator may satisfy the requirement of paragraph (3) of this rule by obtaining liability insurance that meets the requirements of this paragraph.

(a) Standby Trust Fund.

1. A tank owner or operator who uses an insurance policy as financial assurance to meet the requirements of paragraph (3) of this rule for taking corrective action and/or compensating third parties for bodily injury and/or property damage due to accidental releases arising from the operation of petroleum underground storage tank systems shall establish a standby trust fund when the policy is issued.
2. The trust agreement governing the trust fund shall satisfy the requirements of paragraph (15) of this rule. The trust agreement shall be in a format established by the division and worded in accordance with guidance provided by the division.

(b) Qualified Insurer.

The tank owner or operator shall obtain insurance from a qualified insurer:

1. The insurer shall be licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines insurer in the State of Tennessee and have an A.M. Best rating of at least "A."
2. The insurer shall not be a "captive insurance company" as defined in T.C.A. § 56-13-102.

(c) Insurance Policies, UST Certificates of Insurance and UST Insurance Endorsements.

1. Liability insurance may be in the form of an endorsement to an existing insurance policy or a separate insurance policy.
2. An original UST Certificate of Insurance or UST Insurance Endorsement shall be submitted to the Commissioner.
 - (i) The UST Certificate of Insurance shall be in a format established by the division and worded in accordance with guidance provided by the division.
 - (ii) The UST Insurance Endorsement shall be in a format established by the division and worded in accordance with guidance provided by the division.

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3. A duplicate original of the insurance policy shall be provided to the Commissioner within thirty (30) days of the issuance of a UST Certificate of Insurance or a UST Insurance Endorsement. The insurance policy is subject to review and approval by the Commissioner prior to final acceptance of insurance as financial assurance for the tank owner or operator as required by paragraph (3) of this rule.
4. Each policy shall contain a provision allowing the assignment of the policy to a successor tank owner or operator. Such assignment may be conditional upon the consent of the insurer, provided such consent is not unreasonably withheld.
5. The tank owner or operator shall maintain the insurance policy in full force and effect until the Commissioner releases the tank owner or operator from the requirements for financial assurance as specified in paragraph (21) of this rule or until the owner or operator has substituted an acceptable alternate financial assurance mechanism in accordance with paragraphs (4) and (17) of this rule.
6. The insurance policy shall be issued for a face amount at least equal to the amount required by paragraph (3) of this rule. Actual payment by the insurer shall not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.
7. The insurance policy shall guarantee that funds shall be available for taking corrective action in accordance with Rule 0400-18-01-.06 and/or for compensating third parties for bodily injury and/or property damage caused by accidental releases arising from the operation of petroleum underground storage tank systems.
8. The insurance policy shall guarantee that the Commissioner is authorized to draw on the policy through claim or forfeiture up to the limits of liability or face value of the policy in the event the insured fails to take corrective action and/or compensate third parties for bodily injury and/or property damage caused by accidental releases arising from the operation of petroleum underground storage tank systems.
9. Under the terms of the policy, all amounts forfeited by the insurance company, as ordered by the Commissioner, shall be paid to the division in accordance with subparagraph (20)(e) of this rules or shall be paid directly into the standby trust fund.
10. The policy shall provide that the insurer shall comply with any Order of Forfeiture issued by the Commissioner as a result of the occurrence of any of the events or conditions itemized in items 11(v)(I) through (IV) of this subparagraph.
11. Cancellation, Termination or Failure to Renew by the Insurer.
 - (i) The policy shall provide that the insurer shall not cancel, terminate, or fail to renew the policy except for failure to pay the premium in which case the policy is still subject to forfeiture pursuant to subparts (v) and (vi) of this part.
 - (ii) If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy. If the insurer so elects, the insurer shall send notice by certified mail to the insured tank owner or operator and to the Commissioner.
 - (iii) Cancellation, termination, or failure to renew shall not occur until at least one hundred eighty (180) days after the date of receipt of the notice by the tank owner or operator, as evidenced by the certified mail return receipt.
 - (iv) Cancellation, termination or failure to renew shall not occur until the Commissioner has received notice as evidenced by certified mail return receipt.
 - (v) Cancellation, termination, or failure to renew shall not occur during the period of coverage of the policy nor at the end of the one hundred eighty (180) days reference in subpart (iii) of this part and the policy shall remain in force and effect in the event that on or before the date of expiration:

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- (I) The Commissioner deems the facility abandoned; or
 - (II) Closure of the facility is ordered by the Commissioner, the board, or a court of competent jurisdiction; or
 - (III) The tank owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy) U.S. Code; or
 - (IV) The premium due is paid; or
 - (V) The Commissioner issues an Order of Forfeiture as a result of the occurrence of conditions itemized in items (I) through (III) of this subpart.
- (vi) Cancellation of the policy for any reason, without the insured's substitution of alternate financial assurance as specified in paragraph (17) of this rule may result in a demand by the Commissioner to the insurer to pay the face value of the policy into a standby trust fund at the end of the one hundred eighty (180) day period of cancellation notification. If the policy is not renewed or replaced by an approved alternative financial assurance mechanism within one (1) year of the funding of the trust, the funds of the standby trust shall be forfeited to the division in accordance with subparagraph (20)(e) of this rule due to the failure of the insured to maintain financial assurance.

(9) Surety Bond or Performance Bond.

A tank owner or operator may satisfy the requirement of paragraph (3) of this rule by obtaining a surety bond that meets the requirements of this paragraph.

(a) Standby Trust Fund.

1. A tank owner or operator who uses a surety bond or performance bond as financial assurance to meet the requirements of paragraph (3) of this rule for taking corrective action and/or compensating third parties for bodily injury and/or property damage due to accidental releases arising from the operation of petroleum underground storage tank systems shall establish a standby trust fund when the surety bond is acquired.
2. The trust agreement governing the trust fund shall satisfy the requirements of paragraph (15) of this rule. The trust agreement shall be in a format established by the division and worded in accordance with guidance provided by the division.

(b) Qualified Surety Company.

The tank owner or operator shall obtain the surety bond or performance bond from a qualified surety company:

1. The surety company issuing the bond shall be licensed to do business as a surety in the State of Tennessee; and
2. The surety company issuing the bond shall be among those listed as acceptable sureties on federal bonds in the latest Circular 570 of the U.S. Department of the Treasury.

(c) Surety Bond or Performance Bond.

1. The surety bond or performance bond shall be in a format established by the division and worded in accordance with guidance provided by the division.
2. The original of the bond shall be submitted to the Commissioner.
3. The bond shall guarantee that the tank owner or operator shall assume financial responsibility for taking corrective action and/or compensating third parties for bodily

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injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tank systems.

4. The bond shall set forth the per occurrence amount and the annual aggregate amount for taking corrective action, and the per occurrence amount and the annual aggregate amount for third party claims.
5. The penal sum of the bond shall be in an amount at least equal to the amount required for the tank owner or operator as determined by paragraph (3) of this rule.
6. Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a final determination by the Commissioner that the owner or operator has failed to so perform, under the terms of the bond, the surety shall perform corrective action in accordance with Rule 0400-18-01-.06 and/or provide third-party liability compensation or shall forfeit the amount of the penal sum as ordered by the Commissioner.
7. Under the terms of the bond, all amounts forfeited by the surety, as ordered by the Commissioner, shall be paid to the division in accordance with subparagraph (20)(e) of this rules or shall be paid directly into the standby trust fund.
8. Cancellation.
 - (i) To effect cancellation under the terms of the bond, the surety shall issue notification of cancellation of the bond by sending the notice by certified mail to the owner or operator and to the Commissioner as evidenced by return receipt.
 - (ii) The notice of cancellation shall be received by the Commissioner by no later than one hundred eighty (180) days prior to the anniversary date of the bond. Cancellation of the bond shall not occur during the one hundred eighty (180) day period.
 - (iii) The tank owner or operator shall submit alternate financial assurance to the Commissioner as specified in paragraph (17) of this rule and obtain the Commissioner's written approval of the alternate financial assurance by no later than sixty-one (61) days prior to the date of cancellation of the bond.
 - (iv) Cancellation, termination, or failure to renew shall not occur at the end of the one hundred eighty (180) days specified in subpart (ii) of this part or at any other time during the period of coverage of the bond and the bond shall remain in force and effect in the event that on or before the date of expiration:
 - (I) The Commissioner deems the facility abandoned; or
 - (II) Closure of the facility is ordered by the Commissioner, the board, or a court of competent jurisdiction; or
 - (III) The owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy) U.S. Code; or
 - (IV) The premium is paid; or
 - (V) The Commissioner issues an Order of Forfeiture as a result of the occurrence of one or more of the conditions set forth in items (I) through (III) of this subpart.
 - (v) Upon notification by the Commissioner that the principal has failed to provide alternative financial assurance within one hundred twenty (120) days after the date of notice of cancellation is received by the principal, the surety(ies) shall at the direction of the Commissioner, by no later than the one hundred seventy ninth (179th) day following the date of the notice of cancellation, pay the amount

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of the penal sum of the bond into a standby trust fund. If the bond is not renewed or replaced by an alternative instrument within one (1) year of the funding of the trust, the funds of the standby trust will be forfeited to the division in accordance with subparagraph (20)(e) of this rule due to the failure of the tank owner or operator to maintain financial assurance.

- (vii) The tank owner or operator may cancel the bond if the Commissioner has given prior written consent. The Commissioner will provide such written consent when:
 - (I) The tank owner or operator substitutes alternative financial assurance as specified in paragraphs (4) and (17) of this rule; or
 - (II) The Commissioner releases the owner or operator from the requirements of this paragraph in accordance with paragraph (21) of this rule.
- (viii) The surety will not be liable for deficiencies in the performance of corrective action and/or third party liability compensation by the tank owner or operator after the Commissioner releases the tank owner or operator from the requirements of this paragraph in accordance with paragraph (21) of this rule.

(10) Irrevocable Standby Letter of Credit.

A tank owner or operator may satisfy the requirements of paragraph (3) of this rule by obtaining an irrevocable standby letter of credit that meets the requirements of this paragraph.

(a) Standby Trust Fund

1. A tank owner or operator who uses an irrevocable letter of credit as financial assurance to meet the requirements of paragraph (3) of this rule for taking corrective action and/or compensating third parties for bodily injury and/or property damage due to accidental releases arising from the operation of petroleum underground storage tank systems shall establish a standby trust fund when the surety bond is acquired.
2. The trust agreement governing the trust fund shall satisfy the requirements of paragraph (15) of this rule. The trust agreement shall be in a format established by the division and worded in accordance with guidance provided by the division.

(b) The issuing institution shall be an entity that has the authority to issue letters of credit in the State of Tennessee and whose letter of credit operations are regulated and examined by the U.S. Federal Reserve or the Tennessee Department of Financial Institutions.

(c) Letter of Credit.

1. The letter of credit shall be in a format established by the division and worded in accordance with guidance provided by the division.
2. The original of the letter of credit shall be submitted to the Commissioner. The letter of credit shall be accompanied by a letter from the tank owner or operator to the Commissioner referring to the letter of credit by number, issuing institution, and date, and providing the following information:
 - (i) The facility identification number assigned by the division to each facility covered by the letter of credit;
 - (ii) The address of the location for each facility covered by the letter of credit; and
 - (iii) The specified amount of financial responsibility for taking corrective action and for third party liability compensation provided by the letter of credit.
3. The letter of credit shall be irrevocable.

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4. The letter of credit shall be issued for a period of at least one (1) year and shall provide that the expiration date shall be automatically extended each year for a period of at least one (1) year unless, at least one hundred eighty (180) days before the expiration date of the current one (1) year period, the issuing institution notifies both the tank owner or operator and the Commissioner by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the one hundred eighty (180) days shall begin on the date when the owner or operator has received the notice, as evidenced by the return receipt of certification of delivery. However, expiration shall not occur unless the Commissioner has received the notice, as evidenced by the return receipt of certification of delivery.
5. The letter of credit shall be issued in an amount at least equal to the amount specified in accordance with paragraph (3) of this rule.
6. The letter of credit may be drawn on by the Commissioner in the event the tank owner or operator fails to take corrective action in accordance with Rule 0400-18-01-.06 and/or compensate third parties for bodily injury and/or property damage caused by accidental releases arising from the operation of petroleum underground storage tank systems.
7. The letter of credit may be drawn on by the Commissioner in the event of the occurrence of the following events:
 - (i) The Commissioner deems the facility abandoned;
 - (ii) Closure of the facility is ordered by the Commissioner, the board, or a court of competent jurisdiction; or
 - (iii) The owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy) U.S. Code.
8. The Commissioner may draw on the letter of credit upon forfeiture as provided in paragraph (20) of this rule if the tank owner or operator does not establish alternate financial responsibility as specified in paragraphs (4) and (17) of this rule and obtain written approval of such alternate financial responsibility from the Commissioner within one hundred twenty (120) days after receipt by the tank owner or operator of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the expiration date of the current one (1) year period. The Commissioner may delay the drawing if the issuing institution grants a one (1) year extension of the terms of the credit by no later than one hundred twenty (120) days prior to the stated cancellation date. During the last sixty (60) days of any such extension, the Commissioner may draw on the letter of credit if the owner or operator has failed to provide alternate financial responsibility as specified in paragraphs (4) and (17) of this rule and obtain written approval of such financial responsibility from the Commissioner.
9. Under the terms of the letter of credit, all amounts forfeited by the financial institution issuing the letter of credit shall be paid directly to the division in accordance with subparagraph (20)(e) of this rule.
10. The Commissioner will return the letter of credit to the issuing institution for termination when:
 - (i) A tank owner or operator substitutes alternative financial assurance as specified in paragraphs (4) and (17) of this rule; or
 - (ii) The Commissioner releases the owner or operator from the requirements of this paragraph in accordance with paragraph (21) of this rule.
- (11) Personal Bond Supported by Certificate of Deposit.

A tank owner or operator may satisfy the requirements of paragraph (3) of this rule by obtaining a personal bond supported by a certificate of deposit that meets the requirements of this paragraph.

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- (a) The financial institution holding the funds shall be a commercial financial institution governed by the Federal Reserve and the U.S. Comptroller of the Currency or regulated by the Tennessee Department of Financial Institutions.
- (b) Statement of Personal Bond.
 - 1. The owner or operator shall submit the Statement of Personal Bond Supported by Certificate of Deposit to the Department concurrent with the issuance of the certificate of deposit.
 - 2. The Statement of Personal Bond Supported by Certification of Deposit shall be in a format established by the division and worded in accordance with guidance provided by the division.
- (c) Certificate of Deposit.
 - 1. The funds of the account shall be pledged irrevocable to the Tennessee Department of Environment and Conservation.
 - 2. The ownership of the certificate of deposit shall be registered as follows:
 - (i) The name of the tank owner or operator and the Tennessee Department of Environment and Conservation; or
 - (ii) The Tennessee Department of Environment and Conservation.
 - 3. The certificate of deposit shall be automatically renewed annually with the earned interest maintained with the principal.
 - 4. The original certificate of deposit or safekeeping receipt shall be submitted to and held by the Department.
- (d) Accompanying the original certificate of deposit or safekeeping receipt shall be a letter from an officer of the issuing financial institution which attests to the following:
 - 1. No liens or assignments exist on the deposited funds;
 - 2. The certificate of deposit shall be automatically renewed each year;
 - 3. The initial funds of the deposit plus the accrued interest are irrevocably assigned to the Department;
 - 4. The funds shall not be released to the owner or operator without the written consent of the Commissioner or his/her designee; and
 - 5. The issuing financial institution shall honor the right of the Department to unilaterally redeem the certificate(s) of deposit for cash in the event the Commissioner executes an Order of Forfeiture due to the failure of the owner or operator to take corrective action in accordance with Rule 0400-18-01-.06 and/or to compensate third-parties for bodily injury and property damage.

(12) Trust Fund and Agreement.

A tank owner or operator may satisfy the requirement of paragraph (3) of this rule by establishing a trust fund and an associated trust agreement that meets the requirements of this paragraph.

- (a) Trust Fund.
 - 1. Trustee.

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- (i) The trustee shall be an entity that has the authority to act as a trustee.
 - (ii) The operations of the trustee shall be regulated and examined by the State of Tennessee or a federal agency.
 - (iii) The trustee shall invest and reinvest the principal and income of the trust fund, keeping the trust fund as a single fund.
2. Funding.
- (i) The trust fund shall be fully funded on its effective date.
 - (ii) If at any point in time the value of the fund drops below the financial assurance amount covered by this mechanism, the grantor (the tank owner or operator) shall make a payment into the fund to return the value of the trust fund to the required amount.
 - (iii) If at any point in time the value of the fund increases above the financial assurance amount covered by this mechanism, the grantor may submit a written request to the Commissioner for release of the excess funds.
 - (iv) Within sixty (60) days of receipt of a written request for release of excess funds submitted in accordance with subpart (iii) of this part, the Commissioner shall review the request and shall decide whether such release of funds is appropriate at the time of the request.
 - (I) If the Commissioner determines that a release of funds in the amount requested by the grantor or in a lesser amount is appropriate, the Commissioner shall instruct the trustee to release the funds.
 - (II) If the Commissioner determines that a release of the funds is not appropriate, the Commissioner shall notify the grantor and the trustee of that decision.
3. The Division of Underground Storage Tanks of the Department of Environment and Conservation shall be designated as the beneficiary of the trust fund.
4. The trust fund shall not be used for any of the following:
- (i) Any obligation of the grantor (the tank owner or operator) under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;
 - (ii) Bodily injury to an employee of the grantor arising from and/or in the course of employment by the grantor;
 - (iii) Bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;
 - (iv) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by the grantor that is not the direct result of a release from a petroleum underground storage tank system; or
 - (v) Bodily injury or property damage for which the grantor is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of paragraph (3) of this rule.
5. The trust fund shall be irrevocable and shall continue until terminated at the written direction of both the grantor (the tank owner or operator) and the trustee with the written

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approval of the Commissioner or by the trustee acting upon written direction by the Commissioner.

- (b) The trust agreement shall be in a format established by the division and worded in accordance with guidance provided by the division.

(13) Local Government Bond Rating Test.

A local government tank owner or operator and/or a guarantor may satisfy the requirements of paragraph (3) of this rule by having a currently outstanding issue(s) of bonds that meets the requirements of this paragraph.

- (a) A local government bond rating test shall not be used in combination with other financial assurance mechanisms.

- (b) A general purpose local government owner or operator and/or a local government serving as a guarantor shall have a currently outstanding issue(s) of general obligation bonds of one million dollars (\$1,000,000) or more, excluding refunded obligations.

1. The local government shall have a current rating by a bond rating agency for its most recent bond issuance that meets or exceeds the level determined by the Commissioner to indicate a sound financial position. The Commissioner shall make this determination in writing.
2. Where the local government has multiple outstanding issues, or where the local government's bonds are rated by both Moody's and Standard and Poor's, the lowest rating shall be used to determine eligibility.
3. Bonds that are backed by credit enhancements other than municipal bond insurance shall not be considered in determining the amount of applicable bonds outstanding.

- (c) A local government owner or operator and/or a local government serving as a guarantor that is not a general purpose government and does not have the legal authority to issue general purpose bonds shall have a currently outstanding issue(s) of revenue bonds of one million dollars (\$1,000,000) or more, excluding refunded issues.

1. The local government shall have a current rating by a bond rating agency for its most recent bond issuance that meets or exceeds the level determined by the Commissioner to indicate a sound financial position. The Commissioner shall make this determination in writing.
2. Where the local government has multiple outstanding issues, or where the local government's bonds are rated by both Moody's and Standard and Poor's, the lowest rating shall be used to determine eligibility.
3. Bonds that are backed by credit enhancements shall not be considered in determining the amount of applicable bonds outstanding.

- (d) The local government owner or operator and/or guarantor shall submit to the Department an original or certified copy of its most recent bond rating published within the last twelve (12) months by Moody's or Standard and Poor's.

- (e) The local government owner or operator and/or guarantor, using the local government bond rating test, shall annually report to the Commissioner the applicable bond ratings within ninety (90) days following the end of the fiscal year of the owner or operator and/or guarantor.

- (f) To demonstrate that the local government tank owner or operator and/or guarantor meets the local government bond rating test, the chief financial officer of the local government owner or operator and/or guarantor shall complete and submit a notarized letter, both initially and within ninety (90) days following the date of the close of each successive financial reporting year. Wording in the Letter of the Chief Financial Officer, whether for a general purpose local

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government or for a non-general purpose government, shall be in accordance with guidance provided by the division. The letter shall be in format established by the division.

- (g) If a local government owner or operator and/or guarantor, using the bond rating test to provide financial assurance, finds that it no longer meets the requirements of the financial bond rating test, it shall obtain and submit to the Commissioner alternate financial assurance within thirty (30) days of its determination that it no longer meets the requirements. The local government owner or operator and/or guarantor must notify the division within ten (10) days of its failure to obtain alternate insurance.
- (h) If the Commissioner has reason to believe that the local government owner or operator and/or guarantor no longer meets the requirements of the local government bond rating test, the Commissioner may require the local government tank owner or operator and/or guarantor to submit reports of its financial condition. The local government owner or operator and/or guarantor shall submit the required financial reports to the Department in accordance with the schedule established by the Commissioner.
- (i) Upon determination by the Commissioner that the local government owner or operator and/or guarantor no longer meets the local government bond rating test requirements, the local government owner or operator and/or guarantor shall either:
 - 1. Obtain and submit an alternate financial assurance mechanism in accordance with paragraphs (4) and (17) of this rule within thirty (30) days after notification of such a determination by the Commissioner; or
 - 2. Fund a standby trust in accordance with paragraph (15) of this rule in the amount required by paragraph (3) of this rule for corrective action and for compensating third parties for bodily injury and property damage. The trust shall be funded by no later than thirty (30) days after notification of such a determination by the Commissioner.

(14) Local Government Financial Test.

A local government tank owner or operator may satisfy the requirements of paragraph (3) of this rule by passing a financial test that meets the requirements of this paragraph.

- (a) A local government financial test shall not be used in combination with other financial assurance mechanisms.
- (b) The local government owner or operator shall have the ability and authority to assess and levy taxes or to freely establish fees and charges.
- (c) The local government owner or operator shall have the following information available, as shown in the year end financial statements for the latest completed fiscal year:
 - 1. Total revenues: consisting of the sum of general fund operating and non-operating revenues including net local taxes, licenses and permits, fines and forfeitures, revenues from use of money and property, charges for services, investment earnings, sales (property, publications, and others), intergovernmental revenues (restricted and unrestricted), and total revenues from all other governmental funds including enterprise, debt service, capital projects, and special revenues, but not excluding revenues to funds held in a trust or agency capacity. For purposes of this local government financial test, the calculation of total revenues shall exclude all transfers between funds under the direct control of the local government using this financial test (interfund transfers), liquidation of investments, and issuance of debt.
 - 2. Total expenditures: consisting of the sum of general fund operating and non-operating expenditures including public safety, public utilities, transportation, public works, environmental protection, cultural and recreational, community development, revenue sharing, employee benefits and compensation, office management, planning and zoning, capital projects, interest payments on debt, payments for retirement of debt principal, and total expenditures from all other governmental funds including enterprise, debt service,

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capital projects, and special revenues. For purposes of this local government financial test, the calculation of total expenditures shall exclude all transfers between funds under the direct control of the local government using the financial test (interfund transfers).

3. Local revenues: consisting of total revenues, as set forth in part 1 of this subparagraph, minus the sum of all transfers from other governmental entities, including all monies received from federal, state, or local government sources.
 4. Debt service: consisting of the sum of all interest and principal payments on all long-term credit obligations and all interest-bearing short-term credit obligations. Debt service includes interest and principal payments on general obligation bonds, revenue bonds, notes, mortgages, judgments, and interest bearing warrants. Debt service excludes payments on non-interest bearing short term obligations, interfund obligations, amounts owed in a trust or agency capacity, and advances and contingent loans from other governments.
 5. Total funds: consisting of the sum of cash and investment securities from all funds, including general, enterprise, debt service, capital projects, and special revenue funds, but excluding employee retirement funds, at the end of the local government's financial reporting year. Total funds includes federal securities, federal agency securities, state and local government securities, and other securities such as bonds, notes and mortgages. For purposes of this local government financial test, the calculation of total funds shall exclude agency funds, private trust funds, accounts receivable, value of real property, and other non-security assets.
 6. Population: consisting of the number of people in the area served by the local government.
- (d) The local government's year-end financial statements, if independently audited, cannot include an adverse auditor's opinion or a disclaimer of opinion. The local government cannot have outstanding issues of general obligation bonds that are rated at less than investment grade.
 - (e) To demonstrate that it meets the local government financial test, the local government owner or operator shall complete and submit a notarized letter, both initially and within one hundred twenty (120) days following the date of the close of each successive financial reporting year. Wording in the Letter of the Chief Financial Officer shall be in accordance with guidance provided by the division. The letter shall be in format established by the division.
 - (f) If a local government owner or operator, using the local government financial test to provide financial assurance, finds that it no longer meets the requirements of the financial test, it shall obtain and submit to the Commissioner alternate financial assurance within thirty (30) days of its determination that it no longer meets the requirements.
 - (g) If the Commissioner has reason to believe that the local government owner or operator no longer meets the requirements of the local government financial test, the Commissioner may require the local government owner or operator to submit reports of its financial condition. The local government owner or operator shall submit the required financial reports to the Department in accordance with the schedule established by the Commissioner.
 - (h) Upon the Commissioner's determination that the local government owner or operator no longer meets the local government financial test requirements, the local government owner or operator shall either:
 1. Obtain and submit an alternate financial assurance mechanism in accordance with paragraphs (4) and (17) of this rule within thirty (30) days after notification of such a determination by the Commissioner; or
 2. Fund a standby trust in accordance with paragraph (15) of this rule in the amount required by paragraph (3) of this rule for corrective action and for compensating third parties for bodily injury and property damage. The trust shall be funded by no later than thirty (30) days after notification of such a determination by the Commissioner.

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(15) Standby Trust Fund.

- (a) A tank owner or operator using the financial assurance mechanisms set forth in paragraphs (8), (9) and (10) of this rule shall establish a Standby Trust Fund and Agreement in accordance with this paragraph.
- (b) A tank owner or operator using the financial assurance mechanisms set forth in paragraphs (6), (7), (13) and (14) of this rule shall establish a Standby Trust Fund and Agreement in accordance with this paragraph if the requirements of the financial test can no longer be met and the owner or operator or guarantor fails to provide an alternative financial assurance mechanism that meets the requirements of this rule.
- (c) Trustee.
 - 1. The trustee shall be an entity that has the authority to act as a trustee.
 - 2. The operations of the trustee shall be regulated and examined by the State of Tennessee or a federal agency.
 - 3. The trustee shall invest and reinvest the principal and income of the trust fund, keeping the trust fund as a single fund.
- (d) The Division of Underground Storage Tanks of the Department of Environment and Conservation shall be designated as the beneficiary of the trust fund.
- (e) The trust fund shall not be used for any of the following:
 - 1. Any obligation of the grantor (the tank owner or operator) under a workers compensation, disability benefits, or unemployment compensation law or other similar law;
 - 2. Bodily injury to an employee of the grantor arising from and/or in the course of employment by the grantor;
 - 3. Bodily injury or property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;
 - 4. Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by the grantor that is not the direct result of a release from a petroleum underground storage tank system; or
 - 5. Bodily injury or property damage for which the grantor is obligated to pay damages by reason of the assumption of liability in a contract or agreement other than a contract or agreement entered into to meet the requirements of paragraph (3) of this rule.
- (f) The trust fund shall be irrevocable and shall continue until terminated at the written direction of both the grantor (the tank owner or operator) and the trustee with the written approval of the Commissioner or by the trustee acting upon written direction by the Commissioner.
- (g) The trust agreement shall be in a format established by the division and worded in accordance with guidance provided by the division.

(16) Record Keeping.

A tank owner or operator shall maintain, on site at each facility or at the place of business of the owner or operator, a copy of all financial assurance documents submitted to the Department demonstrating compliance with this rule. This documentation shall be maintained until the owner or operator is released from the financial responsibility requirements by the Commissioner in accordance with paragraph (21) of this rule.

(17) Substitution of Financial Assurance Mechanisms by the Owner or Operator.

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In satisfying the requirements of paragraph (3) of this rule, an owner or operator may substitute an alternative financial assurance mechanism for the financial mechanism already on file with the Department. The alternate financial assurance mechanism shall satisfy the requirements of this rule. The financial assurance mechanism already on file with the Department shall not be released and shall be maintained in force until the alternative financial mechanism has been received and approved by the Commissioner. By no later than ten (10) business days following the date of the approval of the alternate financial assurance mechanism by the Commissioner, the prior financial assurance mechanism shall be released to the tank owner or operator.

(18) Changes of Ownership or Operational Control of UST Facilities.

Changes in or the replacement of an existing financial assurance mechanism due to changes of ownership or operational control of a UST facility shall be submitted to the Commissioner concurrent with the change of ownership or operational control of the facility. All submittals shall comply with the requirements of this rule.

(19) Bankruptcy or Other Incapacity of the Owner or Operator or the Issuer of the Financial Assurance Mechanism.

(a) Within ten (10) days after the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy) U.S. Code, naming a tank owner or operator as debtor, the owner or operator shall notify the Commissioner by certified mail of such commencement.

(b) An owner or operator who obtains financial assurance by a mechanism other than the Financial Test of Self-Assurance as set forth in paragraph (6) of this rule will be deemed to be without the financial responsibility required by this rule in the event of a bankruptcy or incapacity of its provider of financial assurance, or a suspension or revocation of the authority of the provider of its financial assurance to issue a guarantee, an insurance policy, a surety bond, or a letter of credit. Within ten (10) business days of receiving notice of such bankruptcy or incapacity, the tank owner or operator shall notify the Commissioner, by certified mail, of the same. By no later than thirty (30) days subsequent to the date of receiving notice of such bankruptcy or incapacity, the tank owner or operator shall obtain alternate financial assurance and shall submit the original financial assurance documents comprising or associated with the alternate financial assurance mechanism to the Commissioner in accordance with the provisions of this rule.

(20) Procedures Governing the Forfeiture of the Financial Assurance of UST Owners and Operators.

(a) Upon the Commissioner's determination that a tank owner or operator has failed to pay for taking corrective action in accordance with Rule 0400-18-01-.06 and/or compensate third parties for bodily injury and property damage caused by an accidental release arising from the operation of a petroleum underground storage tank system, the Commissioner may provide notice of such non-compliance, to be served on the tank owner or operator by hand delivery or by certified mail. The Notice of Non-Compliance shall establish a schedule for coming into compliance with the regulatory requirements.

(b) If the Commissioner determines that the owner or operator has failed to perform as specified in the Notice of Non-Compliance, or as specified in any subsequent compliance agreement which may have been reached by the owner or operator and the Commissioner, the Commissioner may cause a Notice of Show Cause Meeting to be served upon the owner or operator. The Notice of Show Cause Meeting shall establish the date, the time, and the location of a meeting scheduled to provide the owner or operator with the opportunity to "show cause" why the Commissioner should not pursue forfeiture of the financial assurance filed to guarantee such performance.

(c) If no mutual compliance agreement is reached at a show cause meeting, or upon the Commissioner's determination that the owner or operator failed to perform as specified in an agreement that was reached, or in lieu of a show cause meeting, the Commissioner may order forfeiture of the financial assurance filed to guarantee such performance. Upon the Commissioner's determination that the procedures of this paragraph have been followed, the Commissioner, at his or her discretion may issue such an order of forfeiture. Upon issuance, a copy of the Order of Forfeiture shall be hand delivered or forwarded by certified mail to the owner

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or operator and to the issuer of the financial assurance mechanism or guarantor of financial assurance. Any such order issued by the Commissioner shall become effective thirty (30) days after the receipt by the owner or operator unless it is appealed to the Board as provided in Rule 0400-18-01-.11.

- (d) If necessary, upon the effective date of the Order of Forfeiture, the Commissioner may give notice to the Attorney General of the State of Tennessee who shall collect the forfeiture.
- (e) Funds from forfeitures shall be deposited in the Tennessee Petroleum Underground Storage Tank Fund. The forfeited funds shall be earmarked for use in the performance of corrective action or the compensation of third parties due to bodily injury or property damage in connection with the operation of the underground storage tank systems of the owner or operator forfeiting the financial assurance.

(21) Release of Financial Assurance Mechanisms.

The original financial assurance mechanism document(s) shall be held by the Commissioner until replaced by an alternate instrument or until the owner or operator is released by the Commissioner. The Commissioner shall release the financial assurance mechanism to the tank owner or operator or to the issuing financial institution after one of the following has occurred:

- (a) The underground storage tank systems have been closed to the satisfaction of the division pursuant to paragraphs (4) and (5) of Rule 0400-18-01-.07; or
- (b) An alternative financial assurance mechanism has been received and approved by the Commissioner in accordance with paragraph (17) of this rule.

Authority: T.C.A. §§ 68-215-101 et seq. and 4-5-201 et seq.

0400-18-01-.09 Petroleum Underground Storage Tank Fund.

(1) Purpose.

This rule establishes the manner in which disbursements are made from the Tennessee Petroleum Underground Storage Tank Fund and implements the purposes and objectives of the Tennessee Petroleum Underground Storage Tank Act.

(2) Applicability.

- (a) Requirements of this rule apply to all owners and/or operators of an underground storage tank system as defined in paragraph (4) of Rule 0400-18-01-.01 except as otherwise provided for in subparagraph (2)(b) of Rule 0400-18-01-.01. However, the requirements of this rule do not apply to those tanks owned by state and federal entities whose debts and liabilities are the debts and liabilities of a state or the United States.
- (b) Petroleum site owners eligible for fund reimbursement shall only be reimbursed for those fund eligible and reasonable costs which accrued on or after July 1, 2002.

(3) Fund Eligibility Requirements.

- (a) Except as provided for in subparagraph (c) of this paragraph, owners and/or operators satisfying the requirements of this subparagraph will have established fund eligibility for release occurrences prior to July 1, 2008.

1. Registration of each petroleum underground storage tank:

- (i) For tanks installed on or after July 1, 1988, within thirty (30) days of the installation of that tank; or
- (ii) For tanks installed prior to July 1, 1988, by June 30, 1989.

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2. Payment of the annual fee for the tank and/or tank compartments for the first year for which fees were required in accordance with Rule 0400-18-01-.10.
 - (b) Except as provided for in subparagraph (c) of this paragraph, release occurrences on or after July 1, 2008 will be fund eligible if the division has received notification registering the tank prior to the release occurrence.
 - (c) For airport hydrant fuel distribution systems and UST systems with field-constructed tanks required to meet the requirements of Rule 0400-18-01-.17, satisfying the requirements of this subparagraph will establish fund eligibility for release occurrences three (3) years after the effective date of this rule:
 1. Comply with subparagraph (1)(c) of Rule 0400-18-01-.17;
 2. Demonstrate through a division approved site check, conducted in accordance with division guidance, there have been no releases from the UST system(s) at this site or that prior releases at the site would not interfere with the discovery of a new release at the site; and
 3. The division will conduct an inspection of the owner and/or operator's petroleum site and underground storage tank systems. The owner and/or operator shall cure, to the satisfaction of the division, any noted deficiencies or violations discovered by division personnel during this inspection within forty-five (45) days, or such other time period as the division may allow, of the date of the notice of such deficiencies to the owner and/or operator.
 - (d) Within thirty (30) days of meeting the requirements to establish fund eligibility in accordance with subparagraph (c) of this paragraph, the division will notify the owner and/or operator of the date that fund eligibility was established. The fund will not cover either investigative or corrective action costs or third party liability claims associated with a release which occurred during the time of fund ineligibility.
 - (e) Except as provided for in subparagraph (5)(d) of this rule, before the owner and/or operator or petroleum site owner will receive fund benefit, the applicable entry level amount to the fund shall be expended as approved costs by the owner and/or operator or petroleum site owner. The applicable entry level is the entry level in effect on the date of the release as set forth in subparagraph (6)(b) of this rule.
 - (f) An Application for Fund Eligibility shall be timely submitted to the division before the applicable deadline set forth in T.C.A. § 68-215-111(f)(7) and in subparagraph (4)(d) of this rule. Failure to comply with the applicable deadline shall make the release ineligible for reimbursement from the fund.
- (4) Fund Ineligibility
- (a) If at the time of discovery of a release, the division determines that an owner and/or operator has failed to establish fund eligibility in accordance with subparagraph (3)(a) or (b) of this rule, corrective action costs and/or third party damages associated with that release are not eligible for coverage by the fund.
 - (b) An owner and/or operator who has failed to establish fund eligibility in accordance with the provisions of subparagraph (3)(a) or (b) of this rule shall comply with the following in order to establish fund eligibility:
 1. Pay all annual tank fees and late payment penalties owed;
 2. Pay all civil penalties owed;
 3. Perform and pass a systems tightness test in accordance with subparagraphs (3)(b) and (4)(b) of Rule 0400-18-01-.04 for each UST system in operation at the site;

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4. Demonstrate through a division approved site check, conducted in accordance with division guidance, there have been no releases from the UST system(s) at this site or that prior releases at the site would not interfere with the discovery of a new release at the site; and
 5. The division will conduct an inspection of the owner and/or operator's petroleum site and underground storage tank systems. The owner and/or operator shall cure, to the satisfaction of the division, any noted deficiencies or violations discovered by the division personnel during this inspection within forty-five (45) days, or such other time period as the division may allow, of the date of the notice of such deficiencies to the owner and/or operator.
- (c) Within thirty (30) days of meeting the requirements to establish fund eligibility in accordance with subparagraph (b) of this paragraph, the division will notify the owner and/or operator of the date that fund eligibility was established. The fund will not cover either investigative or corrective action costs or third party liability claims associated with a release which occurred during the time of fund ineligibility.
- (d) If there is evidence of a suspected release or a confirmed release on or after July 1, 2004, that release shall be ineligible for reimbursement from the fund if an Application for Fund Eligibility is not timely filed in accordance with the following:
1. An Application for Fund Eligibility shall be filed with the division within ninety (90) days of the discovery of evidence of a suspected release which is subsequently confirmed in accordance with Rules 0400-18-01-.04 and/or 0400-18-01-.05. The ninety (90) days shall start on the day the evidence of the suspected release is discovered.
 2. An Application for Fund Eligibility shall be filed with the division within sixty (60) days of a release which was identified in any manner other than the process for confirmation of a suspected release in accordance with Rules 0400-18-01-.04 and/or 0400-18-01-.05, for example, during closure activities performed in accordance with Rule 0400-18-01-.07.
- (5) Authorized disbursements from the fund.
- (a) Whenever, in the commissioner's determination, an eligible owner and/or operator or petroleum site owner has a release of petroleum from an underground storage tank and the owner and/or operator or petroleum site owner has been found to qualify for fund coverage in accordance with paragraphs (10) and (11) of this rule, the division shall, subject to the provisions of this rule, disburse monies available in the fund to provide for:
1. Emergency response activities, investigation, and assessment of sites contaminated by a release of petroleum in accordance with the requirements of Rules 0400-18-01-.05 through 0400-18-01-.06;
 2. The rehabilitation of sites contaminated by a release of petroleum, which may consist of cleanup of affected soil and groundwater, using cost effective alternatives that are technologically feasible and reliable, and that provide adequate protection of the public health, safety and welfare and minimize environmental damage, in accordance with release response, remediation and risk management requirements of Rule 0400-18-01-.06;
 3. The interim replacement and permanent restoration of potable water supplies.
- (b) Monies held in the fund may be disbursed for making payments to third parties who bring suit relative to an UST release against an eligible owner and/or operator of an UST or petroleum site owner who is qualified for fund coverage when such third party obtains a final judgment in that action enforceable in Tennessee.
- (c) Costs incurred by the division in the administration of the provisions of this rule or authorized under T.C.A. §68-215-101 et seq. shall be charged to the fund.

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- (d) The fund shall be available to the board and the Commissioner for expenditures for the purposes of providing for the investigation, identification, and for the reasonable and safe cleanup, including monitoring and maintenance of petroleum sites and for third party claims within the state as provided in T.C.A. §68-215-101 et seq., in this rule and in paragraph (5) of Rule 0400-18-01-.08.
1. If a fund eligible tank owner or operator claims financial inability to pay the corrective action entry level or deductible set forth in paragraph (6) of Rule 0400-18-01-.09 at the time an Application for Fund Eligibility is submitted to the division, the fund may be utilized to pay the deductible for taking corrective action.
 - (i) The tank owner or operator shall supply documentation of inability to pay the fund entry level or deductible for taking corrective action to the division upon request.
 - (ii) Pursuant to T.C.A. § 68-215-115, the Commissioner may seek cost recovery against the tank owner or tank operator for the amount of the entry level or deductible paid by the fund for taking corrective action.
 2. If a fund eligible tank owner or operator fails, without sufficient cause, to perform the release response, remediation and/or risk management actions required in Rule 0400-18-01-.06 on order of the Commissioner and fails, without sufficient cause to pay the amount of the applicable fund entry level or deductible amount for taking corrective action at the time an Application for Fund Eligibility is submitted to the division, the fund may be utilized to pay the deductible. Pursuant to T.C.A. § 68-215-115, the Commissioner may seek cost recovery against the tank owner or tank operator for the amount of the entry level or deductible paid by the fund for taking corrective action. In addition, pursuant to T.C.A. § 68-215-116, the Commissioner may seek a penalty in the amount of one hundred fifty percent (150%) of the costs expended by the fund as the result of the failure to take proper action.
 3. If a fund eligible tank owner or operator has been denied fund coverage of corrective action costs under the provisions of subparagraph (10)(c) of this rule and the owner or operator claims financial inability to pay for part or all of the necessary corrective action, the fund may be utilized to pay for taking corrective action.
 - (i) The tank owner or operator shall supply documentation of inability to pay for corrective action to the division upon request.
 - (ii) Pursuant to T.C.A. § 68-215-115, the Commissioner may seek cost recovery against the tank owner or tank operator for the amount paid by the fund for taking corrective action.
 4. If a fund eligible tank owner or operator cannot pay the amount of the applicable fund entry level or deductible amount for third party claims at the time an application for payment accompanied by the original or a certified copy of a final judgment is submitted to the division in accordance with subparagraph (12)(h) of Rule 0400-18-01-.09, the fund may be utilized to pay the deductible for satisfying the third party claim.
 - (i) The tank owner or operator shall supply documentation of their inability to pay the fund entry level or deductible for third party claims to the division upon request.
 - (ii) Pursuant to T.C.A. § 68-215-115, the Commissioner may seek cost recovery against the tank owner or tank operator for the amount of the entry level or deductible paid by the fund for satisfying the third party claim.
 5. If a fund eligible tank owner or operator fails, without sufficient cause, to pay the amount of the applicable fund entry level or deductible amount for a third party claim, the fund may be utilized to pay the deductible. Pursuant to T.C.A. § 68-215-115, the Commissioner may seek cost recovery against the tank owner or tank operator for the amount of the entry level or deductible paid by the fund for third party damages.

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- (e) The commissioner may enter into contracts and use the fund for those purposes directly associated with identification, investigation, containment, and cleanup, including monitoring and maintenance prescribed above including:
 - 1. Hiring consultants and personnel;
 - 2. Purchase, lease or rental of necessary equipment; and
 - 3. Other necessary expenses.
 - (f) The commissioner will pay each approved claim of the fund in chronological order based upon the date the claim is submitted for payment.
 - (g) The commissioner will not authorize any disbursement from the fund for costs for which the owner and/or operator or petroleum site owner receives payment from another insurance carrier or other source.
 - (h) If fund dollars have been expended in accordance with the provisions of subparagraph (d) and/or (e) of this paragraph for the fund deductible for corrective action or third party claims for a fund eligible release occurrence or for the entire cost for non-fund eligible release occurrence, the Commissioner may seek cost recovery and/or assess a penalty in accordance with the provisions of paragraphs (16) and (17) of this rule and paragraph (5) of Rule 0400-18-01-.08.
- (6) Scope of fund reimbursement.
- (a) The fund will reimburse eligible owners and/or operators or petroleum site owners, who qualify for fund coverage in accordance with paragraphs (10) and (11) of this rule, for the cost of investigation and corrective action resulting from the accidental release of petroleum from an UST storing petroleum in accordance with the provisions of this rule.
 - (b) Owners and/or operators of USTs or petroleum site owners who qualify for fund reimbursement shall meet the per site per occurrence fund entry level or deductible requirements specified in parts 1 through 6 and illustrated in Table 3.
 - 1. If the date of the release was after January 1, 1974 and before July 1, 1988, and the release was reported to the Department before April 11, 1990, and eligible expenditures for assessment or remediation were incurred before April 11, 1990, the deductible requirements for eligible UST owners and/or operators or petroleum site owners for taking corrective action will be seventy-five thousand dollars (\$75,000) and compensation of third parties will be one hundred fifty thousand dollars (\$150,000).
 - 2. If the date of release was between July 1, 1988 and June 30, 1989, the deductible requirements for eligible UST owners and/or operators or petroleum site owners for taking corrective action will be seventy-five thousand dollars (\$75,000) and compensation of third parties will be one hundred fifty thousand dollars (\$150,000).
 - 3. If the date of release was between July 1, 1989 and April 30, 1990, the deductible requirements for eligible UST owners and/or operators or petroleum site owners for taking corrective action will be fifty thousand dollars (\$50,000) and compensation of third parties will be one hundred fifty thousand dollars (\$150,000).
 - 4. If the date of release was between May 1, 1990 and April 4, 1995, the deductible requirements for eligible UST owners and/or operators or petroleum site owners for corrective action and for compensation for third party claims will be as follows based on the number of tanks owned or operated:
 - (i) 1 to 12 tanks, ten thousand dollars (\$10,000) for taking corrective actions and ten thousand dollars (\$10,000) for compensation of third parties;

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- (ii) 13 to 999 tanks, twenty thousand dollars (\$20,000) for taking corrective actions and thirty-seven thousand five hundred dollars (\$37,500) for compensation of third parties; or
 - (iii) 1,000 or more tanks, fifty thousand dollars (\$50,000) for taking corrective actions and two hundred twenty-five thousand dollars (\$225,000) for compensation of third parties.
5. If the date of release was between April 5, 1995 and July 1, 2005, the deductible requirements for eligible UST owners and/or operators or petroleum site owners shall be as follows based on the number of tanks owned or operated by the tank owner at the time of the release:
- (i) For corrective action costs:
 - (I) 1 to 12 tanks, ten percent (10%) of the total corrective action costs expended in an amount not to exceed ten thousand dollars (\$10,000);
 - (II) 13 to 999 tanks, twenty percent (20%) of the total corrective action costs expended in an amount not to exceed twenty thousand dollars (\$20,000); or
 - (III) 1,000 or more tanks, fifty thousand dollars (\$50,000);
 - (ii) For compensation of third party claims:
 - (I) 1 to 12 tanks, ten thousand dollars (\$10,000) for compensation of third parties;
 - (II) 13 to 999 tanks, thirty-seven thousand five hundred dollars (\$37,500) for compensation of third parties; or
 - (III) 1,000 or more tanks, two hundred twenty-five thousand dollars (\$225,000) for compensation of third parties.
6. If the date of the release was on or after July 1, 2005, the deductible for eligible UST owners and/or operators or petroleum site owners for taking corrective action will be twenty thousand dollars (\$20,000) and compensation of third parties will be twenty thousand dollars (\$20,000).

Table 3

Owner And/Or Operator Or Petroleum Site Owner Deductible Per Site Per Occurrence

Date Of Release	Number Of Tanks		
	1 - 12 Tanks	13 - 999 Tanks	1000+ Tanks
After January 1, 1974 and Before July 1, 1988 *	\$75,000 Cleanup/ \$150,000 third party	\$75,000 Cleanup/ \$150,000 third party	\$75,000 Cleanup/ \$150,000 third party
Between July 1, 1988 and June 30, 1989	\$75,000 Cleanup/ \$150,000 third party	\$75,000 Cleanup/ \$150,000 third party	\$75,000 Cleanup/ \$150,000 third party
Between July 1, 1989 and April 30, 1990	\$50,000 Cleanup/ \$150,000 third party	\$50,000 Cleanup/ \$150,000 third party	\$50,000 Cleanup/ \$150,000 third party
Between May 1, 1990	\$10,000 Cleanup/	\$20,000 Cleanup/	\$50,000 Cleanup/

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Date Of Release	Number Of Tanks		
	1 - 12 Tanks	13 - 999 Tanks	1000+ Tanks
And April 4, 1995	\$10,000 third party	\$37,500 third party	\$225,000 third party
Between April 5, 1995 And June 30, 2005	10% of Cleanup Cost not to exceed \$10,000/ \$10,000 third party	20% of Cleanup cost not to exceed \$20,000/ \$37,500 third party	\$50,000 Cleanup/ \$225,000 third party
On or after July 1, 2005	\$20,000 Cleanup/ \$20,000 third party	\$20,000 Cleanup/ \$20,000 third party	\$20,000 Cleanup/ \$20,000 third party

* Releases which occurred during this time period are only eligible for reimbursement if, prior to April 11, 1990, the release was reported to the division and the owner and/or operator incurred eligible expenses for assessment or remediation.

(c) The fund shall reimburse eligible UST owners and/or operators or petroleum site owners, who qualify for fund coverage in accordance with paragraphs (10) and (11) of this rule, for eligible corrective action costs above the entry level to the fund in an amount not to exceed:

1. Two million dollars (\$2,000,000) per site per occurrence for sites still undergoing corrective action on July 1, 2015 or releases that occur on or after July 1, 2015;
2. One million dollars (\$1,000,000) per site per occurrence for site cleanups closed before or on June 30, 2015: or
3. One million dollars (\$1,000,000) per site per occurrence for court awards involving third party claims.

(d) If the date of the release is on or after September 1, 2005, the owner and/or operator may apply for a reduction of the deductible requirement for corrective action set forth in part (b)6 of this paragraph. Application shall be made using a format established by the division and in accordance with instructions provided by the division.

1. The tank owner and/or operator shall demonstrate to the satisfaction of the division that each UST system at the facility meets or exceeds the criteria for reduction of the deductible set forth in the table in this subparagraph. Such demonstration may include, but not be limited to:
 - (i) Submittal of verifying documentation to the division; and/or
 - (ii) On-site verification by the division.
2. For each criterion met there shall be an associated reduction in the deductible. However, the maximum percentage reduction in the deductible per occurrence shall not exceed fifty percent (50%).

	Criteria	Percentage Reduction
(i)	Double Wall Tank(s) installed before July 24, 2007	10%
(ii)	Secondary containment Chase Piping Enclosed Fiberglass Primary Piping or Flexible Plastic Piping with Containment Sumps at Piping Joints Installed before July 24, 2007	10%
(iii)	Containment Sumps at Submersible Turbine Pumps installed before July 24, 2007	10%

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(iv)	Containment Sumps under Dispensers installed Before July 24, 2007	10%
(v)	Continuous In-Tank Leak Detection System	10%
(vi)	Double Wall Spill Bucket with Interstitial Monitoring	10%

3. If a criterion is not applicable to one or more of the UST systems at the facility, then the conditions of part 1 of this subparagraph shall have been met if every UST system at the facility for which the criterion is applicable meets that criterion. For example, the criterion for a containment sump under a dispenser is not applicable to a UST system used to store waste oil or used oil.
4. Upon confirmation by the division that a tank owner and/or operator has met one or more of the criteria for reduction of the deductible set forth in the table in this subparagraph, the tank owner and/or operator will be sent correspondence setting forth the new reduced deductible.
5. However, if one or more of the criteria in subparts 2(i) through (vi) of this subparagraph was met on or after July 24, 2007, in accordance with the requirements of paragraph (2) or (6) of Rule 0400-18-01-.02, there shall be no reduction in the deductible.

(7) Removal, Replacement or Repair of Property Improvements.

- (a) In accordance with paragraph (7) of Rule 0400-18-01-.06, a recommendation of an option for removal and either disposal, replacement or repair of a property improvement may be made as a part of site remediation using fund dollars.
 1. Division approval to pursue this option shall be obtained prior to taking the action in part 2 of this subparagraph.
 2. Two cost proposals shall be submitted to the division. The two cost proposals shall be prepared in accordance with guidance provided by the division and submitted in a format established by the division.
 - (i) One proposal shall be for the cost of remediation without the removal, disposal, replacement or repair of the property improvement.
 - (ii) One proposal shall be for the cost of the removal and either the disposal, replacement or repair of the property improvement plus the cost of remediation without the impediment of the property improvement.
 3. A recommendation that includes replacement or repair shall be consistent with the requirements of Rule 0400-18-01-.02.
- (b) If the division evaluation of the cost proposals submitted in accordance with part (a)2 of this paragraph as well as any other pertinent information, that the expenditure of fund dollars for removal and either disposal, replacement or repair of property improvements would result in a substantial reduction of the total cost of cleanup activities at the petroleum site, the division may approve reimbursement from the fund for removal and either disposal, replacement or repair of property improvements.
- (c) Prior to removal of a property improvement approved for removal in accordance with the provisions of subparagraph (b) of this paragraph, documentation of the condition and location of the property improvement, including, but not limited to, photographs and a scaled site map, shall be provided to the division in a format and in accordance with guidance provided by the division.
- (d) Prior to reimbursement by the fund for replacement or repair of a property improvement approved by the division in accordance with subparagraph (b) of this paragraph, documentation of the condition and location of the property improvement, including, but not limited to, photographs, shall be provided to the division.

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- (e) Unless division approval has been granted in accordance with subparagraph (b) of this paragraph, the fund shall not reimburse tank owners, tank operators or petroleum site owners for the cost of property improvements.
- (8) Fund ineligible costs.
- (a) Costs of maintenance and/or retrofitting of affected tanks and associated piping and any costs not integral to site rehabilitation shall not be eligible for payment or reimbursement by the fund.
 - (b) The cost of equipment purchases other than routinely required supplies which are expended at a given site or equipment which shall be installed at a site to implement a Corrective Action Plan shall not be charged as a lump sum to the cost of rehabilitating any given site at which funds are being claimed for containment, investigative, or corrective action costs. Examples of equipment which could not be charged to a specific site would include: drilling rigs, earth moving equipment, groundwater sampling pumps, and photoionization detectors. Examples of equipment which could be charged to a specific site would include: bailers, sample containers, etc. Hourly charges for equipment may be established in the cost proposal submitted for each major phase of work. These hourly rates shall be competitive with similar charges by other approved contractors, or they may be rejected by the division if they are determined to represent unreasonable costs.
 - (c) The owner and/or operator or petroleum site owner fund deductible amounts as specified in subparagraph (6)(b) of this rule are not eligible for reimbursement from the fund. Proof of payment of these initial amounts is required prior to reimbursement of any costs. The owner and/or operator or petroleum site owner fund deductible for taking corrective action cannot include any cost defined as fund ineligible in subparagraphs (a) and (b) of this paragraph.
 - (d) Costs of removing underground storage tanks, other than those costs approved in accordance with the provisions of paragraph (7) of this rule, including any expenditure associated with the proper closure of a tank in compliance with Rule 0400-18-01-.07 shall not be eligible for fund payment or reimbursement.
 - (e) Corrective action costs associated with a release of petroleum caused by overt actions taken by the tank owner or his employee(s) will not be eligible for reimbursement from the fund, for example, an overfill release caused by the disabling of an overfill prevention device.
- (9) Fund obligations.
- (a) Contingent upon availability of funds, the commissioner will make obligations from the fund when:
 1. A cost proposal for containment, investigative, or corrective actions, submitted in accordance with paragraph (10) of this rule, is approved by the division;
 2. A judgment for a third party claim is submitted for payment in accordance with paragraphs (6), (11) and (12) of this rule;
 3. A payment application is received for containment, investigative, or corrective action work performed from July 1, 1988 until April 15, 1990, subject to a determination of reasonable costs by the division. Fund eligibility from July 1, 1988 until April 15, 1990 shall be determined by fee payment as required by the Tennessee Petroleum Underground Storage Tank Act;
 4. A payment application is received for initial release response, abatement measures, and initial free product removal under the terms of subparagraph (10)(d) of this rule;
 5. A payment application is received and approved by the division for costs associated with providing an alternate water supply to a person whose water supply has been contaminated by a release of petroleum; or

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6. The commissioner or board determines it is necessary to provide for containment, investigation, identification, reasonable and safe cleanup, and as otherwise provided in the Tennessee Petroleum Underground Storage Tank Act.
- (b) If the unobligated balance of the fund is less than the total amount associated with payment applications, cost proposals, and third party judgments which have been accepted by the commissioner, to the extent allowed by available funds, funds will be obligated in the chronological order in which the claims were submitted, except for the provisions of subparagraph (c) of this paragraph.
 - (c) Obligations of funds required for satisfying fund eligible payment applications for work performed under part (a)3 of this paragraph or judgments for third party claims which were rendered prior to April 15, 1990, for releases discovered from July 1, 1988 until April 15, 1990, will be given priority over payment applications and cost proposals for releases which occur after April 15, 1990.
 - (d) All claims against the fund are clearly obligations only of the fund and not of the State, and any amounts required to be paid under this part are subject to the availability of sufficient monies in the fund. The full faith and credit of the State shall not in any way be pledged or considered to be available to guarantee payment from such fund.
- (10) Requirements for fund coverage of corrective action costs.

An eligible owner and/or operator or petroleum site owner conducting UST corrective actions is entitled to coverage of reasonable costs from the fund, subject to the provisions set forth in this paragraph.

- (a) Upon confirmation of a release in accordance with paragraph (3) of Rule 0400-18-01-.05 or after a release from the UST system is identified in any other manner, owners and/or operators or petroleum site owners shall comply with the requirements of Rule 0400-18-01-.06 as necessary to investigate the release, characterize the site and control any hazards posed by the release in order to stabilize the site, prevent significant risk to human health and safety, and/or continuing damage to the environment.
- (b) Upon confirmation and reporting of a release in accordance with the requirements of paragraphs (1) through (3) of Rule 0400-18-01-.05 or after a release from the UST system is identified in any other manner, the owner and/or operator or petroleum site owner shall select a contractor from the division's list of approved contractors if the owner and/or operator or petroleum site owner expects to apply for fund benefits. The division shall be notified in writing of such a selection within thirty (30) days or other time frame specified by the division. A contractual agreement shall be established between the owner and/or operator or petroleum site owner and the contractor in accordance with the requirements of T.C.A. § 68-215-129. The division shall be provided a copy of the contractual agreement.
- (c) Upon confirmation and reporting of a release in accordance with the requirements of paragraphs (1) through (3) of Rule 0400-18-01-.05 or after a release from the UST system is identified in any other manner,
 - 1. Effective December 22, 1998, the owner and/or operator shall submit documentation to the division verifying that the underground storage tank system is in compliance with paragraphs (3) and (4) of Rule 0400-18-01-.02;
 - 2. On or after April 20, 1998, the owner and/or operator shall submit documentation to the division verifying the performance of release detection as required by Rule 0400-18-01-.04 at the time of the release; and
 - 3. On or after the effective date of these rules, the owner or operator shall submit documentation to the division verifying compliance with applicable secondary containment requirements as set forth in subparagraph (1)(c) of Rule 0400-18-01-.02 and paragraphs (2) and (6) of Rule 0400-18-01-.02.

The owner and/or operator shall submit this documentation to the division within thirty (30) days of the date the release is confirmed.

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- (d) If initial response or hazard control measures conducted in accordance with paragraphs (3) and (4) of Rule 0400-18-01-.06 are required to properly stabilize a site and prevent significant continuing damage to the environment or risk to human health, and the cost of such required measures is expected to exceed ten thousand dollars (\$10,000), then the owner and/or operator or petroleum site owner or the approved corrective action contractor may contact the division to obtain verbal or written approval to allow additional expenditures prior to the submittal of a cost proposal. Additional expenditures may be authorized by the Commissioner which may be reimbursable from the fund to achieve site stabilization and immediate protection of human health or the environment. Such approval may be given following the actual expenditures if immediate actions were necessary to protect human health or the environment and division personnel were unavailable. In such a case, the Commissioner shall be notified of the actions taken by no later than one (1) working day after any such actions.
- (e) Following completion of necessary site stabilization actions as described in subparagraph (d) of this paragraph, subsequent investigation, risk evaluation, and remediation shall be performed by approved contractors and in accordance with the requirements of Rule 0400-18-01-.06. Unless directed to do otherwise by the division, prior to initiating any subsequent investigation, risk evaluation or remediation, the owner and/or operator or the petroleum site owner shall, through the assistance of the selected approved contractor, prepare and submit to the division a cost proposal for conducting the proposed investigation, risk evaluation or remediation. Cost proposals shall be prepared in accordance with guidance provided by the division and in a format established by the division.
- (f) Upon review of a cost proposal submitted in accordance with subparagraph (e) of this paragraph the division may:
 - 1. Accept the cost proposal and authorize work to be initiated; or
 - 2. Request a modification to or clarification of the cost proposal if projected costs are determined not to be reasonable.
- (g) Unless directed to do otherwise by the division, in addition to the requirements of subparagraphs (d) and (e) of this paragraph, the owner and/or operator or petroleum site owner shall upon submittal of a cost proposal for a site investigation, also submit an estimate of the total cost of remediation for the site in a format required by the division, which shall be used solely for the purpose of the board and the division in projecting future funding requirements for the fund. The total estimated cost of remediation for a site shall be updated by the owner and/or operator or petroleum site owner in accordance with a schedule required by the division and as more complete information regarding a site becomes available.
- (h) Upon acceptance of a cost proposal by the division, sufficient monies will be obligated from the fund for completion of the particular phase of work for which the cost proposal was submitted and authorization will be provided for the initiation of the proposed action. Obligation of funds shall be subject to the availability of funds at the time of acceptance of the cost proposal.
- (i) Corrective actions performed prior to acceptance of an associated cost proposal may not be eligible for reimbursement.
- (j) If the cost of completing any of the corrective actions of subparagraph (e) of this paragraph is expected to exceed the amount of an accepted cost proposal, an amended cost proposal shall be submitted and accepted to allow additional funds to be obligated.
- (k) Any corrective action which is carried out in response to any discharge, release, or threatened release of petroleum from an UST shall be conducted in accordance with the requirements of Rules 0400-18-01-.06 and subparagraphs (a) through (e) of this paragraph.
- (l) The owner and/or operator or petroleum site owner or the selected corrective action contractor shall keep and preserve detailed records demonstrating compliance with approved investigative and corrective action plans and all invoices and financial records associated with costs for which

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reimbursement will be requested. These records shall be kept for at least three (3) years after corrective action has been completed for a site.

- (m) Any approved corrective action shall be implemented in a manner acceptable to the division in accordance with an approved corrective action plan, if applicable, in order for the owner and/or operator or petroleum site owner to be eligible for the reimbursement of costs.
 - (n) An eligible owner and/or operator conducting UST response actions from July 1, 1988 until April 15, 1990, relative to any discharge, release or threatened release of petroleum from an UST, is entitled to reimbursement of reasonable costs above entry level from the fund but is exempted from the requirements of subparagraphs (b) through (j) of this paragraph, provided that corrective actions were carried out in accordance with a plan approved by the division.
 - (o) If corrective actions which were initiated during the time period referenced in subparagraph (n) of this paragraph are still continuing on April 15, 1990, the division may require submittal of cost proposals for any remaining phases of work and for the total projected cost of the remediation.
 - (p) If the contractor performing corrective actions as described in subparagraph (o) of this paragraph is not an approved contractor, the division may authorize the continued use of that contractor.
 - (q) If a contractor is performing corrective action at a site prior to development of an approved contractor list, the division may authorize the continued use of that contractor.
 - (r) The tank owner and/or operator or petroleum site owner, and his/her representative or corrective action contractor, shall gather and maintain documentation and records necessary to verify the necessity for any implemented corrective action and any claim for reimbursement from the fund. Further, the tank owner and/or operator or petroleum site owner, and his/her representative or corrective action contractor, shall fully cooperate with any audit which the commissioner, or his authorized representatives, conducts to verify the expenditures and costs contained within documentation submitted to the department for reimbursement from the fund. Therefore, the tank owner and/or operator or petroleum site owner, and his/her representative or corrective action contractor, shall produce any records, data, documents, information, and personnel for interviews as necessary in the commissioner's determination to fully and completely conduct an audit.
 - (s) To avoid a conflict of interest, if the tank owner and/or operator or the petroleum site owner expects to be reimbursed from the fund for the cost of laboratory analysis of environmental samples, the approved CAC hired by the tank owner and/or operator or petroleum site owner shall not be in control of or controlled by the laboratory performing analysis of environmental samples nor controlled by the same parent company.
- (11) Requirements for fund coverage of third party claims.

An eligible owner and/or operator or petroleum site owner is entitled to fund coverage for third party damages caused by the release of petroleum from an underground storage tank system, subject to the requirements set forth in this paragraph.

To assert a claim for payment or reimbursement of a third party claim, an eligible owner and/or operator or petroleum site owner shall comply with each of the following:

- (a) Notify the division in writing within twenty-one (21) days upon the receipt of written notice of the third party liability suit. Thereafter, the owner and/or operator or petroleum site owner shall submit to the division a report which accurately reflects the status of the lawsuit every four (4) months, until the litigation is resolved. The owner and/or operator or petroleum site owner shall also notify the division in writing fourteen (14) days in advance of any settlement conference or settlement agreement;
- (b) The owner and/or operator is fund eligible at the time the release occurred;
- (c) Copies of all available documents used to support the claim(s) of property damage(s) or bodily injury(ies), including, but not limited to, invoices, cost estimates or bid proposals, appraisals, medical evaluations, and medical bills.

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- (d) The third party obtains a final judgment enforceable in Tennessee or pursuant to a settlement reviewed and approved by the division. The underground storage tank system owner and/or operator or petroleum site owner shall file a motion with the court requesting that the final judgment specify the type and amount of all damages awarded to the third party(ies);
 - (e) The final judgment is for an amount greater than the fund entry level in effect on the date of release.
 - (f) The tank owner and/or operator or petroleum site owner, and his/her representative or corrective action contractor, shall gather and maintain documentation and records necessary to verify any claim for reimbursement from the fund. Further, the tank owner and/or operator or petroleum site owner, and his/her representative or corrective action contractor, shall fully cooperate with any audit which the commissioner, or his authorized representatives, conducts to verify the expenditures and costs contained within documentation submitted to the division for reimbursement from the fund. Therefore, the tank owner and/or operator or petroleum site owner, and his/her representative or corrective action contractor, shall produce any records, data, documents, information and personnel for interviews as necessary in the commissioner's determination to fully and completely conduct an audit.
- (12) Applications for payment.
- (a) Applications for reimbursement for costs of corrective actions shall be submitted on a form established by the division which shall include an itemization of all charges according to labor hours and rates, analytical charges, equipment charges, and other categories which may be identified by the division, or which the applicant may wish to provide.
 - (b) The following statement shall be signed in accordance with the requirements of either part 1 or 2 of this subparagraph:

“I certify to the best of my knowledge and belief: that the costs presented therein represent actual costs incurred in the performance of response actions at this site during the period of time indicated on this application; that an accidental release has occurred from a petroleum underground storage tank system at this site; and that no charges are presented as part of this application that do not directly relate to the performance of corrective actions related to the release of petroleum at this site.”

 1. The owner and/or operator or petroleum site owner and the approved CAC or an authorized representative of the approved CAC shall sign the application for payment containing the statement in this subparagraph if authorized payments from the fund will be made in accordance with the provisions of subparagraph (14)(a) of this rule.
 2. The owner and/or operator or petroleum site owner shall sign the application for payment containing the statement in this subparagraph if authorized payments from the fund will be made in accordance with the provisions of subparagraph (14)(b) of this rule.
 - (c) Applications for payments may be submitted following acceptance by the division of completed corrective actions. Such corrective actions may include but are not limited to the following:
 1. Completion of hazard management activities, which were authorized by the division, including, but not limited to, provision of an alternate water supply;
 2. Completion and submittal of a Hazard Management Report;
 3. Development and submittal of an Initial Site Characterization Report;
 4. Development and submittal of a Risk Analysis Report;
 5. Implementation of interim remediation and/or risk management activities which were authorized by the division;

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6. Advanced risk-based modeling development which was authorized by the division; and/or
 7. Development and/or implementation of a Corrective Action Plan which was authorized by the division.
- (d) Applications for payments for the implementation of corrective action may be submitted sixty (60) days following initiation of work to implement the Corrective Action Plan and at sixty (60) day intervals thereafter until completion of the authorized activities. Upon request, the division may approve interim payments at more frequent intervals.
 - (e) All payments shall be subject to approval by the division. Should a site inspection or other information available to the division reveal a discrepancy between the work performed and the work addressed by a payment application, the division may deny payment or may require the fund to be reimbursed.
 - (f) All applications for payment of costs of cleanup shall be received by the division within one (1) year of performance of the task or tasks covered by that application in order to be eligible for payment from the fund.
 - (g) Except for the situations provided for in subparagraph (10)(a) of this rule, payment shall not be made for corrective actions performed at a site until the division has reviewed and accepted a cost proposal for that work and until funds have been obligated from the fund for completion of that particular stage of work.
 - (h) For payment of third party claims, the UST owner and/or operator or petroleum site owner shall submit an application to the division, using the approved form, attaching the original or a certified copy of a final judgment (enforceable in Tennessee) with proof of payment of the applicable fund deductible for compensation of third parties as specified in subparagraph (6)(b) of this rule. The UST owner and/or operator or petroleum site owner shall submit proof that a motion was submitted to the court on their behalf requesting that the type and amounts of all damages awarded to the third party(ies) in the final judgment be specifically listed. This application shall be received by the division no later than thirty (30) days after notification of judgment.
 1. The division may require additional information to determine the eligibility of a cost for payment.
 2. If the application is determined to be incomplete, the division shall notify the applicant of the deficiencies. The applicant shall submit supplemental information to correct the deficiencies within forty-five (45) days of receipt of notice. The applicant may submit a written request for an extension of time for submittal of information to the division. The applicant shall state and the division shall approve the conditions which warrant an extension of submittal time.
 3. Only the following costs shall be eligible for payment or reimbursement from the fund:
 - (i) Awards for property damage to third parties made by a court of suitable jurisdiction in Tennessee; and
 - (ii) Awards for bodily injury to third parties made by a court of suitable jurisdiction in Tennessee.
- (13) Settlement of third party claims.
- (a) No settlement of a third party claim shall be made by an owner and/or operator or petroleum site owner without the prior approval of the division. The fund shall not be obligated to pay any claim for reimbursement if the owner and/or operator or petroleum site owner enters into a settlement without the prior approval of the division.
 - (b) The fund shall not be obligated to pay any final and enforceable third party judgment or reimburse an owner and/or operator or petroleum site owner for payment of the judgment in any amount

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exceeding a settlement offer rejected by the owner and/or operator or petroleum site owner which was submitted to the division, reviewed and approved by the division for payment.

- (14) Fund payment procedures.
- (a) Where the owner and/or operator or petroleum site owner has submitted an acceptable application for payment for corrective actions or third party claims, but has not paid for these activities or claims, payments will be made by a check written to both the eligible owner and/or operator or petroleum site owner and the provider of the corrective action services or third party.
 - (b) Payments from the fund will be made directly to the eligible owner and/or operator or petroleum site owner in cases where the owner and/or operator or petroleum site owner submits documentation verifying the owner and/or operator or petroleum site owner has paid in excess of the applicable fund deductible for taking corrective actions as specified in subparagraph (6)(b) of this rule.
 - (c) The owner and/or operator or petroleum site owner is responsible for final payment to the contractor who performed the corrective actions and for payment of judgments to third parties.
 - (d) Contingent upon availability of funds, the department shall process all applications for payment as soon as possible upon receipt of application. If all costs are considered to be reasonable and eligible for reimbursement, payment will be issued within ninety (90) days once costs have been determined to be reasonable and eligible for reimbursement. If certain costs are considered as not being reasonable or eligible for reimbursement, the division may issue a check for the amount of the application not in question and provide a forty-five (45) day period in which the owner and/or operator or petroleum site owner or contractor may present such information as is necessary to justify the disallowed costs. Following review of such information, the division may agree to pay the previously disallowed costs, or any portion thereof, or may again disallow the costs for payment. If the division disallows costs upon a second review, the owner and/or operator or petroleum site owner may petition the board for a hearing on the disallowance pursuant to Rule 0400-18-01-.11.
- (15) Approval of corrective action contractors.
- (a) The CAC is the person responsible for conducting and overseeing the corrective action at a petroleum underground storage tank site. There shall be only one CAC for each site.
 - 1. The CAC shall be either:
 - (i) A properly licensed contractor, licensed engineer, registered geologist, or other licensed environmental professional; or
 - (ii) An owner and/or operator of the petroleum underground storage tank(s) which caused the release of petroleum to the environment or petroleum site owner, provided that each contractor/subcontractor working for the owner and/or operator or petroleum site owner shall be a properly licensed contractor pursuant to T.C.A. § 62-6-101 et seq.
 - (b) CACs will be approved to perform fund eligible work upon satisfaction of the following:
 - 1. The CAC files a written application to become an approved corrective action contractor with the division via certified mail or personal service.
 - (i) The application shall be updated by April 1 of each year; and
 - (ii) The application shall include the following information:
 - (I) The name of the CAC;
 - (II) The principal(s) of CAC;

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- (III) The name of a contact person for the CAC;
 - (IV) Address(es) of CAC's office;
 - (V) Office phone number(s) of CAC;
 - (VI) Office facsimile number;
 - (VII) Electronic mail address; and
 - (VIII) Other information requested by the division.
2. The CAC submits a sworn statement with the written application in part 1 of this subparagraph, including the following provisions:
- (i) The CAC shall abide by and comply with the Rules and Regulations of the Department of Finance and Administration, Chapter 0620-03-03, Personal, Professional and Consulting Services Contracts.
 - (ii) The CAC shall have written contract(s) with all contractors/subcontractors, and contract(s) shall contain provisions that contractors/subcontractors will abide by and comply with the Rules and Regulations of the Department of General Services, Chapter 0690-03-01, Comprehensive Rules and Regulations of the Central Procurement Office. Contract(s) between the CAC and contractors/subcontractors shall also contain provisions that all site workers working under authority of contractors/subcontractors shall have applicable health and safety training when required by the Tennessee Department of Labor;
 - (iii) Site workers working under authority of the CAC shall have the applicable health and safety training when required by the Tennessee Department of Labor;
 - (iv) The CAC understands that reimbursement from the fund shall be in accordance with the reasonable rate schedule as established by the division;
 - (v) If the CAC is not the owner and/or operator of the tank that caused the release or petroleum site owner, the CAC shall have a written contract with the UST owner and/or operator or petroleum site owner, and the contract shall contain the following sentence conspicuously located on the first page of the contract:

The corrective action contractor will/will not (mark one) use the division's reasonable rate schedule when invoicing the owner and/or operator or petroleum site owner for the expenses incurred in the investigation and cleanup of this site.
 - (vi) If the CAC is the owner and/or operator of the tank which caused the release or petroleum site owner, the CAC shall have a written contract with all contractors/subcontractors, and the contract shall contain the following sentence conspicuously located on the first page of the contract:

The contractor/subcontractor (mark one) will/will not (mark one) use the division's reasonable rate schedule when invoicing the owner and/or operator or petroleum site owner for the expenses incurred in the investigation and cleanup of this site;
 - (vii) The CACs services shall be performed in a manner consistent with the level of care and skill ordinarily exercised by members of their profession practicing in the State of Tennessee, under similar conditions, and at the time the services were rendered. The CAC shall not knowingly or willfully cause the spread of contamination nor inhibit corrective action at the site;
 - (viii) The CAC shall gather and maintain documentation and records necessary for filing a claim with the Tennessee Petroleum Underground Storage Tank Fund;

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- (ix) The CAC shall, at a minimum, follow Quality Assurance/Quality Control Standard Operating Procedures supplied by the division, unless alternate Quality Assurance/Quality Control is approved in writing in advance by the division;
 - (x) The CAC shall assure that the CAC and/or any person the CAC employs or contracts with to engage in the practice of engineering shall be appropriately licensed/registered under the Tennessee Architects, Engineers, Landscape Architects and Interior Designers Law and Rules T.C.A. § 62-2-101 et seq.;
 - (xi) The CAC shall assure that any and all work defined as contracting in Tennessee Contractor's License Law (T.C.A. § 62-6-101 et seq.) shall be performed by a licensed contractor(s) with appropriate classification and monetary limitation;
 - (xii) The CAC shall assure that the CAC and/or any person the CAC employs or contracts with to perform professional geologic work shall be appropriately registered under the Tennessee Geologists Act (T.C.A. § 62-36-101 et seq.); and
 - (xiii) The CAC shall assure that all work done by the CAC had the prior approval of a Registered Professional Engineer or Professional Geologist who is licensed/registered with the Tennessee Department of Commerce and Insurance, and the work was done as specified in this Chapter, that is Chapter 0400-18-01, and/or according to a plan approved by the division. The CAC shall assure that all plans and reports submitted to the division were prepared and signed by the Registered Professional Engineer or Professional Geologist who prepared or is responsible for the plan or report. The CAC shall further assure that a Registered Professional Engineer or Professional Geologist shall make periodic site visits to verify whether or not the work performed was as specified by the Registered Professional Engineer or Professional Geologist, and as specified in this Chapter, and/or according to a plan approved by the division. The CAC shall require a Registered Professional Engineer or Professional Geologist to submit a signed certification based on their personal observation and review of job site records stating whether or not the work was performed as directed by the Registered Professional Engineer or Professional Geologist, and whether or not the work has been performed in accordance with this Chapter, and/or a plan approved by the division. If the work was not performed according to the above specifications, the certification shall include a listing of how the work which was performed varies from this Chapter, the approved plan, and/or the authorization of the Registered Professional Engineer or Professional Geologist and the specific reason for each variation. The certification shall be submitted according to a schedule and format determined by the division.
 - (xiv) The CAC shall fully and completely cooperate with the Commissioner during any audit by the Commissioner or his authorized representative, and comply with subparagraphs (10)(r) and (11)(f) of this rule.
3. The CAC has any applicable license(s) and registration(s) required in the State of Tennessee; and
- (i) If the CAC is a licensed contractor, the contractor shall be properly licensed with an S-Underground Tank Installers, Removal, and Remediation of Pollutants or other applicable classification with a monetary limitation as required under rule 0680-01-13 and established by the board for Licensing Contractors of the Tennessee Department of Commerce and Insurance in the amount of at least three hundred fifty thousand dollars (\$350,000). Date of license expiration shall be included. The CAC shall submit requirements of this part with the application required in part 1 of this subparagraph and shall submit documentation of any changes, renewals, renovations, etc. of the CAC's Tennessee license. (There shall be no fund reimbursement for those expenses which exceed the contractor's monetary limitation.)

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(ii) All contractors and their subcontractors and employees shall have other applicable license(s) and registration(s).

4. The CAC shall maintain liability insurance coverage of the types and in the amounts described in the Table below, or the equivalent, and shall provide certification, with the division listed as a certificate holder, to the division of such coverage with the application described in part 1 of this subparagraph on April 1 of each year thereafter, or more frequently if necessary, to keep the division updated as to the CAC's current insurance coverage.

<u>TYPE OF POLICY</u>	<u>Limits of Liability</u>	<u>Description</u>
Worker's Compensation	Statutory	All states
Employer's Liability	\$500,000	
Automobile Liability	\$1,000,000 combined single limit (bodily injury and property damages)	All owned, non-owned, and hired vehicles
General Liability	\$1,000,000 combined single limit	Broad Form Comprehensive General Liability

5. The CAC shall submit a list of the CAC's employees which will be utilized by the CAC as a part of the assessment and remediation of UST sites in the State of Tennessee.

(i) For each employee the list shall include, but not necessarily be limited to, the following information for each employee on the list:

(I) Job description;

(II) Job title;

(III) Level of education, including any college degrees, and date(s) of graduation;

(IV) Professional registration(s) and license number(s);

(V) Office location; and

(VI) Telephone number(s).

(ii) The list of employees shall be submitted with the application described in part 1 of this subparagraph and annually with a due date of April 1 of each year thereafter.

(iii) When a new employee begins working for a CAC, within fifteen (15) days of the first day of employment or as soon as their work time will be submitted to the division for reimbursement, the CAC shall submit the employee information required in subpart (i) of this part to the division.

(c) For those CACs not approved by the division for placement on the list of Approved CACs:

1. CACs who submitted applications but did not meet the requirements of parts (b)1 through 5 of this paragraph may submit a subsequent application for review at such time they feel that the requirements of (b)1 through 5 of this paragraph may have been met.

2. If the division does not approve a CAC and does not place the CAC on the list of Approved CACs, the decision of the review committee may be appealed to the board in accordance with Rule 0400-18-01-.11.

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- (d) At any time other than when the division compiles the new year's approved CAC list after the submission of information each April 1, a CAC will be removed from the division's approved CAC list when it has been determined that the CAC has failed to satisfactorily maintain the requirements of subparagraph (b) of this paragraph or has committed one or more of the violations listed in subparagraph (e) of this paragraph.
1. The removal process shall be initiated when a complaint is referred to the division's review committee;
 2. Within ten (10) days of receipt of a complaint, the review committee shall inform the CAC via certified mail of receipt of the complaint and identify whether the complaint was filed by a person in accordance with T.C.A. § 68-215-123 or by the board, department, or its officials and employees acting in their official capacity;
 3. The division's review committee may request the CAC to appear at a meeting to show cause why the department should not remove the CAC from the list of approved CACs;
 4. The CAC may request a meeting with the review committee;
 5. The review committee shall notify the CAC of its decision via certified mail within sixty (60) days of dispatch of the certified letter referenced in part 2 of this subparagraph;
 6. If the review committee decides to remove the CAC from the list of approved CACs, removal shall be effective thirty (30) days after dispatch to the last known address on file with the division unless:
 - (i) The CAC corrects the non-compliance to the satisfaction of the review committee during the thirty (30) day period; or
 - (ii) The CAC files a written appeal or petition for declaratory order with the division within the thirty (30) day period requesting a hearing to appeal the decision of the review committee to, or obtain a declaratory order from, the board.
 7. If the division removes a CAC from the list of approved CAC's the CAC may either:
 - (i) Petition the board for a hearing on its removal pursuant to Rule 0400-18-01-.11, if the complaint against the CAS was filed by a person in accordance with T.C.A. § 68-215-123. The filing of an appeal will postpone actions to remove a CAC from the list of approved CACs until the appeal is heard by the board; or
 - (ii) Petition the board for a declaratory order on its removal pursuant to T.C.A. §§ 4-5-223 to -225 if the complaint against the CAC was filed by the board, department, or its officials and employees acting in their official capacity. The filing of a petition will postpone actions to remove a CAC from the list of approved CACs until the petition is heard by the board.
 8. If the division does not remove a CAC from the list of approved CAC's, the complainant may petition the board for a hearing on the decision pursuant to T.C.A. § 68-215-123;
 9. Once the review committee has dispatched a Notice of Removal to a CAC via certified mail, the division will approve no additional plans, scopes of work, or cost proposals if such approval will cause division personnel to violate T.C.A. § 62-6-120(c)(1);
 10. If an appeal, referenced in subpart 7(i) of this subparagraph, is not filed during the thirty (30) day period, the decision of the review committee will be final;
 11. A CAC removed from the approved CAC list may reapply for approval as provided for in subparts (i) or (ii) of this part:
 - (i) A CAC who was removed from the approved CAC list due to failure to satisfactorily maintain the requirements of subparagraph (b) of this paragraph

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may reapply under subparagraphs (b) and (c) of this paragraph once the requirements of subparagraph (b) of this paragraph have been met;

- (ii) A CAC who was removed from the approved CAC list due to one or more of the violations listed in (e) below may reapply after one (1) year. The CAC shall submit evidence showing the reasons why the CAC should be reinstated for evaluation by the review committee. The CAC shall reapply under the provisions of subparagraphs (15)(b) and (c) of this rule.
- (e) A CAC may be removed from the list of Approved Corrective Action Contractors if it is determined by a review committee consisting of division staff members that the CAC has done any of the following:
1. The CAC charged the state or owner and/or operator for unnecessary or unapproved work or work which was not performed;
 2. The CAC filed false information with the department;
 3. The CAC has been found guilty of violating any of the following or a comparable law in another jurisdiction:
 - (i) T.C.A. § 39-16-503 Tampering with or fabricating evidence;
 - (ii) T.C.A. § 39-16-504 Destruction of and tampering with governmental records;
 - (iii) T.C.A. § 39-14-130 Destruction of valuable papers with intent to defraud;
 - (iv) T.C.A. § 39-14-114 Forgery;
 - (v) T.C.A. § 39-14-104 Theft of services, or
 - (vi) T.C.A. § 39-14-103 Theft of property;
 - (vii) T.C.A. § 68-211-101 et seq. Solid Waste Disposal Act;
 - (viii) T.C.A. § 68-212-101 et seq. Hazardous Waste Management Act;
 - (ix) T.C.A. § 69-3-101 et seq. Water Quality Control Act;
 - (x) Other environmental regulatory legislation.
 4. The CACs or an employee(s), principal(s), or officer(s) of the CAC is found to have engaged in the unauthorized practice of engineering, contracting, or geology under T.C.A. § 62-2-101 et seq., § 62-6-101 et seq., and § 62-36-101 et seq., or a comparable law in another jurisdiction by the appropriate regulatory agency or court.
 5. Due to the quality of work performed by the CAC, the CAC has significantly delayed or inhibited progress in achieving appropriate corrective action at a site(s). This shall include, but shall not be limited to, the following:
 - (i) The CAC performs a non-approved action which spreads contamination in the environment;
 - (ii) The CAC files a plan, including, but not limited to, a Free Product Investigation Plan and/or a Corrective Action Plan, which is rejected by the division as deficient, followed by three subsequent revisions, each of which is rejected by the division as deficient; or
 - (iii) The CAC fails to supply recommendations for further assessment, remediation, site specific cleanup standards, site closure, or other conclusions supported by the following:

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- (I) The physical and chemical characteristics of petroleum, including its toxicity, persistence, and potential for migration;
 - (II) The hydrogeologic characteristics of the petroleum site and the surrounding land;
 - (III) The proximity, quality, and current and future uses of groundwater;
 - (IV) An exposure assessment;
 - (V) The proximity, quality, and current and future uses of surface waters;
 - (VI) Applicable regulations in Chapter 0400-18-01; and
 - (VII) The magnitude and extent of petroleum contamination at the petroleum site and the surrounding land.
- (iv) The CAC supplies recommendations for further assessment, remediation, site specific cleanup standards, site closure, or other conclusions not supported by items (iii)(I) through (VII) of this part.
- 6. The CAC filed plan(s) or report(s) which do not bear the appropriate signature and Tennessee license/registration number of a Registered Professional Engineer or Professional Geologist.
 - 7. The CAC performed work which did not have the prior approval of a Registered Professional Engineer or Professional Geologist who is licensed/registered with the Tennessee Department of Commerce and Insurance.
 - 8. The CAC has deviated from an approved plan or scope of work without the approval of the division. This includes, but is not limited to, the following:
 - (i) Failure to follow Quality Assurance and Quality Control approved in the plan, or
 - (ii) Failure to follow the schedule for implementation approved in the plan.
 - 9. The CAC has failed to follow Quality Assurance/Quality Control (QA/QC) procedures supplied by the division without having alternate QA/QC approved in advance in writing by the division.
 - 10. The CAC has failed to follow UST regulations promulgated in Chapter 0400-18-01.
 - 11. The CAC failed to have a Registered Professional Engineer or Professional Geologist file a signed certification according to a schedule and format required by the division. Said certification shall be based on the Registered Professional Engineer's or Professional Geologist's personal observation and review of job site records. The certification shall state whether or not the work was performed as directed by a Registered Professional Engineer or Professional Geologist, and whether or not the work has been performed in accordance with this Chapter, and/or a plan approved by the division. The certification shall include a listing of how the work performed varies from this Chapter, the approved plan, and/or the work approved of the Registered Professional Engineer or Professional Geologist and the specific reason for each variation.
- (f) A CAC that fails to comply with the requirements of parts (b)1, 4, or 5 of this paragraph on April 1 of any year will not be eligible to remain on the list of approved contractors.
- 1. The review committee shall inform the CAC via certified mail that removal shall be seven (7) days after dispatch to the last known address on file with the division unless the CAC corrects the non-compliance to the satisfaction of the review committee during the seven (7) day period.

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2. A CAC that fails to correct this noncompliance as provided in part 1 of this subparagraph, may reapply to be on the approved CAC list under subparagraphs (b) and (c) of this rule once it can meet all of those requirements.
- (g) No CAC shall be placed on the Approved Corrective Action Contractors list if the CAC is on a list of contractors banned from usage on federally funded projects. If a CAC on the Approved Corrective Action Contractors list is placed on the list of contractors banned from usage on federally funded projects, that CAC will be removed from the Approved Corrective Action Contractors list. When the CAC is removed from the list of contractors banned from usage on federally funded projects, the CAC may apply to be added to the Approved Corrective Action Contractors list according to procedures outlined in subparagraphs (b) and (c) of this paragraph. A CAC on a list of contractors banned from usage on federally funded projects cannot work as a subcontractor to an approved corrective action contractor.
 - (h) The appearance of a CAC on the division's list of Approved Corrective Action Contractors shall in no way establish liability or responsibility on the part of the division, the fund, or the State of Tennessee in regards to the services provided by the CAC or circumstances which may occur as a result of such services.
 - (i) An owner and/or operator may perform corrective actions for releases of petroleum from USTs he owns and/or operates provided that he submits an application with documentation as described in subparagraphs (b) and (c) of this paragraph and the application is approved by the division. The owner and/or operator may use qualifications of subcontractor(s) in addition to qualifications of the owner and/or operator in applying for approved corrective action contractor status. If an owner and/or operator uses a subcontractor(s) in qualifying for an approved corrective action contractor classification and there is a change of a subcontractor whose qualifications were used in the application or documentation, then the owner and/or operator shall notify the division; the owner and/or operator shall be removed from approved corrective action contractor status. The owner and/or operator shall submit a new application with documentation and be approved as discussed in subparagraphs (b) and (c) of this paragraph to continue work as an approved corrective action contractor.
 - (j) A CAC working as a subcontractor under contract to an approved CAC is not required to be classified as an approved CAC. The subcontractor shall maintain all applicable license(s) and/or registration(s) required in the State of Tennessee for work performed.
- (16) Recovery of costs by state - apportionment of liability.
- (a) Making use of any and all appropriate existing state legal remedies, the Commissioner may commence court action to recover the amount expended by the state from any and all responsible parties for each site investigated, identified, contained or cleaned up, including up to the limits of the deductible for owners and/or operators of petroleum underground storage tanks covered by the fund and the entire amount from owners and/or operators of petroleum underground storage tanks not covered by the fund.
 - (b) In any action under this rule, no responsible party shall be liable for more than that party's apportioned share of the amount expended by the state for such site. The responsible party has the burden of proving his apportioned share. Such apportioned share shall be based solely on the liable party's portion of the total volume of the petroleum at the petroleum site at the time of action under this chapter. Any expenditures required by the provisions of this chapter made by a responsible party (before or after suit) shall be credited toward any such apportioned share.
 - (c) In no event shall the total moneys recovered from the responsible party or parties exceed the total expenditure by the state for each site.
 - (d) Any party found liable for any costs or expenditures recoverable under this chapter who establishes by a preponderance of evidence that only a portion of such costs or expenditures are attributable to his or her actions shall be required to pay only for such portion.

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- (e) If the trier of the fact finds evidence insufficient to establish such party's portion of costs or expenditures in such a cost recovery, the court shall apportion such costs or expenditures among the defendants, to the extent practicable, according to equitable principles.

(17) Failure to take proper action.

Any responsible party who fails without sufficient cause to properly provide for removal of petroleum or remedial action upon order of the commissioner pursuant to this chapter may be liable to the state for a penalty in an amount equal to one hundred fifty percent (150%) of the amount of any costs incurred by the state as a result of such failure to take proper action. The commissioner may recover this penalty in an action commenced under T.C.A. § 68-215-115, paragraph (16) of this rule, or in a separate civil action, and such penalty shall be in addition to any costs recovered from such responsible party pursuant to this chapter.

(18) Severability.

If any paragraph, subparagraph, part, subpart, item or subitem, section or subsection of this rule is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of this rule shall not be affected thereby.

Authority: T.C.A. §§ 68-215-101 et seq. and 4-5-201 et seq.

0400-18-01-.10 Fee Collection.

(1) Purpose.

The purpose of this rule is to establish a system and schedule for collection of underground storage tank fees.

(2) Applicability.

Requirements of this rule apply to the following persons:

- (a) Owners and/or operators of petroleum underground storage tanks and/or tank compartments required to be reported under the requirements of T.C.A. § 68-215-101 et seq., as follows:

1. All petroleum underground storage tanks and/or tank compartments that are actively storing petroleum;
2. All petroleum underground storage tanks and/or tank compartments that are reported as in service at the start of the annual billing cycle (July 1 for underground storage tanks and/or tank compartments in East Tennessee, October 1 for underground storage tanks and/or tank compartments in Middle Tennessee, and January 1 for underground storage tanks and/or tank compartments in West Tennessee); and
3. All petroleum underground storage tanks and/or tank compartments taken temporarily out of service after June 30, 1988, and not properly closed in accordance with paragraphs (3) through (5) of Rule 0400-18-01-.07.

- (b) Any person electing to pay annual fees on behalf of a tank owner and/or operator, including, but not limited to the owner of the petroleum site.

(3) Annual petroleum underground storage tank fees.

- (a) The required fee shall be submitted in the specified amount, with checks made payable to the Tennessee State Treasurer.

- (b) Any person who is an owner and/or operator of a petroleum underground storage tank subject to annual fees shall pay the required annual fee unless the fee is paid by another person on behalf of the tank owner and/or operator.

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- (c) The amount of the annual petroleum underground storage tanks fee shall be either:

Years Assessed	Fee	Assessment
July 1, 1988 to June 30, 1990	\$100.00	Per Tank
July 1, 1990 to June 30, 2005	\$125.00	Per Tank
July 1, 2005 to June 30, 2013	\$250.00	Per Tank Compartment
July 1, 2013 forward	\$125.00	Per Tank Compartment

- (d) The amount of the annual administrative service fee for agencies and functions of the U.S. Government shall be:

Years Assessed	Fee	Assessment
July 1, 1988 to June 30, 1990	\$25.00	Per Tank
July 1, 1990 to June 30, 2005	\$25.00	Per Tank
July 1, 2005 to June 30, 2013	\$250.00	Per Tank Compartment
July 1, 2013 forward	\$125.00	Per Tank Compartment

Agencies and functions of the U.S. Government are not eligible for benefit or financial assistance from the Tennessee Petroleum Underground Storage Tank Fund.

- (e) If an annual fee is paid on an existing underground storage tank which is subsequently permanently closed in accordance with Rule 0400-18-01-.07 and replaced by a new underground storage tank installed at the same site in accordance with paragraph (1) or (6) of Rule 0400-18-01-.02 no additional annual fee will be required, provided that the replacement tank has the same number of tank compartments as the existing tank. If the replacement tank has more tank compartments than the existing tank, an additional annual fee of:

1. Two hundred fifty dollars (\$250) per compartment shall be paid if the tank was replaced before July 1, 2013; or
2. One hundred twenty five dollars (\$125) per compartment shall be paid if the tank was replaced on or after July 1, 2013.

If the replacement tank has fewer tank compartments than the existing tank, no refund of the annual fee or any portion thereof is due, as stated in subparagraph (f) of this paragraph.

- (f) Payment of the entire amount of the annual fee is required for underground storage tanks and/or tank compartments in service or temporarily out of service during any portion of the current billing year. Tanks and/or tank compartments placed into service after the current billing year begins or tanks and/or tank compartments which are permanently closed before the current billing year ends are not due a refund of the annual fee or any portion thereof.

- (4) Failure to pay the annual petroleum underground storage tank fee.

- (a) Any petroleum underground storage tank owner and/or operator of tanks for which the lawfully levied petroleum underground storage tank fee is owed will be assessed a monthly late payment penalty of five percent (5%) of the amount owed. Such penalty shall be assessed monthly until the fee and all associated penalties are paid; however, the total of the late payment penalties shall not exceed three (3) times the amount of the original fee. The tank owner and/or operator may file with the commissioner a written petition requesting a reduction in the penalties assessed under this subparagraph, setting forth in the petition the grounds and reasons for such a request. At the commissioner's sole discretion, the commissioner may reduce the penalties that otherwise accrue if, in the commissioner's opinion, the failure to pay fees was due to inadvertent error or excusable neglect. However, in no event shall the penalties be reduced to an amount less than ten percent (10%) per annum, plus statutory interest.

- (b) To refuse or fail to pay the annual fee per tank and/or tank compartment to the division is an unlawful action as described in T.C.A. § 68-215-104(3). The division may take one or more of the following actions to prohibit delivery to any facility at which there is a petroleum underground storage tank for which annual fees or penalties have not been paid:

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1. Affix a tag or notice to the dispensers;
 2. Affix a tag to the fill ports; or
 3. Give notice on the department's web site.
- (c) If a lawfully levied fee has not been paid within a reasonable time allowed by the Commissioner, the commissioner may proceed in the Chancery Court of Davidson County to obtain judgment and seek execution of such judgment against the tank owner and/or operator.
- (5) Petroleum underground storage tank annual fee notices.
- (a) Prior to the due date of the annual underground storage tanks fee, the division shall issue fee notices to the owner or operator of the petroleum underground storage tanks. Fee notices and due dates shall be staggered using the three grand divisions of the State of Tennessee.
1. Tank fees for underground storage tanks and/or tank compartments in the following East Tennessee counties shall be due on July 31 of each year:

Johnson, Sullivan, Carter, Washington, Unicoi, Hancock, Hawkins, Greene, Claiborne, Grainger, Hamblen, Cocke, Scott, Campbell, Union, Anderson, Knox, Jefferson, Sevier, Morgan, Roane, Loudon, Blount, Bledsoe, Rhea, Meigs, McMinn, Monroe, Grundy, Sequatchie, Hamilton, Bradley, Polk, Franklin, and Marion.
 2. Tank fees for underground storage tanks and/or tank compartments in the following Middle Tennessee counties shall be due October 31 of each year:

Stewart, Montgomery, Robertson, Sumner, Macon, Clay, Pickett, Houston, Hickman, Cheatham, Davidson, Wilson, Trousdale, Smith, Jackson, Overton, Fentress, Putnam, Cumberland, White, DeKalb, Van Buren, Warren, Cannon, Rutherford, Williamson, Dickson, Humphreys, Perry, Wayne, Lewis, Lawrence, Maury, Giles, Marshall, Lincoln, Moore, Bedford, and Coffee.
 3. Tank fees for underground storage tanks and/or tank compartments in the following West Tennessee counties shall be due January 31 of each year:

Lake, Obion, Weakley, Henry, Dyer, Crockett, Gibson, Carroll, Benton, Lauderdale, Tipton, Shelby, Haywood, Fayette, Madison, Hardeman, Henderson, Chester, McNairy, Decatur, and Hardin.
- (b) The annual fee shall be paid on or before the due date.
- (c) For any underground storage tank system brought into use after the effective date of this rule, the current year's annual fee shall be submitted with the notice of existence of such tank system required in part (1)(a)2 of Rule 0400-18-01-.02.
- (d) For any underground storage tank system not previously reported to the division, the current year's annual fee shall be submitted with the required notice of existence of such tank system.
- (6) Unlawful Action.
- (a) It shall be unlawful to put petroleum into underground storage tanks and/or tank compartments at a facility if the division has taken one or more of the following actions:
1. A tag or notice has been affixed to the dispensers;
 2. A tag has been affixed to the fill ports; or
 3. Notice has been given on the department's web site.

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- (b) Placing petroleum into a tank and/or tank compartment at a facility when the division has taken one or more of the actions listed in parts (a)1 through 3 of this paragraph is a violation for the person putting petroleum into the underground storage tank and/or tank compartment as well as for the person having product put into the underground storage tank and/or tank compartment.

Authority: T.C.A. §§ 68-215-101 et seq. and 4-5-201 et seq.

0400-18-01-.11 Appeals.

- (1) Any responsible party, tank owner, tank operator, CAC or person who has a right to appeal a determination of the Commissioner by these Rules shall comply with the procedure set forth in this paragraph to perfect an appeal. Such responsible party, tank owner, tank operator, CAC, or person may petition the Board for a hearing provided a written petition is submitted to and received by the Commissioner within thirty (30) days of receipt of the division's determination. The division's determination and action shall be final and not subject to review unless the written petition for hearing is submitted and received by the Commissioner within this time frame. The written petition shall set forth the basis for the appeal as required by the Uniform Administrative Procedures Act, T.C.A. § 4-5-101 et seq. and the rules promulgated thereunder, in particular, Rule 1360-04-01-.05.

Authority: T.C.A. §§ 68-215-101 et seq. and 4-5-201 et seq.

0400-18-01-.12 Indicia of Ownership.

- (1) Applicability.
 - (a) This rule applies to holders of security interests in petroleum underground storage tanks, UST systems, petroleum sites or property on which a petroleum site or UST system is located.
 - (b) Holders are subject to these requirements if they became holders on or after April 12, 1996.
- (2) Notification by the Holder.
 - (a) Within thirty (30) days after foreclosure or its equivalent is completed, the holder shall notify the Department of the foreclosure. The holder shall use a notification form prescribed by the division. Holders shall complete the notification form accurately and in its entirety.
 - (b) If at any time after foreclosure, the holder causes a change in the status of the tanks at a petroleum UST facility, the holder shall report the change within thirty (30) days. This includes but is not limited to change of ownership, upgrading, or replacement of tanks, changes in mailing address and changes in service. Such reports shall be made using an amended notification form prescribed by the division.
 - (c) In the case of a sale of petroleum underground storage tanks, UST systems, petroleum sites or property on which a petroleum site or UST system is located or the sale of the security interest in such petroleum underground storage tanks, UST systems, petroleum sites or property on which a petroleum site or UST system is located, which occurs at any time after foreclosure, the holder must submit the notification form prescribed by the division and must also inform the buyer of the notification requirements.
- (3) Fund Eligibility Requirements.
 - (a) If a release from a petroleum underground storage tank system would have been eligible for reimbursement from the UST Fund under the provisions of Rule 0400-18-01-.09 had there been no foreclosure, then the holder shall be able to take full advantage of the Petroleum Underground Storage Tank Fund. Reimbursement from the Fund shall be in accordance with the provisions of Rule 0400-18-01-.09.
 - (b) A holder who is eligible for reimbursement from the state Fund must satisfy the deductible requirements as required by subparagraph (6)(b) of Rule 0400-18-01-.09.

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- (c) If a Fund Eligible release occurred prior to the time of foreclosure and assessment and remediation activities have been initiated in accordance with the requirements of Rule 0400-18-01-.06, then assessment and remediation, in accordance with the requirements of Rule 0400-18-01-.06, must be continued for the site to remain Fund Eligible after the holder has sold or otherwise disposed of his interest in it.
- (d) If it is determined that the tanks are not fund eligible due to failure to timely register the tanks, the purchaser of such tanks from a holder must follow the requirements of subparagraph (4)(b) of Rule 0400-18-01-.09 to establish Fund Eligibility for the UST systems.

(4) Fee Payment.

Annual tank fees may be paid after foreclosure either by the holder or by an operator who is in charge of the daily operation of the UST systems provided that the holder has properly registered the tanks in accordance with paragraph (2) of this rule.

Authority: T.C.A. §§ 68-215-101 et seq. and 4-5-201 et seq.

0400-18-01-.13 Reserved.

Authority: T.C.A. §§ 68-215-101 et seq. and 4-5-201 et seq.

0400-18-01-.14 Record Retention by the Division.

(1) Notification and tank ownership records.

The division shall maintain both tank registration/notification information and responsible party information that has been provided to the division or otherwise obtained by the division. Documents containing notification, tank registration and/or responsible party information shall be maintained as permanent records by the Division of Underground Storage Tanks due to the following factors:

- (a) Tank ownership records must be available should petroleum contamination be discovered sometime in the future, requiring the division to make determinations concerning fund eligibility and/or responsible parties, because:
 - 1. Timely registration or notification, in accordance with Rule 0400-18-01-.03, is required for establishment of fund eligibility in accordance with subparagraphs (3)(a) and (b) of Rule 0400-18-01-.09;
 - 2. The tank owner at the time of a release is a responsible party in accordance with T.C.A. § 68-215-103(17)(A);
 - 3. There may be some residual petroleum contamination that is not discovered during the site assessment at closure required by subparagraph (5)(a) of Rule 0400-18-01-.07; and/or
 - 4. Some petroleum underground storage tanks regulated under T.C.A. § 68-215-101 et seq. were permanently closed, and in some cases removed from the ground, prior to the promulgation of regulatory requirements to perform a site assessment at closure. Residual petroleum contamination may exist at such sites; and
- (b) Some of these records include copies of deeds to real property, causing them to have permanent value.

(2) Fee payment records.

The division shall maintain fee payment information that has been provided to the division or otherwise obtained by the division. Records documenting the fee payment history associated with a petroleum site shall be maintained as permanent records by the Division of Underground Storage Tanks due to the following factors:

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- (a) Fee payment records must be available should petroleum contamination be discovered sometime in the future, requiring the division to make determinations concerning fund eligibility, because:
1. For releases which occurred prior to July 1, 2008, fee payment was required for establishment and maintenance of fund eligibility;
 2. For releases which occurred prior to July 1, 2008, the determination of fund eligibility is based, in part, on fee payment records; and/or
 3. There may be some residual petroleum contamination that is not discovered during the site assessment at closure required by subparagraph (5)(a) of Rule 0400-18-01-.07.

(3) Release response, remediation and risk management records.

Records documenting the actions taken to assess, remediate and/or manage petroleum contamination at a petroleum site caused by a release from a UST system shall be maintained as permanent records by the Division of Underground Storage Tanks due to the following factors:

- (a) These records pertain to real property, causing them to have permanent value.
1. These records may contain copies of Notices of Land Use Restrictions, which have been attached to the deed to real property, in accordance with subparagraph (8)(c) of Rule 0400-18-01-.06 and T.C.A. § 68-212-225.
- (b) Risk based cleanup levels are required to be based on current and reasonably anticipated use of the property and location of receptors in accordance with part (5)(b)4 of Rule 0400-18-01-.06.
1. If a person is contemplating a future use that was not anticipated at the time the site assessment and remediation was done in accordance with Rule 0400-18-01-.06, new risk calculations may need to be made taking into consideration the historical documents; and
 2. If a person is contemplating the future location of receptors that were not anticipated at the time the site assessment and remediation was done in accordance with Rule 0400-18-01-.06, new risk calculations, including the risk of human exposure to carcinogens, may need to be made taking into consideration the historical documents.

(4) Reimbursement records.

Records documenting fund eligibility determinations and/or fund reimbursement payment history associated with a petroleum site shall be maintained as permanent records by the Division of Underground Storage Tanks due to the following factors:

- (a) These records have fiscal value, causing them to have permanent value.
- (b) The per site per occurrence maximum reimbursable amount is set forth in paragraph (6) of Rule 0400-18-01-.09, for taking corrective actions. Reimbursement records contain information concerning the portion of this reimbursement amount which has been expended and the balance, if any, available for future reimbursement for corrective actions which might need to be taken in the future for previously undetected contamination.
1. Post tank closure discovery of residual contamination.
 - (i) There may be some residual petroleum contamination that is not discovered during the site assessment at tank closure required by subparagraph (5)(a) of Rule 0400-18-01-.07.
 - (ii) Some petroleum underground storage tanks regulated under T.C.A. § 68-215-101 et seq. were permanently closed, and in some cases removed from the ground, prior to the promulgation of regulatory requirements to perform a site assessment at closure. Residual petroleum contamination may exist at such

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sites and may be discovered many years after the tanks were permanently closed.

2. Discovery of residual contamination post closure of a contamination case.
 - (i) Previously undetected residual petroleum contamination may be discovered years after assessment and remediation activities have been completed in accordance with Rule 0400-18-01-.06.
 - (ii) Additional remediation activities may be needed after assessment and remediation activities have been completed in accordance with Rule 0400-18-01-.06 if the risk at the site has changed, as described in subparagraph (3)(b) of this rule.

(5) Tank closure records.

The division shall maintain tank closure information that has been provided to the division or otherwise obtained by the division. Records documenting tank closure as well as the site assessment records associated with tank closure shall be maintained as permanent records by the Division of Underground Storage Tanks due to the following factors:

- (a) These records pertain to real property, causing them to have permanent value; and
- (b) In accordance with subparagraph (4)(b) of Rule 0400-18-01-.07 petroleum underground storage tanks may be closed in place if they are filled with an inert substance or removed from the ground. It is important, when future use of the petroleum site is being considered, to know which tank closure option was utilized.

(6) Orders for correction and/or assessment, and cost recovery actions.

Records documenting enforcement actions that result in the issuance of an administrative order, under the provisions of T.C.A. § 68-215-114, and/or the issuance of an administrative order for the assessment of civil penalties, under the provisions of T.C.A. § 68-215-121, and records relating to cost recovery actions, under the provisions of T.C.A. § 68-215-115, shall be maintained as permanent records by the Division of Underground Storage Tanks due to the following factors:

- (a) These records have legal value; and
- (b) These records have fiscal value. These records may contain information concerning uncollected debts owed to the State of Tennessee, for example, when a respondent moves after being served with an administrative order and leaves no forwarding address.

(7) Maintenance of records.

- (a) All division records, including the permanent records specified in this rule, may be maintained as paper records, compact disks, microfilm records, electronic records, photographic records, and/or other forms that allow access for review and duplication.
- (b) The form of the record at the time of submittal to the division shall not limit or otherwise prescribe the form in which that record may be permanently maintained.
- (c) Nothing in this rule shall be construed to mean that the division is required to accept record submittals in any form other than that prescribed by the division.

Authority: T.C.A. §§ 68-215-101 et seq. and 4-5-201 et seq.

0400-18-01-.15 Petroleum Product Delivery.

(1) Delivery prohibition.

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- (a) It shall be unlawful for any person to place or cause to be placed, petroleum substances in a petroleum underground storage tank or to dispense petroleum from a tank, if the division has taken one or more of the following actions:
1. A tag or notice has been affixed to the dispensers;
 2. A tag has been affixed to the fill ports; or
 3. Notice has been given on the Department's web site.
- (b) It is unlawful for any person to place, or cause to be placed, petroleum substances in a petroleum underground storage tank or to dispense petroleum from a petroleum underground storage tank when the owner of the tank is required to notify the Commissioner under T.C.A. § 68-215-106(a) or (b) and the owner has not notified the Commissioner of the existence or ownership of the tank. This subparagraph applies even if no physical notice or tag is placed on the dispenser or fill port or no notice is placed on the department web site pursuant to T.C.A. § 68-215-106(c).

(2) Dispensing prohibition.

It shall be unlawful for any person to dispense petroleum from a petroleum underground storage tank if the division has taken one or more of the actions in parts (1)(a)1 through 3 of this rule.

(3) If the division has prohibited delivery and dispensing of petroleum products in accordance with paragraphs (1) and (2) of this rule, resumption of deliveries of petroleum and dispensing of petroleum shall not occur until:

- (a) The division has notified the tank owner and/or operator that the tag may be removed; and
- (b) The division has removed the facility from the delivery prohibition list on the division's section of the Department's website.

Authority: T.C.A. §§ 68-215-101 et seq. and 4-5-201 et seq.

0400-18-01-.16 Certified Operator Program.

(1) Operator Designation Requirements.

- (a) Effective August 8, 2012, every facility having one or more petroleum UST systems subject to the requirements of Chapter 0400-18-01 must have one or more persons who have been designated by the tank owner as Class A, Class B, and Class C Operator(s).
- (b) A Class A, Class B, or Class C Operator is not necessarily considered the same as "operator" defined in paragraph (4) of Rule 0400-18-01-.01, although the same individual may hold both positions.
- (c) A Class A, Class B, or Class C Operator is not necessarily the same as "owner" as defined in paragraph (4) of Rule 0400-18-01-.01, unless such a person also owns these petroleum underground storage tanks.

(2) Operator Training Requirements

- (a) Persons to be classified as Class A, Class B, or Class C Operators must log on to the division's web based training database and indicate how operator training requirements are met for each applicable classification by indicating successful completion of at least one of the following:
 1. Applicable portions of the division's web-based operator training program designed to meet Class A, Class B, and/or Class C Operator training requirements, or
 2. Obtaining a passing score on the applicable UST System Operator Examination administered by the International Code Council and submitting the records to the division every two years, or

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3. Obtaining a passing score on a UST operator training program examination administered by the division.
 - (b) Class C Operator training may be provided by the tank owner, a trained Class A or Class B Operator in accordance with guidance published by the division, or by successful completion of Class C Operator training using the division's web-based operator training program.
 - (c) Class C Operators must be trained before assuming responsibility for responding to emergencies.
- (3) Tank Owner Responsibilities.
 - (a) Tank owners must register a Class A, and Class B Operator(s) for each facility where petroleum UST systems are located using the division's web-based operator training database within thirty (30) days of tank installation or a change in Class A or Class B operator.
 - (b) Tank owners must verify in the division's web-based operator training database that a trained individual meeting the requirements for a Class C Operator will be on site whenever the facility is operating.
 - (c) If a UST facility has a person(s) on site, at least one person on site must be a Class C Operator whenever the facility is operating. A sign or instruction manual must be placed where the Class C operator would be expected to see it during the normal course of their work. At a minimum, it must include the following:
 1. Employee's role in responding to spills and overfills, and
 2. Procedures for handling warnings, alarms, and response from leak detection console (if applicable), and
 3. Name and number of contact person for emergencies and monitoring equipment alarms, and
 4. Local emergency numbers, and
 5. An instruction to maintain a safe distance from any potential hazards.
 - (d) Unmanned facilities, as defined in paragraph (4) of Rule 0400-18-01-.01, must have a designated Class A and Class B Operator, but are not required to have designated operators on site. Class C Operator requirements for unmanned facilities may be met by the designated Class B Operator who is also trained as the designated Class C Operator. The designated Class B/C Operator must respond to all emergencies and alarms caused by spills or releases from the underground storage tank facility.
 - (e) A facility that is unmanned part of the time will be required to follow subparagraph (c) of this paragraph during the times the facility is manned and subparagraph (d) of this paragraph during the time the facility is unmanned.
 - (f) Tank owners may elect to replace Class A or Class B Operators at any time by providing proper notice to the division in accordance with subparagraph (1)(h) of Rule 0400-18-01-.03. Notice to the division is not required when replacing a designated Class C Operator.
 - (g) It is unlawful to operate a petroleum UST facility without Class A, Class B, and Class C Operator designations.

(4) Retraining

If the division determines that the UST system is out of compliance at any time, then successful completion of operator retraining appropriate to the level of the operator Class must be completed within thirty (30) days from the date the division determines that the UST system is out of compliance.

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Authority: T.C.A. §§ 68-215-101 et seq. and 4-5-201 et seq.

Chapter 0400-18-01 Underground Storage Tank Program

New Rule

A new rule is added to Chapter 0400-18-01 Underground Storage Tank Program to read as follows:

0400-18-01-.17 UST Systems with Field-Constructed Tanks and Airport Hydrant Systems.

- (1) General requirements.
 - (a) Except as provided in paragraph (2) of this rule, owners and/or operators of UST systems with field-constructed tanks and airport hydrant systems must comply with the requirements of
 1. Rules 0400-18-01-.02 through 0400-18-01-.04 and 0400-18-01-.06 and 0400-18-01-.08 and 0400-18-01-.16 and 0400-18-01-.17 on or before three (3) years after the effective date of this rule; and
 2. Rules 0400-18-01-.05 and 0400-18-01-.07 on the effective date of this rule.
 - (b) For owners and/or operators of UST systems with field-constructed tanks and airport hydrant systems installed after the effective date of this rule, the requirements in subparagraph (a) of this rule apply at installation.
 - (c) Not later than three (3) years after the effective date of this rule, all owners of UST systems with field-constructed tanks and airport hydrant systems must submit a one-time notice of tank system existence to the division in accordance with subparagraphs (1)(b) and (c) of Rule 0400-18-1-.03 in a format established by the division and in accordance with instructions provided by the division. Owners and/or operators of UST systems in use as of the effective date of this rule must demonstrate financial responsibility at the time of submission of the notification form.
 - (d) Owners and/or operators of UST systems with field-constructed tanks and airport hydrant systems may use military construction criteria, such as Unified Facilities Criteria (UFC) 3-460-01, *Petroleum Fuel Facilities*, when designing, constructing, and installing airport hydrant systems and UST systems with field-constructed tanks.
- (2) Additions, exceptions, and alternatives for UST systems with field-constructed tanks and airport hydrant systems.
 - (a) Exception to piping secondary containment requirements. Owners and/or operators may use single walled piping when installing or replacing piping associated with UST systems with field-constructed tanks greater than 50,000 gallons and piping associated with airport hydrant systems. Piping associated with UST systems with field-constructed tanks less than or equal to 50,000 gallons not part of an airport hydrant system must meet the secondary containment requirement when installed or replaced.
 - (b) Upgrade requirements. Not later than three (3) years after the effective date of this rule, airport hydrant systems and UST systems with field-constructed tanks must meet the following requirements or be permanently closed in accordance with the closure procedures in Rule 0400-18-01-.07.
 1. Corrosion protection. UST system components in contact with the ground that routinely contain petroleum substances must meet one of the following:
 - (i) Except as provided in subparagraph (a) of this paragraph, the new UST system performance standards for tanks in subparagraph (4)(a) of Rule 0400-18-01-.02 and for piping in subparagraph (4)(b) of Rule 0400-18-01-.02; or

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- (ii) Be constructed of metal and cathodically protected according to a code of practice developed by a nationally recognized association or independent testing laboratory and meets the following:
 - (I) Cathodic protection must meet the requirements of subparts (4)(a)2(ii), (iii) and (iv) of Rule 0400-18-01-.02 for tanks and subparts (4)(b)2(ii), (iii), and (iv) of Rule 0400-18-01-.02 for piping.
 - (II) Tanks greater than ten (10) years old without cathodic protection must be assessed to ensure the tank is structurally sound and free of corrosion holes prior to adding cathodic protection. The assessment must be by internal inspection or another method determined by the division to adequately assess the tank for structural soundness and corrosion holes.
- 2. Spill and overflow prevention equipment. To prevent spilling and overflowing associated with product transfer to the UST system, all UST systems with field-constructed tanks and airport hydrant systems must comply with new UST system spill and overflow prevention equipment requirements specified in paragraph (3) of Rule 0400-18-01-.02.
- (c) Walkthrough inspections. In addition to the walkthrough inspection requirements in paragraph (8) of Rule 0400-18-01-.02, owners and/or operators must inspect the following additional areas for airport hydrant systems at least once every thirty (30) days if confined space entry according to the Occupational Safety and Health Administration (see 29 CFR part 1910) is not required or at least annually if confined space entry is required and keep documentation of the inspection according to paragraph (8) of Rule 0400-18-01-.02.
 - 1. Hydrant pits – visually check for any damage; remove any liquid or debris; and check for any leaks, and
 - 2. Hydrant piping vaults – check for any hydrant piping leaks.
- (d) Release detection. Owners and/or operators of UST systems with field-constructed tanks and airport hydrant systems must begin meeting the release detection requirements described in this subparagraph not later than three (3) years after the effective date of this rule.
 - 1. Methods of release detection for field-constructed tanks. Owners and/or operators of field-constructed tanks with a capacity less than or equal to 50,000 gallons must meet the release detection requirements in Rule 0400-18-01-.04. Owners and/or operators of field-constructed tanks with a capacity greater than 50,000 gallons must meet either the requirements in Rule 0400-18-01-.04 or use one or a combination of the following alternative methods of release detection:
 - (i) Conduct an annual tank tightness test that can detect a 0.5 gallon per hour leak rate;
 - (ii) Use an automatic tank gauging system to perform release detection at least every thirty (30) days that can detect a leak rate less than or equal to one (1) gallon per hour. This method must be combined with a tank tightness test that can detect a 0.2 gallon per hour leak rate performed at least every three (3) years;
 - (iii) Use an automatic tank gauging system to perform release detection at least every thirty (30) days that can detect a leak rate less than or equal to two (2) gallons per hour. This method must be combined with a tank tightness test that can detect a 0.2 gallon per hour leak rate performed at least every two (2) years;
 - (iv) Another method approved by the division if the owner and/or operator can demonstrate that the method can detect a release as effectively as any of the methods allowed in part (d)1(i) through (iii) of this paragraph. In comparing

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methods, the division shall consider the size of release that the method can detect and the frequency and reliability of detection.

2. Methods of release detection for piping. Owners and/or operators of underground piping associated with field-constructed tanks less than or equal to 50,000 gallons must meet the release detection requirements in Rule 0400-18-01-.04. Owners and/or operators of underground piping associated with airport hydrant systems and field-constructed tanks greater than 50,000 gallons must follow either the requirements in Rule 0400-18-01-.04 or use one or a combination of the following alternative methods of release detection:

- (i) Perform a semiannual or annual line tightness test at or above the piping operating pressure in accordance with the table below:

MAXIMUM LEAK DETECTION RATE PER TEST SECTION VOLUME		
Test section volume (gallons)	Semiannual test – leak detection rate not to exceed (gallons per hour)	Annual test – leak detection rate not to exceed (gallons per hour)
< 50,000	1.0	0.5
≥ 50,000 to <75,000	1.5	0.75
≥ 75,000 to <100,000	2.0	1.0
≥ 100,000	3.0	1.5

- (ii) Piping segment volumes ≥ 100,000 gallons not capable of meeting the maximum three (3) gallon per hour leak rate for the semiannual test or maximum one and a half (1.5) gallon per hour leak rate for the annual test may be tested at a leak rate up to six (6) gallons per hour according to the following schedule:

PHASE IN FOR PIPING SEGMENTS ≥ 100,000 GALLONS IN VOLUME	
First test	Not later than three (3) years after the effective date of this rule (may use up to six (6) gph leak rate)
Second test	Between three (3) years after the effective date of this rule and six (6) years after the effective date of this rule (may use up to six (6) gph leak rate)
Third test	Between three (3) years after the effective date of this rule and seven (7) years after the effective date of this rule (must use three (3) gph for leak rate)
Subsequent tests	After seven (7) years after the effective date of this rule, begin using semiannual or annual line testing according to the Maximum Leak Detection Rate Per Test Section Volume table in subpart (i) of this part.

- (iii) Another method approved by the division if the owner and/or operator can demonstrate that the method can detect a release as effectively as any of the methods allowed in subparts (i) and (ii) of this part. In comparing methods, the division shall consider the size of release that the method can detect and the frequency and reliability of detection.

3. Recordkeeping for release detection. Owners and/or operators must maintain release detection records according to the recordkeeping requirements in paragraph (5) of Rule 0400-18-01-.04.

- (e) Applicability of closure requirements to previously closed UST systems. When directed by the division, the owner and/or operator of an UST system with field-constructed tanks or airport hydrant systems permanently closed before three (3) years after the effective date of this rule must assess the excavation zone and close the UST system in accordance with the closure procedures in Rule 0400-18-01-.07 if releases from the UST may, in the judgment of the division, pose a current or potential threat to human health and the environment.

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Authority: T.C.A. §§ 68-215-101 et seq. and 4-5-201 et seq.

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I certify that the information included in this filing is an accurate and complete representation of the intent and scope of rulemaking proposed by the agency.

Date: October 13, 2017

Signature: _____

Name of Officer: Stanley R. Boyd

Title of Officer: Director

Subscribed and sworn to before me on: _____

Notary Public Signature: _____

My commission expires on: _____

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Filed with the Department of State on: _____

Tre Hargett
Secretary of State