ALARM HISTORY REPORT

------ SENSOR ALARM ------
  Q 2:REG 2
  PLLD SHUTDOWN ALARM
  JUL 22, 2011  8:38 PM

GROSS LINE FAIL ✓
  JUL 22, 2011  8:38 PM

PLL D SHUTDOWN ALARM
  MAY 19, 2011  4:04 PM

GROSS LINE FAIL ✓
  MAY 19, 2011  4:04 PM

LCU PRESSURE ALARM
  MAY 19, 2011  3:40 PM

PLL D SHUTDOWN ALARM
  APR 29, 2011  2:06 PM

GROSS LINE FAIL ✓
  APR 29, 2011  2:06 PM

LCU PRESSURE ALARM
  APR 29, 2011  1:55 PM

PLL D SHUTDOWN ALARM
  JAN 20, 2011  8:06 PM

GROSS LINE FAIL ✓
  JAN 20, 2011  8:06 PM

Release Reporting
for
Underground Storage Tank Owners
Table of Contents

Introduction ............................................. page 1

Chapter 1. Definitions .................................. page 2

Chapter 2. Tier I Notifications: Conditions that require immediate investigation from the owner and response from ERT ............................ page 3

Chapter 3. Tier II Notifications: Conditions that require immediate investigation from the owner and possible response from ERT ........................................ page 6

Chapter 4. Tier III Notifications: Conditions that require prompt investigation from the owner and follow-up from FOB ........................................ page 11
Release Reporting for UST Owners

June 11, 2013

Introduction

Releases from underground storage tank (UST) systems are costly to clean up and negatively impact the business operations of UST owners. While cleanup costs are usually reimbursable through the Petroleum Storage Tank Environmental Assurance Fund, the costs of lost product and reduced revenues from a release may not be recoverable. The Kentucky Department for Environmental Protection (KDEP) has the mission of protecting human health and the environment and the UST owner is in business for economic gain – both parties benefit from early detection and reporting of releases and repair of USTs, if necessary.

State law and regulations require immediate reporting of suspected, threatened or confirmed releases from UST systems to the Environmental Response Branch’s 24-hour reporting hotline (800-928-2380). This document provides information on what is considered a release, what type of response to expect from KDEP, and recommended steps to investigate a potential release. Some events will result in a response by KDEP’s Environmental Response Team (ERT), while others may require follow-up by KDEP’s Field Operations Branch (FOB) and/or submitting documents to the Underground Storage Tank Branch (USTB).

This document is arranged in four short chapters for ease of use and for quickly finding the appropriate response to a confirmed or suspected release. Definitions of terminology are included in the first chapter; tier I notifications: confirmed or suspected releases that require immediate response by ERT are in the second chapter; tier II notifications: suspected releases that may require response by ERT if a release is confirmed are in the third chapter; and tier III notifications: suspected releases that are managed by FOB are in the fourth chapter.

Tier I notifications: Conditions that require immediate investigation from the owner and response from ERT

- Confirmed presence of product outside the primary UST system (including secondary containment above de minimis quantities) (See Chapter 2.1)
- Presence of vapors (See Chapter 2.2)
- Presence of water in tanks (See Chapter 2.3)
- Failure of third-party-approved tank and/or piping tests (See Chapter 2.4)
- Potential damage to the UST system from fires, lightning strikes, natural disasters, transport accidents, struck dispensers, etc. (See Chapter 2.5)
- Disabled or missing automatic line leak detectors (See Chapter 2.6)

Tier II notifications: Conditions that require immediate investigation from the owner and response from ERT if a release is confirmed

- Erratic dispenser behavior from a suction system (See Chapter 3.1)
- Failing results from a tank and/or piping release detection method (See Chapter 3.2)
- Fuel alarms from non-discriminating sensors (See Chapter 3.3)
- Potential catastrophic product piping failure (>3.0 gph leak) (See Chapter 3.4)
- Potential catastrophic product tank failure (>3.0 gph leak) (See Chapter 3.5)

Tier III notifications: Conditions that require prompt investigation from the owner and response from FOB

- Failed spill buckets or catch basins that are not contributing to water intrusion (See Chapter 4.1)
- Failed cathodic protection testing on any part of the UST system (See Chapter 4.2)
- Suspected Release Reports that do no result in confirmed releases (See Chapter 4.3)
Chapter 1. Definitions

These definitions can be found in state and federal regulations and statutes and are included here for clarity and convenience. Since this document is about release reporting, please be aware that there are federal, state and possibly local reporting requirements. Notification to one does not guarantee notification to the others.

Declared environmental emergencies for UST systems (ERT “red tag”) – “during the course of an environmental emergency declared by the Environmental Response Branch, the cabinet shall have the authority to prevent delivery, deposit, or storage of regulated substances and require all actions necessary to protect human health and the environment” (401 KAR 42:050, Section 2).

Primary release detection method(s) – for the purposes of this document, this terminology refers to primary release detection method(s) are any method(s) used to comply with monthly release detection compliance requirements. Any additional monitoring equipment that is not used to achieve monthly compliance with release detection requirements would not be considered a release detection method. Alarms from this additional equipment, would not be reportable and compliance testing is not required.

Release – for the purposes of this document, a release is the presence of a hazardous or regulated substance outside of its intended primary containment. This includes the substance in the environment and in secondary containment as an unusual operating condition. A release from a UST system that is not the result of a spill has no limits on reportable quantity and must be reported so that a determination of cause of the release and repair to the UST system can be made by KDEP working with the UST owner or the owner’s agent. Reference KRS 224.60-115.

Spill – for the purposes of this document, a spill is a release to the environment from a dispensing or transfer operation or from an overfill of a tank beyond its capacity. A spill to the ground surface has a reportable quantity of 25 gallons of petroleum product except for diesel, which has a reportable quantity of 75 gallons. Any quantity that impacts, or threatens to impact, surface water is reportable (KRS 224.01-400). Local jurisdictions may have reporting quantities and conditions that are different from this.

Suspected release – “the observation of an unusual operating condition or an unconfirmed UST system release” (401 KAR 42:005 Section 1).

Underground storage tank system – “means an underground storage tank, connected underground piping, underground ancillary equipment, and containment system, if any” (40 CFR 280.12).

Unusual operating condition – “a condition observed during the normal operation of an underground storage tank system that shall be reported to the cabinet pursuant to 401 KAR 42:050. Unusual operating conditions include the erratic behavior of product dispensing equipment; the sudden loss of product from a portion of the UST system; the unexplained presence of water in the tank exceeding one inch; failing results from a tank or line tightness test; failing results of a corrosion protection evaluation; unexplained failing results from a release detection method or device; unexplained inventory discrepancies; two consecutive months of inconclusive statistical inventory reconciliation (SIR) results; unexplained equipment failure or malfunction; unexplained presence of vapors; infiltration of liquid into the interstitial space of a UST system; unexplained overfill or release detection alarms; or evidence of a release of a regulated substance” (401 KAR 42:005 Section 1).
Chapter 2. Tier I Notifications: Conditions that require immediate investigation from the owner and response from ERT

These are conditions with a confirmed release of regulated substance or conditions with a high probability or high risk of potential release.

### 2.1 Confirmed presence of product outside of primary UST system

**Immediate facility response**

- Product in the environment
- Fuel alarm from discriminating liquid sensors
- Failure of overfill device that results in a release to the environment

**Facility response:** Any free product noted outside of the primary UST system in the environment or posing a threat to the environment is a UST system release and must be reported immediately to the hotline. The facility must investigate the source of the release, make required repairs and test the repair using a third-party-approved method. The free product must be properly cleaned up. Maintain records of all actions taken to resolve the event.

**Liquid sensor fuel alarm.** Since this alarm indicates the presence of free product, the facility must report the alarm, take immediate actions to evaluate the liquid causing the alarm, remove the fuel or water, and make appropriate repairs to keep the containment sump dry. If initial investigation confirms a system failure or release, immediately update the confirmed release to the hotline. If the cause of the alarm was determined to be a failed or faulty sensor, the sensor must be repaired or replaced with a passing operational test conducted. Maintain all records of actions taken to resolve the sensor alarm.

**KDEP response:** ERT will immediately respond. If system release or failed test is confirmed, ERT will red tag and disable the failed system until the equipment is repaired or replaced and tested using a third-party-approved method with documentation of passing test results provided to ERT if required.

### 2.2 Presence of vapors

**Immediate facility response**

**Facility response:** Immediately investigate the entire UST system to determine the cause of petroleum vapors being noted. A review of all release detection and inventory records must be conducted to investigate possible undetected inventory losses. All sumps, manways, dispensers, tank pit observation wells, and other system components must be checked for the presence of free product. All subsurface features such as stormwater or sanitary collection systems or utility conduits must also be checked for free product or vapors. If a failed system component is identified, the facility must immediately update the incident status to the hotline. Appropriate repairs and re-testing with a third party approved test method must be conducted. If no known cause for the vapor is identified, the entire UST system must be tightness tested in an effort to locate the leak source. Maintain records of all actions taken to resolve the event.
**Release Reporting for UST Owners**  
**June 11, 2013**

**KDEP response:** Any notification of petroleum vapors inside any commercial or residential structure or other feature (stormwater/sanitary collection systems, utility conduits, etc.) will result in the immediate dispatch of an ERT responder to investigate. If the investigation determines a probable source for the vapors, ERT will red tag and disable the confirmed failed UST system. At times, there may not be a readily known vapor source or there may be multiple UST facilities nearby. In those situations, ERT may invoke red tag at multiple facilities and require system tightness testing in an effort to locate the leak source.

<table>
<thead>
<tr>
<th>2.3 Presence of water in tanks</th>
<th>Immediate facility response</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ATG high water alarm or warning</td>
<td></td>
</tr>
<tr>
<td>• Phase separation</td>
<td></td>
</tr>
<tr>
<td>• Manual gauging with water-finding paste</td>
<td></td>
</tr>
</tbody>
</table>

**Facility response:** Confirm automatic tank gauge (ATG) reading by manually gauging tank with the appropriate water finding paste. Begin investigation of tank components to determine if water intrusion was caused by failed riser caps in flooded sumps or manways; failed pump head gasket in flooded sumps or manways; failed spill bucket with water entering through riser or faulty plunger; failed vapor recovery adaptor; and/or other site specific tank component that might allow water into the tank. Depending on the response findings and specific repairs conducted, a third party approved tightness test will likely be required. However, if failed riser caps are visually identified as the water entry point, no tightness test will be required. If no water entry source is identified, a tank tightness test must be conducted to confirm the tank is tight. Maintain all records of actions taken to resolve the water intrusion event.

**KDEP response:** ERT will immediately respond to reports of water intrusion into tanks. If system release, confirmed water intrusion or failed test is confirmed, ERT will red tag and disable the failed system until the system components are repaired or replaced and tested using a third-party-approved method with documentation of passing test results provided to ERT.

<table>
<thead>
<tr>
<th>2.4 Failure of third-party-approved tank or piping tightness tests</th>
<th>Immediate facility response</th>
</tr>
</thead>
</table>

**Facility response:** The facility will be required to identify the leak source, perform required repairs and conduct third-party-approved tightness testing to confirm no other leaks exist. Maintain all records of actions taken to resolve the test failure event.

**KDEP response:** ERT will immediately respond and red tag and disable the failed system until the equipment is repaired or replaced and re-tested using a third-party-approved method with documentation of passing test results provided to ERT.

<table>
<thead>
<tr>
<th>2.5 Potential damage to UST system or components</th>
<th>Immediate facility response</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fires, lightning strikes, natural disasters</td>
<td></td>
</tr>
<tr>
<td>• Transport accidents</td>
<td></td>
</tr>
<tr>
<td>• Struck dispensers</td>
<td></td>
</tr>
</tbody>
</table>

**Facility response:** Immediately investigate the unusual operating conditions described in this section. Assess the UST system for damage or presence of any free product noted outside of the primary UST system in the environment or posing a threat to the environment. The facility must investigate the source of the release, make required repairs and test the repair using a third-party-approved method. Any free product discovered must be properly cleaned up. Maintain records of all actions taken to resolve the event.
**Release Reporting for UST Owners**  
**June 11, 2013**

**DEP response:** ERT will immediately respond. If system damage, release or failed test is confirmed, ERT will red tag and disable the failed system until the equipment is repaired or replaced and tested using a third-party-approved method with documentation of passing test results provided to ERT.

<table>
<thead>
<tr>
<th>2.6 Disabled or missing automatic line leak detectors</th>
<th>Immediate facility response</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Pump relay alarm, continuously running STP, or absence of automatic line leak detector</td>
<td></td>
</tr>
</tbody>
</table>

**Facility response:** **Pump relay alarm or continuously running STP.** This alarm indicates the STP is continuing to run after it was instructed to stop or the pump is continuing to pump longer than expected. A continuously running pump does not allow gross line leak detection to occur. The facility must immediately disable and repair equipment. If KDEP discovers this condition during a compliance inspection or incident investigation, or if ERT responds because of a report of this alarm, ERT will red tag and disable the deficient system. Appropriate repairs must be made to the system and a passing gross or operational (3.0 gph) line test must be obtained thru the ATG within seven days of the initial report. If an operational leak detector test has not been conducted in the last 12 months, a third-party-approved operational test must be conducted. Maintain records of all actions taken to resolve the event.

**Absence of automatic line leak detector.** During compliance inspections or incident investigations, if a pressurized product line is observed to lack an automatic line leak detector, the inspector will notify the State Fire Marshal Office and Environmental Response Branch hotline and ERT will red tag and disable the deficient system until the equipment is installed and tested using a third-party-approved method with documentation of passing test results provided to ERT.

**KDEP response:** ERT will dispatch a responder if the facility confirms a release or essential release detection equipment is found to be nonfunctioning or absent. ERT will red tag and disable the failed system until the equipment is repaired or replaced and tested using a third-party-approved method with documentation of passing test results provided to ERT.
Release Reporting for UST Owners
June 11, 2013

Chapter 3. Tier II Notifications: Conditions that require immediate investigation from the owner and possible response from ERT

These are conditions with a moderate risk of release or where releases are not catastrophic when given proper attention.

### 3.1 Erratic dispenser behavior from a suction system

**Facility response:** Erratic or intermittent flow from a suction dispenser may indicate a leak in product piping. Investigate specific piping by checking the tank sump or manway, if present, and under all dispensers for the presence of free product. If investigation confirms a line failure or system release, immediately update the confirmed release to the hotline. The failed system must be repaired and tested using a third-party-approved test method. If the cause of the slow flow is visually confirmed to be a leak above the dispenser check valve somewhere in the dispensing equipment, the facility must disable the leaking system to stop the leak and ensure appropriate repairs are made. **No third party line tightness test is required for this specific finding.** If no releases are noted, check internal components such as filters, check valves or other system specific components that might cause slow flow. If dispensing problems continue, third-party-approved system tightness test must be conducted to determine if the piping is leaking. Maintain all records of actions taken to resolve slow flow event.

**KDEP response:** ERT will dispatch a responder when the facility reports back to the hotline if system release or failed test is confirmed. ERT will red tag and disable the failed system until the equipment is repaired or replaced and tested using a third-party-approved method with documentation of passing test results provided to ERT.

### 3.2 Failing results from a tank or piping release detection method

- Annual and periodic line test failures from electronic line leak detectors
- Annual and periodic tank test failures from automatic tank gauge
- **Liquid** alarm from discriminating liquid sensor
- Tank interstice alarm
- Failure of electronic release detection equipment
- Failing results from SIR or MTG
- SIR inconclusive results
- Unexplained inventory discrepancies

**Facility response:** Annual and periodic line test failures. As a first step to investigate this type of suspected release, force an equivalent line test to confirm or refute the original alarm. A passing test is sufficient to confirm the integrity of the product piping. Otherwise investigate specific product piping by checking STP sumps and under all dispensers for the presence of free product. If initial investigation confirms a line failure or system release, immediately update the confirmed failure or release to the hotline. The failed system must be repaired and tested using a third-party-approved method. If the cause of the line failure is visually confirmed to be a leak above the impact valve in the dispensing equipment, the facility must trigger the impact valve to stop the leak and the facility must ensure appropriate repairs are made. **No third party line tightness test is required for this specific finding.** If the cause of the line failure is a leak located in the STP pump head (for example, the functional element or leak detector port), **no third party line test would be required for this specific finding.** If no releases
are noted, check internal components such as filters, blend valves, check valves, functional element, leak detector transducer or other system specific components that might cause this alarm. If no failed components are identified and piping does not pass an annual test, the facility must continue closely monitoring the situation. ERT may direct a third-party-approved line tightness test, depending on the situation. Maintain all records of actions taken to resolve this situation.

**Annual and periodic tank test failures.** As a first step to investigate this type of suspected release, force an equivalent tank test to confirm or refute the original alarm. A passing test is sufficient to confirm the integrity of the tank. Otherwise investigate the specific tank by checking all tank sumps, riser manways, tank interstice, or any pit observation wells for the presence of free product. If initial investigation confirms a tank failure or system release, immediately update the confirmed failure or release to the hotline. Appropriate repairs must be made to the tank system and tested using a third-party-approved test method. If no releases are noted, check ATG programming for possible errors that might cause this alarm and ensure a passing annual tank test is obtained after the initial failure. Continued failure may require ERT to direct a third-party-approved tank tightness test. Maintain all records of actions taken to resolve annual tank test failure alarm.

**Liquid alarm from discriminating sensor.** If interstitial monitoring is the primary release detection method, the facility must investigate the alarm and take appropriate actions to empty, repair and test the containment sump. If initial investigation confirms a system failure or release, immediately update the confirmed failure or release to the hotline. The source of the release must be repaired and tested using a third party approved test method. If the cause of the alarm was determined to be a failed or faulty sensor, the sensor must be repaired or replaced with a passing operational test conducted. **Note that sensor alarms are not reportable if the sensors are not used for primary release detection method(s) and the source of the alarm was verified to be water.** Maintain all records of actions taken to resolve the sensor alarm.

**Tank interstice alarm.** If interstitial monitoring is the primary release detection method, the facility must report the alarm. If investigation confirms a primary or secondary tank wall failure, the facility must immediately update the confirmed failure/release to the hotline. Appropriate repairs must be made to the tank system and tested using a third-party-approved test method. **Note that sensor alarms are not reportable if the sensors are not used for primary release detection method(s) and a primary tank failure has not been confirmed.** Maintain all records of actions taken to resolve the tank interstice alarm.

**Failure of electronic release detection equipment (except electronic line leak detectors).** If an electronic release detection component (except electronic line leak detectors) fails to pass an operational test or fails during normal operation, the facility will repair or replace the failed component and retest the component within seven days. If a component can be immediately repaired or replaced, a release report is not required but test results are required to be submitted to USTB within 30 days. Maintain all records of actions taken to resolve the equipment failure.

**Failing result from SIR or MTG release detection methods.** Failing monthly test results from manual tank gauging or statistical inventory reconciliation (SIR) must be investigated immediately by reviewing the data collection process to rule out data errors or stick reading problems. If no obvious errors are noted, investigate the suspect UST system by checking all tank sumps, riser manways, tank interstice, under dispensers or any pit observation wells for the presence of free product. If the investigation confirms a system release, immediately update the confirmed failure or release to the hotline. Appropriate repairs must be made to the failed component and a third-party-approved test must be conducted. If no
Releases are noted, check the dispenser meter calibration and repair if necessary. If a cause for the monthly failure is not identified, a third party approved system tightness test must be conducted to check both tank and associated piping for leaks. Maintain records of all actions taken to resolve the release detection method failure.

**SIR inconclusive results.** Immediately review the data collection process to rule out data errors or stick reading problems. If no obvious errors are noted, investigate the suspect UST system by checking all tank sumps, riser manways, tank interstice, under dispensers or any pit observation wells for the presence of free product. If the investigation confirms a system release, immediately update the confirmed failure or release to the hotline. Appropriate repairs must be made to the failed component and a third-party-approved test must be conducted. If no releases are noted, check the dispenser meter calibration and repair if necessary. If a cause for the consecutive inconclusive results is not identified, a third party approved system tightness test must be conducted to check both tank and associated piping for leaks. Maintain records of all actions taken to resolve the release detection method failure.

**Unexplained inventory discrepancies.** Release detection methods are not foolproof: automatic tank gauging and line leak detectors don’t detect leaks from the pump head and SIR only returns a result on a monthly basis, for example. Treat this unusual operating condition as any other suspected release by immediately reviewing the data collection process to rule out data collection errors or stick reading problems. If no obvious errors are noted, investigate the suspect UST system by checking all tank sumps, riser manways, tank interstice, under dispensers or any pit observation wells for the presence of free product. If the investigation confirms a system release, immediately update the confirmed failure or release to the hotline. Appropriate repairs must be made to the failed component and a third-party-approved test must be conducted. If no releases are noted, check the dispenser meter calibration and repair if necessary. If a cause for the monthly failure is not identified, a third party approved system tightness test must be conducted to check both tank and associated piping for leaks. Maintain records of all actions taken to resolve the release detection method failure.

**KDEP response:** ERT will dispatch a responder if the facility reports that a system release or a failing test has been confirmed. ERT will red tag and disable the failed system until the equipment is repaired or replaced and tested using a third-party-approved method with documentation of passing test results provided to ERT.

### 3.3 Fuel alarm from non-discriminating liquid sensor

**Facility response:** If interstitial monitoring is the primary release detection method, the facility must investigate the alarm and determine the cause of the alarm. If water is found to be causing the alarm, the facility must take appropriate actions to empty, repair and test the containment sump. If initial investigation confirms a system failure or release of fuel, immediately update the confirmed failure or release to the hotline. The source of the release must be repaired and tested using a third party approved test method. If the cause of the alarm was determined to be a failed or faulty sensor, the sensor must be repaired or replaced with a passing operational test conducted. **Note that sensor alarms are not reportable if the sensors are not used for primary release detection method(s) and the source of the alarm was verified to be water.** If the cause of the release is visually confirmed to be a leak above the impact valve in the dispensing equipment, the facility must trigger the impact valve to stop the leak and the facility must ensure appropriate repairs are made. **No third party line tightness test is required for this specific finding.** If the cause of the release is a leak located in the STP pump head (for example, the functional element or leak detector port), **no third party line test would be required for this specific finding.** Maintain all records of actions taken to resolve the sensor alarm.
KDEP response: ERT will dispatch a responder if the facility reports that a system release has been confirmed. ERT will red tag and disable the failed system until the equipment is repaired or replaced and tested using a third-party-approved method with documentation of passing test results provided to ERT.

3.4 Potential catastrophic product piping failure (>3.0 gph leak)  

<table>
<thead>
<tr>
<th>Immediate facility response</th>
<th>Facility resolve within 7 days</th>
</tr>
</thead>
</table>
| **Facility response:** Electronic line leak detectors (Gross Failure/Pump Shutdown).** If the facility has the ability to immediately re-run a gross line test (3.0 gph) thru the ATG unit and a passing gross line result is obtained, the facility is NOT required to report the initial gross line failure or PLLD shutdown alarm.** As an additional step to investigate this type of suspected release, force a periodic (0.2 gph) or annual (0.1 gph) line test to confirm or refute the original alarm. A passing test is sufficient to confirm the integrity of the product piping. Otherwise the facility must investigate the potential line leak by checking STP sumps or manways and under all dispensers for the presence of free product. If initial investigation confirms a line failure or system release, immediately update the confirmed failure to the hotline. The failed system must be repaired and tested using a third-party-approved method. If the cause of the line failure is visually confirmed to be a leak above the impact valve in the dispensing equipment, the facility must trigger the impact valve to stop the leak and the facility must ensure appropriate repairs are made. **No third party line tightness test is required for this specific finding.** If the cause of the line failure is a leak located in the STP pump head (for example, the functional element or leak detector port), **no third party line test would be required for this specific finding.** If no releases are noted, check internal components such as filters, blend valves, check valves, functional element, leak detector transducer or other system specific components that might cause this alarm. If no failed components are identified, the facility must ensure a passing annual (0.1 gph) line test is obtained thru the ATG after the initial failure date but within the allowed response timeframe. Maintain all records of actions taken to resolve shutdown failure alarm.

Mechanical line leak detectors. Slow flow indicates a mechanical line leak detector may have detected a leak in product piping greater than 3.0 gph. Investigate the potential line leak by checking STP sumps or manways and under all dispensers for the presence of free product. If initial investigation confirms a line failure or system release, immediately update the confirmed failure to the hotline. The failed system must be repaired and tested using a third-party-approved test method. If the cause of the slow flow is visually confirmed to be a leak above the impact valve in the dispensing equipment, the facility must trigger the impact valve to stop the leak and the facility must ensure appropriate repairs are made. **No third party line tightness test is required for this specific finding.** If the cause of the slow flow is a leak located in the STP pump head (for example, the functional element or leak detector port), **no third party line test would be required for this specific finding.** If no releases are noted, check internal components such as filters, blend valves, check valves, functional element, leak detector transducer or other system specific components that might cause slow flow conditions. If slow flow conditions continue, a new leak detector must be installed with a passing operational test conducted on the replacement leak detector, and/or a third-party-approved line tightness test must be conducted to determine if the piping is leaking. Maintain all records of actions taken to resolve slow flow event.
Automatic line leak detector failure that is not immediately remedied. If a mechanical or electronic line leak detector fails to pass an operational test, the failed test result must be submitted to USTB within seven days of the test date. The failed line leak detector must be immediately replaced with a leak detector that is functioning properly and that has passed an operational test after replacement. The passing test result must be submitted to USTB within 30 days. If immediate replacement and re-testing is conducted, no release reporting is required, but testing is still required to be submitted to USTB. If an improperly functioning leak detector cannot be immediately replaced, the facility must immediately report to the hotline of the test failure. The failed system must be immediately taken out of service until a properly functioning leak detector is installed with a passing operational test result conducted. Maintain records of all actions taken to resolve the event.

KDEP response: ERT will dispatch a responder if the facility confirms a release or essential release detection equipment is found to be nonfunctioning or absent. ERT will red tag and disable the failed system until the equipment is repaired or replaced and tested using a third-party-approved method with documentation of passing test results provided to ERT.

<table>
<thead>
<tr>
<th>3.5 Potential catastrophic tank failure (&gt;3.0 gph leak)</th>
<th>Immediate facility response</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A sudden loss or leak alarm</td>
<td>Facility resolve within 7 days</td>
</tr>
<tr>
<td>• Gross tank leak or failure alarm</td>
<td></td>
</tr>
</tbody>
</table>

Facility response: KDEP recognizes these alarms may have many causes, but the alarm indicates a potentially catastrophic leak situation. As a first step to investigate this type of suspected release, force an annual (0.1 gph) tank test to confirm or refute the original alarm. A passing test is sufficient to confirm the integrity of the tank. Otherwise, investigate specific tank by checking all tank sumps, riser manways, tank interstice, and any pit observation wells for the presence of free product. Subsequent passing static or CSLD/SCALD tests can be used to confirm tank integrity. If investigation confirms a possible leaking tank or failed siphon line for siphoned tanks, immediately update the confirmed failure to the hotline. The failed system must be repaired and a passing third-party-approved tightness test conducted. Maintain all records of action taken to resolve the alarm.

KDEP response: ERT will dispatch a responder if a system release or failed test is confirmed. ERT will red tag and disable the failed system until the equipment is repaired or replaced and tested using a third-party-approved method with documentation of passing test results provided to ERT.
Chapter 4. Tier III Notifications: Conditions that require prompt investigation from the owner and follow-up from FOB

These conditions have low risk of a release if the owner addresses the condition within the timeframe outlined in the document.

<table>
<thead>
<tr>
<th>4.1 Failed spill buckets or catchbasins that are not contributing to water intrusion</th>
<th>Facility response within 7 days</th>
</tr>
</thead>
</table>

**Facility response**: Owners are required to report failing test results to the Underground Storage Tank Branch (USTB) within seven days of completing the test. The facility has 30 days from the test date to replace the defective spill bucket and submit passing test results.

**KDEP response**: FOB will follow up to ensure the spill bucket has been replaced and that passing test results have been submitted.

<table>
<thead>
<tr>
<th>4.2 Failed cathodic protection testing</th>
<th>Facility response within 7 days</th>
</tr>
</thead>
</table>

**Facility response**: Owners are required to report failing test results to USTB within seven days of completing the test. The facility has 90 days from the test date to retest the system if the failing results are thought to be due to adverse weather condition. The facility has 90 days to repair the cathodic protection system, retest and submit the passing results.

**KDEP response**: FOB will follow up to ensure the cathodic protection system has been retested and/or repaired.

<table>
<thead>
<tr>
<th>4.3 Suspected release reports that do not result in confirmed releases</th>
<th>Facility response within 7 days</th>
</tr>
</thead>
</table>

**Facility response**: Owners shall maintain records of all repairs to UST systems and system components for the life of the system. Types of records could be service tickets, passing system test records, etc.

**KDEP response**: FOB will follow up to ensure that suspected releases have been resolved.