***Florida Department of Environmental Protection***

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**Division Of Waste Management**

**Bureau of Petroleum Storage Systems**

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#### Storage Tanks Program Training Manual

Preface:

This training manual represents hard work and dedication by a number of local program (County) and Department of Environmental Protection (Department) personnel over an extended period of time. The manual has been arranged into a format that, hopefully, will be easy to use. After a brief overview of each inspection type, the manual provides detailed instructions for completing the forms. In this section, there are two columns of information: to the left, a list of keywords; to the right, the inspection data entry item, an interpretation (if necessary), followed by comments. The level of noncompliance (*i.e.* Significant-A, Significant–B or Minor) assigned for failure to meet the requirement is indicated in the header.

References appear throughout this manual, where appropriate, rather than in a separate Appendix. Furthermore, this training manual is something to take along as a reference tool, bound in a manner compatible with the outdoor inspection process. It contains information necessary to complete the inspection process and the form at the facility.

Remember, this document is intended to encompass the entire inspection process as much as is possible. As the process evolves, so will this manual. If there are areas in need of clarification or if you have information that may be beneficial to inspectors statewide, contact Marshall Mott-Smith’s office and describe the changes or additions you would like to see.

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**TYPES OF INSPECTIONS**

**TCI** – Routine compliance inspections are performed annually each Task Year (July 1 – June 30). It includes examination of the equipment present at the facility and, at a minimum, and the records dating back to the previous TCI. The TCI review period may encompass other inspection activities that have occurred (closure, install, discharge, incident, or complaint). In effect, the annual review summarizes the compliance history of the facility since the last TCI.

**TXI** – Inspection performed for the permanent closure of a tank system or its major components. It is also performed during closure assessments alone.

**TDI** – Discharge investigation inspection performed after notification of a discharge, and the TCI has already been performed during the current task year at the facility.

**TCDI** – Discharge investigation inspection performed after notification of a discharge, and the TCI has not yet been performed during the current task year at the facility; or when discharge discovery occurs during the TCI.

**TIN** – Inspections performed to document the installation of a system or its components, generally over an extended timeframe.

**TCPI** – Inspection performed in response to a complaint when the nature of the complaint appears to be justified and no TCI has been performed. If the TCI has already been performed, then a TCR (see below) would be performed.

**TCR** – Inspection performed to determine the status of previously noted noncompliance items. Reinspections generally examine the existing violations. If new violations are discovered, they must be noted.

**INSPECTION FORMS**

1. The inspection documentation paperwork has three components.

* The **Storage Tank Facility Compliance Inspection Report (Inspection Report)** upon which you describe your observations. This form is used to describe the conditions which exist at the facility during the inspection, primarily those representing non compliance with Chapter 62-761, F.A.C. It is required that you provide the specific rule citation(s), as well as provide a description of the issue. Be as detailed as possible. Remember to document as much as possible. Any person reading your Inspection Report should be able to understand the level of compliance existing at that facility on the date of your inspection. When possible you should have a facility representative sign the form. If you do not obtain a signature you must write in how you provided the facility owner a copy [e.g. copy mailed with follow-up letter].
* The **STCM Facility Information Page** lists the facility information as it is currently stored in the Department’s STCM Data Base. The STCM Facility Information Page is generated from the DEP database via the Internet. Registration accuracy should be verified during the inspection, with changes noted on the printed document. This page must be generated for use during the inspection and is to be attached to the file copy of the inspection report.
* The **Database Entry Form** on which you check off the non compliance items for subsequent entry into STCM. This optional, but recommended form has been designed to contain the minimum information needed to enter the inspection into the STCM database. This form can be separated from the inspection for the data entry process.

1. Accompanying these items is the **Inspection Rule Sheet**, which serves as a uniform guide to assist the inspector in assigning the pertinent rule citation. This document was intended to expedite the assignment of the correct rule citation as you complete the inspection in the field. Rule citations have been cross referenced to other applicable sections when appropriate. In addition, this form will help guide you through the complexity of the rule.

III. As of April, 2000, copies of all inspection forms, rule sheets, master violation lists, rules, select reference standards, along with registration forms and STCM entry code definitions are available online at:

<http://www.dep.state.fl.us/waste/categories/tanks/default.htm> **COMPLETING THE FIRST PAGE OF THE STORAGE TANK FACILITY COMPLIANCE INSPECTION FORM:**

**Facility ID Number:** Enter the seven digit number.

**Facility/County:** Enter either the two digit county number or the county name.

**Inspection Date:** Enter the date you conducted the compliance inspection or the final field visit for installations and closures. Subsequent record review may be required. The date entered in this block must agree with the date entered into STCM.

**Facility Name:** Enter the name of the facility exactly as it appears on the STCM Facility Information Page. Note all changes on the STCM Facility Information Page.

**Facility Type:** Enter the code letter as listed on the STCM Facility Information Page. Observe the actual operational use of the facility. If the best or most appropriate descriptive classification has changed, advise the facility to submit a registration form. Document why the change is warranted on the inspection form.

**Latitude/Longitude:** First, determine the accuracy of the coordinates, if the coordinates have not been verified previously with a Magellan or another more accurate method. Note that the Magellan unit readout must be in minutes and seconds, instead of decimal degrees. Record the most accurate readings available to you into the STCM database.

**# of USTs/ASTs:** Mark the number of all regulated tanks (active and out of service) listed under that specific facility ID.

**Inspection Type:** Check the block next to the type of inspection being performed (TCI, TXI, etc.).

**Rule Cite:** Write down the specific rule citation assigned to the noted violation. Refer to the Inspection Rule Sheet for the appropriate reference. It is recommended that you write the Item number as well.

**Description/Inspector Comments:** Use the space available to describe the violation noted, in as much detail as necessary. Remember DOCUMENT, DOCUMENT, DOCUMENT! If you are performing a reinspection note the previous item numbers that have been corrected, then list any remaining and/or new violations.

**Financial Responsibility:** Examine the Certification of Financial Responsibility (COFR) and any attached documentation. Determine and write down the type of mechanism and the period of coverage. If financial responsibility is required, but not demonstrated, mark “none”.

**Based upon the inspection result…:** Remember to check the “YES” dot if the facility is in full compliance. If you are performing a reinspection and “Compliance Without Enforcement” has been achieved mark the “CWOE” block. If needed, indicate a date or timeframe for reinspection.

**What the Facility Type codes mean:**

(1) For a facility to be considered “**bulk product**” it must be “a waterfront location with at least one aboveground tank with a capacity greater than 30,000 gallons which is used for the storage of pollutants”. Pollutants include “oil of any kind and in any form, gasoline, pesticides, ammonia, chlorine, and derivatives thereof, excluding liquefied petroleum gas”. Bulk Product facilities can then be classed as either:

**“T” Coastal Bulk Product Facility** – located on the Florida coast, and may have tank systems that store hazardous materials in addition to pollutants. The “coastline” is defined as the “mean low water along the portion of the coast that is in direct contact with the open sea and the line marking the seaward limit of inland waters, as determined under the Convention on Territorial Seas & the Contiguous Zone, 15 UST (Part 2) 1606”.

**“S” Inland Waterfront Bulk Product Facility** – located on inland waterways (lakes and rivers), also may store hazardous materials in addition to pollutants.

(2) When a facility is a “**waterfront location**” but not a “bulk product facility” then the options are:

**“V” Marine Fueling Facility** – a commercial, recreational, or retail coastal facility that provides fuel to vessels, and may store other pollutants and/or hazardous substances on-site.

**“W” Waterfront Fueling Facility** - a commercial, recreational, or retail facility located on a non coastal waterway that provides fuel to vessels, and may store other pollutants and/or hazardous substances on-site.

(3) Other options:

**“A” Retail Station** – primarily supplies vehicular fuel to automotive customers, although other regulated substances may be present.

**“C” Fuel-User, Not Seller** – stores a variety of substances for consumption at the facility.

**“D” Inland Bulk Petroleum Storage** – an inland facility with no waterfront access, with multiple active UST and/or AST storage systems used primarily for storage prior to distribution. May also store hazardous substances for on-site consumption and/or distribution.

**“E” Industrial Plant** – an inland facility with no waterfront access, may include power plants and facilities designed for manufacturing/chemical processing. May have multiple active UST and/or AST storage systems used for pollutant and/or hazardous substances intended for facility consumption.

**“J” Collection Station** – a maintenance or related facility that acquires and temporarily stores used and/or waste oil prior to recycling and/or disposal.

**“K” Inland Bulk Chemical Storage** – an inland facility with no waterfront access, with multiple active UST and/or AST storage systems and/or compression vessels used for the storage of hazardous substances intended for distribution. May also store pollutants on-site for facility consumption and/or distribution purposes.

**“L” Chemical User** – facility primarily uses regulated hazardous substance tanks

on-site, may also store pollutants.

**“M” Agricultural** – Facility actively used in the production of crops, plants, or livestock. Property must be zoned agricultural.

**“B” Residential (not regulated)** – property is used primarily for dwelling purposes; and regulated substances are used for non commercial purposes; and no UST greater than 1,100 gallons present.

**“P” UST Residential (>1,100 gallons)** – USTs are regulated by the USEPA, and not by the state of Florida.

**“Z” Other** – describe the type of facility.

If the facility is owned by a government entity, select the appropriate code:

**“F” Federal**

**“G” State**

**“H” Local or City**

**“I” County**

**“N” Indian Land** - (Must be owned by the tribe)

**PLAN REVIEW**

The Department does not require facilities or contractors to undergo plan review prior to construction activities required by Chapter 62-761, F.A.C. However, many local governments require plan reviews as part of the permitting process. The purpose of the plan review process is not only to ensure that the upcoming construction meets the requirements of Chapter 62-761, F.A.C., but also to get a permit issued. The submissions required to obtain the permit will be dictated by the responsible local government. It is also a useful tool to ensure the achievement of substantial compliance for all facilities undergoing any type of system modification.

In addition, plan review is an excellent means to meet and develop working relationships with Pollutant Storage System Contractors (PSSCs). PSSCs can be informed of the critical points in the construction or closure process when inspections need to be performed.

The following areas may be examined, as applicable, during a plan review:

1. Tank sizes, construction and manufacturer.
2. Locations of tank inlets, outlets, and vents.
3. The tank position relative to other tanks, buildings, roads, and property lines.
4. Details of the containment area (size, capacity, construction materials, volume calculations, drainage, tank position within the containment, etc.).
5. Type of backfill to be used and distance from the UST to grade.
6. Method of anchoring.
7. Grounding.
8. Overfill protection manufacturer.
9. Spill containment manufacturer.
10. Piping size, length, configuration, construction and manufacturer.
11. Release detection method(s).
12. Cathodic protection test stations.
13. Dispenser locations and type of liners.
14. Pump specifications.
15. Valve size, type, and location (isolation & solenoid/anti-siphon).
16. Site plan drawn to scale, with “north” shown.

It is also helpful to have a scope of work provided by the contractor describing the extent of the planned activities.

Note that many plans submitted for review are generic, so some specific components (e.g. tank model, etc.) will need on-site verification.**RECOMMENDED TOOLS**

Some facilities (e.g. mines, mills, etc.) require certain equipment to enter the site. Required equipment may include: hard hat, steel-toed shoes, long pants, and safety glasses. Be aware of the requirements of the facility you are visiting, and the type of inspection you are doing. Arrive prepared!

1. **Standard Safety Equipment:** safety vest, hard hat, gloves, steel-toed shoes and traffic cones.
2. **Recommended Safety Equipment:** hearing & eye protection, nitrile gloves, back support, and properly fitted respirator.
3. **General Tools:** at least two large screwdrivers, small and large pliers, hammer, adjustable wrench, large sized socket set, long-handled crowbar, camera, explosion-proof flashlight, and fuel gauge stick with appropriate paste. Towels, detergents and other hygiene supplies should be available.
4. **Monitor Well Sampling:** a properly calibrated OVA device, bailers, string or monofilament line, safety knife, buckets, manual bilge pump or turkey baster, long bottle brush, laboratory grade soap, clean glass jars or cups, and lab grade isopropanol.
5. **Training Certification:** required for all inspectors and for use of specialized safety equipment (e.g. respirators). Verify that all certifications are current. Be prepared to show your OSHA 8-hour HAZWOPER Refresher certification.

6. **Other:** Sunscreen and mosquito repellent, camera.

**UST INSTALLATION INSPECTION (TIN)**

# Scheduling

Except for portions dealing with excavation, backfill, etc., most of the discussion below can apply to both ASTs and USTs.

There are generally five UST installation inspection visits to be coordinated between the inspector and the contractor. 30 days prior notification is required. Additionally, the contractor must provide at least 48 hours notice to the County prior to the initial visit. Both parties can agree on a subsequent inspection schedule. Advise contractors to notify the County when a scheduled inspection is delayed to avoid unnecessary trips.

# Preparation

After notification is received, determine if the installation is at a new or existing facility. If it is new, begin a file. If it is an existing facility, review the information available on the STCM database and the compliance file. Assemble the forms necessary to complete the inspection. During the final inspection, the owner/operator may be provided with copies of Chapter 62-761, F.A.C., and pertinent associated documents (e.g. INFs, DRFs, etc.). If possible, the owner/operator should be on site to review the compliance requirements.

**On Site**

Always wear proper safety equipment. This may include, but is not limited to: safety vest, hard hat, steel-toed shoes, boots, safety glasses, or hearing protection. Some facilities or construction projects may require long pants. Remember, just because no one else on the site is using safety equipment does not mean it is not required.

Upon arrival at the facility, introduce yourself to the PSSC or contractor, and any representative of the facility. Note that a PSSC is not required for installation of ASTs.

**Inspection #1** – Document the name and license number of the PSSC. When the tank arrives on site, walk around it and examine it for evidence of damage, such as scrapes of the exterior coating. Note the type of surface upon which the tank has been stored (hard, soft). Note the arrival date of the tank, and document pertinent gauge measurements. In accordance with manufacturer’s specifications, observe the air soap tests of the tank fittings, and record the tank pressure. Observe the excavation to see if fixed structures are jeopardized. Document the tank setting, tie-down, and backfill\* processes. When the contractor begins filling the tank, document the liquid used, and the depth of backfill to the height of liquid. If the contractor fills the tank with product, it is advisable to notify the local fire department.

\*Examples of backfill standards include, but are not limited to:

Fiberglass tank backfill guidelines (XERXES Corporation).

Pea gravel – mix of round particles having a minimum diameter of 1/8-inch and a maximum diameter of ¾-inch.

Crushed stone– should be washed and free flowing. The mix of angular particle size should be between 1/8-inch and ½-inch and meet ASTM C-33 paragraph 9.1 requirements.

No more than 5% of the backfill shall pass through a No. 8 sieve.

Clean washed sand.

**Inspection #2** – Note the type of gauge and its range. Document the initial pressure present on each line. Observe the contractor perform air soap tests of the primary piping (150% of the operating pressure). Look at the piping for evidence of damage. Record the final pressure reading. After the test, have the contractor release some air from the line to verify pressure existed on the line.

**Inspection #3** - Note the type of gauge and its range. Document the pressure present on each line. Observe the contractor perform air soap tests of the secondary piping (generally ≤5 psi). After the test, have the contractor release some air from the line to verify pressure existed on the line. Look at the piping for evidence of damage. NOTE: Inspections #2 & #3 may be done concurrently depending on the piping type.

**Inspection #4** – Observe hydrostatic tests of the dispenser liners, piping sumps, and spill containment devices. Pre-fabricated units require at least a 3-hour test, while field fabricated units require at least a 24-hour test. If back filling has not occurred, check all entry points for leakage. The contractor may be able to demonstrate the presence of ball-check overfill protection valves at this time.

**Inspection #5** – A final inspection during which the following items are observed and/or verified:

1. **Tank and line precision tightness test verification.** It is preferable to have a printed copy of the precision tightness test data, rather than just a pass/fail rating. Document the name and license number of the precision tightness tester. If in-line leak detectors were installed, a 3.0 gph leak test must be performed and results provided.

Brine filled and select vacuum monitored tanks do not require precision tightness testing after installation; however, they have manufacturer specified final test procedures and/or parameters to meet. Also, although a tightness test is required for underground piping associated with ASTs, it is not required that a registered tester perform the test.

1. **Release detection system verification.** Document the release detection method used for each component of the system. Observe the test(s) of the release detection system. Request that the owner/operator be present when the contractor performs the systems check to ensure that they are familiar with the system.

An electronic system may be equipped with a variety of sensors located in liners, sumps, and tank interstices. The most common types of sensors are floats, optics, or vapor sensing, and they may be discriminating or non-discriminating. Check the placement of the sensors in the dispenser liners and/or the piping sumps. It is recommended that you obtain copies of the system test tape.

If vacuum monitoring is used, record the initial vacuum readings. The initial readings determine the benchmark by which subsequent readings are measured.

If the tank interstice is going to be monitored manually, have them demonstrate the procedure.

Ensure that the secondary piping boots allow movement of any released product to the monitoring point. Be sure that the entire length of the piping can be monitored, intermediate sumps may be necessary.

1. **Overfill protection verification.** Note that the ball check valve is located inside the tank; therefore, have the PSSC help you to verify. The flow shut off overfill protection device, if installed, is located in the drop tube. Verify the audible and visual alarms on high level alarm systems.
2. **Shear valve verification.**  Observe that all shear valves are properly anchored and verify that they have been checked by a certified contractor for operability and anchoring. Consult the shear valve installation instructions to determine if the shear point is properly positioned relative to the island.
3. **Cathodic protection verification.** Review the cathodic protection test data, if applicable. Confirm the location of any test stations, if present. Note that the system must be tested within six months of installation, and depending on the type, either annually or triennially thereafter.
4. **Line Leak detector verification for pressurized piping system.** Verify that the line leak detectors are present. Pressurized piping systems with continuously operating interstitial monitoring devices that shut off the pump are exempt from this requirement.

g. **Miscellaneous.** Verify that all hydrostatic test liquids have been removed and that the appropriate API RP 1637 markings have been applied to the fillbox covers.

Additional notes:

As the installation process may cover an extended timeframe, it is important to document the chronology of site visits and observations. Note any problems observed, and the method and date of correction. Identify brands and models of all equipment, and indicate the EQ number assigned to it by the Department. Draw a site sketch indicating the system layout.

# Inspection Follow Up

If the owner/operator is available during the final inspection, you should take time to discuss any problems noted.

Next, make sure that the owner/operator understands operational requirements needed to maintain the system in compliance with the rules. Inform the owner/operator that the release detection systems must be checked at least monthly and the results recorded. Make sure that the facility has a written release detection response level (RDRL) statement for each method employed. The Department has model RDRLs that can be provided. Mention the requirements for annual checks for release detection devices. Advise the owner/operator which records are to be maintained and of the requirement for financial responsibility.

**ROUTINE COMPLIANCE INSPECTION (TCI)**

# Scheduling

Chapter 62-761, F.A.C., allows five working days to provide pertinent records. It is, therefore, good practice to notify the facility representative prior to the inspection. This will also facilitate access to restricted facilities (e.g. military bases, etc.). Notification can be via telephone call, facsimile, electronic mail, US mail, or in some cases, in person. If not all the requested records are available, a violation cannot be considered until at least five working days has elapsed from the initial request.

Ensure the facility representative is aware of the records needed to complete the inspection. Advise the facility representative of the chronological period covered by the inspection (e.g., all records since August 1998).

Make access arrangements with the facility representative regarding dispenser panel keys, monitoring well locks, manhole bolts, and/or specialized tools to remove sump lids (e.g., fiberlite lid handles). Some Counties maintain at least one set of keys or specialized tools.

# Preparation

Print the STCM Facility Information Page available via the Internet. Review the compliance file to determine if there are any unresolved issues. Become familiar with the site attributes (e.g. number of USTs, etc.), and the storage tank system attributes (construction of tank, piping, release detection methods etc.).

If monitoring wells are used for release detection, determine if a site suitability determination was required. Proof of proper construction of the wells is still required, if a site suitability is waived. Also note if a vapor monitoring plan is required.

If the site has an impressed current cathodic protection system and the rectifier is equipped with a clock hour meter, note the reading obtained during the last inspection. The elapsed time can then be calculated and compared to the current reading to ensure that the rectifier has been functioning continuously.

Check the STCM database for information regarding payment of registration fees.

Assemble the forms needed to complete the inspection.

# On Site

Always wear proper safety equipment. This may include, but is not limited to: safety vest, hard hat, steel-toed shoes, boots, safety glasses, or hearing protection. Some facilities or construction projects may require long pants. Remember, just because no one else on the site is using safety equipment does not mean it is not required.

Upon arrival at the facility, introduce yourself to the facility representative.

It is best to have owner/operator or a facility representative accompany you on the inspection. This person can gain access to different system components (locked dispensers and wells, heavy/awkward sump lids, fragile components) as well as answer any questions that may arise during the course of the inspection.

The inspection steps represented below need not be followed in the same order. This will depend on the preferences of the inspector or owner operator and can vary from site to site depending on logistics.

# Field Inspection

If vapor detection equipment is to be used, it should be turned on to allow time to warm up.

The inspector should take time to become familiar with the site (location of tanks, vents, dispensers, manways, etc.). If necessary, update the site map to document any changes.

Collect the equipment needed to conduct the inspection (safety equipment, inspection forms, notepad/log for notes, screwdrivers, pliers, hammers, camera etc.). Additionally, sunscreen and mosquito repellent may be helpful.

Position safety cones around the area to be inspected in traffic areas. Since you are in an area where the public may not expect to find you, you must remain vigilant to traffic at all times.

Be cognizant of potential biological hazards such as insects, spiders and snakes which may be located in sumps, dispensers or in tall grass.

Other potential hazards: Excessive hydrocarbon vapors (minimize exposure), weather (heat, inclement weather).

The following discussion will be broken down into Underground Storage Tank inspections, Aboveground Shop Fabricated Storage Tank inspection, and Aboveground Shop Field Erected Storage Tank inspections.

**Underground Storage Tank Systems**

a. **Fill Port and Spill Buckets:** Examine the spill bucket for evidence of damage (cracks are common in high-density polyethylene units). Liquid in the spill bucket may be an indicator of proper function. If the bucket is dry and its ability to perform is suspect, further investigation (i.e., hydrostatic test) may be requested of the owner/operator. If debris or dirt has accumulated in the spill bucket, this should be noted on the inspection report and the owner/operator asked to clean it out. If liquid has accumulated in the spill bucket, the owner/operator should remove this accordance with Section 62-761.700, F.A.C.

b. **Submersible Pump/Piping Sumps:** Screwdrivers, crowbars and a hammer are typically needed to remove sump lids. Composite lids may require the use of a specialized tool provided by the owner/operator. If the lid is large (greater than 36 inches diameter or length), it is not recommended that you lift it yourself (they can weigh in excess of 200 pounds). It is the owner/operators responsibility to provide access to the sump. Additionally, square sump covers have the potential to fall through the opening and damage the piping, submersible pump or tank. Round lids, while not capable of falling into the sump, may swing down and impact the submersible pump or line leak detector. Both types of lids have the potential to cause bodily harm. Exercise extreme caution.

Sumps may be lined (containment) or earthen. Lined sumps typically have a special cover designed to keep out stormwater and groundwater. Make note of the presence of water/product, and the liquid depth in relationship to the piping entrance to the sump (a liquid level higher than the piping entry point will make it impossible to detect a new release). Note if the piping is open to the sump or closed with test boots. If closed, is a release detection valve in place? If a release detection sensor is in the sump, is it correctly positioned below the piping entry? The make and model of the line leak detector should be noted. If the line leak detector has a vapor bypass line, check for leaks at both ends (the dispenser may need to be engaged for this type of leak to be evident).

Earthen pump/piping sumps do not provide complete secondary protection to the piping, swing joints, flex connectors, and pump unit. These sumps may incorporate wooden or metal sheeting in an attempt to restrict the slumping of soil or crushed rock onto the equipment and prevent the pavement from being undermined. At times the STP housing and the line leak detector may be completely or partially buried. While it is preferable that the assembly be uncovered so that it can be examined for damage and leakage, as long as the piping, swing joints and flex connectors are protected from corrosion, this is not required.

c. **Dispenser Inspection:** A key may be required to remove the dispenser cover. Visually inspect the interior of each dispenser. Check to ensure that all openings into the dispenser liners are properly sealed. Note if water or product has been allowed to accumulate. If a leak is suspected, the dispenser may need to be engaged to confirm it. Note the presence of any sensing devices (floats), and their position and condition. The shear valve must be rigidly anchored to the concrete or the dispenser island (not the liner).

d. **Tank Interstices:** Systems with monitoring ports can be checked manually. If the interstice is supposed to be dry, note the presence and type of liquid. Electronically monitored interstices must be checked via the remote panel (e.g., Veeder-Root, Pneumercator).

1. **Vacuum Gauges:** These may be located within the piping sump or in a separate sump and may be either air or fluid filled. It may be equipped with an alarm, but regardless of its presence, the vacuum gauge reading should be recorded monthly and the results maintained with the release detection records.

f. **Monitoring Wells:** Conduct a physical check of the wells. If wells are dry or contain less than one foot of water, then a vapor monitoring plan should be in place. If not, the facility may not have a valid method of release detection. Determine the following:

i. Are the surface lids correctly marked?

ii. Are the well caps tight in the casing to prevent surface water

intrusion?

iii. Are the well caps locked or otherwise secured?

iv. Are the wells properly grouted?

v. Is the proper slotting evident?

If the wells are to be sampled, follow the SOP Guidance entitled “Release Detection Monitoring Well Sampling Procedures for Compliance Inspections”, dated December 27, 1995.

g. **Corrosion Protection:** For an impressed current system, locate the rectifier box. Record the status of any indicator light, amperage, voltage, and/or hour meter readings. Note that the hour meter will run whenever power is supplied to the rectifier, and is not indicative of an operating cathodic protection system. Ensure that there is no exposure of the cable connecting the anodes to the rectifier in the pavement. Note any potential problems that you observe.

# Aboveground Shop Fabricated Storage Tank Systems

1. **Tank**: Tanks may be either double walled or single walled within a secondary containment area.
2. Double walled tanks: The tank interstice must be monitored either manually or electronically. If the interstices are manually monitored, have it checked in your presence. Note the presence and type of liquid present, if any. Electronically monitored interstices must be checked via the remote panel.
3. Single walled tanks within a secondary containment: The tank system and containment must be visually inspected monthly and the results recorded.

b. **Fill Port and Spill Buckets:** These may be located within the secondary containment dike or outside of it. If the fill port is located within secondary containment, then that containment counts as spill containment. Examine the spill containment for evidence of damage (cracks are common in high density polyethylene units). Liquid in the spill containment may indicate tightness. If its ability to perform is suspect, further investigation (i.e., hydrostatic test) may be requested of the owner/operator. If debris or dirt has accumulated in the spill containment, this should be noted on the inspection report and the owner/operator asked to clean it out. If liquid has accumulated in the spill containment, the owner/operator should remove this accordance with Section 62-761.700, F.A.C.

c. **Dispenser Inspection:** A key may be required to remove the dispenser cover. Visually inspect the interior of each dispenser. Note if water or product has been allowed to accumulate. If a leak is suspected, the dispenser may need to be engaged to confirm it. If located within the secondary containment, dispenser liners are not required and the dispenser should be included in the monthly visual inspection. For dispensers not located within containment, check to ensure that all openings into the dispenser liners are properly sealed. Dispenser located directly on top of an AST are exempt from a dispenser liner requirement. Note if water or product has been allowed to accumulate. Note the presence of any sensing devices (floats), and their position and condition. The shear valve must be rigidly anchored to the concrete or the dispenser island (not the liner).

1. **Corrosion Protection:** For an impressed current system, locate the rectifier box. Record the status of any indicator light, amperage, voltage, and/or hour meter readings. Note that the hour meter will run whenever power is supplied to the rectifier, and is not indicative of an operating cathodic protection system. Note any potential problems.

**Aboveground Field Erected Storage Tank Systems**

a. Some sites require a 30 or more minute walk, so be sure to allow enough time.

b. Site maps are essential and almost always available for copying at the facility. Take the site map along, for clarification and notations. On sites with many tanks, it is often a good idea to have a list pre-prepared of the tanks to be inspected, so that you can easily make notes. The facilities may be in the process of upgrading the tanks. Issues such as overfill and double bottom tanks can be discussed and emphasized.

If you encounter terminology that you are not familiar with, such as the terms knockout, slop, and transmix, ask the facility contact so that you understand what the contact is referencing. Also be aware that on occasion, large compartmented tanks have been inadvertently registered as individual tanks due to the storage of different products.

Consider documenting parts of the inspection using a camera, especially for documenting unusual situations or contamination.

c. Many tanks will have double bottoms. However, do not confuse the concrete seen at the bottom of the field-erected tanks with that of a concrete slab. Often, a concrete ring is built around the bottom of the tank, allowing the slope of the tank bottom to permit water collection and drainage.

d. While walking the farm, take note of signs of overfill, corrosion, lack of maintenance, recent repairs that were not apparent by records or discussion. Many tanks have drains out the side for rainwater drainage from the floating roofs. Also make notes as to the means of stormwater discharge and the presence of retention ponds and unregulated tanks for future reference. Make note if earthen or concrete berms are in place, and if liners are installed. Location of monitor wells are pertinent, a site map of these may already be available in the Site Assessment Report.

e. Make note of unregulated tanks. It is important to remember that 62-761 F.A.C. exempts USTs at terminal facilities covered by 376.011-376.21 from regulation. However, your own county ordinances may provide some regulatory power over USTs as a source of pollution.

f. Don’t forget to check the piping up to the first landward valve.

g. Loading racks for trucks and rail are obvious sources of spills. Also check throughout the berm area and all along the storage tank system for spills.

# Records Review

Document which records are reviewed:

Placard

Financial Responsibility

Release Detection, RDRL

ATGs

Interstitial Monitoring

SIRS

Inventory w/ annual tightness test

monitoring wells

Inventory

Cathodic Protection

Soil to structure potential test

Repairs

Tightness tests

Special Considerations for Field Erected Aboveground Tanks:

SPCC plans signed by a PE are required by 40 CFR 112 for terminal facilities. These plans need to be reviewed to make sure they meet release detection standards, if used as release detection.

Monthly visual inspections are performed at the bulk terminal facilities, most tank farms are walked on a weekly, if not daily basis per SPCC plan requirements. However, documentation is often not so easily provided. Often, visual inspections are documented on a tank area basis (i.e., North farm, additive tanks, etc.). When the inspections are documented and filed on a per tank basis, reviewing each file can take up a significant amount of time. A realistic solution is to spot check through several files.

Internally lined field erected ASTs in contact with soil are required to maintain inventory. Often, over/shorts are determined on a daily and monthly basis by product only. Note that inventory records for field erected ASTs may not be kept on a per tank basis. Tank and piping layouts sometimes impede the ability for a per tank inventory as product is metered from several tanks simultaneously.

Maintenance records are not always complete, as many repairs are handled in house and notations may be brief and insufficient. It may be necessary to remind the facility to complete full maintenance records.

Also review pressure test records to repaired piping. Records of pressure testing of pipes and tanks are not always clear, as those are handled in house, too. Most companies keep some sort of records, but again, these may be by area or by tank.

Installations, upgrades, and closures should also be documented. Very often, the need for proper notification has to be re-emphasized. Also, since most terminal facilities are in the process of site assessment and remediation, a closure assessment is often not needed.

Records of annual and other tests must be reviewed, such as API 653 and 1110, and ASME B31.4.

Cathodic protection records, if applicable, are usually maintained at the corporate headquarters – often out of state. Be sure to clarify the need to check the records for the rectifier, and previous structure-to-soil test.

# Inspection Follow Up

If the owner operator is available during the inspection, you should take time to discuss any non compliance items you noted.

If the DEP data base information is not correct or complete, it is recommended that this is mentioned in the non compliance or follow up letter prepared after the inspection. Provide a Storage Tank Registration Form to allow the owner to properly notify the DEP Tallahassee Registration Section. In certain instances you may be able to update the DEP STCM database.

Note any future upgrade plans on the inspection report. Also, make note of any future upgrades on the inspection report.

DISCHARGE INVESTIGATION INSPECTION (TDI and TCDI)

# Scheduling

An inspection is required to be completed within 10 days of notification of a discharge.

# Preparation

After receiving notification of a discharge, the available compliance and cleanup files should be examined. An additional source of information regarding contamination and cleanup status is the Petroleum Contamination Tracking (PCT) database. Determine the contamination status of the facility.

Assemble the forms needed to perform the inspection. Be prepared to provide copies of Rule 62-761, F.A.C., and Departmental forms (i.e., Discharge Reporting Form, Registration Form).

**On-Site**

Always wear proper safety equipment. This may include, but is not limited to: safety vest, hard hat, steel-toed shoes, boots, safety glasses, or hearing protection. Some facilities or construction projects may require long pants. Remember, just because no one else on the site is using safety equipment does not mean it is not required.

Upon arrival at the facility, introduce yourself to the facility representative.

Inspect the component or components of the storage system thought to have lead to the discharge and review appropriate records (release detection records, inventory records, repair records). If repairs were made, ensure that they are in compliance with 62-761.700(1)(a), F.A.C. Instruct the facility owner/operator to retain records of all repairs.

# Inspection Follow Up

If the owner operator is available during the inspection, you should take time to discuss any non compliance items you noted.

If the DEP data base information is not correct or complete, it is recommended that this is mentioned in the non compliance or follow-up letter prepared after the inspection. Provide a Storage Tank Registration Form (STRF) to allow the owner to properly notify the DEP Tallahassee Registration Section. In certain instances you may be able to update the DEP STCM database.

When recording into STCM, put the TDI in the discharge project, and the TDCI in the compliance project.

**CLOSURE INSPECTION (TXI)**

# Scheduling

Ten days prior notification is required. Additionally, the contractor must provide at least 48 hours notice to the County prior to the commencement of activities. Advise contractors to notify the County when a scheduled inspection is delayed to avoid unnecessary trips.

# Preparation

After receiving notification of a closure, the available compliance and cleanup files should be examined. Review the compliance history of all tank systems or components that are to be closed. An additional source of information regarding contamination and cleanup status is the Petroleum Contamination Tracking (PCT) database. Determine the contamination status of the facility.

Facilities without documented contamination need to perform a full closure assessment.

Facilities with documented contamination may only have to complete a Limited Closure Summary Report Form (LCSRF) depending on several factors. To establish whether a site is only required to perform LCSRF, first determine if the facility is eligible for any cleanup programs (EDI, etc.). Then there are several important factors to consider: Are the planned closure activities in the same location as the previously reported contamination? Are the products the same? Have assessment and/or remediation activities been ongoing or halted, and where is the planned closure relative to portions of the facility that may have already been assessed? Contact the Site Manager, if one has been assigned, for specifics.

**EDI Program sites:** Do not have to perform a closure assessment if a Site Assessment has not been done and the components to be closed are covered in the eligibility. Very generally, EDI eligibility is bound only by date of installation (pre-1989) and content. Barring this, eligibility covers the entire site, regardless of size. EDI Program sites may or may not have to perform a closure assessment in all other circumstances (see above factors to consider).

**ALL other Program sites:** Do not have to perform a closure assessment if a Site Assessment has not been done and the component to be closed is covered in the eligibility. Again, very generally, other Program eligibility is based on a specific discharge event or date, and the only the source area is covered. This can make it even more difficult to determine if a LCSRF is appropriate. Other Program sites may or may not have to perform a closure assessment in all other circumstances (see above factors to consider).

Assemble the forms needed to perform the inspection. Be prepared to provide copies of the Department’s Storage Tank System Closure Assessment Requirements (4/98), LCSRF, INF, DRF, or Storage Tank Registration Form (STRF), if necessary.

**On-Site**

Always wear proper safety equipment. This may include, but is not limited to: safety vest, hard hat, steel-toed shoes, boots, safety glasses, or hearing protection. Some facilities or construction projects may require long pants. Remember, just because no one else on the site is using safety equipment does not mean it is not required.

Upon arrival at the facility, introduce yourself to the PSSC or contractor, the environmental consultant, and any representative of the facility. Obtain the name and license number of the PSSC. Obtain the name and CompQAP number of the consultant. Be advised that any party may close a UST in-place or close an AST.

If applicable, remind the PSSC to submit an Underground Storage Tank Installation and Removal Form for Certified Contractors. If documented contamination exists, and a full assessment was determined unnecessary, provide a LCSRF to the consultant.

Document as much information as possible about the closure activities observed. Explain all aspects of the closure. Ensure that others will be able to understand the inspection at a later date. If a closure assessment report is submitted, the reviewer will compare it to the information in the Inspection Report, and the owner must explain any major discrepancies.

Describe the portions of the system being closed. Note any differences between the information from the STCM database and the actual equipment observed.

Note the condition of the tanks, piping, and any other equipment (e.g. presence of holes, corrosion, etc.), and inquire about the final disposition (e.g. scrap, landfill, etc.). Ask the contractor how many gallons of content were removed from the tanks, and obtain the name of the company used to transport it.

Find out the depth to groundwater. In most cases, a groundwater sample must be collected unless the groundwater is ≥20 feet below land surface. Obtain the location of all samples, water and soil, including OVA locations. If you cannot be present for each sampling event, the consultant should be willing (and able) to provide a field logbook with this information.

Note the presence or absence of contamination encountered, and its location. If contamination is encountered, ask the owner/operator about private or potable wells in the vicinity. If necessary, provide an INF and a DRF. In most cases, the INF will be submitted within 24 hours, but the DRF will not be submitted until confirmation, via analytical results, occurs.

It is not always practical to observe the entire closure process, so record what you witness. You can always return the same day or the next. Subsequent visits, if necessary, should be documented on the same Inspection Report.

# Inspection Follow Up

If the owner operator is available during the inspection, you should take time to discuss any non compliance items you noted.

If the DEP data base information is not correct or complete, it is recommended that this is mentioned in the non compliance or follow-up letter prepared after the inspection. Provide a Storage Tank Registration Form to allow the owner to properly notify the DEP Tallahassee Registration Section. In certain instances you may be able to update the DEP STCM database.

# Storage Tank System Closure Assessment Requirements

Chapter 62-761, F.A.C., requires an owner or operator of a regulated substance storage tank system to perform a closure assessment at the time of permanent closure or replacement, prior to installing secondary containment, and during the change in service from a regulated substance to a non-regulated substance. Guidance for conducting Storage Tank System Closure Assessments that meet the requirements of Chapter 62-761, F.A.C. are contained in Florida Department of Environmental Protection, Division of Waste Management, Bureau of Petroleum Storage Systems, Storage Tank Regulation Section document entitled “Storage Tank System Closure Assessment Requirements” revised April 1998.

The intent of the assessment is to determine if any contamination resulted from the operation of the storage tank system and if sufficient contamination is present to warrant further assessment in accordance with Chapter 62-770, F.A.C. A letter will be issued indicating whether or not the Department or the County agrees with the closure results.

Sites that are not required to perform a closure assessment are contained in Rule 62-761.800(4)(b), F.A.C. Systems with documented contamination including those discharges that are eligible for the Early Detection Incentive Program (EDI), the Florida Petroleum Liability and Restoration Insurance Program (FPLRIP), and the Petroleum Cleanup Participation Program (PCPP) and sites that have not been issued a Site Rehabilitation Order.

Systems initially installed with secondary containment, provided that no unexplained positive response of an interstitial release detection devise or method occurred during the operational life of the system or the system passed a breach of integrity test prior to closure are exempt from closure assessment. Upgraded systems where a closure assessment was performed prior to the installation of secondary containment when the containment passed an interstitial breach of integrity test in accordance with Rule 62-761.640(3)(a), F.A.C. and double walled shop fabricated aboveground tanks are exempt. Above ground systems with less than 1,100 gallons which are upgrading with secondary containment and are elevated from and not in contact with the ground are also relieved from closure assessment. Documentation consisting of a visual inspection of the system and the surface beneath the tank for signs of a discharge needs to be performed instead of performing a closure assessment.

System removal, replacement or upgrade at sites with documented contamination should perform and submit a limited summary report. Include in the report a description of the work performed and a summary of any data collected at that time.

A soil sample must be obtained and analysis provided for all closure assessments. Samples must be analyzed using approved methods listed in Chapter 62-770, F.A.C. The method detection limits must meet cleanup target levels specified in table V and in column 1(direct exposure I) and column 3 (leachability Table V) of Table IV of Chapter 62-770, F.A.C. Groundwater samples have an exception for maximum method detection limit of 1 part per billion that is acceptable for polycyclic aromatic hydrocarbons.

Soil samples obtained during closure of a storage system should be screened in the field using an instrument or method approved by the Department. If no positive samples are obtained from each source area, samples should be collected from the location believed to be most likely to have contamination, such as the fill port. Positive field screening results (hydrocarbon measurements greater than 10 PPM) of the soil samples which remain on site will require a site assessment. Unless a grab sample is analyzed for volatile organic aromatics (VOAs), polycyclic aromatic hydrocarbons (PAHs) and total recoverable petroleum hydrocarbons (TRPHs) and the results show that contaminants do not exceed the default soil cleanup target levels specified in Table IV of Chapter 62-770, F.A.C.

If contaminated soil is identified and excavated, field screen a minimum of four (abandoned in place or aboveground tanks not exempted) or five samples if the groundwater is not encountered. The sample that yields the highest measurement should be analyzed for VOAs, PAHs and TRPHs. Soil samples contaminated with used oil must be analyzed for all the parameters specified in Table II of Chapter 62-770, F.A.C.

A groundwater sample must be obtained when the depth of the groundwater table is less than 20 feet. Groundwater table greater than 20 feet, samples not required provided that the soil screening and the laboratory analysis indicated that contaminated soil was not present or the contaminated soil was identified and excavated. Groundwater samples should be analyzed for VOAs, PAHs and TRPHs. Groundwater samples contaminated with used oil must be analyzed for all the parameters specified in Table II of Chapter 62-770, F.A.C.

***Florida Department of Environmental Protection***

Twin Towers Office Bldg. ⚫ 2600 Blair Stone Road ⚫ Tallahassee, Florida 32399-2400

**Division Of Waste Management**

**Bureau of Petroleum Storage Systems**

April, 2000

# Storage Tanks Program Training Manual

COMPLIANCE /ENFORCEMENT

A. Post Inspection Process.

1. Routine Inspection.

a. Enter the inspection data into STCM.

b. By the 15th of each month, send the "yellow copy" of the inspection report to the District Office - Attn.: Task Manager.

2. For those facilities that are in compliance, you should, within 7 days of the inspection, provide a copy of the inspection to the facility owner/operator.

B. Violation Designations:

1. Non-Significant: While there is no time constraints on when these violations need to be resolved or referred for enforcement, these violations should be pursued and resolved as soon as possible.

2. Significant:

a. SNC-B: These violation must be resolved or referred for enforcement within 90 days of discovery. The Task Manager can grant more time to resolve a SNC-B if the County feels that the violation can be timely resolved.

b. SNC-A: These violations must be referred for enforcement within 15 days of discovery.

C. Non-compliance Letters/Warning Letters.

1. Non-compliance letter.

a. For those facilities not in compliance, a non-compliance letter and a copy of the inspection report should be sent within 10 days following the inspection to the owner/operator.

1. Warning Letter.

a. If there has been no response within 30 days of issuing a Non-compliance letter, a Warning Letter should be sent.

b. These letters should be sent certified along with a return receipt.

D. Meetings.

Organization and planning are the keys to successful

meetings. It is imperative that everyone attending the meeting is prepared.

1. Pre-enforcement meeting.

a. This is a meeting where the local program/department meets with individual owner/operators at a set location to discuss matters relating to storage tank systems.

b. Example: following an inspection but prior to Warning Letter; meeting to review installation/closure plans; review of rules; etc.

2. Informal Meeting.

a. Informal meetings may be requested by the violator after warning notices have been sent, or held subsequent to issuance of Notice of Violation.

3. Minutes should be taken at each meeting, and, a memo to the file should be completed. This often fills narrative gaps in the district file when OGC requests a case report.

E. Documentation.

1. Write everything down.

a. Do not depend on your memory.

b. The more you write down the better.

c. Date, time, who, what, when, where, and why.

d. Make a sketch of the property/place of violation.

2. Take pictures of the violation. a. To the extent possible, these should show fixed points or landmarks that can be used to pinpoint where the violation occurred. b. Maintain a log. (1) Date/Time picture taken. (2) Type of camera and film used. (3) Description of the location. (4) Brief description of content. (5) Individuals present when the photograph taken.

3. Determine the cause of violation.

F. Case Referral

1. When should a case be referred to the District? When all other measures have been exhausted. There is no set time in which a case must come to the District but a good rule of thumb is to make sure all avenues have been tried prior to referring it to the District. One may want to confer with the District Tanks Supervisor/Enforcement coordinator prior to sending.

2. A complete copy of the local program's file should be sent to the District. This gives the District a background of the case as well as the alleged violation(s).

3. Letter of transmittal (Short narrative of case). This should be a brief chronology of events explaining what happens; what steps have been taken to correct the discrepancies; what problems were encountered by the inspector; the amount of cooperation, if any, by the responsible party; what the local program would like the District to do.

G. District Enforcement

1. Once a case is referred to the District, formal enforcement begins. A Warning Letter is sent requesting a meeting with the responsible party.

2. Enforcement Meeting is held. It is important here to note that the local program inspector/supervisor should be at that meeting. If a settlement is not reached at the meeting, then an NOV is prepared or a Case Report is sent to OGC. Following the issuance of an NOV the respondent is given written notice that he/she has ten days within which to request a formal or informal administrative proceeding. If none is requested, a Final Order is issued.

3. Formal/Informal Administrative Hearing. This is a formal proceeding, obtained by the respondent before an administrative law judge. While the administrative process may be somewhat formal, it is less formal than a judicial proceeding. This informality usually lends itself better to a negotiated settlement than the formal judicial proceedings. It is also less expensive and often less time consuming.

4. Case Reports a. An organized presentation of the information necessary to analyze a case and prepare the appropriate legal document. b. Show a copy of Case Report.

5. Judicial Complaint a. The initial pleading or paper that is filed with the clerk of the state court in the county in which state court action is initiated.

6. Notice of Violation

a. The administrative version of a Judicial

Complaint.

b. An NOV is really three documents tied into one:

(1) The Notice of Violation, which contains the Findings of Facts and Conclusions of Law, notifies the respondent of the facts which DEP believes are true and which form the basis of the violation(s). Each count in the Notice (Findings of Fact) section should address a separate violation or series of related violations.

(2) The Orders for Corrective Action proposes those actions which DEP believes are appropriate to abate the violation(s) described in the Notice section.

(3) The Notice of Rights informs respondent under the Administrative Procedure Act FS-120, to contest the proposed Findings of Fact, Conclusions of Law and Orders for Corrective Action in the NOV.

1. Consent Orders
2. The administrative version of the judicial Consent Decree or Consent Final Judgment. It is a legal document which binds the respondent to perform certain acts and is authorized by Rule 103.110(3), FAC. It may be entered into at any stage of the administrative process, including before or after the filing of an NOV.

b. Sets out the terms of a settlement between DEP and the respondent.

c. Long Form

(1) Contains Findings of Fact and Conclusions of Law; orders for Corrective Action and a Notice of Rights - none of these sections are separated by headings in the CO as in the NOV.

e. Short Form

(1) Is used where the violations have been

resolved and the Department is only seeking

penalties.

(2) Clean-up Short Form Consent Orders.

(Appendix I)

8. Penalty Guidelines

a. A set of Guidelines intended to provide a rational, fair, and consistent method for determining the appropriate amount of civil penalties the Department should seek from responsible parties in settling enforcement actions.

9. Indigent

a. Financial Affidavit

10.Bankruptcy

a. The following information must be submitted to the District's Enforcement coordinator: (1) Name of Facility (2) Name of Owner (3) Name of person filing bankruptcy. (4) Name of Bankruptcy court in which the person has filed. (5) Bankruptcy case number.

b. District Enforcement Coordinator will forward the information to Jon Alden, DEP's Bankruptcy attorney.

H. Witness

1. When you are called as a witness, try not to be nervous.

2. Things to do when on the stand.

a. Always tell the **TRUTH!**

b. Speak clearly.

c. Be yourself. Don't memorize your testimony before hand.

d. Listen carefully to each question in its entirety.

e. Pause before you answer. Collect your thoughts and then tell the truth.

f. Answer directly and simply, with a "yes" or "no" if possible. DON'T VOLUNTEER ADDITIONAL INFORMATION THAT IS NOT REQUESTED.

g. State the facts that you yourself have observed, not what someone else told you.

h. When at all possible, give positive, definite answers.

i. Do not exaggerate.

j. If your answer was wrong or unclear, correct it immediately.

k. Stop instantly when the hearing officer, attorney poses an objection, or the Judge interrupts you.

l. Always be polite even if the attorney is not. Try not to let the opposing attorney make you angry

# Storage Tank & Petroleum Contamination Monitoring System

# Compliance and Enforcement Tracking

**Data Management Guidance**

### Compliance & Enforcement Project Management

## Compliance and enforcement events for all DEP programs are required to be data entered as activities in DEP’s *Compliance and Enforcement Tracking Database (*COMET). The Storage Tank Program has customized access to Comet available from our own Storage Tank and Contamination Monitoring (STCM). From the main menu, select Compliance Tracking.

## Information is logged into *Projects* that are essentially “theme-based”, to effectively manage what might amount to a long history of information for any given facility. Data recorded into Projects are called “*Activities”.* An activity may be an inspection or letter that is conducted by Department staff; it may reference a submittal of information sent by the owner or operator; it may indicate a meeting or a formal enforcement action. Each activity logged into COMET is identified by an *activity* *type*. Although the activity type information is not commonly displayed on the “entry screens”, it may have a designation of “C” indicating a Compliance Activity; “E” indicating an Enforcement Activity; “G” indicating a Groundwater Monitoring Activity; or “O” indicating an “Other” Activity (usually something general, such as CALL, LTR, MEET, etc.).

During the past year, the focus of our program management continued to move towards resolution of non-compliance; requiring that inspection staff devote an appropriate amount of time to compliance assistance, inspection follow-up and additional task assignments other than basic inspections and data entry of the results. To this end, our data management team has made a concerted effort to streamline data entry responsibilities.

The “new” STCM Compliance Tracking will track both inspections and associated follow-up and enforcement in a single project: **Compliance Assurance**. Other valid STCM projects, and their respective uses include: the **Discharge Project –** for recording the receipt of a discharge or incident notification and all associated follow-up and district-lead cleanup task tracking; the **Terminal Facility Project** – for recording Discharge Prevention & Response inspections and associated follow-up; and the **Mineral Acid Project** – for recording inspection events for mineral acid tanks and necessary noncompliance follow-up.

***Compliance Inspections***

Compliance inspections are performed to determine the owner/operator’s compliance with storage tank rules for routine operating procedures, installation practices, and closure practices for both underground and aboveground storage tank systems.

**Random Inspections** Performed as a regularly scheduled storage tank compliance inspection (TCI). This code indicates that the inspector did not have prior knowledge about the results of *this particular inspection*. (Knowledge that the compliance inspection from *last year* (or any other previous year) discovered violations **does not** constitute knowledge about *this year’s* inspection results.)

**Targeted Inspections** Reinspections (TCR), as well as compliance inspections performed as required after the receipt of a discharge or incident notification (TCDI), or after a complaint (TCPI).

All compliance activities & associated follow-up / enforcement must be recorded in the

Compliance Assurance Project.

**The first compliance inspection for a facility may be performed as TCI, TCDI, or TCPI**; all of the three “count” as fulfillment toward the required (contracted) number of inspections. However, only the results of the regularly scheduled ‘TCI’ inspections will be included in the calculation of the storage tank program annual compliance rate.

The date the inspection is performed is recorded as the Date Done. In addition, the inspection must have an Evaluation Result stored to be counted as completed, and included in the compliance rate calculation.

***Data Entry Instructions***

From the Compliance Tracking menu, select **Facility Compliance.** Screen displays a compilation of several types of data. Query by Facility ID number. Press tab to move the cursor to other fields for update, or press page down to move to the next block. To requery another facility ID number, press Page Up until the cursor is returned to the zip-code field.

Activity Violations Projects Tanks Exit Help

--------------------------- Facility Compliance ----------------------------

+-----------------------------------------------------+------------------------+

|Co Facility District:NED County: ALACHUA |Fac Status:OPEN |

|1 8500004 CITGO-GATOR CITY |Fac Type:A-Retail Statio|

| 3310 SW 35TH BLVD |Contractor Owned?:Y |

| GAINESVILLE 32608-2407|Insp Tanks: A:0 U:2 |

|Onsite Mgr:MALIK Phone:352-376-8170|Tank Office:TKNED |

+-----------------------------------------------------+------------------------+

| Lat/Long Method:UNVR |FinanResp:INSURANCE |

| Lat Coordinates:29 :36 :21 |Insurance Carrier:FPLIPA |

|Long Coordinates:82 :21 :33 |Effective:22-JUL-1996 Expires:22-JUL-1999|

+-+----------------------------------------------------------++----------------+

|^|Project:204012 COMPLIANCE ASSURANCE || Facility has |

|v|Last Activity: UTCI Date Done:19-AUG-1998 || 2 Project(s) |

+-+----------------------------------------------------------++----------------+

|^|Contract Year: 1998-1999 Created:27-APR-1998 Priority:P /DW Contractor OwnN|

|v|FY Evaluation: UTCI Date Done:19-AUG-1998 Results:MINOR OUT-OF-COMPLIA |

+-+----------------------------------------------------------------------------+

| Compliance Status:[violations]:MINOR OUT- / 19-AUG-1998 #Open Violations:2 |

|Enforcement Status:[activities]: / Signif:N Effort Level:REVI |

+------------------------------------------------------------------------------+

**Registration Information:** When the facility information displays, user can move to and update the following information: zip code, phone, on-site manager, (current) contractor-owned indicator, or lat/long data. Data entry of lat/long information requires selection of the method used to determine this data. All previously stored data have been loaded as UNVR – Unverified. Change the method as appropriate. Most common are either MMAP – Manual map interpolation or AGPS – Autonomous GPS. Press the list key (Home) for available types of Lat/Long methods.

Tab from lat/long to go to financial responsibility – or Press <page down> from facility to go right to financial responsibility. Press the list key to see the valid types of financial responsibility. When “Insurance” is chosen, you must also enter an Insurance Carrier with effective and expiration dates. Use the list key to see names of insurance carrier companies already entered to the system. Make a selection or enter a new name that is not on the list. Once entered, the insurance company name just entered should then become a valid choice on the Insurance Carrier selection menu.

**Project Information:** The middle block displays the projects associated with the facility in alphabetic order, as well as the most recent recorded activity in that project. Press **Page Down** to move to that block and “arrow down” through the list. **To see a list of all projects for the facility,** select **Project** from the top menu; then select **Project Summary.** Arrow down to position the cursor on the project of your choice and select **Activity** from the top menu to view that project’s activity summary.

Contract Year Information: Press Page down where your cursor is positioned by the field *Contract Year.* In this field, there may or may not exist a year range (such as 1998-1999). A contract year will display when the facility was part of the Compliance Verification “snapshot” that is generated April 15 each year. This program produces the list of all facilities with regulated storage tanks that require an inspection (based upon data in STCM at that time) as preparation for contract renewals for the next fiscal year. If the registration of a particular facility is completed after the “snapshot” is created, the field “contract year” will be blank. Regardless, these facilities can be inspected, and the data can be recorded, but the results of these inspections will not be reported in the quarterly compliance reports.

In the same block you will find reference to “FY Evaluation”. When the **first** annual compliance inspection is performed (the first TCI, TCDI, or TCPI), the activity code, the date and the evaluation result is stored in this fiscal year compliance record.

Current Compliance Information: The last block of information indicates the current facility compliance, based upon the presence (or absence) of violations, and upon the “significance” and “level of effort” indicated for each. Any open violation that is Sig:A makes the facility have the same result; likewise, any open violation requiring re-inspection, again, rolls the “Effort Level” of the facility to the same level.

***Adding a new Project***

From **Facility Compliance,** select **Projects** – then select **New Project** – then select the appropriate project description. Add a project only if one does not yet exist for the same project type. Your selection of **Compliance** from the pick list creates a **Compliance Assurance Project**. This is the project into which all activities dated on or after July 1, 1998 should be entered.

Activity Violations **Projects** Tanks Exit Help

-----------------------+-------------------+iance ----------------------------

+----------------------| project Summary |----------+------------------------+

|Co Facility District:| project Detail +----------------+atus:CLOSED |

|1 8500003 7-ELEVEN | **New project >** | **Compliance** |pe:A-Retail Statio|

| GA07 NE 1| Delete project | Discharge |ctor Owned?:N |

| GAINESVIL+-------------------| Mineral acid |anks: A:0 U:0 |

|Onsite Mgr:7-ELEVEN FOOD STORE-14 Phone:9| Terminal fac |ffice:TKALEP |

+------------------------------------------+----------------+------------------+

| Lat/Long Method:UNVR |FinanResp: |

| Lat Coordinates:29 :41 :10 |Insurance Carrier: |

|Long Coordinates:82 :18 :25 |Effective: Expires: |

+-+----------------------------------------------------------++----------------+

|^|Project:104974 UST COMPLIANCE PROJECT || Facility has |

|v|Last Activity: FC Date Done:06-MAY-1994 || 1 Project(s) |

+-+----------------------------------------------------------++----------------+

|^|Contract Year: Created: Priority: / Contractor Own |

|v|FY Evaluation: Date Done: Results: |

+-+----------------------------------------------------------------------------+

| Compliance Status:[violations]: / #Open Violations: |

|Enforcement Status:[activities]: / Signif: Effort Level: |

+------------------------------------------------------------------------------+

Select the project type and press 'Enter'

The bottom portion of the screen changes (see below) so that the user can verify the information being stored for this newly created project. You’ll see the project open date (date you just created this project), the person assigned (automatically chooses the district’s contract supervisor), the office, and the username of the person doing the data entry.

Activity Violations Projects Tanks Exit Help

--------------------------- Facility Compliance ----------------------------

+-----------------------------------------------------+------------------------+

|Co Facility District:NED County: ALACHUA |Fac Status:CLOSED |

|1 8500003 7-ELEVEN FOOD STORE #10172 |Fac Type:A-Retail Statio|

| GA07 NE 15TH ST |Contractor Owned?:N |

| GAINESVILLE 32609-2431|Insp Tanks: A:0 U:0 |

|Onsite Mgr:7-ELEVEN FOOD STORE-14 Phone:904-371-2759|Tank Office:TKALEP |

+-----------------------------------------------------+------------------------+

+------------------------------------------------------------------------------+

|Project Number: Name:7-ELEVEN FOOD STORE #10172 |

| Facility ID:8500003 Open Date:24-FEB-1999 Status:OPEN |

| |

|Project Reason: COMPLIANCE |

|Description:COMPLIANCE ASSURANCE |

+------------------------------------------------------------------------------+

|Person Assigned:DOHANEY\_T |

|Location County:1 Project Office:NEAL [Districts or Local Program County] |

+------------------------------------------------------------------------------+

|Project Added By:OPS$CARNLEY\_C Add Date:24-FEB-1999 |

+------------------------------------------------------------------------------+

**Verify information and Press [COMMIT] key** to save this project or [EXIT] to cancel

When the facility is designated ‘contractor-owned’, the project office will have the district office designation.

When the facility is not designated ‘contractor-owned’, the project office will have the local program office designation.

Press Commit to save. Press ESC to return to Facility Compliance.

**Note:** You will no longer be adding data to the UST Compliance Project and/or the AST Compliance Project. These projects now maintain historical data. **All new data entry should be recorded in the Compliance Assurance Project** with the exception of Terminal Facility and/or Mineral Acid inspections performed by district staff.

***Adding Activities***

From Facility Compliance, select **Projects**, then **Proj Summary** to see a complete list of all projects for the facility.

Activity Violations Projects Tanks Exit Help

--------------------------- Facility Compliance ----------------------------

+-----------------------------------------------------+------------------------+

|Co Facility District:NED County: ALACHUA |Fac Status:CLOSED |

|1 8500003 7-ELEVEN FOOD STORE #10172 |Fac Type:A-Retail Statio|

| GA07 NE 15TH ST |Contractor Owned?:N |

| GAINESVILLE 32609-2431|Insp Tanks: A:0 U:0 |

|Onsite Mgr:7-ELEVEN FOOD STORE-14 Phone:904-371-2759|Tank Office:TKALEP |

+------------------------------------------------------------------------------+

|P R O J E C T S U M M A R Y ----------------------------------------------- |

|Number Project Description Project Name Manager |

| 104974 UST COMPLIANCE PROJECT 7-ELEVEN FOOD STORE #1017 OPS$DOHANEY\_T |

| 217599 COMPLIANCE ASSURANCE 7-ELEVEN FOOD STORE #1017 DOHANEY\_T |

| |

| | | | | | | | | |

+--------+--------+----+----------+-----------+-----------+-----+------+-------+

Position your cursor next to the Project of your choice and select **Activity** from the top menu**.**

The Activity screen looks very much like it has. Previously stored activities are displayed in reverse order by date\_done.

Select **New Act** to enter a new activity. The Acivity ID number will automatically “fill in” the first field.

**New act** Complete Act detail Reinsp-rpt Pct pgm Appl Exit

--------------------------------- Activity ---------------------------------

+------------------------------------------------------------------------------+

| Project: 161919 UST COMPLIANCE PROJECT Status:OPEN |

|Facility: 8520202 TEXACO-ORANGE PARK Open Date:13-MAR-1997|

|Fac Type: Retail Station County:10 Tank Office:TKCLPH |

|Open Facility Violations:0 Level of Effort:PHYSICAL INSPECTION |

+--------+--------+----+----------+-----------+-----------+-----+------+-------+

| |Activity|ACT | | | | | Tank |# Viol |

|Activity| Link |Code| Form ID |Date Done | Due Date |Eval |Office| Found |

+--------+--------+----+----------+-----------+-----------+-----+------+-------+

|414167 | |TCI |761-05-98 |15-DEC-1998| | |TKHQ | 0 |

|414145 | |TCI |761-05-98 |12-DEC-1998| |IN C |TKHQ | 0 |

|414123 | |UTCI|761-02-91 |02-AUG-1998| | |TKHQ | 0 |

|383712 | |UTCI|61-02-88 |03-MAY-1990| |HIST | | 0 |

| | | | | | | | | |

+--------+--------+----+----------+-----------+-----------+-----+------+-------+

Tab to the Act Code and press **List** (Home key) to see the available choices of Activity Codes. Tab to add the date\_done or the date\_due, and press commit. Dates can be entered as 3jan99; upon pressing <Tab> or <Enter>, they will automatically display in the correct format. Date done cannot be greater than today’s date.

***Completing Inspections***

If the activity is an inspection (TCI, TCDI, TCPI, etc.), you will need to proceed with the **Complete** step to either mark it as **“In Compliance”** (no additional data need be entered), or to select **“Add Violations”** so that the appropriate evaluation result of “Minor out of compliance” or “Significant out of compliance” can be calculated. Also, if the activity is one by which outstanding violations have been determined corrected, you will also need to utilize **Complete** and **“Resolve Violations”.**

Make sure you select **Complete** while your cursor is positioned on the activity you just entered.

New act **Complete** Act detail Reinsp-rpt Pct pgm Appl Exit

----------+-------------------+-- Activity ---------------------------------

+---------| **Name/tank count** |------------------------------------------------+

| Project:| In compliance |NCE PROJECT Status:OPEN |

|Facility:| Add violations |GE PARK Open Date:13-MAR-1997|

|Fac Type:| Close violation | County:10 Tank Office:TKCLPH |

|Open Faci+-------------------+ Level of Effort:PHYSICAL INSPECTION |

+--------+--------+----+----------+-----------+-----------+-----+------+-------+

| |Activity|ACT | | | | | Tank |# Viol |

|Activity| Link |Code| Form ID |Date Done | Due Date |Eval |Office| Found |

+--------+--------+----+----------+-----------+-----------+-----+------+-------+

|414167 | |TCI |761-05-98 |15-DEC-1998| | |TKHQ | 0 |

|414145 | |TCI |761-05-98 |12-DEC-1998| |IN C |TKHQ | 0 |

|414103 | |UTCI| |03-DEC-1998| | |TKHQ | 0 |

|414123 | |UTCI|761-02-91 |02-AUG-1998| | |TKHQ | 0 |

|383712 | |UTCI|61-02-88 |03-MAY-1990| |HIST | | 0 |

| | | | | | | | | |

| | | | | | | | | |

| | | | | | | | | |

+--------+--------+----+----------+-----------+-----------+-----+------+-------+

In Compliance, however open violations exist for this facility

From the sub-menu that displays, **you must first select Name/Tank Count to add the name of the inspector**

**& the number of tanks reviewed during the inspection (required entry).**

--------------------------------- Activity ---------------------------------

+------------------------------------------------------------------------------+

| Project: 176362 COMPLIANCE ASSURANCE Status:OPEN |

|Facility: 8500016 AMOCO-NICKS Open Date:11-JAN-1999|

|Fac Type: Retail Station County:1 Tank Office:TKALEP |

|Open Facility Violations:16 Level of Effort:INSP RE-INSPECTION |

+------------------------------------------------------------------------------+

|Activity:414359 Code: TCI Date:03-DEC-1998 Eval: [Link: ]|

+------------------------------------------------------------------------------+

|Completion Notes: **ADD NOTES HERE - - - -** |

|Inspector's Name: **NASH** |

|Number of AST inspected: **1** Answer Y or N to questions about construction|

|Number of UST Inspected: **0** of the tanks: All AST DW?:**N** All UST DW?:**N** |

+------------------------------------------------------------------------------+

+------------------------------------------------------------------------------+

|Completion Notes are optional. The text block for notes is much larger than |

| it appears. Press '/' on key-pad to maximize block, Press again to minimize.|

|Inspector's Name is free format. Number of AST and UST inspected is required,|

| zero is a valid entry. Answers to Double Wall Tank questions are optional. |

+------------------------------------------------------------------------------+

Add the info about whether all ASTs &/or USTs are DW – “double-walled” (**meaning having secondary containment**).

Press Commit to save your data. The system will return you to Activity, and show you a “successful transaction” message.

Select **Complete** again to make a selection for the Evaluation Result. If the inspection is “In Compliance”, make that selection. The Evaluation Result will appear and you will be finished with your data entry.

If you mark the inspection as “In Compliance”, but there still exist open violations, a message will display at the bottom of the screen – FYI. You are not prohibited from doing so, but the system prompts you to be aware that previous violations may need to be closed. If you mark the inspection as “In Compliance” in error – you can **Complete** again, and select **Add Violations** to correct the Evaluation Result.

***Adding Violations***

Violations are added to STCM Compliance Tracking only by way of a valid storage tank inspection code: TCI, TCPI, TCDI, TCR, TIN, TXI. As with each of the inspection questions in the prior version of Compliance Tracking, each violation is identified with a “Significance Level” of A, B, or N (N is “not significant” or “minor”; “A” is the most severe, “B” allows follow-up by the local program). In addition, each violation is identified with a “Next Effort” of I, R, or N. (I indicates INSP: correction should be verified during a re-inspection; R indicates REVIEW: correction may be verified by reviewing late submitted records, new info by phone, letter, etc.; N indicates NCLI: essentially that the violation is a “timing issue” that cannot be “fixed” and inspection staff are required to send and record an NCLI).

Select **Complete**, then **Add Violations.** The **Violation Categories (**that match the Inspection Data Entry forms) will appear.

----------------- Storage Tank & Contamination Monitoring ------------------

------------------- Compliance Categories -------------------

+-+---------------------------------------------------------+

|^| REGISTRATION/FINANCIAL RESPONSIBILITY | +--------------+

||| NOTIFICATION & REPORTING | |To Compute |

||| **CATEGORY C SYSTEMS - GENERAL PERFORMANCE** | |Evaluation & |

||| CATEGORY C SYSTEMS - UST SYSTEMS | |Save Result |

||| CATEGORY C SYSTEMS - AST SYSTEMS | | |

||| CATEGORY C SYSTEMS - INTEGRAL PIPING | |Enter 'Y' in |

||| CATEGORY A/B SYSTEMS - GENERAL PERFORMANCE | |box below then|

||| CATEGORY A/B SYSTEMS - UST SYSTEMS | |Press [COMMIT]|

||| CATEGORY A/B SYSTEMS - AST SYSTEMS | | +------+ |

||| RELEASE DETECTION - GENERAL | | | | |

||| RELEASE DETECTION - EXTERNAL | | +------+ |

|v| RELEASE DETECTION - INTERNAL | +--------------+

+-+---------------------------------------------------------+

Instructions:

1. Choose Category, Press [ENTER] to add violations for selected category.

2. On return, chose another category and add additional violations --OR--

3. Press [PAGE DOWN] to move to "Compute Evaluation" box (see above).

4. From "Evaluation box", press [PAGE UP] to return to category selection.

**Following the instructions, “arrow down” to choose (highlight) the appropriate category, and press enter.**

**The violations for that category will appear . . . .**

Exit

----------------- Storage Tank & Contamination Monitoring ------------------

+------+------------------------------------------------------+

|Select| List of Violations for the Category Choosen |

| 'X' |Number Text |

| | 12 SITING |

| | 13 EXTERIOR COATINGS |

| | 14 SPILL CONTAINMENT |

| | 15 DISPENSING SYSTEMS |

| | 16 SECONDARY CONTAINMENT/LINERS HOLD PRODUCT FOR 3|

+------+------------------------------------------------------+

Instructions: Scroll through violations; Choose all that apply

by entering 'X' beside the violation number. Press [COMMIT] to

save 'marked' violations and return to "Select Categories".

Following the instructions, “arrow down” & select violations by entering ‘X’ next to your choice(s). Press commit to save. You will be “returned” to the list of Violation Categories. Repeat the process to add more violations OR press **Page Down** to access **Compute Evaluation** field. Enter ‘Y’ to ‘tell’ the system that data entry is complete, and commit; an evaluation result will be calculated and stored with the inspection. The system will return you to the Activity screen.

**Please remember to perform the last step and the last commit. Inspections entered without an evaluation result cannot be counted in our program’s compliance reports.**

**2/24** – at this time, this screen is not doing what we call a “requery” on the return; thus the evaluation result that was just calculated does not appear to “be there” when Activity returns. However if you back out one more screen and return to Activity, you will see that it is there.

***View Violations***

If you would like to confirm your data entry of violations, escape back to **Facility Compliance** and select **Violations** from the top menu. Choose to see the “open” violations, or a complete history by date or by violation number.

Activity **Violations** Projects Tanks Exit Help

-----------+-------------------+cility Compliance ----------------------------

+----------| **Open violations** |----------------------+------------------------+

|Co Facilit| history by Date |nty: CLAY |Fac Status:OPEN |

|10 8520202| history by Vio# | |Fac Type:A-Retail Statio|

| | del Resolution | |Contractor Owned?:Y |

| | del Violation | 32073-4910 |Insp Tanks: A:0 U:11 |

|Onsite Mgr+-------------------+ Phone:904-269-5630 |Tank Office:TKNED |

+-----------------------------------------------------+------------------------+

| Lat/Long Method:AGPS |FinanResp:INSURANCE |

| Lat Coordinates:30 :10 :28 |Insurance Carrier:FPLIPA |

|Long Coordinates:81 :42 :8 |Effective:13-FEB-1990 Expires:13-FEB-1998|

+-+------------------------------------------------------------++--------------+

|^|Project:161919 UST COMPLIANCE PROJECT || Facility has |

| |Last Activity: TCI Date Done:15-DEC-1998 || 1 Project(s)|

+-+------------------------------------------------------------++--------------+

|^|Contract Year: 1998-1999 Created:15-APR-1998 Priority:P /SW Contractor OwnN|

|v|FY Evaluation: Date Done: Results: |

+-+----------------------------------------------------------------------------+

|Current Compliance: / Significance Level:N |

|Enforcement Status: / Open Violations:0 Level of Effort:NCLI |

+-+----------------------------------------------------------------------------+

Selecting **Open Violations** will also list the “interim” violations created from the compliance inspection questions with a response = 2 (out of compliance); and where the inspection was the most recent activity for the previous UST or AST Project.

The “interim” violations are identified by a 900-series ID number.

Activity Violations Projects Tanks Exit Help

--------------------------- Facility Compliance ----------------------------

+-----------------------------------------------------+------------------------+

|Co Facility District:CD County: ORANGE |Fac Status:OPEN |

|48 8521789 BATTAGLIA FRUIT CO., INC. |Fac Type:C-Fuel user/Non|

| 628 E PLANT ST |Contractor Owned?:N |

| WINTER GARDEN 34787-3135 |Insp Tanks: A:1 U:2 |

|Onsite Mgr:BATTAGLIA FRUIT CO.,IN Phone:407-281-8585 |Tank Office:TKOREP |

+-----------------------------------------------------+------------------------+

+---------------------------+--------------------------------------------------+

|----- Initiating Info -----|----------- Open Violation Information -----------|

|Activity Code Date Done |Number Compliance Category Sig. ReEv Text |

| 402610 ATXI 12-DEC-1996| 911 RELEASE DETECTION COMPLIAN A I CHAPT |

| 402610 ATXI 12-DEC-1996| 914 SYSTEM PERFORMANCE / UPGRA A I CHAPT |

| | |

| | |

| | |

# +---------------------------+--------------------------------------------------+

# *Resolving Violations*

Outstanding violations can be resolved or closed by a follow-up re-inspection, the next year’s compliance inspection, a following closure or new installation inspection, in some cases by an NCLI, in other cases by another general follow-up type of activity, and lastly by the use of an enforcement-related activity code. Most violations will probably be resolved by the use of one of the following inspection codes: TCI, TCDI, TCPI, TCR, TIN, TXI (yes, closure inspections and subsequent installation inspections can “close” outstanding compliance violations, if that’s how the inspector makes that determination).

The **resolving activity** is data entered on the **Activity screen,** just as the inspection was, and with a date that is subsequent to the inspection. The follow-up activity essentially indicates the procedure or event by which the inspector came to agreement that the violation was adequately and properly corrected and/or addressed. It will not be unusual to see several violations discovered during the same inspection to be “resolved” in different ways. One may be a ‘timing’ issue addressed (resolved) by an NCLI; another may be determined corrected during a re-inspection; a third may “go to enforcement” and be subsequently resolved by a consent order (COE).

**2/24** At the present time, the following activity codes, *in addition to the inspection codes listed above*, are allowed to resolve violations: CALL, LTR, NCLI, WLI, PDNE, FR, MTG, COE, and FOI.

Select **New act**, then enter the appropriate (follow-up) activity with a date done, and link to the original inspection having violations. In the case below – violations are “found” during the inspection (the **TCI** is called the *initiating activity*). During the re-inspection, the violations are deemed ‘corrected (the **TCR** closes the violations and is called the *resolving activity*.

**New act** Complete Act detail Reinsp-rpt Pct pgm Appl Exit

--------------------------------- Activity ---------------------------------

+------------------------------------------------------------------------------+

| Project: 217599 COMPLIANCE ASSURANCE Status:OPEN |

|Facility: 8500003 7-ELEVEN FOOD STORE #10172 Open Date:24-FEB-1999|

|Fac Type: Retail Station County:1 Tank Office:TKALEP |

|**Open Facility Violations:3**  Level of Effort:INSP - RE-INSPECTION DUE |

+--------+--------+----+----------+-----------+-----------+-----+------+-------+

| |Activity|ACT | | | | | Tank |# Viol |

|Activity| Link |Code| Form ID |Date Done | Due Date |Eval |Office| Found |

+--------+--------+----+----------+-----------+-----------+-----+------+-------+

|774758 |774752 |TCR |761-00-98 |03-FEB-1999| | |TKHQ | 0 |

|774752 | |TCI |761-05-98 |03-JAN-1999| |SIGN |TKHQ | 3 |

| | | | | | | | | |

| | | | | | | | | |

With your cursor positioned on the *resolving activity*, select **Complete**, then select **Close Violations.**

New act Complete Act detail Reinsp-rpt Pct pgm Appl Exit

----------+-------------------+-- Activity ---------------------------------

+---------| Name/tank count |------------------------------------------------+

| Project:| In compliance |ASSURANCE Status:OPEN |

|Facility:| Add violations |OD STORE #10172 Open Date:24-FEB-1999|

|Fac Type:| **Close violation** | County:1 Tank Office:TKALEP |

|Open Faci+-------------------+ Level of Effort:INSP - RE-INSPECTION DUE |

+--------+--------+----+----------+-----------+-----------+-----+------+-------+

| |Activity|ACT | | | | | Tank |# Viol |

|Activity| Link |Code| Form ID |Date Done | Due Date |Eval |Office| Found |

+--------+--------+----+----------+-----------+-----------+-----+------+-------+

|774758 |774752 |TCR |761-00-98 |03-FEB-1999| | |TKHQ | 0 |

|774752 | |TCI |761-05-98 |03-JAN-1999| |SIGN |TKHQ | 3 |

| | | | | | | | | |

| | | | | | | | | |

A screen will appear that displays all open violations. Following the instructions on the screen, mark with an ‘X’ those that were addressed and deemed corrected by the follow-up activity just entered (the TCR, in this example).

Exit

----------------- Storage Tank & Contamination Monitoring ------------------

Resolve Open Violations

+------------------------------------------------------------------------------+

|**Activity:774758 Code:TCR Date Done:03-FEB-1999** |

|**This Activity has been choosen to resolve the open violations listed below.** |

+-------+---------------------+------------------------------------------------+

|Resolve| Violation | |

| 'X' |Number Activity Date| Violation Text |

| X | 1 03-JAN-1999 | SYSTEMS REGISTERED; FEES PAID |

| X | 32 03-JAN-1999 | INSTALLED WITH SECONDARY CONTAINMENT |

| X | 33 03-JAN-1999 | OVERFILL PROTECTION |

| | | |

| | | |

+-------+---------------------+------------------------------------------------+

Scroll through open violations displayed. Choose ones to be resolved by

entering 'X' in field beside violation number. When all violations are

'marked' for resolution, Press [COMMIT].

Press commit to save your changes and you will return to the Activity screen.

New act Complete Act detail Reinsp-rpt Pct pgm Appl Exit

--------------------------------- Activity ---------------------------------

+------------------------------------------------------------------------------+

| Project: 217599 COMPLIANCE ASSURANCE Status:OPEN |

|Facility: 8500003 7-ELEVEN FOOD STORE #10172 Open Date:24-FEB-1999|

|Fac Type: Retail Station County:1 Tank Office:TKALEP |

|**Open Facility Violations:0** Level of Effort:INSP - RE-INSPECTION DUE |

+--------+--------+----+----------+-----------+-----------+-----+------+-------+

| |Activity|ACT | | | | | Tank |# Viol |

|Activity| Link |Code| Form ID |Date Done | Due Date |Eval |Office| Found |

+--------+--------+----+----------+-----------+-----------+-----+------+-------+

|774758 |774752 |TCR |761-00-98 |03-FEB-1999| | |TKHQ | 0 |

|774752 | |TCI |761-05-98 |03-JAN-1999| |SIGN |TKHQ | 3 |

| | | | | | | | | |

In the last column, “# Violations Found”, the data does not change after resolving violations. This number reflects the count of violations that were originally found during the inspection, regardless of their current status. However, the count displayed in the top block of the form, “Open Facility Violations”, has been reduced by the number you just ‘resolved’.

**Note:** Once all violations have been addressed and the violation count = 0, the inspector will need to data enter, when appropriate, a **final status code** of **CWOE** (indicating that all violations were corrected, and no enforcement effort was necessary), or **CFFE** (indicating that formal enforcement has been concluded. CWOE should be linked to the inspection with violations; EPI should be linked to the inspection with violations; CFFE should be linked to the EPI.

New act Complete Act detail Reinsp-rpt Pct pgm Appl Exit

--------------------------------- Activity ---------------------------------

+------------------------------------------------------------------------------+

| Project: 217599 COMPLIANCE ASSURANCE Status:OPEN |

|Facility: 8500003 7-ELEVEN FOOD STORE #10172 Open Date:24-FEB-1999|

|Fac Type: Retail Station County:1 Tank Office:TKALEP |

|Open Facility Violations:0 Level of Effort:INSP - RE-INSPECTION DUE |

+--------+--------+----+----------+-----------+-----------+-----+------+-------+

| |Activity|ACT | | | | | Tank |# Viol |

|Activity| Link |Code| Form ID |Date Done | Due Date |Eval |Office| Found |

+--------+--------+----+----------+-----------+-----------+-----+------+-------+

|774758 |774752 |TCR |761-00-98 |03-FEB-1999| | |TKHQ | 0 |

|774752 | |TCI |761-05-98 |03-JAN-1999| |SIGN |TKHQ | 3 |

|774770 |774752 |CWOE| |03-FEB-1999| | |TKHQ | |

| | | | | | | | | |

| | | | | | | | | |

**Note:** an inspection can both “resolve” violations and “discover” new ones. Thus, from the same activity, you can select **Close Violations**, and mark the old ones closed; and (through **Complete** again) select **Add Violations** to record new ones.

##### Enforcement status

On the “Facility Compliance” view, we created a field to display the most recent “enforcement” code that is present in the Compliance Assurance project. It merely provides a “quick look” into the status of the facility.

At a glance, a user can tell if the current fiscal year compliance inspection has been accomplished, and what the result was. Further, you can quickly tell if there are still outstanding violations that have not been addressed by the Current Compliance Status. The Enforcment Status will reflect the most recent of the following codes: WLI, CRDE, CRLE, EPI, COE, FOI, CWOE, CFFE; helping the user to identify situations where an inspection was performed after the facility was designated as being in an “on-going” enforcement situation; or where some next enforcement step may be still pending.

*Compliance Tracking Project Management*

Intended to manage on-going, year by year accrual of data volume within the Compliance Assurance Project, the following plan is proposed: On or about July 15, all data entry of compliance activities should be complete for the “just-ended” fiscal year (July 1, 1998 – June 30, 1999; for example). The “end-of-year Compliance Report” for our program is run at that time. Following, we will move all of the activities recorded during the previous fiscal year fromthe Compliance Assurance Projectto the **Historical Compliance Project** – a designated “hold” of “archived data”. This will be done for every facility at which there are no open violations and at which there is no open enforcement action on-going. When there are open, unresolved violations, or when there has been entered an EPI code that does not yet have a CFFE linked to it – then the data will remain in the Compliance Assurance Project.

***Updating Tank Attributes***

Escape back to Facility Compliance. Select menu item “Tanks” and you will see a summary listing of the tanks with the following information:

Tank Detail Exit

------------------------- Storage Tank Attributes --------------------------

Tank / Vessel / Drum Search

+------------+-----+----+--+-----------+-----------+----------+--------------+-+

| | |Tank|A | |Added | | |I|

|County/ |Tank |Vess|/ | |To |Substance |Status Code |S|

| Facility | ID |Drum|U |Installed |Database | Gallons|Effective Date|P|

+------------+-----+----+--+-----------+-----------+--+-------+--------------+-+

|48 /8521789 |1 | TA |UN|01-APR-1961| |U |3000 |U - |Y|

|48 /8521789 |2 | TA |UN|01-APR-1961| |U |4000 |F -01-JUN-1995|Y|

|48 /8521789 |3 | TA |AB|01-MAY-1968| |A |8000 |T -01-AUG-1994|Y|

| / | | | | | | | | - | |

Select Tank Detail to access “update” to the tank system construction attributes. “Arrow” down to move to a different Tank ID; press **Page Down** to move to the next block (construction or piping, etc.). Press insert

to add a new construction code; tab to the End Date to “end” an old code that no longer applies. Press commit to save your changes.

Exit

----------------- Storage Tank & Contamination Monitoring ------------------

Tank Details

+----------------------------------------------------------------------------+

|Co /Facility Name: BATTAGLIA FRUIT CO., INC. |

|48 /8521789 628 E PLANT ST |

| WINTER GARDEN FL 34787 |

+----------------------------------------------------------------------------+

|Tank ID: 1 Tank Type:TANK Replaces: Replaced By: |

|Installed: 01-APR-1961 Tank Status:U-In Service Effective: |

|Placement: UNDERGROUND Substance: U-Mineral Acid Gallons:3000 |

+------------+-+-------------------------------------------------------------+

| |^|Type/Description Begin Date End Date |

|Construction||| D Unknown 01-APR-1961 |

| |V| |

+------------+-+-------------------------------------------------------------+

|Piping |^| Y Unknown 01-APR-1961 |

| |V| |

+------------+-+-------------------------------------------------------------+

|Monitoring |^| Y Unknown |

| |V| |

+------------+-+-------------------------------------------------------------+

Exit to return to Tank Summary; exit again to return to Facility Compliance.

***Discharge Project Management***

All records of incident and/or discharge notification, discovery of a discharge during an inspection or during a closure report review, and confirmation that the discharge does or does not require 62-770 cleanup will continue to be tracked in the Discharge Project. “Short” inspections that deal only with discharge info (TDI) should be recorded in the Discharge Project. All other inspections that deal also with compliance issues and “count” towards completion of a compliance inspection should be recorded in the Compliance Assurance Project.

***Discovery***

The initial “discovery” of a potential release from a regulated storage tank system should be submitted by the facility owner/operator to the Department or Local Program with an **Incident Notification Form.** Record receipt of the **IRFR** in **Discharge Project,** and investigate appropriately. When a release if confirmed, a **Discharge Report Form** should be filed. Data enter **DRFR - Discharge Report Form Received** in the same project. The date of receipt of the notification is the Date Done. Investigation/confirmation should determine whether or not the environment has been affected.

When a confirmed discharge (actual release to the environment) is “discovered” by the inspector during a routine compliance or closure inspection, record the event as **DDCI - Discharge Discovered During Compliance/Closure Inspection**. The date of inspection (date of discovery) is entered as the Date Done. If a Closure Inspection is not done, or does not reveal evidence of contamination, but a (later) review of the Closure Report does, record the event as **DDCR - Discharge Discovered During Closure Report Review.** The date of the review (date of discovery) is entered as the Date Done.

Occasionally, incidents of “spill” occur that are not related to storage tank systems. “Trucker spills” are usually reported to the Bureau of Emergency Response and may be reported to the Tanks Program. If the discharge results in contamination that will be tracked by the Petroleum Cleanup Section, then a (tankless) facility must be created, as well as a Discharge Project, and the related PCT records data entered. This type of “discovery” is logged as **ERNR - Emergency Report Notification Received**.

***Discharge Inspections***

When an inspection is conducted *after* the notification of a suspected or confirmed discharge, the activity should be recorded as TDI and logged into the Discharge Project. **If a full compliance inspection is conducted at the same time, the inspector will record the TCDI in the Compliance Assurance Project, and the TDI in the Discharge Project.**

Other pertinent “follow-up” to the notification or to the inspection should be recorded in the Discharge Project, as well.

You will use codes such as LTR, MEET, NCLI, WLI, RRBD, CNLI, CWOE, CRDE, EPI, etc. Please link all follow-up codes to the event that is considered the “discovery” or the “initiating” point.

***Cleanup Assessments***

After a “discovery” event is recorded, it will be required of the inspector to make an assessment of the situation and report whether or not “62-770 Cleanup is required”. Use one of the following activity codes; the date of assessment is the Date Done.

**DCCR - Discharge Confirmed; 62-770 CU Required**

**DCNC - Discharge Minor; 62-770 CU Not Required** **\*Containment/abatement responsibilities still apply.**

**DSNR - Discharge Suspected; No Release Found (to environment)**

**DSUC - Discharge Suspected; Unconfirmed**

Subsequent to the cleanup assessment, notify the facility owner or operator of their containment/abatement/cleanup responsibilities with a **Cleanup Notification Letter**; and record as **CNLI**. The date of issue is the Date Done.

***“Informal” Cleanup***

An assessment of **DCNC** is made when there has occurred a spill or discharge to the environment that does not exceed Chapter 62-770 limits, and constitutes what is commonly referred to as an “informal” cleanup. When the owner/operator has complied with the containment/abatement responsibilities outlined in chapter 62-761, F.A.C., and this effort is approved by the inspector; the owner should be informed by letter that no further remedial action is required.

**Do not enter CWOE into the Discharge Project until owner/operator has fulfilled all containment/abatement/follow-up responsibilities.**

***Petroleum Contamination Tracking (PCT)***

An assessment of **DCCR** is made when there has occurred a spill or discharge to the environment that exceeds Chapter 62-770 limits, and tracking of cleanup efforts and activities are required in STCM - PCT. From the Activity Screen (in Discharge Projects only), select **‘PCT’** from the top menu to access the STCM Petroleum Contamination Tracking module. The Discharge Notification screen will appear. Here you will enter additional information about the discharge: contaminated media, gallons lost, etc. DO NOT ENTER DATA TO PCT THAT IS NOT A CONFIRMED DISHCARGE WITH 62-770 CLEANUP REQUIRED.

NOTE: a required entry into the Discharge Notification screen is the inspection date. For situations where a Discharge Report Form or Emergency Response Notification has been filed for either a site without tanks or the site of a “trucker spill”, where there will be no storage tank inspection, record either the date of a site visit (**SV**) if one is appropriate or the date that the notification (& any supporting soil/water analysis that documents the contamination) was reviewed.

Local programs contracted with the Petroleum Cleanup Section will have additional data entry options and responsibilities in STCM - PCT, while compliance inspection staff contracted with Storage Tank Regulation will enter only the basic discharge information. All staff, however, will have read access to all PCT data.

***Complaints & Assistance***

When an inspector responds to a complaint, but no compliance inspection is performed, the activity should be recorded as a **CVAL - Complaint Evaluation**. When an inspector is requested to “visit” a site in order to provide “compliance assistance”, education regarding rules and/or operational procedures, the activity is recorded as **CASV - Compliance Assistance Site Visit.** When the inspector finds it necessary to conduct a complete compliance inspection, the activity shall be recorded using the “complaint inspection” code TCPI.Record these activities in the Compliance Assurance Project.

***Discovery of “Unregistered Sites”***

Inspection staff are required to ensure that all “unregistered sites” are properly registered. However, when the site is best described as a “prior” tank site (that is, evidence suggests that tanks were once present, but have long since been removed), then registration is only required if there is further evidence that contamination is present. At that time, it is especially important to complete a registration form with as much historical tank information as possible. It may also be appropriate to complete an inspection coverpage with site information and site visit comments, using the Discharge Checklist as guidance. **When tanks no longer exist, no compliance inspection paperwork should be completed.** Data entry of this event should be limited to recording a **Site Visit - SV** in the Compliance Assurance Project, with the date of the visit entered as Date Done.

***“Emergency” Registration of New Facility ID Numbers***

# Occasionally, an inspector will conduct an inspection at a facility that is not registered with the Department; or petroleum contamination may be discovered at a location where storage tanks existed many years ago, prior to Department rules. When this occurs, and a facility ID number is needed quickly, please E-mail two of the following: Sinclair\_A, McGill\_A, Cason\_B, or Farr\_S with the basic facility information needed for data entry: facility name, address, city, and factype. We will create a facility ID number for you.

# These requests should be limited to those occasions where data entry of compliance or PCT information is held up, pending the registration. It is important that an original registration form follow these requests so that we can include tank and owner information on the STCM registration, and document the registration in the STRS files. If the facility is no longer active, a form will be accepted from the inspector. It must provide (legible) name, signature and date. If the facility is active, the form will be accepted from the owner/operator with the same name, signature, and date. Tank and owner data will not be entered via email for active tank sites without the submittal of a registration form.

# We do give priority to these requests, but understand that staff are sometimes out of the office, or previously committed to correcting other registration problems for facility owners. I ask that you email each request to two staff for those days/times where a “backup” may be needed. We attempt to complete these requests very timely, but there may be occasions when you experience a ‘wait’. Staff have occasionally gotten as many as 10 requests from a single county in a day, in addition to the “regular” mail they were expected to complete, and the “regular” phone calls that can’t be planned.

Please also attempt a thorough search before sending your request. The best way is to seach by entering the county, the city and the street name (use a wildcard in the street search, like: %Main% ). You may find that the facility ID you are looking for is already there, just under a “previous facility name” (ID numbers stay with the address, not the facility name).

***Compliance Inspection Follow-up***

In every instance where the evaluation of an inspection is “out of compliance”, a **Non Compliance Letter** that specifically addresses the violation(s) should be sent to the owner/operator within 10 days. Record this event as an Activity - **NCLI** - in the appropriate compliance project(s). Enter the date the letter was mailed as the Date Done. Record any other follow-up information that you feel is necessary or important. Meetings, phone calls, letters all represent efforts to achieve compliance.

***“Timing” Violations & Minor Violations***

When the violation is one of a “timing” nature (uncorrectable and does not require a re-inspection); that is the owner should have done “XYZ”, but did so “late” - the **Non Compliance Letter** can be used to “resolve” this violation. If the inspector deems it necessary for the owner/operator to acknowledge an understanding of his or her responsibility, the inspector can enter the activity **RRBD - Response Received by Department** - with a Date Due, if an actual response is expected. When the response is received, enter the date of receipt in the Date Done field of RRBD, and use the RRBD to “resolve” the violation. This sequence of events can be completed by the data entry of **CWOE - Compliance Without Formal Enforcement**.

***Repeated Minor Violations & Significant Violations***

Sometimes repeat violations (even minor ones), and/or significant violations are not resolved by “Compliance Without Enforcement” (CWOE) efforts. There will be times when a case should be referred directly to the District or to the Level Three Enforcement Section for action. When a referral is necessary, record the Activity **CRDE - Case Referred for District Enforcement** , or **CRLE – Case Referred to Local Enforcement** with your referral date as the Date Done.

***Enforcement***

When enforcement is necessary, as a result of a referral from the local program or as a result of district initiation, each district and/or each “Level Three” enforcement program should exercise it’s own procedural guidelines as to the next course of action (Warning Letter, subsequent actions). All enforcement follow-up should be tracked in the same Compliance Assurance Project. Two important “milestone” activity codes indicate the “status” of the facility with regard to enforcement. **EPI means that an Enforcement Project has been initiated** and should be recorded when enforcement begins, and this code should be linked to the original inspection that is out of compliance. **CFFE means that compliance was achieved after enforcement initiatives were implemented** and the code should be recorded when facility compliance is achieved, and linked to the “EPI” as a means of identifying the “closure” of the enforcement action.

# TK Activity Codes

**FK$A DESCRIPTION T**

**---- ------------------------------------------------------------ ----**

ABD AS BUILT DRAWINGS C

ABDA AS BUILT DRAWINGS APPROVED C

ACO AMENDED CONSENT ORDER ISSUED E

ACOE AMENDED CONSENT ORDER EXECUTED E

ACOG AMENDED CONSENT ORDER SENT TO OGC E

AH ADMINISTRATIVE HEARING E

AHR ADMINISTRATIVE HEARING REQUESTED E

APR ABILITY TO PAY REVIEW C

CALL TELEPHONE CONVERSATION O Resolve Violations

CAP CONTAMINATION ASSESSMENT PLAN G

CAPA CONTAMINATION ASSESSMENT PLAN APPROVED G

CAR CONTAMINATION ASSESSMENT REPORT G

CARA CONTAMINATION ASSESSMENT REPORT APPROVED G

CASV COMPLIANCE ASSISTANCE SITE VISIT C

CCD CASE CLOSED BY DISTRICT E

CCLR Clean Tank Closure Report Approved C

CFFE RETURN TO COMPLIANCE FROM FORMAL ENFORCEMENT C

CNLI CLEANUP NOTIFICATION LETTER ISSUED E

COE CONSENT ORDER EXECUTED E Resolve Violations

COND PERMIT CONDITION OR CONSENT ORDER/RESPONSE DUE O

CPAM CIVIL PENALTY AUTHORIZATION MEMO E

CPIS COMPLAINT INVESTIGATION SCHEDULED C

CPR COMPLAINT RECEIVED O

CRCC CASE REFERRED TO COUNTY CLEANUP SECTION C

CRDA CASE REFERRED TO DISTRICT ATTORNEY E

CRDE CASE REFERRED TO DISTRICT ENFORCEMENT E

CRE CASE REFERRED TO EPA E

CRFC CASE REFERRED FROM COUNTY PROGRAM E

CRLE CASE REFERRED TO LOCAL ENFORCEMENT AUTHORITY E

CRO CASE REFERRED TO OGC E

CROP CASE REFERRED TO OTHER PROGRAM OR AGENCY E

CRSA CASE REFERRED TO STATE ATTORNEY E

CRSC CASE REFERRED TO STATE CLEANUP/SUPERFUND ASSISTANCE E

CRSI CASE REFERRED TO SITE INVESTIGATION E

CVAL COMPLAINT EVALUATION O

CWOE COMPLIANCE W/O FORMAL ENFORCEMENT ACTION C

DCCR DISCHARGE CONFIRMED - 770 CU REQUIRED C

DCNC DISCHARGE MINOR - 770 CU NOT REQUIRED C

DCOG DRAFT CONSENT ORDER SENT TO OGC E

DCOI DRAFT CONSENT ORDER ISSUED E

DCS DEPARTMENT COMMENTS SENT O

DDCI DISCHARGE DISCOVERED DURING COMPLIANCE/CLOSURE INSPECTION C

DDCR DISCHARGE DISCOVERED DURING CLOSURE REPORT REVIEW C

DFTR DOCUMENT FORWARDED FOR TECHNICAL REVIEW O

DPRI DISCHARGE PREVENTION/RESPONSE INSPECTION C

DPRR DISCHARGE PREVENTION/RESPONSE REINSPECTION C

DRFR DISCHARGE REPORT FORM RECEIVED C

DSNR DISCHARGE SUSPECTED - NO RELEASE FOUND C

DSUC DISCHARGE SUSPECTED - UNCONFIRMED C

EMT ENFORCEMENT MEETING E

EPI ENFORCEMENT PROJECT INITIATED C

ERNR EMERGENCY RESPONSE NOTICE RECIEVED E

FC FACILITY CLOSED O Resolve Violations

FOI FINAL ORDER ISSUED E Resolve Violations

FR FILE REVIEW O

FRR FINANCIAL RECORD REVIEW C

FS FEASIBILITY STUDY G

IH INFORMAL HEARING E

IHR INFORMAL HEARING REQUESTED E

IKPA INKIND PROJECT PROPOSAL APPROVED E

IKPC INKIND PROJECT COMPLETED E

IKPI INKIND PROJECT IMPLEMENTED E

IKPP INKIND PROJECT PROPOSAL RECEIVED E

IKPR INKIND PROJECT PROGRESS REPORT E

IPAM IN-KIND PENALTY AUTHORIZATION MEMO E

IRA INTERIM REMEDIAL ACTION G

IRAP INTERIM REMEDIAL ACTION PLAN G

IRFR INCIDENT REPORT FORM RECEIVED C

IRPA IRAP APPROVED G

JCD JUDICIAL CONSENT DECREE E

JCP JUDICIAL COMPLAINT/PETITION FILED E

LTR LETTER O Resolve Violations

MATI MINERAL ACID TANK COMPLIANCE INSPECTION C

MATR MINERAL ACID TANK COMPLIANCE REINSPECTION C

MDR MONITORING DATA RESULTS REVIEWED G

MEET MEETING O Resolve Violations

MEMO INTERDEPARTMENTAL MEMO O

**FK$A DESCRIPTION T**

**---- ------------------------------------------------------------ -**

MOP MONITORING ONLY PLAN G

MOPA MONITORING ONLY PLAN APPROVED G

NCLI NON-COMPLIANCE LETTER ISSUED C Resolve Violations

NOVI NOTICE OF VIOLATION ISSUED E

NOVO NOTICE OF VIOLATION SENT TO OGC E

P2FR P2 FINAL REPORT E

P2PP P2 PROJECT PLAN E

P2PR P2 PROGRESS REPORT E

P2WA P2 WASTE AUDIT REPORT E

PCAP PRELIMINARY CONTAMINATION ASSESSMENT PLAN G

PCAR PRELIMINARY CONTAMINATION ASSESSMENT REPORT G

PCL PROJECT CLOSED LETTER O

PCPA PRELIMINARY CONTAMINATION ASSESSMENT PLAN APPROVED G

PCRA PRELIMINARY CONTAMINATION ASSESSMENT REPORT APPROVED G

PDNE PROGRAM DISCRETION/NO ENFORCEMENT INITIATED C Resolve Violations

PHA1 PRELIMINARY ASSESSMENT OR INITIAL REMEDIATION ACTION PHASE G

PHA2 SITE ASSESSMENT PHASE G

PHA3 SITE REHABILITATION PHASE G

PHA4 CLEANUP COMPLETE PHASE G

PNP PUBLIC NOTICE PUBLICATION E

PR PENALTY RECEIVED O

PRPC POTENTIALLY RESPONSIBLE PARTIES CONTACTED O

QAPA QAPP APPROVED G

QAPP QUALITY ASSURANCE PROJECT PLAN C

RAJ RISK ASSESSMENT / JUSTIFICATION G

RAP REMEDIAL ACTION PLAN G

RAPA REMEDIAL ACTION PLAN APPROVED G

RASA RISK ASSESSMENT REPORT APPROVED G

RCL RETURN TO COMPLIANCE LETTER C

REX REQUEST FOR EXTENSION O

REXA REQUEST FOR EXTENSION APPROVED G

RRBD RESPONSE RECEIVED BY DEPARTMENT C Resolve Violations

RVR REVISIONS RECEIVED O

SADC SELF AUDIT DISCLOSURE DATE S

SADU SELF AUDIT CORRECTIONS DUE DATE S

SAEF SELF AUDIT ENFORCEMENT REFERRAL DATE S

SAIT SELF AUDIT INITIATED DATE S

SARD SELF AUDIT REMEDIATION DUE DATE S

SAVL SELF AUDIT VIOLATION DATE S

SCOE SHORT FORM CONSENT ORDER EXECUTED E

SCOI SHORT FORM CONSENT ORDER ISSUED E

SIR SITE INVESTIGATION REPORT G

SPL SAMPLING INSPECTION C

SRCA SITE REHABILITATION COMPLETION APPROVED G

SRCC SITE REHAB COMPLETION REPORT APPROVED WITH CONDITIONS G

SRCR SITE REHABILITATION COMPLETION REPORT G

SRRV ANALYTICAL SAMPLE RESULTS REVIEWED C

SRVC SUBMITTAL RECEIVED BY DEPARTMENT O

STAR STATUS REPORT E

SV SITE VISIT C

TCDI STORAGE TANK COMPLIANCE INPSECTION/DISCHARGE C Add & Resolve Violations

TCI STORAGE TANK ANNUAL COMPLIANCE INSPECTION C Add & Resolve Violations

TCPI STORAGE TANK COMPLIANCE INSPECTION/COMPLAINT C Add & Resolve Violations

TCR STORAGE TANK COMPLIANCE RE-INSPECTION C Add & Resolve Violations

TDI STORAGE TANK DISCHARGE INSPECTION/EVALUATION C Add & Resolve Violations

TIN STORAGE TANK INSTALLATION INSPECTION C Add & Resolve Violations

TR TECHNICAL REVIEW O

TXI STORAGE TANK CLOSURE INSPECTION C Add & Resolve Violations

VCAE VOLUNTARY CLEANUP AGREEMENT EXECUTED E

VCAI VOLUNTARY CLEANUP AGREEMENT ISSUED E

WLI WARNING LETTER ISSUED E Resolve Violations

Inspection Form/Question & Interim Violation Conversion Chart – for use in relating how inspection data recorded prior to 1999 has been translated into the new violation tracking system.

###### Insp Form Q# Sig Question Category Viol# Violation Category Sig

761-02-91 1 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

761-02-91 2 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

761-02-91 3 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

761-02-91 4 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

761-02-91 5 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

761-02-91 6 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

761-02-91 7 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

761-02-91 8 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

761-02-91 9 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

761-02-91 10 N RECORD KEEPING 909 RECORD KEEPING N

761-02-91 11 N RECORD KEEPING 909 RECORD KEEPING N

761-02-91 12 Y DISCHARGE REPORTING 903 DISCHARGE REPORTING A

761-02-91 13 Y DISCHARGE REPORTING 903 DISCHARGE REPORTING A

761-02-91 14 Y DISCHARGE REPORTING 903 DISCHARGE REPORTING A

761-02-91 15 Y DISCHARGE REPORTING 903 DISCHARGE REPORTING A

761-02-91 16 Y DISCHARGE RESPONSE / REPAIRS 905 DISCHARGE RESPONSE / A

761-02-91 17 Y DISCHARGE RESPONSE / REPAIRS 905 DISCHARGE RESPONSE / A

761-02-91 18 Y DISCHARGE RESPONSE / REPAIRS 905 DISCHARGE RESPONSE / A

761-02-91 19 N DISCHARGE RESPONSE / REPAIRS 904 DISCHARGE RESPONSE / N

761-02-91 20 N DISCHARGE RESPONSE / REPAIRS 904 DISCHARGE RESPONSE / N

761-02-91 21 Y DISCHARGE RESPONSE / REPAIRS 905 DISCHARGE RESPONSE / A

761-02-91 22 N INVENTORY PERFORMANCE 906 INVENTORY PERFORMANC N

761-02-91 23 N INVENTORY PERFORMANCE 906 INVENTORY PERFORMANC N

761-02-91 24 N SYSTEM PERFORMANCE / UPGRADES / 914 SYSTEM PERFORMANCE / N

761-02-91 25 N SYSTEM PERFORMANCE / UPGRADES / 914 SYSTEM PERFORMANCE / N

761-02-91 26 N SYSTEM PERFORMANCE / UPGRADES / 914 SYSTEM PERFORMANCE / N

761-02-91 27 N SYSTEM PERFORMANCE / UPGRADES / 914 SYSTEM PERFORMANCE / N

761-02-91 28 Y SYSTEM PERFORMANCE / UPGRADES / 915 SYSTEM PERFORMANCE / B

761-02-91 29 N SYSTEM PERFORMANCE / UPGRADES / 914 SYSTEM PERFORMANCE / N

761-02-91 30 N SYSTEM PERFORMANCE / UPGRADES / 914 SYSTEM PERFORMANCE / N

761-02-91 31 Y SYSTEM PERFORMANCE / UPGRADES / 915 SYSTEM PERFORMANCE / B

761-02-91 32 N SYSTEM PERFORMANCE / UPGRADES / 914 SYSTEM PERFORMANCE / N

761-02-91 33 Y SYSTEM PERFORMANCE / UPGRADES / 915 SYSTEM PERFORMANCE / B

761-02-91 34 N SYSTEM PERFORMANCE / UPGRADES / 914 SYSTEM PERFORMANCE / N

761-02-91 35 Y RELEASE DETECTION COMPLIANCE 912 RELEASE DETECTION CO A

761-02-91 36 Y RELEASE DETECTION COMPLIANCE 912 RELEASE DETECTION CO A

761-02-91 37 Y RELEASE DETECTION COMPLIANCE 912 RELEASE DETECTION CO A

761-02-91 38 Y RELEASE DETECTION COMPLIANCE 912 RELEASE DETECTION CO A

761-02-91 39 Y RELEASE DETECTION COMPLIANCE 912 RELEASE DETECTION CO A

761-02-91 40 Y RELEASE DETECTION COMPLIANCE 912 RELEASE DETECTION CO A

761-02-91 41 Y RELEASE DETECTION COMPLIANCE 912 RELEASE DETECTION CO A

761-02-91 42 Y RELEASE DETECTION COMPLIANCE 912 RELEASE DETECTION CO A

761-02-91 43 Y RELEASE DETECTION COMPLIANCE 912 RELEASE DETECTION CO A

761-02-91 44 Y RELEASE DETECTION COMPLIANCE 912 RELEASE DETECTION CO A

761-02-91 45 Y TANK OUT-OF-SERVICE STATUS 920 TANK OUT-OF-SERVICE B

761-02-91 46 N TANK OUT-OF-SERVICE STATUS 919 TANK OUT-OF-SERVICE N

761-02-91 47 N TANK OUT-OF-SERVICE STATUS 919 TANK OUT-OF-SERVICE N

761-02-91 48 N TANK OUT-OF-SERVICE STATUS 919 TANK OUT-OF-SERVICE N

761-02-91 49 Y TANK OUT-OF-SERVICE STATUS 920 TANK OUT-OF-SERVICE B

761-02-91 50 Y TANK OUT-OF-SERVICE STATUS 920 TANK OUT-OF-SERVICE B

761-02-91 51 N TANK OUT-OF-SERVICE STATUS 919 TANK OUT-OF-SERVICE N

761-02-91 52 N TANK OUT-OF-SERVICE STATUS 919 TANK OUT-OF-SERVICE N

761-02-91 53 Y TANK OUT-OF-SERVICE STATUS 920 TANK OUT-OF-SERVICE B

761-02-91 54 N TANK OUT-OF-SERVICE STATUS 919 TANK OUT-OF-SERVICE N

761-02-91 56 N VARIANCE / OTHER 922 VARIANCE / OTHER N

###### Insp Form Q# Sig Question Category Viol# Violation Category Sig

761-03-91 1 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

761-03-91 2 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

761-03-91 3 Y TANK CONSTRUCTION / PERFORMANCE 917 TANK CONSTRUCTION / B

761-03-91 4 N TANK EXCAVATION 918 TANK EXCAVATION N

761-03-91 5 N TANK CONSTRUCTION / PERFORMANCE 916 TANK CONSTRUCTION / N

761-03-91 6 N TANK CONSTRUCTION / PERFORMANCE 916 TANK CONSTRUCTION / N

761-03-91 7 Y TANK CONSTRUCTION / PERFORMANCE 917 TANK CONSTRUCTION / B

761-03-91 8 N TANK CONSTRUCTION / PERFORMANCE 916 TANK CONSTRUCTION / N

761-03-91 9 N TANK EXCAVATION 918 TANK EXCAVATION N

761-03-91 10 N TANK EXCAVATION 918 TANK EXCAVATION N

761-03-91 11 N TANK EXCAVATION 918 TANK EXCAVATION N

761-03-91 12 N TANK EXCAVATION 918 TANK EXCAVATION N

761-03-91 13 N TANK EXCAVATION 918 TANK EXCAVATION N

761-03-91 14 N TANK EXCAVATION 918 TANK EXCAVATION N

761-03-91 15 N TANK EXCAVATION 918 TANK EXCAVATION N

761-03-91 16 N TANK EXCAVATION 918 TANK EXCAVATION N

###### Insp Form Q# Sig Question Category Viol# Violation Category Sig

761-03-91 17 N TANK EXCAVATION 918 TANK EXCAVATION N

761-03-91 18 N TANK EXCAVATION 918 TANK EXCAVATION N

761-03-91 19 N TANK EXCAVATION 918 TANK EXCAVATION N

761-03-91 20 N CP SYSTEM CONSTRUCTION 902 CP SYSTEM CONSTRUCTI N

761-03-91 21 N CP SYSTEM CONSTRUCTION 902 CP SYSTEM CONSTRUCTI N

761-03-91 22 N CP SYSTEM CONSTRUCTION 902 CP SYSTEM CONSTRUCTI N

761-03-91 23 N CP SYSTEM CONSTRUCTION 902 CP SYSTEM CONSTRUCTI N

761-03-91 24 N CP SYSTEM CONSTRUCTION 902 CP SYSTEM CONSTRUCTI N

761-03-91 25 N CP SYSTEM CONSTRUCTION 902 CP SYSTEM CONSTRUCTI N

761-03-91 26 N CP SYSTEM CONSTRUCTION 902 CP SYSTEM CONSTRUCTI N

761-03-91 27 N CP SYSTEM CONSTRUCTION 902 CP SYSTEM CONSTRUCTI N

761-03-91 28 N CP SYSTEM CONSTRUCTION 902 CP SYSTEM CONSTRUCTI N

761-03-91 29 N CP SYSTEM CONSTRUCTION 902 CP SYSTEM CONSTRUCTI N

761-03-91 30 N CP SYSTEM CONSTRUCTION 902 CP SYSTEM CONSTRUCTI N

761-03-91 31 N CP SYSTEM CONSTRUCTION 902 CP SYSTEM CONSTRUCTI N

761-03-91 32 N CP SYSTEM CONSTRUCTION 902 CP SYSTEM CONSTRUCTI N

761-03-91 33 N PIPE CONSTRUCTION / PERFORMANCE 907 PIPE CONSTRUCTION / N

761-03-91 34 N PIPE CONSTRUCTION / PERFORMANCE 907 PIPE CONSTRUCTION / N

761-03-91 35 N PIPE EXCAVATION 908 PIPE EXCAVATION N

761-03-91 36 N PIPE CONSTRUCTION / PERFORMANCE 907 PIPE CONSTRUCTION / N

761-03-91 37 N PIPE EXCAVATION 908 PIPE EXCAVATION N

761-03-91 38 N PIPE CONSTRUCTION / PERFORMANCE 907 PIPE CONSTRUCTION / N

761-03-91 39 N PIPE CONSTRUCTION / PERFORMANCE 907 PIPE CONSTRUCTION / N

761-03-91 40 N PIPE CONSTRUCTION / PERFORMANCE 907 PIPE CONSTRUCTION / N

761-03-91 41 N PIPE CONSTRUCTION / PERFORMANCE 907 PIPE CONSTRUCTION / N

761-03-91 42 N PIPE CONSTRUCTION / PERFORMANCE 907 PIPE CONSTRUCTION / N

761-03-91 43 N PIPE CONSTRUCTION / PERFORMANCE 907 PIPE CONSTRUCTION / N

761-03-91 44 N PIPE CONSTRUCTION / PERFORMANCE 907 PIPE CONSTRUCTION / N

761-03-91 45 N PIPE CONSTRUCTION / PERFORMANCE 907 PIPE CONSTRUCTION / N

761-03-91 46 N RELEASE DETECTION CONSTRUCTION 913 RELEASE DETECTION CO N

761-03-91 47 N RELEASE DETECTION CONSTRUCTION 913 RELEASE DETECTION CO N

761-03-91 48 N RELEASE DETECTION CONSTRUCTION 913 RELEASE DETECTION CO N

761-03-91 49 N RELEASE DETECTION CONSTRUCTION 913 RELEASE DETECTION CO N

761-03-91 50 N RELEASE DETECTION CONSTRUCTION 913 RELEASE DETECTION CO N

761-03-91 51 N RELEASE DETECTION CONSTRUCTION 913 RELEASE DETECTION CO N

761-03-91 52 N RELEASE DETECTION CONSTRUCTION 913 RELEASE DETECTION CO N

761-03-91 53 N RELEASE DETECTION CONSTRUCTION 913 RELEASE DETECTION CO N

761-03-91 54 N RELEASE DETECTION CONSTRUCTION 913 RELEASE DETECTION CO N

761-03-91 55 N RELEASE DETECTION CONSTRUCTION 913 RELEASE DETECTION CO N

761-03-91 56 N RELEASE DETECTION CONSTRUCTION 913 RELEASE DETECTION CO N

761-03-91 57 N RELEASE DETECTION CONSTRUCTION 913 RELEASE DETECTION CO N

761-03-91 58 N RELEASE DETECTION CONSTRUCTION 913 RELEASE DETECTION CO N

761-03-91 59 N RELEASE DETECTION CONSTRUCTION 913 RELEASE DETECTION CO N

761-03-91 60 N RELEASE DETECTION CONSTRUCTION 913 RELEASE DETECTION CO N

761-03-91 61 N RELEASE DETECTION CONSTRUCTION 913 RELEASE DETECTION CO N

761-03-91 62 N RELEASE DETECTION CONSTRUCTION 913 RELEASE DETECTION CO N

###### Insp Form Q# Sig Question Category Viol# Violation Category Sig

761-04-91 1 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

761-04-91 2 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

761-04-91 3 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

761-04-91 4 N CLOSURE PROCEDURES 901 CLOSURE PROCEDURES N

761-04-91 5 Y TANK STATUS 921 TANK STATUS B

761-04-91 6 Y TANK STATUS 921 TANK STATUS B

761-04-91 7 Y TANK STATUS 921 TANK STATUS B

761-04-91 8 N CLOSURE PROCEDURES 901 CLOSURE PROCEDURES N

761-04-91 9 N CLOSURE PROCEDURES 901 CLOSURE PROCEDURES N

761-04-91 10 N CLOSURE PROCEDURES 901 CLOSURE PROCEDURES N

761-04-91 11 N CLOSURE PROCEDURES 901 CLOSURE PROCEDURES N

761-04-91 12 N CLOSURE PROCEDURES 901 CLOSURE PROCEDURES N

761-04-91 13 N CLOSURE PROCEDURES 901 CLOSURE PROCEDURES N

761-04-91 14 Y DISCHARGE REPORTING 903 DISCHARGE REPORTING A

761-04-91 15 Y DISCHARGE REPORTING 903 DISCHARGE REPORTING A

761-04-91 17 Y DISCHARGE RESPONSE / REPAIRS 905 DISCHARGE RESPONSE / A

###### Insp Form Q# Sig Question Category Viol# Violation Category Sig

762-01-91 1 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

762-01-91 2 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

762-01-91 3 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

762-01-91 4 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

762-01-91 5 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

762-01-91 6 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

762-01-91 7 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

762-01-91 8 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

762-01-91 9 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

762-01-91 10 N REGISTRATION / NOTIFICATION 910 REGISTRATION / NOTIF N

###### Insp Form Q# Sig Question Category Viol# Violation Category Sig

762-01-91 11 N RECORD KEEPING 909 RECORD KEEPING N

762-01-91 12 N RECORD KEEPING 909 RECORD KEEPING N

762-01-91 13 Y DISCHARGE REPORTING 903 DISCHARGE REPORTING A

762-01-91 14 Y DISCHARGE REPORTING 903 DISCHARGE REPORTING A

762-01-91 15 Y DISCHARGE REPORTING 903 DISCHARGE REPORTING A

762-01-91 16 Y DISCHARGE RESPONSE / REPAIRS 905 DISCHARGE RESPONSE / A

762-01-91 17 Y DISCHARGE RESPONSE / REPAIRS 905 DISCHARGE RESPONSE / A

762-01-91 18 Y DISCHARGE RESPONSE / REPAIRS 905 DISCHARGE RESPONSE / A

762-01-91 19 Y DISCHARGE RESPONSE / REPAIRS 905 DISCHARGE RESPONSE / A

762-01-91 20 N INVENTORY PERFORMANCE 906 INVENTORY PERFORMANC N

762-01-91 21 N INVENTORY PERFORMANCE 906 INVENTORY PERFORMANC N

762-01-91 22 Y SYSTEM PERFORMANCE / UPGRADES / 915 SYSTEM PERFORMANCE / B

762-01-91 23 N SYSTEM PERFORMANCE / UPGRADES / 914 SYSTEM PERFORMANCE / N

762-01-91 24 N SYSTEM PERFORMANCE / UPGRADES / 914 SYSTEM PERFORMANCE / N

762-01-91 25 N SYSTEM PERFORMANCE / UPGRADES / 914 SYSTEM PERFORMANCE / N

762-01-91 26 N SYSTEM PERFORMANCE / UPGRADES / 914 SYSTEM PERFORMANCE / N

762-01-91 27 Y SYSTEM PERFORMANCE / UPGRADES / 915 SYSTEM PERFORMANCE / B

762-01-91 28 Y DISCHARGE RESPONSE / REPAIRS 905 DISCHARGE RESPONSE / A

762-01-91 29 Y DISCHARGE RESPONSE / REPAIRS 905 DISCHARGE RESPONSE / A

762-01-91 30 N SYSTEM PERFORMANCE / UPGRADES / 914 SYSTEM PERFORMANCE / N

762-01-91 31 N SYSTEM PERFORMANCE / UPGRADES / 914 SYSTEM PERFORMANCE / N

762-01-91 32 N SYSTEM PERFORMANCE / UPGRADES / 914 SYSTEM PERFORMANCE / N

762-01-91 33 N SYSTEM PERFORMANCE / UPGRADES / 914 SYSTEM PERFORMANCE / N

762-01-91 34 N SYSTEM PERFORMANCE / UPGRADES / 914 SYSTEM PERFORMANCE / N

762-01-91 35 Y RELEASE DETECTION COMPLIANCE 912 RELEASE DETECTION CO A

762-01-91 36 Y RELEASE DETECTION COMPLIANCE 912 RELEASE DETECTION CO A

762-01-91 37 Y RELEASE DETECTION COMPLIANCE 912 RELEASE DETECTION CO A

762-01-91 38 N TANK OUT-OF-SERVICE STATUS 919 TANK OUT-OF-SERVICE N

762-01-91 39 N TANK OUT-OF-SERVICE STATUS 919 TANK OUT-OF-SERVICE N

762-01-91 40 Y TANK OUT-OF-SERVICE STATUS 920 TANK OUT-OF-SERVICE B

762-01-91 41 N VARIANCE / OTHER 922 VARIANCE / OTHER N

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| KEYWORDS | **SPECIFICS Non SNC** |
| Cat A, B, C  AST and UST systems  Accurate  Paid registration TCITIN TXI | **Item #1:** Systems registered, fees paid.  **Rule: 761.400(1)-(2)**  (1) General registration requirements.  (a) The owner or operator of any facility, or the owner or operator of a storage tank system, aboveground hazardous substance tank, or compression vessel, shall register the storage tank system, aboveground hazardous substance tank, or compression vessel with the Department on Form 62-761.900(2).  (b) A completed registration form shall be submitted to the Department no later than 30 days after regulated or hazardous substances are put into any new storage tank system, above ground hazardous substance tank, or compression vessel.  (2) Registration fees.  (a) General requirements.  1. Registration fees are due from the tank or facility owner or operator, as indicated in this section, for all registered storage tank systems and compression vessels, except for:  a. Storage tank systems that have been properly closed in accordance with Rule 62-761.800(3), F.A.C.; and  b. ASTs at federally-owned or operated facilities.  **Interpretation:**  Registration of the following:  ASTs >550g (vehicular fuel, pollutants)  USTs >110g (vehicular fuel, pollutants, RCRA “I”  CERCLA ASTs >110g [See note below]  AST Compression Vessels >110g [See note below]  Note: These classes of tanks are required to only register – there are no other compliance issues.  Was a registration form submitted within 30 days of tank system being placed in use?  **Comment:**  Does STCM accurately reflect the tanks at the facility? This question concerns the registration process and payment of fees only – it is not about accurate registration. Check the number of tanks listed on the registration placard.  Can the facility owner/operator produce a registration form to document submittal to DEP?  Does STCM show that all DEP fees are paid?  At the time of tank closure, a registration form should be submitted showing the change in tank codes. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  AST and UST systems  Placard  Plain view TCI | **Item #2:** Placard displayed in plain view.  **Rule: 761.400(2)(a)6**  6. Each facility shall receive a registration placard upon payment of all applicable fees. The placard shall be displayed in plain view in the office, kiosk, or at another suitable location at the facility where the tank is located.  **Interpretation:**  If fees are paid, a placard will be issued.  **Comment:**  All federal facilities with USTs will have a placard. Federal facilities with only ASTs will not have a placard.  Per FS 376.3077, “It is unlawful for any owner, operator, or supplier to pump or otherwise deposit any motor fuel into a tank required to be registered under section 376.303 FS, unless proof of valid registration is displayed on such tank itself or the dispensing or measuring device connected thereto or, where appropriate, in the office or kiosk of the facility where the tank is located.”  Penalties can be assessed to the facility owner for failure to properly register tank systems. Note that penalties can be assessed to the supplier that delivers motor fuel to an unregistered facility.  Check the details on the placard. Do they agree with the location you are inspecting? Owners of multiple facilities may switch placards by mistake.  Placards are not always issued or received in a timely manner at the change of year period (June and July). Provide the DEP Tallahassee phone number to the facility so they may resolve problems (850) 487-7077; (850) 488-3935. Check STCM in the registration/placard section for the date that the payment was made and the date that the placard was issued.  The location of the placard in plain view can be subjective in interpretation:   1. For vehicular fuel facilities, plain view is meant to allow the transport delivery driver to view the placard prior to delivering fuel. 2. A legal definition is an exception to the general requirement of a valid search warrant to legitimize a search or seizure; a search implies prying into hidden places, and it is not a search to observe what is open to view. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B, C  AST and UST systems  Petroleum  Liability  Insurance  TCI, TCDI TDI | **Item #3:** Financial responsibility  **Rule: 761.400(3)**  (3) Financial responsibility.  (a) General requirements.  1. The owner or operator of a facility, or individual tanks, if of different ownership, shall demonstrate financial responsibility to the Department. If the owner and operator of a tank are separate persons, only one person is required to demonstrate financial responsibility. However, both persons are liable in event of noncompliance. Financial responsibility is only required for tanks containing petroleum or petroleum products. Financial responsibility is the ability to pay for corrective action and third-party liability resulting from a discharge at the facility.    **Interpretation:**  The facility has a means of demonstrating financial responsibility.  **Comment:**  There are various financial responsibility mechanisms available:  Risk Retention Group (RRG)  Endorsements  Certificate of Insurance  Guarantee  Letter of Credit  Fully Funded Trust Fund  Self-Insurance with letter from CFO  Stand-by Trust Fund  Bond Rating Test (Local Governments)  Local Government Financial Test  Local Government Guarantee  Local Government Fund  For detailed information, refer to the DEP’sFinancial Responsibility Handbookpages 2-1, 2-2.  Verify which mechanism(s) are used by the facility.  State and federal facilities are exempt from financial responsibility, being considered a type of self insurance. They are always in compliance for this category. Document state or federal as appropriate.  Financial responsibility must be maintained on out-of-service tanks.  Note: Mark the absence of/or the lack of complete info in the certification of financial responsibility under #171. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  AST and UST systems TCI TIN | **Item #4:** 30 days before installation or upgrade Rule: 761.450(1)(a)1 (1) Notification requirements.  (a) Verbal or written notice shall be provided to the County:  1. At least 30 days before installation or upgrading to meet the requirements of Rule 62-761.500, F.A.C., unless the County agrees to a shorter time period;    **Interpretation**:  Local programs need to receive adequate advance notice for planning.  **Comment:**  The local program should receive notice of upgrade, replacement, and installation tasks prior to the initiation of the work. Local program may accept less notice and still consider this item in compliance.  This rule citation is not a requirement to submit construction plans. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  AST and UST systems | **Item #5:** 10 days before: API 653 AST inspection, AST/UST internal inspections, change-in-service status, closure, and/or closure assessment.  **Rule: 761.450(1)(a)2**  2. At least 10 days before an internal inspection of a UST, an API 653 internal inspection, a change in service status, closure, or closure assessment, any of which is performed to meet the requirements of this Chapter;    **Interpretation:**  Local programs should receive adequate advance notice for planning.  **Comment:**  The local program should receive notice of listed tasks prior to the initiation of the work. Local program may accept less notice and still consider this item in compliance.  This rule citation is not a requirement to submit construction plans. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  AST and UST systems  Closure  Installation  Scheduling  TCI  TXI  TIN | **Item #6:** 48-hour notification before installation/closure activity begins.  **Rule: 761.450(1)(a)3**  3. At least 48 hours before:  a. Initiating activities specified in subparagraphs 1. or 2. above, to confirm the date and time of the scheduled activities;  b. The establishment of temporary out-of-service status for field-erected ASTs; and  c. Performing any tightness test required under this Chapter; and    **Interpretation:**  Contractor should notify local program and arrange inspection dates and times.  **Comment:**  A good working relationship with the PSSC contractors should minimize scheduling problems.  Notice can be accepted in these formats:  Verbal  Written  Fax  Email |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  AST and UST systems  Notification after the fact  TCI | **Item #7**: Emergency out of service notification before next business day.  **Rule: 761.450(1)(a)4**  4. Before the close of the County's next business day for an emergency change to an out-of-service status made as required by Rule 62-761.820, F.A.C. Verbal or written notification of the activities specified in subparagraphs 1. or 2. above performed as a direct result of the emergency change in service shall be made to the County before initiating the activities.    **Interpretation:**  When emergencies occur, the facility shall take the necessary action and notify the local program after the fact but within 24 hours.  **Comment:**  Use judgement in rating this item. Did the facility provide the proper response? Remember, this is a paperwork violation. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  AST and UST systems  TCI | **Item #8:** Within 30 days change of ownership, closure/upgrade, change in registration, or change in financial responsibility.  **Rule: 761.450(1)(b)**  (b) Within 30 days after completion, the owner or operator shall notify the Department of the following items on Storage Tank Registration Form 62-761.900(2):  1. Any change in ownership of a facility or of a storage tank system. Notice of change of ownership shall be provided to the Department by the new owner. The notice shall include a copy of the bill of sale or a letter of acceptance by the new owner;  2. Closure or upgrading of a storage tank system;  3. Any change or correction in the information reported in the registration form, including changes in the type of regulated substances stored. A change within the same blend of regulated substances should not be reported (e.g., regular unleaded to premium unleaded gasoline); and  4. The establishment of, or changes to, the method of demonstrating financial responsibility required by Rule 62-761.400(3), F.A.C.    **Interpretation:**  Notification to the DEP within 30 days after the event on the registration form.  **Comment:**  Confirm ownership changes with the facility representative. If needed, research the new owner information with the facility’s other licenses, especially alcoholic beverage and occupational. Note that new personnel or a change in name may just reflect the sale of the business rather than sale of the property.  If a change of ownership has occurred, allow a reasonable time (a recommended time frame can be approximately 1-3 months) for the DEP database to be updated. Ask the facility to produce a dated registration form. Mark it as a discrepancy if a longer time frame has elapsed.  Note: DEP Registration Section may change the ownership without receiving any additional proof, other than a registration form.  Has the Certification of Financial Responsibility been revised? |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  AST and UST systems  TCI | **Item #9:** Incident Notification Form (INF) in 24-hours, or next business day.  **Rule: 761.450(2)(a)**  (2) Incident notification requirements.  (a) Notification of the discovery of the following incidents shall be made to the County on Incident Notification Form 62-761.900(6) within 24 hours or before the close of the County’s next business day:  1. A failed SIR evaluation, or inconclusive SIR evaluations as specified in Rule 62-761.640(3)(c)3., F.A.C., or a failed or inconclusive tightness, pressure, or breach of integrity test;  2. Internal inspection results, including perforations, corrosion holes, weld failures, or other similar defects, that indicate that a release could have occurred;  3. Unusual operating conditions, such as the erratic behavior of product dispensing equipment, the sudden loss of product from a storage tank system, or any unexplained presence of water in a tank or unexplained presence of water with or without sheen in a piping sump, unless system equipment is found to be defective but not leaking;  4. The presence of odors of a regulated substance from surface water or groundwater, soil, basements, sewers and utility lines at a facility or in the surrounding area from which it could be reasonably concluded that a release or discharge may have occurred;  5. The loss of a regulated substance from a storage tank system exceeding 100 gallons on impervious surfaces, other than secondary containment, such as driveways, airport runways, or other similar asphalt or concrete surfaces, provided that the loss does not come in contact with pervious surfaces;  6. The loss of a regulated substance exceeding 500 gallons inside a dike field area with secondary containment;  7. A positive response of release detection devices or methods described in Rule 62-761.640, F.A.C., or approved under Rule 62-761.850(2), F.A.C. A positive response shall be the indication of a release of regulated substances, an exceedance of the Release Detection Response Level, or a breach of integrity of a storage tank system; and  8. The presence of free product in a piping sump.    **Interpretation:**  An incident represents suspicion of a discharge and requires further investigation to confirm/deny.  **Comment:**  Multiple incidents occurring at the same time at the facility may be reported on one form.  **#1-3** – Evidence of these types of INF situations are generally found during the inspector’s paperwork review. Ask the facility representative what action they took in response, and in what time frame. If the situations are resolved within 24 hours, the owner/operator is not required to submit an INF to the local program. However, the actions they took to resolve the issue must be documented.  **#4-6, and 8** – Evidence of these types of situations are generally found during the outside or physical portion of the inspection. Give the facility owner/operator 24 hours to resolve, provided they document their actions. If they can not resolve the issues then they must submit the INF, at which time the two week investigative window opens.  **#7** – Evidence of this type of situation may be found during the physical examination of the release detection device (e.g. alarm mode), or during the examination of the records associated with the method.  **Note:** Inspectors may find events that qualify as incidents during their review of the facility’s paperwork. Such issues must have been resolved within 24 hours if an INF was not submitted at the time of the event. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B, C  AST and UST systems  DRF conditions | **Item #10:** Discharge Reporting (DRF) in 24-hours, or next business day.  **Rule: 761.450(3)(a)**  (3) Discharge reporting requirements.  (a) Upon discovery of an unreported discharge, the owner or operator shall report the following to the County on Discharge Report Form 62-761.900(1) within 24 hours or before the close of the County’s next business day:  1. Results, or receipt of results, of analytical or field tests of **surface water or groundwater** indicating the presence of contamination by:  a.A hazardous substance from a UST system;  b.A regulated substance, other than petroleum products; or  c.Petroleum products’ chemicals of concern specified in Table V or VII, as applicable, in Chapter 62-770, F.A.C.;  2. Free product or sheen of a regulated substance, or a regulated substance that is visibly observed in soil, on surface water, in groundwater samples, on basement floors, in subsurface utility conduits or vaults, or in sewer lines at the facility or in the surrounding areas;  3. A spill or overfill event of a regulated substance to soil or another pervious surface, equal to or exceeding 25 gallons, unless the regulated substance has a more stringent reporting requirement specified in C.F.R. Title 40, Part 302;  4. Results of analytical or field tests of soil indicating the presence of contamination by:  a. A hazardous substance from a UST system;  b. A regulated substance, other than petroleum products;  c. Petroleum products’ chemicals of concern that exceed the lower of direct exposure I and leachability Table V cleanup target levels specified in Table IV in Chapter 62-770, F.A.C., unless due to a spill or overfill event in a quantity less than that described in subparagraph 3. above; or  5. Soils stained by regulated substances that are observed during a closure assessment performed in accordance with Rule 62-761.800(4), F.A.C.    **Interpretation:**  Represents confirmed environmental impact.  **Comment:**  While there are events that result in the direct confirmation of a discharge, a DRF is usually filed upon receipt of analytical confirmation.  Make sure you document. Write down what you observe or what you are told by the consultant, contractor, or owner/operator. Be specific. Note the amount of free product in a well, sheen or free product on water in an excavation, OVA readings, loss of product from damaged tanks and/or piping during closure activities, condition of soil during closure or system modification (such as an upgrade, repair). Note which components failed. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  AST and UST systems  Contamination proof for DRF  TCI | **Item #11:** Copy of analytical/test results with DRF.  **Rule: 761.450(3)(b)**  (b) Copies of analytical or field test results that confirm a discharge shall be submitted to the County with Discharge Report Form 62-761.900(1).  **Interpretation:**  OVA data alone is not confirmation of a discharge.  **Comment:**  When laboratory analytical data is submitted, check the reported quantity against the target level and verify that the MDLs are appropriate. Target levels for soil are in mg/kg, groundwater in ug/l. (Soil may be submitted as ug/kg – convert to mg/kg by multiplying this amount by 0.001) |

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| KEYWORDS | SPECIFICS Non SNC |
| Cat C  AST and UST systems  Siting  Potable Wells TIN | **Item #12:** Siting.  **Rule: 761.500(1)(a)**  (a) Siting. Persons are advised that, pursuant to Rule 62-521.400(1)(l)-(n) and Rule 62-521.400(2), F.A.C., no storage tank shall be installed within 500 feet of any existing community water supply system or any existing non-transient non-community water supply system. No Category-C system (AST or UST) shall be installed within 100 feet of any other existing potable water supply well. These prohibitions shall not apply to the replacement of an existing storage tank system within the same excavation or dike field area, or the addition of new storage systems meeting the standards for Category-C systems at an existing facility.  **Comment:**  New storage tank systems must meet stringent setback requirements.  Replacement systems have less restrictive requirements.  Did the system placement meet the rule, or did the facility receive a written variance?  If the local program has a plan review process, this is an excellent time to require the submitter to check if potable wells are in the area. County Health Departments should have a potable well list.  “Community Water System” means a public water system which serves at least 15 service connections used by year round residents or regularly serves at least 25 year round residents.  “Non-Transient Non-Community Water System” means a public water system that is not a community water system and that regularly serves at least 25 of the same persons over 6 months per year. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  Single-walled ASTs  and USTs with aboveground exposed piping runs  Exterior coating TIN TCI | **Item #13:** Exterior Coating  **Rule: 761.500(1)(b)**  (b) Exterior coatings. Exterior portions of aboveground tanks and aboveground integral piping, excluding double-walled systems, shall be coated or otherwise protected from external corrosion. The coating shall be designed and applied to resist corrosion, deterioration, and degradation of the exterior wall. SSPC-PA 1, Paint Application Specification No. 1 may be used to protect storage tank systems from external corrosion.  **Interpretation:**  The external coat’s function is to resist the onset of corrosion.  **Comment:**  Examine exterior surfaces for damage during shipping and installation.  Has the on site applied exterior coating been applied according to the manufacturer’s specifications?  Light colored paints show fuel discoloration.  Refer to item #16 for the exterior of double-walled AST systems.  Refer to item #144 for Cat A, B system tank condition. |

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| **KEYWORDS** | SPECIFICS SNC B |
| Cat C  All USTs  All shop-fabricated ASTs  Spill Containment  Spill Bucket  Vertical Riser  Remote Fill  Drop Tube TIN TCI  Note: Remote fill piping must be secondarily contained, although vertical risers provided with a drop tube do not need secondary containment. | **Item #14:** Spill Containment  **Rule: 761.500(1)(c)**  (c) Spill containment. USTs and shop-fabricated ASTs shall be installed with a spill containment system at each tank fill connection. The spill containment system shall be a fixed component that is designed to prevent a discharge of regulated substances when the transfer hose or pipe is detached from the tank fill pipe. The spill containment system shall meet the requirements of Rule 62-761.500(1)(e), F.A.C.  **Interpretation:**  Provision of a method/means of spill containment at the product loading point(s).  **Comment:**  TIN section:  No minimum gallon capacity set by DEP.  Containment must be adequate to catch product transfer hose volume during typical delivery.  Containment device must have DEP Equipment Approval.  Containment device usually mounted on vertical riser. However, facilities with remote fills defer to that point for spill containment.  Spill containment devices may be constructed of concrete, however the devices must meet .500(1)(e) standards.  TCI section:  Even though this is a Category-C standard, Category-A and B UST systems were required to have spill containment by December 31, 1992, and shop-fabricated ASTs were required to have such by January 1, 2000. If any of these existing spill containment devices are damaged to the extent of compromising their function, this question should be marked out of compliance.  Refer to items #16 and 17 for concrete construction issues.  Refer to item #144 for TCI damaged items needing repair. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  AST and UST systems TIN TCI  Portion of system above the shear/  vertical check valve | **Item #15:** Dispensing Systems  **Rule: 761.500(1)(d)**  (d) Dispensing systems.  1. The dispensing system used for transferring fuels from storage tanks shall be installed and maintained in accordance with the provisions of NFPA 30 and Chapters 2, 4 and 9 of NFPA 30A.  2. Dispensers shall be designed, constructed, and maintained to provide access for examination and removal of collected product and accumulated water from dispenser liners.  **Interpretation:**  This involves fire related and environmental issues, especially for construction.  Refer to Rule definitions #22, 23, 24, of dispensers, dispenser liners and dispensing systems.  **Comment:**  Pressurized system: extends from above shear valve to end of nozzle.  Suction system: extends from above vertical check valve to end of nozzle.  At marinas and waterfront facilities the dispenser may include hose reels.  Loading racks are not considered to be dispensers [exempted by 761.300(2)(a)23].  Dispenser construction shall allow access to the liners for inspection and liquid removal.  Be familiar with environmentally related issues in NFPA Ch. 30 and Ch. 30A Sections 2, 4, 9.  The Fire Department has jurisdiction with NFPA , and should enforce fire related issues. You may want to contact the Fire Marshal regarding potential NFPA violations involving fire hazards [emergency power cutoff, securely mounted to island, etc.].  Typical Keys: GasBoy, GBCO, SPCO, TPX, TPX83, 1290, H2126, 2382  (beg copies from PSSCs). Note: TPX keys are very fragile in the lock. It is convenient to have paired GBCO and SPCO keys as it generally takes two to open the cabinet.  Refer to item #36 for dispenser liner construction. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat C  AST and UST systems  Secondary containment standards TIN TCI | **Item #16:** Secondary containment / liners. Rule: 761.500(1)(e)1-2 (e) Secondary containment.  1. The materials used for secondary containment shall be:  a. Impervious to the regulated substance and able to withstand deterioration from external environmental conditions;  b. Non-corrosive or of corrosion-protected materials;  c. Capable of containing regulated substances for at least 30 days; and  d. Of sufficient thickness and strength to withstand hydrostatic forces at maximum capacity to prevent a discharge during its operating life.  2. Liners, unless previously approved by the Department, shall be approved by the Department in accordance with Rule 62-761.850(2), F.A.C. Liners shall not be constructed or consist of naturally occurring in-situ soils.  **Interpretation:**  This refers to all secondary containment systems including dispenser liners, piping sumps, and other liners.  **Comment:**  Mark this out of compliance if any secondary containment system installed or maintained does not meet these standards.  Installed secondary containment systems meet criteria specified in both DEP Equipment Approval and manufacturer’s specifications. Request information from contractor, especially concerning manufacturer’s specifications.  If the exterior coating of a double-walled AST system has been compromised in some manner, this item shall be marked out of compliance. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat C  ASTs  ACI standards, or  NACE/SPCC coating, or  PE design /evaluation /certification TIN TCI | **Item #17:** Concrete secondary containment  **Rule: 761.500(1)(e)3.**  3. Secondary containment constructed of concrete shall be:  a. Designed and constructed in accordance with ACI 350R-89 and ACI 224R-89; or  b . Lined on the visible interior surfaces of the dike field area in accordance with NACE International Standard RP 0892-92, or SSPC Publication 97-04, Design, Installation, and Maintenance of Coating Systems for Concrete Used in Secondary Containment; or  c. Designed, evaluated, and certified by a professional engineer registered in the State of Florida that the concrete secondary containment system meets the General Construction Requirements specified in Rule 62-761.500(1)(e)1., F.A.C.  **Comment:**  Shop-fabricated AST dike field areas must have met these standards by January 1, 2000. Category-A and B field-erected AST dike field areas need to meet containment standards in .500(1)(e) and .500(3)(c) by January 1, 2005.  Concrete secondary containment must meet one of three standards:  1) the concrete must be poured to ACI standards; or  2) a liner applied (either from the approved equipment list or applied to NACE/SPCC standards); or  3) the containment must be designed by a PE.  Facilities must provide documentation that the concrete was installed according to ACI standards, if this option is used. Note that ACI concrete must be mixed according to a formula which involves a monolith pour.  Applied liners must be compatible to the product stored. For example, coal tar epoxies won’t work with petroleum products. Look at the manufacturer’s specifications for limitations on the product to be used.  The PE must be registered in the State of Florida.  See item #155 for upkeep and maintenance issues. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  AST and UST systems  Secondary containment  Cathodic protection  TIN  TCI | I**tem #18:** Containment does not interfere with cathodic protection.  **Rule: 761.500(1)(e)4**  4. For cathodically protected tanks and integral piping, secondary containment systems shall not interfere with the operation of the cathodic protection system.  **Comment:**  Mark this as out of compliance if containment (such as installing a double bottom on a field-erected AST) is applied in a way that interferes the cathodic protection system.  Pertains primarily to field-erected ASTs with cathodic protection provided to the tank bottom; however, it may apply to any system.  See API 650 for examples of applications. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  AST and UST systems  Does not apply to:  double-walled shop-fabricated ASTs, piping sumps, and dispenser liners.  [.640(3)(a)2]  TIN  TCI | **Item #19:** Closed interstice systems designed and tested for breach of integrity.  **Rule: 761.500(1)(e)5**  5. Storage tank system equipment with closed interstitial spaces, such as double-walled USTs, double-bottomed ASTs, and double-walled integral piping in contact with the soil that is connected to ASTs or USTs, shall be designed, constructed and installed to allow for the detection of a breach of integrity in the inner or outer wall by the monitoring of the interstitial space in accordance with Rule 62-761.640(3)(a), F.A.C. A breach of integrity test shall be performed before the storage tank system is put into service.  **Interpretation:**  This is a test procedure, not a release detection method.  **Comment:**  The breach of integrity test is intended for closed interstices only. A closed interstice has no unsecured or unsealed opening to the outside. Double-walled piping without a boot connector, or if the boot has a bleed valve (for tightness testing), is considered an open interstice.  The breach of integrity test may be performed by using at least one of the following methods:  a. A continuous hydrostatic system  b. A continuous vacuum system  c. Testing of the interstice for liquid tightness in accordance with manufacturer's installation instructions; or  d. Another method in accordance with Rule 62-761.850(2).  How the breach of integrity test is performed or to what degree can depend on the depth to groundwater at each facility. When the tank and or piping is fully submerged, the lack of water intrusion into the secondary containment may be considered a verification of its integrity. However, when total submersion is not the case, one of the rule stipulated options must be used.  The breach of integrity test should not be confused with a precision tightness test, which tests the primary tank or piping only. The breach of integrity test will test the secondary and primary shells, but is not a precision test. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  AST and UST systems  Secondary containment performance standard  TIN  TCI | **Item #20:** Monitoring point(s) for secondary containment.  **Rule: 761.500(1)(e)6**  6. Secondary containment systems shall be designed and installed to direct any release to a monitoring point or points.  **Comment:**  All liquids must drain to a collection point. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  AST and UST systems  Airport and hydrant pit containment  TIN  TCI | **Item #21:** Secondary containment/spill prevention for airport and hydrant pits.  **Rule: 761.500(1)(e)7**  7. Airport and seaport hydrant pits. Underground hydrant pits shall be installed with a spill catchment basin, secondary containment, or other spill prevention equipment to prevent the discharge of pollutants during fueling of aircraft, vessels, or at any other time the hydrant system is in use. Any such equipment shall be sealed to and around the hydrant piping with an impervious, compatible material.  **Comment:**  Inspector needs a strong beam explosion proof flashlight.  Will the as built system function in accordance with manufacturer’s specifications?  Has the sealant material been damaged or suffered deterioration (shrinkage) during the application process?  Restricted size of some hydrant pits may make examination difficult. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  AST and UST systems  CP test station or monitoring point designated  TIN | **Item #22:** Cathodic protection test station/monitoring method designed and installed properly.  **Rule: 761.500(1)(f)1.; 500(1)(f)3.**  (f) Cathodic protection.  1. Test stations. Cathodic protection systems shall be designed, constructed, and installed with at least one test station or method of monitoring to allow for a determination of current operating status. Cathodic protection test stations shall provide direct access to the soil electrolyte in close proximity to each cathodically protected structure for placement of reference electrodes, and monitoring wires that connect directly to cathodically protected structures. Facilities where direct access to soil in close proximity to cathodically protected structures is present, and where electrical connections to cathodically protected structures can be conveniently accomplished, need not have separate dedicated cathodic protection test stations.  3. Any field-installed cathodic protection system shall be designed by a Corrosion Professional.    **Comment:**  Either a designated test station or a monitoring point must be provided. Show the test station area or monitoring point on the site diagram or inspection form.  You should note the name of the NACE Corrosion Professional that designed the system.  See item #23 for TCI issues. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C AST and UST systems  Use of CP test station or methodology  TCI | **Item #23:** Cathodic protection test station/method available.  **Rule: 761.500(1)(f)1**  (f) Cathodic protection.  1. Test stations. Cathodic protection systems shall be designed, constructed, and installed with at least one test station or method of monitoring to allow for a determination of current operating status. Cathodic protection test stations shall provide direct access to the soil electrolyte in close proximity to each cathodically protected structure for placement of reference electrodes, and monitoring wires that connect directly to cathodically protected structures. Facilities where direct access to soil in close proximity to cathodically protected structures is present, and where electrical connections to cathodically protected structures can be conveniently accomplished, need not have separate dedicated cathodic protection test stations.    **Comment:**  Is the test station or apoint for monitoring available? Note that a test station is required only if access for testing is not already present.  Item #22 concerns the installation of the test station.  Refer to items #150-154 concerning the operation of the CP system. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  USTs  TIN | **Item #24:** Underground tank relocation requirements met.  **Rule: 761.500(1)(g)**  (g) Relocation of USTs. Tanks that have been removed and that are to be reinstalled at a different location shall:  1. Be recertified that all original warranties are confirmed by the original manufacturer or the manufacturer's successor, and be reinstalled in accordance with the standards in Rule 62-761.500, F.A.C., that were in effect on July 13, 1998; or  2. Be recertified by a professional engineer registered in the State of Florida that the UST meets all applicable standards of Rule 62-761.500, F.A.C. in effect on July 13, 1998; and  3. Proof of recertification shall be provided to the Department and County prior to the completion of installation. The provisions of Rule 62-761.850(2), F.A.C., do not apply to the requirements of this subparagraph.    **Interpretation:**  Applies when USTs are removed and are to be reused as a UST at a new location.  **Comment:**  Was documentation in support of recertification received prior to new installation? |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  ASTs:  Field-erected  Shop-fabricated  TIN | **Item #25:** Aboveground tank relocation requirements met.  **Rule: 761.500(1)(h)**  (h) Relocation of ASTs. Tanks that have been removed and that are to be reinstalled at a different location shall:  1. For field-erected tanks, comply with API Standard 653; or  2. For shop-fabricated tanks, be reinstalled in accordance with manufacturer’s specifications, if applicable, and with the standards in Rule 62-761.500, F.A.C., that were in effect on July 13, 1998.    **Interpretation:**  Applies when ASTs are moved to a different location or footprint.  **Comment:**  For field-erected ASTs – receive an API 653 report indicating compliance, as prepared by an API certified inspector.  For shop-fabricated ASTs – receive appropriate manufacturer approval for installation style and ensure compliance with .500 standards. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  AST to UST  UST to AST  TIN | **Item #26:** Reused tanks properly recertified.  **Rule: 761.500(1)(I)**  (i) Reuse of storage tanks. Unless it is recertified for use by a professional engineer registered in the State of Florida, or is recertified by the manufacturer, and is brought into service in accordance with Rule 62-761.500, F.A.C.:  1. A UST can not be used or reused as an AST for the storage of regulated substances; and  2. An AST can not be used or reused as a UST for the storage of regulated substances.    **Interpretation:**  When an aboveground tank becomes an underground tank, or when an underground tank becomes an aboveground tank, they must be recertified by a PE or the tank manufacturer and must meet .500 standards.  **Comment:**  Mark this as out of compliance if a tank is reused without recertification.  Receive documentation of recertification prior to new installation. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  UST system only  TIN | **Item #27:** Installed according to manufacturer’s instructions.  **Rule: 761.500(2)(a)1**  (2) Underground storage tank systems.   1. Installation.   1. All components of a storage tank system shall be installed in accordance with the manufacturer's instructions.  **Interpretation:**  The PSSC must follow the manufacturer’s requirements.  **Comment:**  Document deviation from all manufacturer’s requirements. Obtain and review installation instructions. It is a good idea to accumulate a library of tank system specifications for either your office or yourself. |

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| **KEYWORDS** | SPECIFICS SNC B |
| Cat C  UST system installation  NFPA 30/30A  API 1615  PEI 100  TIN | **Item #28:** Install according to NFPA 30/30A, API 1615,and PEI 100. Rule: 761.500(2)(a)2 2. All storage tank systems shall be installed according to the applicable provisions of NFPA 30 and 30A, PEI/RP100-97, and API RP 1615.  **Interpretation:**  NFPA 30 Chapters 2 and 3 –Tank storage, piping systems.  NFPA 30A Chapters 2-4 and 10 – Storage, piping, valves and fittings, fuel dispensing systems, marine service stations.  API 1615 Sections 2,3,5,6,9,10,11 – Pre-installation site analysis, materials and equipment, excavation, equipment, placement, anchorage, secondary containment and ballasting, piping, backfilling, other equipment.  PEI 100 Chapters 1-5 – Handling, excavation, backfilling, anchorage.  **Comment:**  Be familiar with environmentally related issues in these referenced standards. The Fire Department has jurisdiction with NFPA , and should enforce fire related issues. You may want to contact the Fire Marshal regarding potential NFPA violations involving fire hazards [emergency power cutoff, securely mounted to island, etc.].  Personally verify as much of the installation process as possible. Refer to the installation inspection tasks described in the preface to this manual. If you are not able to verify certain aspects, get a written statement from the PSSC that the standard was adhered to.  Document. Document. Document. Verify and write down the make and model of all approved equipment installed.  Note the date of each separate visit and what was observed at that time. Note items that pass or fail.  Make note of clean backfill used and its type.  Backfill standards may include, but not limited to the following examples:  Pea gravel – mix of rounded particles having a minimum diameter of 1/8-inch and a maximum diameter of ¾-inch.  Crushed stone– should be washed and free flowing. The mix of angular particle size should be between 1/8 inch and ½-inch and meet ASTM C-33 paragraph 9.1 requirements.  No more than 5% of the backfill shall pass through a No. 8 sieve. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  UST systems  PSSC  TIN | **Item #29:** Work performed by a certified contractor.  **Rule: 761.500(2)(a)3**  3. A Certified Contractor shall perform the installation of storage tank systems containing pollutants, including tanks, integral piping (excluding drop tubes), overfill protection and spill containment equipment, internal release detection equipment, cathodic protection systems, secondary containment systems, and dispensing systems, if the installation of the storage tank system component disturbs the backfill, or where the integral piping is connected or disconnected during installation.  **Interpretation:**  For the tasks listed, the contracting company must possess a Department of Business and Professional Regulation Pollutant Storage System License with a PCC designation.  **Comment:**  The actual license holder does not have to be present on site.  List the name of the contractor on the inspection form.  During the installation of an automatic tank gauging (ATG) system, a PSSC must perform the installation of a riser into the tank (this task involves breaking the seal of the tank surface). The actual installation of the ATG probe and/or hardware can be done by any technician approved by the manufacturer.  Since overfill flow shut off is installed in the drop tube, this piece of equipment likewise does not have to be installed by a PSSC. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  UST systems  Tank and piping  Post installation testing  Precision tightness  Brine  Vacuum  TIN | **Item #30:** Tank and integral piping tested properly.  **Rule: 761.500(2)(a)4**  4. A tightness test shall be performed on the tank and integral piping before any storage tank system is placed into service unless the system’s equipment approval specifies otherwise.    **Interpretation:**  Not every situation requires precision tightness testing.  **Comment:**  Tanks with brine filled interstices (hydrostatic interstitial monitoring) may not require additional tank tightness testing. Refer to the equipment’s EQ. The principle behind hydrostatic interstitial monitoring is: If a leak should develop in the inner tank, the liquid level in the reservoir will drop as the monitoring fluid drains into the primary tank. If a leak develops in the outer wall, the monitoring fluid will drain into the excavation. If a leak occurs in the outer wall during high groundwater conditions, the level of monitoring fluid will rise in the interstitial space. During the tank installation process a reservoir probe will be installed to allow gauging of the brine level.  Vacuum equipped tanks also may not require additional tank tightness testing. Refer to the equipment’s EQ.  When reviewing tightness test data, look at more than just pass/fail. Review the DEP master equipment list, especially comments concerning: minimum test time, minimum product volume, size of tank.  Precision tightness test methods can be classified as volumetric and non volumetric. The volumetric procedure measures the change in product volume or level over time to determine if a leak has occurred, and accounts or compensates for three major variables: temperature variation, tank distortion, and product stabilization time. Volumetric test can be both overfill and underfill methodologies. Non volumetric methods do not measure a fluctuation in product level, rather, they utilize acoustical or vacuum methods to determine a change in equipment condition. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  USTs  UST meets reference standards  and has an EQ#  TIN | **Item #31:** Tank constructed to standards/approved per 761.850(2).  **Rule: 761.500(2)(b)**  (b) Tank construction standards.  1. Fiberglass reinforced plastic tanks shall be constructed in accordance with UL 1316 and ASTM Standard D4021-86, or certified by a nationally recognized laboratory that these standards are met.  2. Cathodically protected steel tanks shall be:  a. Constructed in accordance with UL 58 and UL 1746, or as applicable;  b. Constructed in accordance with STI #STI-P3® Specification and Manual for External Corrosion Protection of Underground Steel Storage Tanks; or  c. Certified by a Nationally Recognized Laboratory that these standards are met, and constructed and designed by a corrosion professional in accordance with NACE International Standard RP0285-95 for any field-installed cathodic protection system.  3. Steel tanks coated with a fiberglass reinforced plastic composite shall be constructed in accordance with UL-58 and either UL 1746, STI ACT 100® (F894), or certified by a nationally recognized laboratory that one of these standards is met.  4. Storage tanks constructed of any other material, design, or corrosion protection shall be approved by the Department in accordance with Rule 62-761.850(2), F.A.C.  5. Any new tank manufactured with previously used or remanufactured components shall be certified before being installed as meeting the applicable standards by Underwriters Laboratory, by a comparable certified product testing laboratory, or by a professional engineer registered in the State of Florida.  6. Tanks shall be constructed or installed to provide for interstitial monitoring.    **Comment:**  If your local program has a plan review process, this issue will be resolved prior to the initiation of construction. Verify that the tank listed on the plans is the tank being installed.  Tanks must have DEP equipment approval.  Tanks meeting the reference standards must submit documentation to DEP Tallahassee requesting equipment approval. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat C  All USTs secondarily contained  TIN | **Item #32:** Installed with secondary containment.  **Rule: 761.500(2)(c)**  (c) Secondary containment. All tanks installed or constructed at a facility after July 13, 1998 shall have secondary containment.    **Comment:**  Any tank system installed after July 13, 1998 must have secondary containment. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat C  UST systems  Overfill protection devices  TIN | **Item #33**: Proper overfill protection installed.  Rule: 761.500(2)(d)2  (d) Overfill protection.  2. USTs shall be equipped with a system that either:  a. Automatically shuts off flow to the tank when the tank is no more than 95% full;  b. Restricts flow to the tank when the tank is no more than 90% full;  c. Alerts the transfer operator when the tank is no more than 90% full by triggering a high level alarm;  d. Alerts the transfer operator with a high level alarm set at 400 gallons below tank top, but no less than one minute before overfilling; or  f. Automatically shuts off flow into the tank so that none of the fittings located on top of the tank are exposed to product due to overfilling.    **Interpretation**:  Request the PSSC provide a copy of the installation instructions for the various devices. Read, and have the function demonstrated.  **Comment**:  Verify that the specified method(s) of overfill protection have been installed. Generally, tightness test data will report the presence or absence of these devices since the tester has to account for its presence in the tightness test procedure. In those instances when you did not observe the presence of the device, request a copy of the invoice listing the device, or a written statement from a contractor.  Will the installed methods prevent an overfill?  For high level alarms, where is the alarm box? Some facilities locate it inside a building where it may not be visible or audible to the deliverer. Has it been functionally tested in accordance with the manufacturer’s instructions?  What is their product transfer procedure?  Tanks with both a ball check valve and a flow shut off device must have the former oriented above the latter.  Ball check valves can not be used with coaxial vapor recovery delivery. Any metered delivery of product may negate both the ball check and flow shut off devices.  Waste oil tanks that receive less than 25 gallons input at one time are not required to have overfill protection per federal requirements. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  UST systems  Fills marked  TCI | **Item #34:** Fillbox covers marked according to API RP 1637, equivalent method. Rule: 761.500(2)(d)1 1. At a minimum, fillbox covers shall be marked in accordance with API RP 1637, or with an equivalent method approved by the Department in accordance with Rule 62-761.850(2), F.A.C.    **Interpretation:**  Verify that appropriate color coding is used.  **Comment:**  Does not apply to aviation fuels, which have a different color scheme (see API Bulletin 1542 which is not a reference standard).  Fillbox covers are to be labeled using one of the following methods:   1. Painting or placing a decal on top of the cover and on the rim of the fillbox. 2. Attaching a tag to the fill pipe adapter. 3. Screwing a tag onto the fillbox rim. 4. Fitting a plastic or fiberglass insert inside the rim of the fillbox.   Refer to the color coded chart included in the API 1637 Reference Standard. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat C  USTs  Functioning overfill protection  TCI  TDI, TCDI | **Item #35.** UST provided with functioning overfill protection.  **Rule: 761.500(2)(d)2**  2. USTs shall be equipped with a system that either:  a. Automatically shuts off flow to the tank when the tank is no more than 95% full;  b. Restricts flow to the tank when the tank is no more than 90% full;  c. Alerts the transfer operator when the tank is no more than 90% full by triggering a high level alarm;  d. Alerts the transfer operator with a high level alarm set at 400 gallons below tank top, but no less than one minute before overfilling; or  e. Automatically shuts off flow into the tank so that none of the fittings located on top of the tank are exposed to product due to overfilling.    **Interpretation:**  Verify that USTs are equipped with functioning overfill protection.  **Comment:**  Flow shut off device in the drop tube is visible when you look down the drop tube. For systems with flow shut off devices, lift the fill port cover, pop the cap, and view down the drop tube to verify the flow shut off exists.  Has the overfill method been bypassed? (Look for broken off product sticks.)  If an overfill event has occurred at the facility, check maximum product levels on the inventory records. Obtain the actual versus nominal tank volume. In general, metal tanks hold more product than their nominal rating, while FRP tanks hold less than their nominal rating.  Recommend that the high level alarm system be function tested yearly. If the high level alarm is the declared overfill method, at what percentage of actual tank volume is it set to alarm?  How does product transfer occur at the facility? |

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| KEYWORDS | **SPECIFICS SNC B** |
| Cat C  UST systems  Dispenser liners  Test procedure  Capable of being monitored properly  TIN | **Item #36:** Dispenser liners installed, tested and allow for interstitial monitoring.  **Rule: 761.500(2)(e)**  (e) Dispenser liners.  1. Storage tank systems installed or replaced after July 13, 1998 shall be installed with liners meeting the performance standards of Rule 62-761.500(1)(e), F.A.C., beneath the union of the piping and the dispenser.  2. Hydrostatic tests shall be performed for all dispenser liners before placing the system into service. The duration of the tests shall be at least:  a. Twenty-four hours for field-fabricated dispenser liners; or  b. Three hours for factory-made dispenser liners.  3. Dispenser liners shall be installed to allow for interstitial monitoring in accordance with Rule 62-761.640(3)(a), F.A.C.  **Interpretation:**  This is a construction standard for dispenser liners associated with USTs.  **Comment:**  Mark this as out of compliance if dispenser liners were not installed properly, or if they were not tested for integrity before being placed into service, or were installed in such a manner that interstitial monitoring can not be performed.  Dispenser liners may or may not be isolated from the double-walled piping run.  All dispenser liners must have DEP equipment approval. Note the brand name and EQ number in the inspection report. Examples include:  Field fabricated - FlameMaster, Unit Liner, CT Petroleum and concrete secondary containment that meets .500(1)(e) standards.  Pre fabricated - Environ, Total Containment, Bravo, etc.  Refer to equipment approval listing, and record all make and model information of all installed equipment.  Hydrostatically test all liners, making sure the test water is above all piping and conduit penetrations. If this test is conducted prior to backfilling, look at both sides of all boots for water leakage. A good marking method to determine if test waters have dropped is to spray paint the water at the sidewall interface. If the water level drops, there will be a marked shift in the paint.  Dispenser liners may have a variety of release detection monitoring methods (visual, electronic, liquid activated float). The inspector must ensure that the selected method is feasible. For example, dispenser cabinet allows for visual examination; or allow for the placement of electronic sensors.  Is the integrity of the liner compromised? |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat C  UST systems  Piping sumps  Test procedure  Capable of being monitored properly  TIN | **Item #38:** Piping sumps installed, tested and allow for interstitial monitoring.  **Rule: 761.500(2)(f)**  (f) Piping sumps.  1. Piping sumps installed after July 13, 1998 shall meet the performance standards of Rule 62-761.500(1)(e), F.A.C. The sumps shall be designed, constructed, and installed to minimize water entering the sump.  2. Hydrostatic tests shall be performed for all piping sumps before placing the system into service. The duration of the tests shall be at least:  a. Twenty-four hours for field-fabricated piping sumps; or  b. Three hours for factory-made piping sumps.  3. Piping sumps shall be installed to allow for interstitial monitoring in accordance with Rule 62-761.640(3)(a), F.A.C.  **Interpretation:**  This is a construction standard for piping sumps associated with USTs.  **Comment:**  Mark this as out of compliance if piping sumps were not installed properly, or if they were not tested for integrity before being placed into service, or were installed in such a manner that interstitial monitoring can not be performed.  Check sump inner lid and gasket for seal. Note size and composition of surface lid.  Ensure additional sumps are installed when product piping changes direction of elevation. Not all piping slopes back to the tank. Note these changes on the inspection form.  Hydrostatically test all sumps, making sure the test water is above all piping and conduit penetrations. If a this test is conducted prior to backfilling, look at both sides of all boots for water leakage. A good marking method to determine if test waters have dropped is to spray paint the water at the sidewall interface. If the water level drops, there will be a marked shift in the paint.  Piping sumps may have a variety of release detection monitoring methods (visual, electronic, liquid activated float). The inspector must ensure that the selected method is feasible. For example, piping sump allows for visual examination; or allow for the placement of electronic sensors.  In order to use the sumps for piping release detection, the piping boots must be pulled back.  Is the integrity of the sump compromised?  Refer to equipment approval listing, and record all make and model information of all installed equipment. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  AST systems  TIN | **Item #40:** Installed according to manufacturer’s instructions.  **Rule: 761.500(3)(a)1**  (3) Aboveground storage tank systems.  (a) Installation.  1. All components of a storage tank system shall be installed in accordance with the manufacturer's instructions.    **Comment:**  Obtain and read the manufacturer’s instructions.  Make observations, record findings.  It is a good practice to accumulate a library of tank system specifications for either your office or yourself.  A PSSC is not required for any work involving an AST. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  AST systems  TIN | **Item #41:** Installed according to NFPA 30/30A, PEI RP 200-96.  **Rule: 761.500(3)(a)2**  2. Storage tank systems shall be installed according to the applicable provisions of NFPA 30, NFPA 30A and PEI/RP200-96.    **Comment:**  Have a familiarity with these reference standards.  Document your observations.  NFPA 30 Chapters 2 and 3: Tank Storage, Piping Systems.  NFPA 30A Chapters 2-4 and 10: Storage, piping, valves and fittings, fuel dispensing systems, marine service stations.  PEI 200: Chapters 3, 4, 5, 6, 7, 8, 9, 10, 11, 13: Foundations, Supports, Anchorage, Dike Field Areas, Vaults and Special Enclosures, Tanks, Pumps and Valves, Fill Gauges and Vents, Pipes and Fittings, Corrosion Protection, Environmental Protection, and Testing.  Be familiar with environmentally related issues in these referenced standards.  You may want to contact the Fire Marshal regarding potential NFPA violations involving fire hazards [emergency power cutoff, securely mounted to island, etc.].  Personally verify as much of the installation process as possible. Refer to the installation inspection tasks described in the preface to this manual. If you are not able to verify certain aspects, get a written statement from the contractor that the standard was adhered to.  Document. Document. Document. Verify and write down the make and model of all approved equipment installed.  Note the date of each separate visit and what was observed at that time. Note items that pass or fail. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  AST systems  TIN | **Item #42:** Constructed to reference standards/approved per 761.850(2).  **Rule: 761.500(3)(b)**  (b) Tank construction standards.  1. Shop-fabricated tanks shall be constructed in accordance with one of the following:  a. UL 142;  b. API Standard 620;  c. API Specification 12B;  d. API Specification 12F;  e. API Specification 12P;  f. STI F911-93;  g. STI F921®;  h. ASME B96.1; or  i. UL 2085.  2. Field-erected tanks shall be constructed in accordance with one of the following:  a. ASME B96.1;  b. API Standard 620;  c. API Standard 650;  d. API Specification 12B; or  e. API Specification 12D.  3. Field-erected tanks shall have an inspection and testing frequency established in accordance with API Standard 653 and maintained for the life of the tank.  4. Steel tanks in contact with soil shall have a cathodic protection system meeting the following requirements:  a. The cathodic protection system shall be designed, constructed, and installed in accordance with API RP 651 and NACE International Standard RP-0193-93;  b. A field-installed cathodic protection system shall be designed by a Corrosion Professional;  c. The cathodic protection system shall be designed and installed with at least one test station in accordance with Rule 62-761.500(2)(b)2.b., F.A.C., or a method of monitoring to allow for a determination of current operating status; and  d. The cathodic protection system shall be operated and maintained in accordance with Rule 62-761.700(1)(b), F.A.C.  5. Tanks constructed of any other material, design, or corrosion protection shall be approved by the Department in accordance with Rule 62-761.850(2), F.A.C.    **Comment:**  The inspector should be familiar with these reference standards.  Shop-fabricated tanks must be listed on the DEP equipment approval list.  Field-erected tanks will not be listed on the DEP equipment approval list.  A PSSC is not required for any work involving an AST. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat C  AST systems  Shop-fabricated and  field-erected  Exemptions  TIN | **Item #43:** Installed with secondary containment for non exempted AST systems.  **Rule: 761.500(3)(c)**  (c) Secondary containment.  1. All tanks installed or constructed at a facility after July 13, 1998 shall have secondary containment beneath the tank and within the dike field area, except for the following:  a. Tanks containing high viscosity regulated substances are exempt from the requirements for secondary containment. However, used or waste oil tanks, regardless of viscosity, shall have secondary containment beneath the tank and within the dike field area.  b. Double-walled shop-fabricated tanks approved in accordance with Rule 62-761.850(2), F.A.C., do not have to be installed in a dike field area.  c. Shop-fabricated tanks containing petroleum contact water pursuant to Chapter 62-740, F.A.C., that are subject to this chapter, elevated above and not in contact with the soil, and that have an impervious surface directly beneath the area of the tank.  d. Field-erected tanks used for the temporary storage of petroleum contact water pursuant to Chapter 62-740, F.A.C., that are subject to this chapter, and that have passed an internal inspection for structural integrity in accordance with API Standard 653.  e. AST Category-C field-erected tanks constructed within a dike field area with AST Category-A field-erected tanks shall have secondary containment beneath the tank, but shall not be required to have secondary containment within the dike field area until December 31, 1999.  2. Release prevention barriers such as double-bottoms, liners, or other undertank secondary containment systems for field-erected tanks shall be designed and constructed in accordance with API Standard 650.  3. Dike field areas with secondary containment shall:  a. Conform to the requirements of NFPA 30, Chapter 2-3;  e. If constructed of steel, be tested in accordance with UL 142.  **Interpretation:**  Most ASTs must be installed with secondary containment, except for certain exempt tanks.  **Comment:**  See Rule definition #19 of dike field area.  Examples of high viscosity products are #5, #6, bunker C, intermediate fuel oils.  Some petroleum contact water tanks may be regulated, such as tanks that hold petroleum contact water for petroleum reclamation. However, the majority probably won’t be – such as tanks that store stormwater from dike field areas. Regulated petroleum contact water tanks in contact with soil must have secondary containment. Contact the District office if unsure about regulatory status of potential pollutants. Petroleum contact water is defined as water containing petroleum product. Some examples are: tank condensate, water bottoms, drawdown water, product and water with sheen removed from spill containment and secondary containment systems, AST test water, dispenser sump water, tank cleaning liquids.  Be familiar with pertinent portions of API 650 and NFPA 30 Chapter 2-3, UL 142.  A PSSC is not required for any work involving an AST. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  AST systems  110% calculations  TIN  NFPA 30 | **Item #44:** 110% containment.  **Rule: 761.500(3)(c)3.b.**  3. Dike field areas with secondary containment shall:  b. Contain a minimum of 110% of the maximum capacity of the tank or of the largest single-walled tank within the dike field area. Capacity calculations shall include the volume occupied above the area of the “footprint” of the tank bottom or the largest tank within the dike field area;    **Interpretation:**  The dike field area must meet this standard in order to be considered approved secondary containment. The 110% represents the available volume in the containment area, which is the space, less the other structure’s volume present below wall height.  **Comment:**  All calculations are to be in feet.  Conversion factors: (7.48 gallons = 1 cubic foot), (1 gallon = 0.1337 cubic feet)  Volume (gallons) of a rectangular dike = length \* width \* height \* 7.48  Volume (gallons) of a cylinder = 3.1416 \* radius \* radius \* height \* 7.48  Dike height and tank to wall distance, and tank to tank distance are discussed in NFPA 30 Chapter 2, and are enforced at the discretion of the local Fire Marshall. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  AST systems  Drainage options  TIN  TCI | **Item #45:** Containment provided with drainage.  **Rule: 761.500(3)(c)3.c.**  3. Dike field areas with secondary containment shall:  c. If not roofed or otherwise protected from the accumulation of rainfall, be constructed with a manually controlled pump or siphon, or a gravity drain pipe which has a manually controlled valve to remove accumulated liquids. Gravity drain pipes shall be designed and constructed to prevent a discharge in the event of fire;    **Comment:**  Is it roofed or adequately protected? If not, is there a means of drainage or liquid removal?  Automatic drainage involves a device that upon the sensing of a liquid will self engage and remove the liquid to an approved treatment system A manually controlled device is one that requires a physical step to initiate the draining process.  Is the method of drainage secured? The inspector needs to indicate how that is accomplished on the form. [All pumps, siphons, and valves shall be kept closed except when the operator is in the process of draining water per .700(3)(a)3.]  Weather permitting, has all accumulated stormwater been drawn off within one week of rainfall events?  Accumulated water with a visible sheen shall not be discharged without treatment. Look at the condition of the containment during non storm periods for evidence of product. Discuss the rationale for cleaning this area with the facility representative.  Installation inspections: The use of PVC gravity drain piping is not acceptable since the piping is not fire proof , and the piping is not impervious to petroleum products.  See item #164 |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  AST systems  Penetrations through the wall  TIN  TCI | **Item #46:** Penetrations through containment properlysealed.  **Rule: 761.500(3)(c)3.d.**  3. Dike field areas with secondary containment shall:  d. Have all integral piping and other penetrations that pass through the secondary containment of dike field areas sealed around the outside of the penetration with an impervious compatible material to prevent the discharge of pollutants;  **Comment:**  Secondary containment penetrations shall be sealed on the internal and external portions of the wall. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  AST systems  Volume in tank available  TCI  TDI | **Item #48:** Fuel transfer monitored.  **Rule: 761.500(3)(d)1**  (d) Overfill protection.  1. No transfer of regulated substances shall be made unless the volume available in the tank is greater than the volume of regulated substances to be transferred. The transfer shall be repeatedly monitored to prevent overfilling.    **Interpretation:**  Mark this as out of compliance if you find evidence of an overfill incident resulting from improper or no monitoring of a tank delivery.  **Comment:**  The facility should not order more than 90% of the tank’s capacity.  Both the facility and the product deliverer must ensure adequate available (receiving) volume in the subject tank.  Constant monitoring during the fuel transfer process is required, especially at large facilities.  This item will be found as a deficiency in these two instances: tank is overfilled, and/or review of inventory records reveals that product in the tank is above the 90% to 95% level. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat C  AST systems  Field-erected AST overfill protection  TCI  TIN  API 2350 | **Item #49:** Overfill protection performed per API RP 2350 for waterfront facilities with field-erected gasoline storage tanks.  **Rule: 761.500(3)(d)2**  2. Overfill protection shall be performed in accordance with API RP 2350.    **Interpretation:**  API RP 2350 applies only to field-erected ASTs receiving Class I liquids (flammable liquids with a flash point below 100 F – for example, gasoline, etc.) from marine vessels and mainline piping.  **Comment:**  Discusses when high level alarms are/are not required by classifying facilities as attended and unattended. Contains specific tank filling procedures.  The inspector of field-erected systems must be familiar with this reference standard.  The bulk storage tank operator should have a written standard operation manual explaining the procedures to take when fuel is transferred. The inspector should review this plan and ensure the operator is following the outlined procedures.  A PSSC is not required for any work involving an AST. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  AST systems  TCI  TIN  API 1637 | **Item #50:** Fillbox covers marked according to API RP 1637/equivalent method.  **Rule: 761.500(3)(d)3**  3. At a minimum, fillbox covers shall be marked in accordance with API RP 1637, or an equivalent method approved by the Department in accordance with Rule 62-761.850(2), F.A.C.    **Interpretation:**  Does not apply to aviation fuels, which have a different color scheme (see API Bulletin 1542 which is not a reference standard).  Verify that appropriate color coding is used.  **Comment:**  Fillbox covers should be clearly identified by means of a marking system. At least one fixed component of the fillbox itself should be labeled to avoid accidents that might result from mismatching of fillboxes and their covers.  Fillbox covers are to be labeled using one of the following methods:   1. Painting or placing a decal on top of the cover and on the rim of the fillbox. 2. Attaching a tag to the fill pipe adapter. 3. Screwing a tag onto the fillbox rim. 4. Fitting a plastic or fiberglass insert inside the rim of the fillbox.   Refer to the color-coded chart included in the API 1637 Reference Standard. |

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| KEYWORDS | **SPECIFICS SNC B** |
| Cat C  AST shop-fabricated systems    Overfill protection  TCI  TIN | Item #52: Overfill protection provided: dike field / level gauge / hi-level alarm / pump shutoff / gauging stick provided  **Rule: 761.500(3)(d)4**  4. All tanks shall be equipped with at least one of the following:  a. A gauge or other measuring device that accurately shows the level  of pollutant in the tank and that is visible to the person who is monitoring  the filling;  b. A high level warning alarm;  c. A high level liquid flow cutoff controller;  d. An impervious dike field area; or  e. Another device approved in accordance with Rule 62-761.850(2), F.A.C.    **Comment:**  Mark this as out of compliance if an AST has improper or no overfill protection.  Tanks of 15,000 gallons or less capacity can use calibrated stick measurements during the filling process.  In this case, make sure they have a stick capable of measurement.  It is recommended that alarms and cut off controllers be tested annually.  Examine tank surfaces and dike field floor for evidence of overfill events. |

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| **KEYWORDS** | SPECIFICS SNC B |
| Cat C  AST systems  Dispenser liner installation  Test procedure  Capable of being monitored properly  TIN  NFPA 30/30A | **Item #53:** Dispenser liners installed, tested and allow for interstitial monitoring.  **Rule: 761.500(3)(e)**  (e) Dispenser liners.  1. Dispensers connected to AST systems that are installed or replaced after  July 13, 1998 shall be installed with liners meeting the performance standards  of Rule 62-761.500(1)(e), F.A.C., beneath the union of the piping and the dispenser. Dispensers mounted directly upon a tank are exempt from this requirement.  2. Hydrostatic tests shall be performed for all dispenser liners before placing the system into service. The duration of the tests shall be at least:  a. Twenty-four hours for field-fabricated dispenser liners; or  b. Three hours for factory-made dispenser liners.  3. Dispenser liners shall be installed to allow for interstitial monitoring in accordance with Rule 62-761.640(3)(a), F.A.C.  **Interpretation:**  This is a construction standard for dispenser liners associated with ASTs.  **Comment:**  Mark this as out of compliance if dispenser liners were not installed properly, or if they were not tested for integrity before being placed into service, or were installed in such a manner that release detection will not function.  Dispenser liners may or may not be isolated from the double-walled piping run.  All dispenser liners must have DEP equipment approval. Note the brand name and EQ number in the inspection report. Examples include:  Field fabricated - FlameMaster, Unit Liner, CT Petroleum and concrete secondary containment that meets .500(1)(e) standards.  Pre fabricated - Environ, Total Containment, Bravo, etc.  Hydrostatically test all liners, making sure the test water is above all piping and conduit penetrations. A good marking method to determine if test waters have dropped is to spray paint the water at the sidewall interface. If the water level drops, there will be a marked shift in the paint.  Note for underground piping: if a hydrostatic test is conducted prior to backfilling, look at both sides of all boots for water leakage.  Dispenser liners may have a variety of release detection monitoring methods (visual, electronic, liquid activated float). The inspector must ensure that the selected method is feasible. For example, a dispenser liner allows for visual examination; or allows for the placement of electronic sensors.  Is its integrity of the liner compromised?  If the dispenser is mounted directly on top of the AST, it is exempt from the requirement to have a dispenser liner. (Examples: ConVault, Phoenix, and other preapproved ASTs)  Refer to NFPA 30/30A for the placement of dispensers within the containment area.  Refer to Equipment Approval listing, and record all make and model information of all installed equipment. (See item #209, if not located on the approved equipment list.)  A PSSC is not required for any work involving an AST. |

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| **KEYWORDS** | SPECIFICS SNC B |
| Cat C  AST systems with underground piping  Piping sumps  Test procedure  Capable of being monitored properly  TIN | **Item #55:** Piping sumps installed, tested and allow for interstitial monitoring.  **Rule: 761.500(3)(f)**  (f) Piping sumps.  1. Piping sumps installed after July 13, 1998 shall meet the performance standards of Rule 62-761.500(1)(e), F.A.C. The sumps shall be designed, constructed, and installed to minimize water entering the sump.  2. Hydrostatic tests shall be performed for all piping sumps before placing the system into service. The duration of the tests shall be at least:  a. Twenty-four hours for field fabricated piping sumps; or  b. Three hours for factory-made piping sumps.  3. Piping sumps shall be installed to allow for interstitial monitoring in accordance with Rule 62-761.640(3)(a), F.A.C.  **Interpretation:**  This is a construction standard for piping sumps associated with ASTs.  **Comment:**  Mark this as out of compliance if piping sump liners were not installed properly, or if they were not tested for integrity before being placed into service, or were installed in such a manner that release detection will not function.  Transitional sumps occur where aboveground piping goes underground. The facility must provide a means of access to this area, or use a remote release detection method.  Check sump inner lid and gasket for seal. Note size and composition of surface lid.  Ensure additional sumps are installed when product piping changes direction of elevation. Not all piping slopes back to the tank. Note these changes on the inspection form.  Hydrostatically test all sumps, making sure the test water is above all piping and conduit penetrations. A good marking method to determine if test waters have dropped is to spray paint the water at the sidewall interface. If the water level drops, there will be a marked shift in the paint.  When a hydrostatic test is conducted prior to backfilling, look at both sides of all boots for water leakage.  Refer to equipment approval listing for piping sumps.  Piping sumps may have a variety of release detection monitoring methods (visual, electronic, liquid activated float). The inspector must ensure that the selected method is feasible. For example, piping sump allows for visual examination; or allow for the placement of electronic sensors.  When the sumps are used for piping release detection, are the piping boots pulled back?  Is the integrity of the sump compromised?  A PSSC is not required for any work involving an AST. |

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| **KEYWORDS** | SPECIFICS SNC B |
| Cat C  Integral piping for both AST and UST  TIN | **Item #57**: Installed according to NFPA 30/30A, ASME B31.4 and manufacturer’s instructions.  **Rule: 761.500(4)(a)1-2**  (4) Integral piping for aboveground and underground storage tank systems.  (a) Installation.  1. All integral piping shall be installed in accordance with the manufacturer's instructions, if applicable.  2. All integral piping shall be installed according to the applicable provisions of NFPA 30, NFPA 30A, and ASME B31.4.    **Comment:**  Mark this as out of compliance if the installation practices deviate from the referenced standards or the manufacturer’s standards.  Observe and note differences from standard manufacturer’s instructions and requirements. Make note of size and type of backfill material, and the presence of any obstructions within the piping trench. Make note if clean backfill used and type.  For example, flexible connectors have both fire rated and non fire rated types. The latter version must be buried, while the fire rated may be installed in piping sumps and dispenser liners.  A PSSC is not required for any work involving an AST. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat C  AST and UST systems  Small diameter  (<3 inch diameter)  Bulk piping (>3 inch diameter)  NFPA 329  TIN | **Item #58**: Piping has appropriate test before placed in service.  **Rule: 761.500(4)(a)3**  3. A tightness test shall be performed on underground small diameter piping associated with ASTs before any new underground piping system is placed into service. A pressure test shall be performed for underground bulk product piping before the piping system is placed into service. Tightness tests for underground small diameter piping connected to USTs are subject to Rule 62-761.500(2)(a)4., F.A.C.    **Comment:**  Mark this as out of compliance if the piping is placed into service without proof of integrity.  Use the appropriate test for the circumstances.  Note that a registered precision tightness tester is not required to perform the test on underground piping associated with ASTs. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  All UST and AST systems associated piping standards  TIN | **Item #59:** Piping meets referenced standards or certified by nationally recognized lab / approved per 761.850(2).  **Rule: 761.500(4)(b)**  (b) Integral piping construction standards.  1. Fiberglass reinforced plastic piping or other non-metallic piping installed  at a facility shall be listed with UL 971, UL 567,  certified by a nationally recognized laboratory that these standards are met, or approved in accordance with Rule 62-761.500(4)(b)3, F.A.C.  2. Coated steel piping shall be constructed in accordance with  ASME B31.4. Integral piping in contact with the soil shall be cathodically protected in accordance with API RP 1632, NACE International  RP-0169-96, and STI R892-96.  3. Integral piping constructed of other materials, design, or corrosion protection shall be approved by the Department in accordance with  Rule 62-761.850(2), F.A.C.    **Interpretation:**  This rule quote describes approved piping construction standards.  **Comment:**  Mark this as out of compliance if unapproved piping, such as PVC, is installed.  If you see new equipment, check out the UL or other lab listings or in the approved equipment list. All approvals or proof of standards must be presented to the inspector before installation.  Piping not in contact with soil is exempt from the approved equipment list, but must meet .500 performance standards, or be certified by a nationally recognized laboratory.  Record the make and model of all equipment installed. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat C  Piping associated with UST and AST systems  Shear valve install  TIN | **Item #60:** Small diameter piping, pressurized: shear, emergency shutoff valves properly installed.  **Rule: 761.500(4)(c)1.**  (c) Small diameter piping.  1. Pressurized small diameter piping systems connected to dispensers shall be installed with shear valves or emergency shutoff valves in accordance with NFPA 30A, Section 4-3.6, if applicable. These valves shall be designed to close automatically if a dispenser is dislodged from the integral piping. The valves shall be rigidly anchored independently of the dispenser. For underground small diameter piping, the valves shall be checked at the time of installation by a certified contractor to confirm that the automatic closing function of the valve operates properly and that the valve is properly anchored.  **Interpretation:**  This is the shear valve question. Are shear valves properly installed and anchored?  **Comment:**  Mark this as out of compliance if the shear valves are not properly installed or anchored.  The shear valve should be anchored to the dispenser frame in the ground. The valve should stay in place if the dispenser is knocked over.  This is not intended to be the emergency fuel shut off system, and the emergency fuel shut off system already in place can not take the place of a shear valve.  NFPA 30A Section 4-3.6 states:  Small diameter piping systems connected to the dispenser should have a rigidly anchored automatically shutoff shear valve installed in accordance with the manufacturer’s instructions.   1. This valve should be at the base of each individual island type dispenser or at the inlet of each overhead dispensing device. 2. This valve should incorporate a fusible link or other thermally activated device that will close the valve in the event of fire exposure. 3. This valve should incorporate a mechanism to close the valve in the event of severe impact or displacement of the dispenser. 4. The valve should be rigidly anchored so that the shear section functions as intended.   An emergency shutoff valve incorporating a slip joint feature shall not be used.  Note that NFPA 30A Section 4-3.6 suggests that shear valves be tested annually for functionality. However, Rule 761.500(4)(c)1 only requires installation standards to be met. You may recommend that the shear valves be tested annually but the Fire Marshall must enforce this.    In an accident, as the dispenser is knocked over, these valves are intended to break and seal off the piping at the location of the valve to prevent a submersible pump from pumping out a geyser of fuel. It is both a fire hazard issue as well as environmental issue. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  Piping associated with UST and AST systems  Valves:  Solenoid  Anti siphon  Manual  Isolation  TIN  NFPA 30 and 30A | Item #61: Small diameter piping, with gravity head: isolation valves properly   installed and meets NFPA 30A Section 2-1.7 Rule: 761.500(4)(c)2 2. Gravity-fed small diameter integral piping systems must be installed with an isolation valve at the point of connection to the storage tank to prevent the discharge of regulated substances in the case of piping failure. The valve shall meet the standards of NFPA 30A, Section 2-1.7.    **Comment:**  Mark this as out of compliance if the isolationvalves are not properly installed.  This standard requires that this valve be placed downstream of the isolation valve required by NFPA 30, Chapter 2-3.8.1. This isolation valve is a requirement unless the entire AST system is within a diked containment area.  The terms “gravity head” and “gravity fed” are used interchangeably. The word “valve” refers to the device required by NFPA 30A Chapter 2-1.7.  Mark this as out of compliance if small diameter piping with gravity head does not have a properly installed isolation valve at the point the piping meets the tank.  The purpose of this rule citation is to prevent drainage of the tank in case of piping failure.  For ASTs, NFPA 30 Section 2-3.8.1 requires each connection through which liquid can normally flow to be equipped with an **isolation valve** located either inside or outside the tank, but as close as practical to the shell.  NFPA 30A Section 2-1.7 requires systems with a gravity head to have a separate device, similar to a **solenoid valve**, installed downstream of, but as close as practical to, the isolation valve required by NFPA 30 Section 2-3.8.1 (i.e., as close to the tank as possible).  Whether there is a suction pump present or not, a gravity head is created when the height of the piping drops below the fuel level in the tank. With most elevated tanks and/or tanks with bottom connections, the weight of the fuel is enough to cause drainage in the event of piping failure. With suction systems, whether the tank drains completely in the event of piping failure will depend on several factors including the height of the failure relative to the fuel level, and whether a vacuum was present on the piping at the time of the failure.  NFPA 30A Section 2-4.6, Piping and Ancillary Equipment, has information about requirements for specific systems types (e.g., pressurized, suction, etc.). NFPA is fairly consistent with valve requirements throughout the different publications.  **NFPA 30** regulates all systems storing flammable and combustibles.  **NFPA 30A** applies only to service stations.  **NFPA 395** regulates agriculture tanks, and tanks at isolated sites, when the tank volume is less than 1,100 gallons. NFPA 395 Section 2-3 specifies that systems fueling from the top be equipped with anti siphon valves. The device installed on elevated systems must be heat actuated and capable of manual control to prevent drainage in the event of a fire. Since NFPA 395 is not referenced in Chapter 62-761, F.A.C., the local Fire Marshall would need to enforce this requirement. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat C  Bulk product piping associated with UST and AST systems  Bulk Piping:  Construction and installation  TIN | **Item #62:** Bulk piping installed per NFPA 30 and ASME B31.4.  **Rule: 761.500(4)(d)**  (d) Bulk product piping. Bulk product piping shall be constructed and installed in accordance with NFPA 30, and ASME B31.4.    **Interpretation:**  This rule quote describes approved piping construction standards.  **Comment**:  NFPA 30 Chapter 3 discusses piping systems although it is not separated into bulk or integral designations. The scope of Chapter 3 includes the piping, tubing, flanges, bolting, gaskets, valving, fittings, flexible connectors, pressurized system components and secondary containment components that handle liquids and associated vapors. Other topics included are metering, flow control, and distribution.  ANSI B31 addresses material specifications along with pressure and temperature limitations.  A PSSC is not required for any work involving an AST. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat C  Piping associated with UST and AST systems  Small diameter piping in contact with soil  Piping over water  TIN | **Item #63:** Small diameter piping in soil or over water has secondary containment.  **Rule: 761.500(4)(e)1**  (e) Secondary containment.  1. Small diameter integral piping that is in contact with the soil or that transports regulated substances over surface waters of the state shall have secondary containment.    **Comment:**  The outer wall portion of marina piping must be UV rated. (For example, Total Containment brand is black).  Where underground piping transitions to over water piping, auto shutoff isolation valves must be installed.  A PSSC is not required for any work involving an AST. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat C  UST and AST systems  Bulk piping and  Remote fill piping  TIN | **Item #64:** Bulk product and remote fill piping in soil has secondary containment.  **Rule: 761.500(4)(e)2-3**  2. Bulk product piping that is in contact with the soil shall have secondary containment.  3. Remote fill piping that is in contact with the soil shall have secondary containment.    **Interpretation:**  New bulk product piping and remote fill piping in contact with soil must meet this construction standard.  **Comment:**  Mark this as out of compliance if the secondary containment associated with newly installed piping doesn’t meet standards, or wasn’t installed at all.  Exemption: bulk product piping containing high viscosity pollutant is exempt from secondary containment requirements.  A PSSC is not required for any work involving an AST. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B  Piping associated with UST and AST systems  Shear Valves  TCI | **Item #65:** Shear or emergency shut off valves installed by 12/31/98.  **Rule: 761.510(1)(b)1**  1. All pressurized small diameter piping systems connected to dispensers shall have shear valves or emergency shutoff valves installed in accordance with Rule 62-761.500(4)(c), F.A.C.    **Comment:**  Mark this as out of compliance if shear valves have not been installed on existing systems on time.  Be familiar with NFPA 30A Section 4-3.6  All existing pressurized piping systems must have shear valves by this due date.  This is not the same as the emergency fuel shut off system, and the emergency fuel shut off system already in place can not take the place of a shear valve.  It is important to read each manufacturer’s installation instructions.  See item #60 for details. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B  UST and AST systems  CP test station or method  TCI | **Item #66:** Cathodic protection test station or method by 12/31/98. Rule: 761.510(1)(b)2 (b) By December 31, 1998:  2. Cathodic protection test stations shall be installed in accordance with Rule 62-761.500(1)(f)1. and (2)(b)2. F.A.C., for cathodically protected UST or AST systems without test stations.    **Comment:**  Mark this as out of compliance if there is no way to adequately test the cathodic protection system.  See the following items for construction and performance standards:  Item #22 – rates the installation of a test station, or the designation of a monitoring point [.500(1)(f)].  Item #23 – rates the performance of a Cat C test station/monitoring point [.500(1)(f)1]  Item #31 – describes the various Cat C cathodically protected new tanks. Refer to UL 58,  UL 1746, STI-P3 [.500(2)(b)1-6].  Is there a test station or a designated monitoring point? If there is a test station, note the location on the inspection report or site diagram.  Was the test station properly installed? |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B  UST and AST systems  TCI | **Item #67:** Fillboxes color coded by 12/31/98.  **Rule: 761.510(1)(b)3**  3. Fillboxes shall be color coded in accordance with Rule  62-761.500(2)(d)1., F.A.C.    **Comment:**  Refer to the color coded chart included in the API 1637 Reference Standard.  Note that airport fuel identification is described in API Bulletin 1542.  Other identification methods are: tag or decal on the surface adjacent to the fill, tag on the fillpipe adapter, or colored plastic identification card inside the spill containment unit.  Major oil retailers often have their own specific color scheme.  See item #34. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B only  AST used as UST  UST used as AST  TCI | **Item #68:** USTs reinstalled as ASTs or vise versa meet rule by 12/31/98 Rule: 761.510(1)(b)4 (b) By December 31, 1998:  4. ASTs that have been reinstalled as USTs, and USTs that have been reinstalled as ASTs, shall meet the requirements of Rule 62-761.500, F.A.C.    **Comment:**  Mark this as out of compliance if Category-A and B tanks reused in this manner do not meet all .500 standards, including recertification, by December 31, 1998. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B  UST and AST systems  TCI | **Item #69:** Closure assessment prior to tank system component upgrade.  **Rule: 761.510(1)(c)**  (c) After July 13, 1998, a closure assessment shall be performed in accordance with Rule 62-761.800(4), F.A.C., before the installation of dispenser liners, piping sumps, or secondary containment of tanks and integral piping.  **Interpretation:**  This item asks only whether or not a closure assessment was performed properly when an upgrade was completed.    **Comment:**  Check the PCT database. Refer to the April 1998 Closure Assessment Requirements. A Limited Closure Summary Report is required for sites with documented contamination requiring a site assessment.  Was an appropriate closure assessment performed for the installation of dispenser liners, piping sumps, spill containment, or secondary containment of tanks and integral piping?  See item #196 for timely submittal of this report. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B  Piping associated with UST and AST systems  Valves:  Solenoid  Anti siphon  Manual  Isolation  Gravity head  TCI  NFPA 30A / 30A | **Item #70:** Valves meeting NFPA 30A standards required for piping systems with gravity head.  **Rule: 761.510(1)(d)**  (d) Valves meeting the requirements of Section 2-1.7 of NFPA 30A, shall be installed by January 13, 1999 on any storage tank system located at an elevation that produces a gravity head on the dispenser or on small diameter piping.    **Interpretation:**  The terms “gravity head” and “gravity-fed” are used interchangeably. The word “valve” refers to the device required by NFPA 30A Chapter 2-1.7.  This standard requires that this valve be placed downstream of the isolation valve required by NFPA 30, Chapter 2-3.8.1. This isolation valve is a requirement unless the entire AST system is within a diked containment area.  **Comment:**  Mark this as out of compliance if small diameter piping with gravity head does not have a properly installed isolation valve at the point the piping meets the tank.  The purpose of this Rule cite is to prevent drainage of the tank in case of piping failure.  For ASTs, NFPA 30 Section 2-3.8.1 requires each connection through which liquid can normally flow to be equipped with an **isolation valve** located either inside or outside the tank, but as close as practical to the shell.  NFPA 30A Section 2-1.7 requires systems with a gravity head to have a separate device, similar to a **solenoid valve**, installed downstream of, but as close as practical to, the isolation valve required by NFPA 30 Section 2-3.8.1 (i.e., as close to the tank as possible).  Whether there is a suction pump present or not, a gravity head is created when the height of the piping drops below the fuel level in the tank. With most elevated tanks and/or tanks with bottom connections, the weight of the fuel is enough to cause drainage in the event of piping failure. With suction systems, whether the tank drains completely in the event of piping failure will depend on several factors including the height of the failure relative to the fuel level, and whether a vacuum was present on the piping at the time of the failure.  NFPA 30A Section 2-4.6, Piping and Ancillary Equipment, has information about requirements for specific systems types (e.g., pressurized, suction, etc.). NFPA is fairly consistent with valve requirements throughout the different publications.  **NFPA 30** regulates all systems storing flammable and combustibles.  **NFPA 30A** applies only to service stations.  **NFPA 395** regulates agriculture tanks, and tanks at isolated sites, when the tank volume is less than 1,100 gallons. NFPA 395 Section 2-3 specifies that systems fueling from the top be equipped with anti siphon valves. The device installed on elevated systems must be heat actuated and capable of manual control to prevent drainage in the event of a fire. Since NFPA 395 is not referenced in Chapter 62-761, F.A.C., the local Fire Marshall would need to enforce this requirement.  Were these valves installed on applicable tanks by 1/13/99? |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B  Piping associated with UST and AST systems Due 12/31/2004 Small diameter piping over water  TCI | **Item #71:** Secondary containment for piping over water by 12/31/2004.  **Rule: 761.510(1)(e)**  (e) Small diameter piping transporting regulated substances over surface waters of the state shall have secondary containment by December 31, 2004.    **Comment:**  The inspector should make accurate notations of the current piping.  Piping that is exposed to sunlight must be UV rated. |

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| **KEYWORDS** | **SPECIFICS SNC A** |
| Cat B  USTs  TCI | **Item #73:** Category B USTs installed with secondary containment.  **Rule: 761.510(2)(b)1**  (b) UST Category-B systems.  1. All tanks containing pollutants, installed or constructed at a facility after June 30, 1992, shall have secondary containment.  **Comment:**  UST Category-B tanks must have had secondary containment when originally installed.  This is a historical item. Note a discrepancy if you find evidence that a Category-B tank did not receive secondary containment upon original installation.  See item #75, 76 for other system components |

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| **KEYWORDS** | SPECIFICS SNC A |
| Cat B  Hazardous substance USTs  RCRA “I” List  TCI | **Item #74:** Hazardous substance USTs installed after 1/1/91 have secondary containment.  **Rule: 761.510(2)(b)2**  2. All tanks containing hazardous substances, installed or constructed at a facility after January 1, 1991, shall have secondary containment.    **Comment:**  This is a historical item. Note a discrepancy if you find evidence that Category-B tank was not originally installed with secondary containment.  Verify that hazardous substance USTs are secondarily contained.  See item #75, 76 for other system components |

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| **KEYWORDS** | **SPECIFICS SNC A** |
| Cat B  UST small diameter piping  TCI  12/11/90 to 7/12/98 | **Item #75:** Piping installed with secondary containment after 12/10/90.  **Rule: 761.510(2)(c)**  (c) Small diameter integral piping in contact with the soil that is connected to UST systems shall have secondary containment if installed after December 10, 1990.    **Interpretation:**  Applies to existing piping installed after 12/10/90.  **Comment:**  This is a historical item. Note a discrepancy if you find evidence that Category-B piping was not originally installed with secondary containment.  The submersible turbine pump housing does not require secondary containment, but must be protected from corrosion. |

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| **KEYWORDS** | **SPECIFICS SNC A** |
| Cat A, B  UST systems  Table UST  TCI | **Item #76:** All systems meet the requirements of Table UST.  **Rule: 761.510(2)(d)**  (d) By December 31 of the appropriate year shown in Table UST below, all storage tank systems shall meet the performance standards of Rule 62-761.500, F.A.C., or be permanently closed in accordance with Rule 62-761.800(3), F.A.C.  **Interpretation:**  This item deals with Table UST upgrade deadline requirements.    **Comment:**  Table UST has several sections, labeled with a code letter. Each code or section describes standards to be met by the table deadlines. Note that the deadlines for codes A, B, F, L, O, S have already passed.  Codes D and E deadline requirements are upcoming.  By 12/31/2004 all tank or integral piping installed on or before 6/30/92 and other\* systems to have:  **D**(1)= Secondary containment shall be installed for small diameter piping extending over surface waters.  **D**(2)= Secondary containment for remote fill pipes associated with Category-A and Category-B systems.  \*All systems with a capacity between 110 and 550 gallons, all marine fueling facilities as defined in  Section 376.031, F.S., and those systems of greater than 550 gallon capacity that use less than 1,000 gallons per month or 10,000 gallons per year.  By 12/31/2009 all tank or integral piping installed on or before 6/30/92 and other systems to have:  **E** = Pollutant storage tanks and small diameter piping protected from corrosion on or before  June 30, 1992, and all manifolded piping, shall be upgraded with secondary containment.  Indicate upcoming deadline requirements on inspection reports. |

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| **KEYWORDS** | SPECIFICS SNC A |
| Cat A  AST systems  >550 gallons and installed on or before 12/31/89  TCI | **Item #77:** Met Chapter 17-61 requirements if applicable.  **Rule: 761.510(3)(a)**  (3) Aboveground storage tank systems.  (a) All storage tank systems with tanks having capacities greater than 550 gallons that contain vehicular fuel and that were subject to Chapter 17-61, F.A.C., shall have met the requirements of such chapter by January 1, 1990.    **Interpretation:**  This item is historical, and required the installation of impervious containment area with controlled drainage for vehicular fuel shop-fabricated ASTs and inland field-erected ASTs.  **Comment:**  Mark this as out of compliance if such tanks did not meet the 17-61 requirements.  17-61.060 listed alternatives for field-erected systems.  Note that 17-61, F.A.C. has been repealed. |

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| **KEYWORDS** | **SPECIFICS SNC A** |
| Cat B  AST systems  3/13/91 to 7/12/98  TCI | **Item #78:** Category B ASTs installed with secondary containment.  **Rule: 761.510(3)(b)**  (b) AST Category-B tanks, with the exception of tanks exempt under  Rule 62-761.500(3)(c)1., F.A.C., installed or constructed at a facility after  March 12, 1991, shall have secondary containment for the tank.    **Interpretation**:  Existing Category-B ASTs that were regulated by Chapter 17-762 and 62-762, F.A.C., must have been installed with secondary containment (except for exempted tanks).  **Comment:**  All this item asks is if secondary containment is present. Construction and performance standard concerns are addressed in item #43-47.  Exempted Tanks:  **Rule: 761.500(3)(c)**  (c) Secondary containment.  1. All tanks installed or constructed at a facility after July 13, 1998 shall have secondary containment beneath the tank and within the dike field area, **except for the following**:  a. Tanks containing **high viscosity** regulated substances are exempt from the requirements for secondary containment. However, used or waste oil tanks, regardless of viscosity, shall have secondary containment beneath the tank and within the dike field area.  b. **Double-walled shop-fabricated tanks** approved in accordance with  Rule 62-761.850(2), F.A.C., do not have to be installed in a dike field area.  c. **Shop-fabricated tanks containing** **petroleum contact water** pursuant to Chapter 62-740, F.A.C., that are subject to this chapter, elevated above and not in contact with the soil, and that have an impervious surface directly beneath the area of the tank.  d. **Field-erected tanks used for the temporary storage of petroleum contact water** pursuant to Chapter 62-740, F.A.C., that are subject to this chapter, and that have passed an internal inspection for structural integrity in accordance with API Standard 653.  e. AST Category-C field-erected tanks constructed within a dike field area with AST Category-A field-erected tanks shall have secondary containment beneath the tank, but shall not be required to have secondary containment within the dike field area untilDecember 31, 1999*.*  See item #43 |

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| **KEYWORDS** | SPECIFICS SNC A |
| Cat B  AST systems with underground piping  3/13/91 to 7/12/98  TCI | **Item #79:** Category-B piping installed with secondary containment.  **Rule: 761.510(3)(c)**  (c) Integral piping that is in contact with the soil and that is connected to AST systems shall have secondary containment if installed after March 12, 1991. For integral piping that is exempt under Rule 62-761.500(4)(e)4., F.A.C., it is not required to install secondary containment.    **Interpretation:**  Existing Category-B AST associated piping that was regulated by Chapter 17-762 and 62-762, F.A.C., must have been initially installed with secondary containment, except for exempted piping.  **Comment:**  Exempt piping: high viscosity (#5, #6, bunker C, intermediate fuel oils) piping, and vertical fill pipes equipped with a drop tube. |

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| **KEYWORDS** | **SPECIFICS SNC A Part 1 of 4** |
| Cat A, B  AST systems  Cat A AST systems  3/12/91 or earlier  Cat B AST systems  3/13/91 to 7/12/98  TCI | **Item #80:** Category A/B ASTs meet requirements of Table AST**.**  **Rule: 761.510(3)(d)**  (d) By January 1 of the appropriate year shown in Table AST below, unless specified otherwise, all AST Category-A and Category-B storage tank systems shall meet the following requirements or be permanently closed in accordance with  Rule 62-761.800(3), F.A.C.  **Interpretation:**  Tank or integral piping installed before 7/13/98 shall by 1/1/93:  Code P reads:  P= With the exception of high viscosity bulk product piping, bulk product piping in contact  with soil and not in secondary containment shall be tested in accordance with API RP 1110, ASME B31.4, or an equivalent method approved by the Department in accordance with  Rule 62-761.850, F.A.C. Such testing shall be performed annually thereafter.    **Comment:**  Indicate upcoming deadline requirements on inspection reports.  Mark #80 as a discrepancy if a facility does not upgrade to Table AST standards by January 1, 2000; or has not initiated upgrade work by January 1, 2000 and fails to complete work by March 31, 2000.  Initiating work means having a contract in place with any contractor for the upgrade work and obtaining all needed city, county, state or federal permits by January 1, 2000; or taking any steps necessary to begin the work.  Note that a PSSC is not required for any work on an AST, including underground piping associated with ASTs.  Specifically to code P: bulk product piping installed within this date range must be tested annually if not secondarily contained. |

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| **KEYWORDS** | **SPECIFICS SNC A Part 2a of 4** |
| Cat-A, B  AST systems  Cat A AST systems  3/12/91 or earlier  Cat B AST systems  3/13/91 to 7/12/98  TCI  Lists exemptions to .500 performance standards  Bulk and integral piping upgrade and exemption criteria  Internal/external API 653 cycle and response  Internal lining on floor and 18 inches up side  Secondarily contain the dike field | **Item #80:** Category A/B ASTs meet requirements of Table AST.  **Rule: 761.510(3)(d)**  (d) By January 1 of the appropriate year shown in Table AST below, unless specified otherwise, all AST Category-A and Category-B storage tank systems shall meet the following requirements or be permanently closed in accordance with Rule 62-761.800(3), F.A.C.  **Interpretation:**  Tank or integral piping installed before 7/13/98 shall by 1/1/00:  **T**(1)= With the exception of siting and material construction standards, Category-A and  Category-B systems shall meet the performance standards of Rule 62-761.500, F.A.C.  In addition:   1. Storage tank system construction standards that include cathodic protection remain applicable; and 2. Storage tanks where the entire bottom of the tank is in contact with concrete do not  have to seal the concrete beneath the tank until such time that the tank bottom is replaced.  However, concrete secondary containment system designed in accordance with  Rule 62-761.500(1)(e)3., F.A.C., do not have to be sealed.   **T**(2)= Category-A bulk product piping in contact with the soil shall be upgraded with secondary  containment, unless:   1. A structural evaluation is performed in accordance with API 570, as specified in  “U” (2)(b), of Table AST, and results of the structural evaluation indicate that the bulk  product piping has remaining useful life; or 2. The integral piping conveys high viscosity regulated substances, that are exempt from  secondary containment in accordance with Rule 62-761.500(4)(e) 4., F.A.C.; or 3. The integral piping is protected from corrosion and is tested annually in accordance with  ASME B31.4, API 1110, or an equivalent method approved by the Department in  accordance with Rule 62-761.850, F.A.C. This piping shall have secondary containment  by January 1, 2010, in accordance with “U” of Table AST.     **T**(3)= Initial internal and external inspections, examinations, and tests for each tank shall be  performed in accordance with API Standard 653, and an appropriate reinspection interval for  each tank shall be established in accordance with API Standard 653. If any deficiency is  discovered during the inspections, the person performing the evaluation of the tank in  accordance with API 653 must verify that the tank is ready for service before the storage  tank is put back into service. This verification must be documented in the internal inspection  records. Future tests for each tank shall be performed in accordance with the inspection  interval established in accordance with API 653 (1996). Baseline inspections already  conducted according to the API Standard 653 (1991) will be accepted.  **T**(4)= As an alternative to installing secondary containment underneath an AST Category-A or Category-B storage tank, the interior bottom of the tank and at least 18 inches up the sides may be internally lined in accordance with API RP 652. Secondary containment must nonetheless be installed in the dike field area and be continuously bonded to the perimeter of the tank foundation.  **Comment:**  Note: all single-walled integral piping in contact with soil that is connected to an AST system shall have secondary containment by 1/1/2000 (except for exempted piping). Keep in mind that there is no 2009 upgrade deadline for AST systems.  Have the various conditions been met by 1/1/00, or 3/31/00? |

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| **KEYWORDS** | **SPECIFICS SNC A Part 2b of 4** |
| Cat A, B  AST systems  Cat A AST systems  3/12/91 or earlier  Cat B AST systems  3/13/91 to 7/12/98  TCI | **Item #80:** Category A/B ASTs meet requirements of Table AST.  **Rule: 761. 510(3)(d)**  (d) By January 1 of the appropriate year shown in Table AST below, unless specified otherwise, all AST Category-A and Category-B storage tank systems shall meet the following requirements or be permanently closed in accordance with Rule 62-761.800(3), F.A.C.  **Interpretation:**  Tank or integral piping installed before 7/13/98 shall by 1/1/2000:  **V**(1)= Secondary containment for **cut and cover or concrete storage tanks**.  V(2)= Spill containment in accordance with Rule 62-761.500(1)(c), F.A.C.  V(3)= Dispenser liners for shop-fabricated tanks in accordance with Rule 62-761.500(3)(e), F.A.C.  V(4)= Secondary containment in accordance with Rule 62-761.500(1)(e) and (3)(c), F.A.C., for dike field areas of facilities with shop-fabricated tanks having dike field area secondary containment that is constructed of concrete or installed with synthetic liners not meeting these requirements.  X = Deadline to determine integrity of single-wall bulk product piping with an API 570 structural integrity evaluation in accordance with the option for Category-A systems in “U” of Table AST.  **Comment:**  Dispenser liners and spill containment are not required if both components are located within the secondary containment area. |

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| **KEYWORDS** | SPECIFICS SNC A Part 3 of 4 |
| Cat A, B  AST systems  Cat A AST systems  3/12/91 or earlier  Cat B AST systems  3/13/91 to 7/12/98  TCI | **Item #80:** Category A/B ASTs meet requirements of Table AST.  **Rule: 761. 510(3)(d)**  (d) By January 1 of the appropriate year shown in Table AST below, unless specified otherwise, all AST Category-A and Category-B storage tank systems shall meet the following requirements or be permanently closed in accordance with  Rule 62-761.800(3), F.A.C.  **Interpretation:**  Tank or integral piping installed before 7/13/98 shall by 1/1/2005 have:  W(1)= Secondary containment in accordance with Rule 62-761.500(1)(e) and (3)(c), F.A.C.,  for dike field areas of facilities with field-erected tanks having dike field area secondary containment that is constructed of concrete or installed with synthetic liners not meeting these requirements.  W(2)= Secondary containment for small diameter piping extending over surface waters.  W(3)= Secondary containment for small diameter petroleum contact water piping in contact   with the soil.    **Comment**:  Note that field-erected tank systems that already have secondary containment have until 2005 to upgrade to .500(1)(e) and .500(3)(c) standards per code W(1). |

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| **KEYWORDS** | **SPECIFICS SNC A Part 4 of 4** |
| Cat A, B  AST systems  Cat A AST systems  3/12/91 or earlier  Cat B AST systems  3/13/91 to 7/12/98  TCI  Table AST | **Item #80:** Category A/B ASTs meet requirements of Table AST.  **Rule: 761. 510(3)(d)**  (d) By January 1 of the appropriate year shown in Table AST below, unless specified otherwise, all AST Category-A and Category-B storage tank systems shall meet the following requirements or be permanently closed in accordance with  Rule 62-761.800(3), F.A.C.  **Interpretation:**  Tank or integral piping installed before 7/13/98 shall by 1/1/2010 have:  **U**(1)= All internally lined single bottom storage tanks, with the exception of tanks exempt under Rule 62-761.500(3)(c)1., F.A.C., shall be upgraded with secondary containment.  **U**(2)= All AST Category-A bulk product piping in contact with the soil , except for piping exempt from secondary containment requirements under Rule 62-761.500(4)(e)4. F.A.C., shall be:  (a) Upgraded with secondary containment in accordance with Rule 62-761.500(1)(e), F.A.C.; or  (b) Instead of being upgraded with secondary containment, be evaluated for structural integrity by:  1. Establishing and maintaining the piping inspection intervals in accordance with API 570, Section 4-2, by January 1, 2000;  2. Determining the remaining life of the system in accordance with API 570, Section 5.0, by January 1, 2000. If the determination indicates that the piping:  a. Must be repaired, then the piping shall be repaired within three months of the determination in accordance with API 570 and Rule 62-761.700, F.A.C.;  b. Is leaking, then the piping must be immediately taken out of operation. If the piping can not be repaired, it must be closed or upgraded with secondary containment within one year of the determination;  c. Is not leaking, but has corroded to a point where it no longer has structural integrity, then the piping shall be closed, or upgraded with secondary containment by January 1, 2000; or  d. Has remaining useful life, then the piping shall be closed or upgraded with secondary containment when the API 570 inspection and remaining life determination data indicates that closure or replacement is necessary.  3. Providing a certification by a professional engineer registered in the State of Florida that the evaluation meets the above criteria. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  UST and AST systems  TCI  Release detection standards | **Item #81:** Can detect a new release from any portion of the system.  **Rule: 761.600(1)(a)1**  (1) General.  (a) Storage tank systems shall have a method, or combination of methods,  of release detection that:  1. Can detect a new release from any portion of the storage tank system;    **Comment:**  Mark this as out of compliance if the release detection method is not able to register or detect a new release. If you feel that the release detection system has lost its ability to detect a new release, document why in the inspection report.  Examples include:   1. An automatic tank gauge system already in alarm mode will not be able to detect a new release; 2. sumps with water/product may impair detection abilities; 3. monitoring wells at contaminated sites may also have impaired ability to detect new releases.   See .640(2)(c)2. for further guidance on using contaminated monitoring wells for release detection. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B, C  UST and AST systems  TCI  TIN | **Item #82:** Installed, calibrated, operated, and maintained per manufacturer’s specifications.  **Rule: 761.600(1)(a)2** (1) General.  (a) Storage tank systems shall have a method, or combination of methods,  of release detection that:  2. Is installed, calibrated, operated and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability to ensure that the device is functioning as designed; and  **Interpretation:**  This is a release detection maintenance and installation standard.  **Comment:**  Mark this as out of compliance if release detection systems are not functioning or not maintained properly.  The inspector will have to know what release detection components have been installed at the facility. Furthermore, develop a library of installation and system operation specifications. These documents will assist you in determining calibration/maintenance as required by the manufacturer. Additional guidance can be found in the Appendix sections of the USEPA “List of Leak Detection Evaluations for Underground Storage Tank Systems” and the DEP Master Equipment List.  Installations – have the release detection components been function tested? Just because a piece of equipment is new out of the box does not mean it is fully functional. Have it demonstrated!  Calibration/Maintenance – the facility must provide documentation attesting to these operability tests.  Operation - The RDRL must be developed, and the facility personnel must be knowledgeable of all the components of the release detection system. Theoretically, they should be able to demonstrate to you how they monitor the release detection system.  See item #157 |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  TCI  Release detection standard | **Item #83:** Meets performance standards; all manufacturer’s claims retained.  **Rule: 761.600(1)(a)3** (1) General.  (a) Storage tank systems shall have a method, or combination of methods,  of release detection that:  3. Meets the applicable performance standards in Rule 62-761.640, F.A.C. All manufacturer’s instructions, and the performance claims and their manner of determination described in writing by the equipment manufacturer or installer shall be retained for as long as the storage tank system is used.    **Interpretation:**  Capable of detecting a release of 0.2 gph or 150 gallons within 30 days. There are four release detection methods exempted: tightness testing, visual inspections, groundwater or vapor monitoring, and manual tank gauging.  **Comment:**  Mark this as out of compliance if the release detection method used doesn’t meet these performance standards.  Some methods may have stricter criteria, which is usually incorporated in the equipment approval.  Also note this as a record keeping violation, item #172, if the written performance claims are not retained. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat C  UST and AST systems  TIN | **Item #85:** Release detection method provided upon installation.  **Rule: 761.600(1)(c)**  (c) A release detection method shall be established and provided for all storage tank systems upon installation.    **Interpretation:**  Facility must have an approved release detection system before being placed into service.  **Comment:**  At the time of the completion of the installation inspection, does the facility have an approved and appropriate release detection method for all the applicable portions of the system? |

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| KEYWORDS | SPECIFICS SNC B |
| Cat A, B, C  UST and AST systems  TCI | **Item #86**: Release detection performed at least once a month.  **Rule: 761.600(1)(d)**  (d) Except as otherwise specified in Rule 62-761.600-640, F.A.C., the release detection method or combination of methods used at a facility shall be performed at least once a month, but not exceeding 35 days, to determine if a release from the storage tank system has occurred.    **Comment**:  Mark this as out of compliance if any release detection method has not been monitored as required.  Look for evidence that the release detection system is not being properly monitored. Examples include: blocked access to monitoring wells; ATG in alarm; ATG panel hidden from view; ATG tape spool empty; buried or submerged sampling ports; corroded locks; or no dispenser keys.  Be aware that manual tank gauging requires weekly sampling.  Electronic line leak detectors may be wired into an ATG with a memory of test cycles.  Facilities with static/periodic ATG systems are required to provide one passing test per product per month. This method has a minimum fuel capacity requirement.  Facilities with continuous electronic leak detection ATG systems (e.g., Veeder-Root CSLD) are required to provide one passing test per product per month, although the system must be in daily operation with monthly summary logs. This method has no minimum fuel requirement.  If there is a record keeping problem, see item #171. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  TCI | **Item #87**: Storage tank system components and electronic leak detection inspected monthly.  **Rule: 761.600(1)(e)**  (e) At least once a month, but not exceeding 35 days, any storage tank and component of a storage tank that can be inspected visually shall be visually inspected in accordance with Rule 62-761.640(2)(e), F.A.C. A visual inspection is not required for any system component that has a continuous or monthly electronic release detection sensor. Continuous electronic leak detection devices shall be inspected for proper operation on a monthly basis. Inspection may consist of visual observation or remote verification of proper operation.    **Comment:**  The electronic monitoring unit is a system consisting of a sensor, wiring, and a panel. The sensor and the component that it monitors are exempt from the visual inspection process. However, the proper operation of the remainder of the electronic system must be verified on a monthly basis. One way to test is to activate the panel alarm switch. Depending on the system in place this test may check the alarm light, alarm horn, or the circuit continuity between the panel and the remote sensor. This test procedure must be documented by the facility, as required in item #171.  The remote verification feature meets this requirement, such as the Veeder-Root Simplicity system. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B  UST and AST systems  TCI  Site suitability by 12/31/98 for USTs  1/1/2000 for ASTs | **Item #88:** Site suitability determination (USTs by 12/31/98; ASTs by 1/1/2000)  **Rule: 761.600(1)(f)**  (f) A site suitability determination shall be performed for UST systems by December 31, 1998, and January 1, 2000 for AST systems, in accordance with Rule 62-761.640(2)(a)-(d), F.A.C., for storage tank systems using groundwater or vapor monitoring wells for release detection. If the site suitability determination indicates that on-site conditions are unsuitable for external monitoring, another method of release detection must be used.    **Interpretation:**  This item is a timing question and also covers site suitability standards.  **Comment:**  If the facility has decided to use monitoring wells as their method of release detection, a site suitability determination must be performed, unless exempted as described below. Note that the well construction standards still need to be proven, if the site suitability is exempted.  Is the report available during the inspection visit?  The site suitability determination is meant to prove that the site meets geologic standards. If the wells are located in tank excavation with proper backfill, then the site suitability determination is exempted. Note that the well construction standards still need to be proven. [This is the “exemption” mentioned in .640(2)(b)2.] Refer to the memorandum dated December 16, 1998 from Marshall Mott-Smith.  The site suitability determination shall be performed in accordance with DEP’s “Guidelines for Site Suitability Determinations for External Monitoring.” It is to be signed by a Professional Geologist registered in the State of Florida.  The site suitability determination shall be kept on site. If the site suitability determination is not present at the time of inspection, this item should be marked as non compliance.  The site suitability determination should be reviewed by the inspector. The inspector does not approve the determination but should review it to ensure that the monitoring wells have been approved for use.  Facilities that have been using external monitoring as the method of release detection may continue to use external monitoring during the development of the site suitability determination. Facilities that elect to use external monitoring as a new method of release detection after the adoption of these guidelines must use another approved method of release detection until the completion of the site suitability determination.  Any change in site conditions that adversely affects external release detection at a site will require modification of the site suitability determination by a PG.  A failing site suitability determination for groundwater monitoring wells does not preclude their use as a release detection system. Following the repairs according to .640(2)(b), including the repositioning of the wells, another site suitability determination will have to be performed to obtain the passing grade.  If a facility fails a site suitability determination, the storage system does not have an appropriate method of release detection. Note that the tanks have a release detection method (the monitoring wells), but it is not an approved method. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B  UST and AST systems  TCI  Vapor plan  UST 12/31/98  AST 1/1/2000 | **Item #89:** Vapor monitoring plan (USTs by 12/31/98; ASTs by 1/1/2000)  **Rule: 761.600(1)(g)**  (g) Vapor monitoring plans shall be performed by December 31, 1998, for UST systems and by January 1, 2000, for AST systems, in accordance with Rule 62-761.640(2)(d), F.A.C., for storage tank systems using vapor monitoring for release detection.    **Interpretation:**  This item is intended to cover whether or not the vapor monitoring plan was completed on time.  **Comment:**  Was the plan in place by the specified dates?  Requires the performance of a site suitability determination first, unless the wells can meet the 761.640(2)(b)2.b exemption criteria.  Note that Geotech’s dilution method for vapor monitoring was approved for USTs, and therefore use of this method does not require a vapor monitoring plan. Note that release detection response levels and site suitability determination report are still needed, if the site suitability determination is not exempted (as explained in item #88).  If an acceptable vapor monitoring plan is not in place, then vapor monitoring can not be used, and another method of release detection must be implemented.  Vapor monitoring plans must be updated yearly. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B, C  UST and AST systems  TIN  TCI | **Item #90:** Interstitial monitoring for secondary containment.  **Rule: 761.600(1)(h)**  (h) Any component of a storage tank system with secondary containment shall have an interstitial monitoring method meeting the requirements of Rule 62-761.640(3)(a), F.A.C.    **Interpretation**:  Must have one or more methods of interstitial monitoring.  **Comment:**  Visual monitoring or manual sampling:  The idea is to visually inspect the interstice or inside containment area for product. Works well with piping sumps, dispenser liners, AST containment, integral piping J ports, tanks with interstitial ports.  Continuous electronic sensing equipment:  Panel on the wall, probe in the interstice. Variety of probes: liquid (petroleum discriminating/ non discriminating), vapor, optical.  Hydrostatic monitoring systems: Liquid level readings recorded monthly, or electronically monitored with an alarm.  Vacuum monitoring:  Vacuum readings recorded monthly, or equipped with a low vacuum alarm. |

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| **KEYWORDS** | SPECIFICS SNC B |
| Cat A, B, C  Piping associated with UST systems  TIN  TCI | **Item #91:** Line leak detector provided for pressurized piping.  **Rule: 761.600(1)(i)**  (i) Pressurized piping, excluding bulk product piping, shall be equipped with a line leak detector that meets the standards of Rule 62-761.640(3)(d)1., F.A.C. Gravity piping systems are exempt from this requirement.    **Interpretation:**  Almost all pressurized small diameter piping, whether single or double-walled, must have an line leak detector.  **Comment:**  Note that there is an exemption: double-walled piping that uses a continuously operating interstitial monitoring method that can detect a 10 gallon release within one hour and shut the pump off, does not need a line leak detector. Note that this method is described in item #143.  Due to the wording of the current rule, line leak detectors can not be required for underground pressurized piping associated with ASTs.  Also note that line leak detectors need 20 psi pressure to operate. Some pumps, such as centrifugal pumps, are not capable of delivering this pressure needed to operate a line leak detector.  Indicate make and model of the line leak detector on the inspection report. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B  UST and AST systems  TCI  Well closure dates | **Item #92:** Monitoring wells no longer used for release detection closed.  **Rule: 761.600(1)(k)**  (k) Groundwater and vapor monitoring wells meeting the standards for external monitoring specified in Rule 62-761.640(2)(a) - (d), F.A.C., that are no longer used for release detection, shall be closed in accordance with Rule 62-532.500(4), F.A.C., by December 31, 2010. Wells not meeting these standards shall be closed in accordance with Rule 62-532.500(4), F.A.C., by December 31, 1998, unless the wells are:  1. Used for contamination assessment purposes as specified in Rule 62-761.600(2)(d), F.A.C.; or  2. Required by rules adopted by a County government in accordance with Chapter 376.317, F.S.    **Comment:**  Wells may remain in place until 12/31/2010 if the well meets: construction standards, passes a site suitability determination (or exemption), meets groundwater monitoring product criteria, or qualifies as a vapor monitoring well. Wells must be closed by 12/31/98 if the well does not meet those criteria.  Wells used for assessment or cleanup do not need to be closed. However, the surface lid must be colored black with a white inner circle, in accordance with .600(2)(d) (See item #95).  If wells are to be closed, they must be closed in accordance with the local water management district guidelines. See Item #184 for the 62-532 procedure to properly close wells.  During a precision tank tightness test, some single-walled UST systems may have to determine the depth to groundwater relative to product level in the tank. |

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| **KEYWORDS** | **SPECIFICS SNC A** |
| Cat A, B  UST systems  TCI | **Item #93:** Release detection provided according to Table RD.  **Rule: 761.600(2)(a)**  (2) Underground storage tank systems.  (a) By December 10, 1990, vehicular fuel petroleum storage tank systems of greater than 550 gallons capacity shall be provided with release detection. Release detection for all other storage tank and integral piping systems in contact with the soil shall be provided by December 31 of the year shown in Table RD.  **Interpretation:**  The table applies to Category-A non vehicular fuel tanks, vehicular fuel tanks less than 550 gallons, and all integral piping systems in contact with the soil.  This is historical.  **Comment:**  All Category-B and C UST systems were or are required to have release detection upon installation. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B  UST systems  TCI | **Item #94:** GW monitoring or SPCC plans before 12/22/90 meet 761.640(1)(a).  **Rule: 761.600(2)(b)**  (b) Effective December 31 of the applicable year specified under the schedule in Table RD, any groundwater monitoring plan or spill prevention control and countermeasure plan implemented before December 22, 1990, shall be capable of detecting the leak rate or quantity specified in Rule 62-761.640(1)(a), F.A.C.    **Interpretation:**  SPCC and monitoring plans must meet release detection standards.  **Comment**:  Since this is a historical item, all SPCC and other groundwater monitoring plans must be capable of detecting a 0.2 gph release or 150 gallons within 30 days.  Also note that the SPCC plan is a federal requirement detailed by 40 C.F.R. Section 112,  and it can be used as a release detection method in this state.  Note that an SPCC or groundwater monitoring plan will suffice as an RDRL (see item #118).  Rule 62-528.700, F.A.C. lists state requirements for groundwater monitoring plans. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B  UST systems  TCI | **Item #95:** Monitoring wells meet 761.640(2) by 12/31/98  **Rule: 761.600(2)(d)**  (d) Monitoring wells shall meet the standards of Rule 62-761.640(2), F.A.C., by December 31, 1998. Wells that do no meet these standards shall be closed in accordance with Rule 62-532.500(4), F.A.C., by December 31, 1998, unless the wells are required by a rule that was adopted by a County government in accordance with Chapter 376.317, F.S. However, if a monitoring well is used solely for the purpose of monitoring petroleum contamination in accordance with Chapter 62-770, F.A.C., the well does not have to be closed until the completion of the site rehabilitation pursuant to Chapter 62-770, F.A.C. Covers of leak detection monitoring wells redesignated as site assessment wells by the facility owner or operator shall be colored black with a white circle within the black background. The diameter of the white circle shall be approximately one half the diameter of the manhole cover, or approximately four inches.    **Interpretation:**  The question focuses on whether the wells met .640(2)(a)-(d) standards by 12/31/98.  **Comment:**  Wells must meet standards by 12/31/98: well construction requirements are met, site suitability has been determined, and either a groundwater or vapor monitoring method has been implemented. Wells must be closed by 12/31/98 if the wells do not meet these criteria. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  AST systems  TCI  SPCC or  GW monitoring plan  Due date 12/31/99 | **Item #96**: Groundwater monitoring or SPCC plans shall meet 761.640(1)(a) by 12/31/99.  **Rule: 761.600(3)(a)**  (3) Aboveground storage tank systems.  (a) The following methods of release detection that were implemented before March 12, 1991, shall be capable of detecting the leak rate or quantity specified in Rule 62-761.640(1)(a), F.A.C., by December 31, 1999:  1. Any groundwater monitoring plan that meets the requirements of Rule 62-528.700, F.A.C.; or  2. Any Spill Prevention Control and Countermeasure plan as required by 40 C.F.R. Section 112.  **Rule: 761.600(3)(f)**  (f) Facilities using a Spill Prevention Control and Countermeasure plan as required by 40 C.F.R. Section 112, for release detection, or a groundwater monitoring plan meeting the requirements of Rule 62-528.700, F.A.C., for release detection, shall meet the release detection requirements of Rule 62-761.610, F.A.C., by December 31, 1999.    **Comment:**  Was the deadline met? For details, see item #94.  The SPCC plan is a federal requirement detailed by 40 C.F.R. Section 112, and it can be used as a release detection method in this state.  All AST systems installed after 3/12/91 must have a release detection method that meets standards in .640(1)(a) upon installation. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B  AST systems  TCI | **Item #97:** Monitoring wells meet 761.640(2) by 1/1/2000 or closed.  **Rule: 761.600(3)(b)**  (b) All monitoring wells used for release detection shall meet the standards in Rule 62-761.640(2), F.A.C., by January 1, 2000, or be properly closed in accordance with Rule 62-532.500(4), F.A.C.    **Interpretation:**  The question focuses on whether the wells met the .640(2)(a)-(d) standards by 1/1/2000.  **Comment:**  Wells must meet standards by 1/1/2000: well construction requirements are met, site suitability has been determined, and either a groundwater or vapor monitoring method has been implemented. Wells must be closed by 1/1/2000 if the wells do not meet these criteria. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat C  AST systems  Field-erected  TCI | **Item #98:** Release detection for field-erected tanks meets API 650, Appendix I.  **Rule: 761.600(3)(c)**  (c) Release detection for field-erected storage tanks with secondary containment beneath the tank shall comply with API Standard 650, Appendix I.    **Interpretation:**  Per API 650, Appendix I “Undertank Leak Detection and Subgrade Protection” provides acceptable construction details for the detection of product leaks through the bottoms of aboveground tanks.  **Comment:**  API 650 Appendix I.2 Performance Requirements state:   1. Leaks through the tank bottom shall be detectable by observation at the tank perimeter. 2. If electronic sensors are used, then I.2.a standards shall be satisfied. All sensors shall be failsafe and calibrated. 3. Materials used shall be chemically resistant to the stored product. 4. Permeability of the leak detection barrier [shall meet the Rule definition #38 of impervious]. 5. Material in contact with the subgrade shall be suitable and protected against degradation. 6. It is preferred that the leak barrier be one piece construction. 7. Sumps and piping below tank bottom are acceptable, provided the leak detection system compensates for it.   Appendix I includes several diagrams of tank bottom/leak detection configurations to assist the inspector in determining which method is in place. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B  AST systems  TCI | **Item #99:** Release detection for internally lined tank meets 761.640(2).  **Rule: 761.600(3)(d)**  (d) Storage tanks upgraded with internal lining shall, by the completion of the installation of the internal lining, be provided with a method of release detection that meets the standards in Rule 62-761.640(2), F.A.C.    **Comment:**  Rule definition #44 allows internal lining on AST bottom to protect the tank from internal corrosion.  Applies to both shop-fabricated and field-erected tanks.  Such tanks must use external release detection that meet the following standards listed in .640(2)(a)-(d): well construction requirements are met, site suitability has been determined, and either a groundwater or vapor monitoring method has been implemented.  Some field-erected tanks may be exempted based on product viscosity. |

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| **KEYWORDS** | SPECIFICS SNC B |
| Cat A, B  AST systems  TCI, TIN | **Item #100:** AST piping in contact with soil has release detection.  **Rule: 761.600(3)(e)**  (e) AST integral piping in contact with the soil shall be provided with a method, or combination of methods, of release detection. Integral piping in contact with the soil having secondary containment shall have interstitial monitoring, and single-walled integral piping in contact with the soil shall have release detection meeting the requirements of Rule 62-761.610(4), F.A.C.    **Comment:**  Determine which configuration of piping exists. Small diameter piping in contact with soil associated with ASTs (except high viscosity) was required to be double-walled by 1/1/2000. Make sure that this piping has interstitial monitoring. |

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| KEYWORDS | **SPECIFICS Non SNC** |
| Cat A, B, C  UST and AST systems  TCI | **Item #101:** SPCC or groundwater monitoring Plan meets 761.610 by 12/31/99.  **Rule: 761.600(3)(f)**  (f) Facilities using a Spill Prevention Control and Countermeasure plan as required by 40 C.F.R. Section 112, for release detection, or a groundwater monitoring plan meeting the requirements of Rule 62-528.700, F.A.C., for release detection, shall meet the release detection requirements of Rule 62-761.610, F.A.C., by December 31, 1999.    **Interpretation:**  SPCC and monitoring plans must meet release detection standards.  **Comment:**  If either plan is the current release detection method for a facility then by 12/31/99, the facility must change its release detection method to one listed under Rule .610.  Category-A and B: systems equipped with one or more of methods in .610.  Category-C: interstitial or visual monitoring of secondary containment; integral pressurized piping equipped with line leak detector, and all appropriate systems perform five year breach of integrity test procedures.  By 12/31/99 did these specific type facilities provide a .610 release detection method? |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B, C  AST systems  TCI | **Item #102:** Visual inspections for ASTs with high viscosity regulated substances.  **Rule: 761.600(3)(g)**   1. ASTs containing high viscosity regulated substances are exempt from all release detection requirements except for visual inspections pursuant to Rule 62-761.640(2)(e), F.A.C.   **Interpretation**:  This is a release detection requirement for ASTs containing high viscosity regulated substances.  Comment:  Mark this as out of compliance if there are no monthly visual inspections conducted at all.  Monthly visual inspection is the only release detection required for AST systems with high viscosity product. Make sure that the facility conducts and records these inspections monthly.  See Rule definition #35 of high viscosity,.  Examples of high viscosity fuels are: #5, #6, bunker C, intermediate fuel oils.  Look for signs of corrosion, cracks, structural damage, leakage, or similar problems and make sure these observations are recorded by the facility on a monthly basis.  See also item #86 and/or #103.  See item #127 (for a Non SNC). |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B  UST and AST systems  TCI | **Item #103:** Categories A+B have release detection methods, and methods meet performance standards  **Rule: 761.610(1)(a)**  (1) General.  (a) Category-A and Category-B systems. Release detection methods shall be one of the methods specified in this section, and shall meet the performance standards contained in Rule 62-761.640, F.A.C.  **Interpretation:**  This item is intended primarily for systems that have a release detection system, but the release detection is not approved, inappropriate, doesn’t meet standards, or is not functioning properly.  Comment:  Mark this as out of compliance if the storage tank system has a method of release detection available, but the method is improper.  Some examples are: monitoring wells used without a site suitability determination; interstitial sensors improperly located, or no sensor at all; SIR contract signed but not performed; inventory control with annual tightness test listed as method, but no test results available or inventory records are incomplete, incorrect or missing; etc. |

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| **KEYWORDS** | SPECIFICS SNC A |
| Cat C  UST and AST systems  TCI  TIN | **Item #104:**  CATEGORY C SYSTEMS MUST HAVE ONE OF THE FOLLOWING METHODS:  -visual monitoring / manual sampling of secondary containment interstice, or  -continuous electronic sensing equipment, or  -hydrostatic monitoring, or  -vacuum monitoring, and  -piping leak detector or continuous interstitial monitoring with pump shutoff for secondarily   contained small diameter pressurized piping  Rule: 761.610(1)(b)  (b) Category-C systems. Release detection methods shall be either interstitial or visual monitoring of secondary containment in accordance with Rule 62-761.640, F.A.C. Small diameter pressurized piping shall have a line leak detector in accordance with Rule 62-761.640(3)(d)1., F.A.C.  Interpretation:  Mark this as out of compliance if a Category-C system has no method of release detection for either the piping or the tanks.  Comments:  Note that this covers release detection for both Category-C UST and AST systems.  #106 deals with release detection for Category-A and B USTs only.  #107 deals with release detection for Category-A and B ASTs only.  #108 deals with visual release detection method for AST systems.  #109-115 deals with all piping release detection. |

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| **KEYWORDS** | SPECIFICS SNC A |
| Cat A, B  USTs only  TCI  For manual tank gauging,  See item #135 | **Item #106:** CATEGORY A+B SYSTEMS MUST HAVE ONE OF THE FOLLOWING METHODS:  --interstitial monitoring system .610(2)(a)  --single monitoring well or vapor detector within liner .610(2)(b)  --continuously operating leak detection system .610(2)(c)  --groundwater / vapor monitoring wells installed per site suitability .610(2)(d)  --ATG with tank tightness test every 3 years or continuous ATG .610(2)(e)  --SIR system with tank tightness test every three years .610(2)(f)  --manual tank gauging .610(2)(g)-(h)  --annual tank test in conjunction with inventory control .610(2)(i)  **Rule: 761.610(2)**  (2) Underground storage tank systems. Category-A and Category-B USTs shall be equipped with one or more  of the following release detection systems:  (a) An interstitial monitoring system between the walls of a double-walled tank;  (b) Interstitial monitoring involving a single monitoring well or vapor detector located within a liner that meets the standards in Rule 62-761.500(1)(e), F.A.C., provided the well or detector is placed at the  low point of the liner so that collected liquids will drain to the monitoring point;  (c) A continuously operating release detection system placed around a tank in an excavation or in the secondary containment in accordance with the manufacturer's requirements;  (d) A network of groundwater or vapor monitoring wells installed or verified in accordance with  Rule 62-761.640(2)(a) - (d), F.A.C., as applicable;  (e) Automatic tank gauge systems.  1. An automatic tank gauge system with a tightness test of the storage tank every three years; or  2. A continuous automatic tank gauge system;  (f) A statistical inventory reconciliation system with a tightness test of the storage tank every three years;  (g) Manual tank gauging shall be performed as specified in Table MTG in Rule 62-761.640(3)(c), F.A.C.,  for tanks of 550 gallons or less nominal capacity, and for tanks 551-1000 gallons with known diameters  of 48 or 64 inches;  (h) Manual tank gauging may be used for tanks of 551 to 2000 gallons nominal capacity provided that a  tank tightness test is performed:  1. Every 12 months for tanks not protected from corrosion by June 30, 1992; or  2. Every five years for tanks installed with corrosion protection, or for tanks upgraded with corrosion protection by June 30, 1992. However, this method is only available for the  first 10 years after:  a. A tank is upgraded with cathodic protection;  b. A single-walled corrosion-protected tank is installed; or  c. Until December 22, 1998, whichever is later;  (i) An annual tank test in conjunction with inventory control performed in accordance with  Rule 62-761.640, F.A.C. This method can only be used until:  1. Ten years after the date of installation of a single-walled corrosion protected tank;  2. Ten years after the tank is upgraded with corrosion protection or internal lining; or   1. December 22, 1998, whichever is later.   **Comment:**  Mark this as out of compliance if the tank does not have one or more of the above listed methods at all.  Although .610(2) Rule quote mentions systems, this question deals with underground tanks and whether they have  a release detection system.  #104 deals with release detection for both Category-C AST and UST systems.  #107 deals with release detection for Category-A and B AST only.  #108 deals with visual release detection method for AST systems.  #109-115 deals with all piping release detection. |

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| **KEYWORDS** | **SPECIFICS SNC A** |
| Cat A, B  ASTs only  TCI | **Item #107:** CATEGORY A+B SYSTEMS MUST HAVE ONE OF THE FOLLOWING METHODS:  --interstitial monitoring for tanks with secondary containment .610(3)(a)1.  --visual inspection .610(3)(a)2.  --method for lined and cut and cover tanks meets 62-761.640(2) .610(3)(a)3.  **Rule: 761.610(3)(a)**  (3) Aboveground storage tank systems.  (a) Tanks. Category-A and Category-B ASTs shall be equipped with one or more of the following release detection systems:  1. Tanks with secondary containment shall have an interstitial monitoring system:  a. Between the walls of a double-walled tank;  b. In the interstice between the tank and any liner used for secondary containment;  c. Between the tank bottom and the secondary containment for double-bottomed tanks;  2. Tanks without secondary containment or that are exempt from secondary containment shall have a visual inspection performed in accordance with Rule 62-761.610(3)(b), F.A.C.  3. Tanks with internal lining and cut and cover tanks shall have a method of release detection that meets the requirements of Rule 62-761.640(2), F.A.C.    **Comment:**  Mark this as out of compliance if an existing Category-A or B AST does not have any release detection at all.  Although .610(3) Rule quote mentions systems, this question deals with aboveground tanks and whether they have a release detection system.  See item #108  #104 covers release detection for both Category-C UST and AST systems.  #106 deals with release detection for Category-A and B USTs only.  #108 deals with visual release detection method for AST systems.  #109-115 deals with all piping release detection. |

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| **KEYWORDS** | SPECIFICS SNC B |
| Cat A, B, C  AST systems  TCI | **Item #108:** Visual inspection of AST system and containment once a month.  **Rule: 761.610(3)(b)**  (b) Visual inspections of tank systems. A visual inspection of the exterior of each tank, the aboveground integral piping system, the secondary containment within the dike field area (if applicable), the dike field area, and any other storage system components shall be conducted and documented at least once a month, but not exceeding 35 days.  **Comment:**  Mark this as out of compliance if the facility is not performing visual inspections or is not recording the results monthly.  Walk around and look at the tank, containment, all system components, valve and hydrant pits if applicable, and piping. Record your observations. Review monthly records.  Does the physical evidence support the facility written record?  Look for evidence of wetting, discoloration, blistering, corrosion, cracks, structural damage, leakage. Examine the tank, saddle, containment inner and outer walls, containment floors, dike height.  Note that this applies to all visible parts of an AST system.  This item and #107 deals with release detection for Category-A and B ASTs only.  Item #104 covers release detection for both Category-C UST and AST systems.  #106 deals with release detection for Category-A and B USTs only.  #109-115 deals with all piping release detection. |

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| **KEYWORDS** | SPECIFICS SNC B |
| Cat A, B, C  Piping associated with UST and AST systems  Small diameter piping  TCI | **Item #109:** Annual line test or 62-761.640(2) method for suction piping.  **Rule: 761.610(4)(a)1**  (4) Integral piping.  (a) Small diameter piping in contact with the soil. Single-walled piping that is in contact with soil shall be equipped with one of the following release detection systems:  1. Suction or gravity piping shall have:  a. An annual line tightness test; or  b. An external monthly monitoring or release detection method meeting the requirements of Rule 62-761.640(2), F.A.C., if designed to detect a discharge from any portion of the integral piping.  **Interpretation:**  This question asks whether a single walled suction or gravity piping system in contact with soil has a method of release detection.  Comment:  The following exemptions are allowed under .640(4)(a)3:  Release detection is not required for piping associated with:  a. Suction pumps, provided that a single check valve is installed directly below the suction pump, and the piping is sloped so that the contents of the pipe will drain back to the tank if the suction is broken. Written verification shall be provided by a certified contractor that no other check valves exist between the dispenser and the tank, and that the above criteria are met. Any subsequent modification of the piping which involves disconnection shall be recertified by a Certified Contractor that these conditions are still being met; and  b. Manifold piping systems.  .640(2) provides for external monitoring methods provided that: well construction requirements are met, site suitability has been determined, and either a groundwater or vapor monitoring method has been implemented.  Item #104 covers release detection for both Category-C UST and AST systems.  #106 deals with release detection for Category-A and B UST only.  #107 deals with release detection for Category-A and B AST only.  #108 deals with visual release detection method for AST systems.  #109-115 deals with all piping release detection. |

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| **KEYWORDS** | SPECIFICS SNC B |
| Cat A, B, C  Piping associated with UST systems  Small diameter piping  TCI | **Item #110:** single walled pressurized piping has mechanical leak detectors / annual tightness test, or electronic leak detector.  **Rule: 761.610(4)(a)2**  2. By December 31, 1998, pressurized piping shall have:  a. Mechanical line leak detectors meeting the requirements of Rule 62-761.640(3)(d), F.A.C., **and** either an annual line tightness test, or an external release detection method meeting the requirements of Rule 62-761.640(2)(a)-(d), F.A.C.; **or**  b. Electronic line leak detectors meeting the requirements of Rule 62-761.640(1)(a), F.A.C.    **Interpretation:**  This item specifies release detection methods for any small diameter pressurized piping in contact with soil.  **Comment:**  There are two types of piping leak detectors.   1. Mechanical (flow restrictive), 2. Electronic (automatic shutoff).   Mark this as out of compliance if single-walled pressurized small diameter piping in contact with the soil does not have a line leak detector, isn’t conducting an annual tightness test, or doesn’t have an external release detection method.  Also note that the requirement for a line leak detector applies to UST associated piping. AST associated piping is not required to install a line leak detector, but must have some approved method of release detection.  Item #104 covers release detection for both Category-C UST and AST systems.  #106 deals with release detection for Category-A and B UST only.  #107 deals with release detection for Category-A and B AST only.  #108 deals with visual release detection method for AST systems.  #109-115 deals with all piping release detection. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B, C  Piping associated with UST and AST systems  Small diameter piping  TCI | **Item #111:** Aboveground piping visually inspected.  **Rule: 761.610(4)(b)**  (b) Small diameter piping not in contact with the soil, or that is exempt from secondary containment. These systems shall be visually inspected in accordance with Rule 62-761.610(3)(b), F.A.C.    **Interpretation:**  If they have, do they look at it?  **Comment:**  Does your visual inspection of the piping coincide with their written record? Look for evidence of: wetting, discoloration, blistering, corrosion, cracks, structural damage, leakage.  Item #104 covers release detection for both Category-C UST and AST systems.  #106 deals with release detection for Category-A and B UST only.  #107 deals with release detection for Category-A and B AST only.  #108 deals with visual release detection method for AST systems.  #109-115 deals with all piping release detection. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  Piping associated with UST and AST systems  Small diameter piping  TCI | **Item #112:** Secondarily contained piping in contact with soil has: interstitial monitoring, line leak detector, and a breach of integrity testing method.  **Rule: 761.610(4)(c)**  (c) Small diameter piping with secondary containment that is in contact with the soil. Double-walled piping, or single-walled piping with secondary containment shall be equipped with the following release detection systems:  1. Interstitial monitoring;  2. A method of testing for a breach of integrity that meets the requirements of Rule 62-761.640(3)(a)2., F.A.C., for Category-C systems, as applicable; and  3. A line leak detector that restricts or shuts off flow or a continuously operating interstitial monitoring device that meets the requirements of Rule 62-761.640(3)(d)1.e., F.A.C., for pressurized piping connected to a UST, by December 31, 1998.    **Comment:**  Does piping meeting this description have: interstitial monitoring, a line leak detector, or a system that can detect a 10 gallon piping leak in 1 hour and shut off the pump?  Can a breach of integrity test be performed for Category-C systems with closed interstices?  Record dates that breach of integrity tests were performed.  Item #104 covers release detection for both Category-C UST and AST systems.  #106 deals with release detection for Category-A and B UST only.  #107 deals with release detection for Category-A and B AST only.  #108 deals with visual release detection method for AST systems.  #109-115 deals with all piping release detection. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B, C  Piping associated with UST and AST systems  Bulk piping  Hydrant piping  TCI | **Item #113:** Single-walled piping in contact with soil pressure tested yearly or monthly release detection system. Rule: 761.610(4)(d)1 (d) Bulk product and hydrant piping.  1. Single-walled piping in contact with the soil:  a. Shall be pressure tested annually in accordance with Rule 62-761.640(3)(e), F.A.C.; or  b. Instead of annual testing, a monthly release detection system meeting the requirements of Rule 62-761.640(2) F.A.C., may be installed.  **Interpretation:**  This item deals with single-walled bulk product and hydrant piping release detection.    **Comment:**  Annual test methods include: API RP 1110 hydrostatic testing, ASME B31.4 hydrostatic testing, or another DEP equipment approval method. Prior to testing, a visual inspection of all exposed components must be performed to evaluate tightness.  View copy of test results during inspection.  Item #104 covers release detection for both Category-C UST and AST systems.  #106 deals with release detection for Category-A and B UST only.  #107 deals with release detection for Category-A and B AST only.  #108 deals with visual release detection method for AST systems.  #109-115 deals with all piping release detection.  761.640(2) allows for an external monitoring system. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B, C  Bulk piping,  Hydrant piping associated with UST and AST systems  See exemptions  TCI  . | **Item #114:** Monthly visual inspection of aboveground or exempt pipe.  **Rule: 761.610(4)(d)2** (d) Bulk product and hydrant piping.  2. Piping not in contact with the soil, or that is exempt from secondary containment, shall be visually inspected in accordance with Rule 62-761.610(3)(b), F.A.C.    **Comment:**  .610(3)(b) states that the inspection of the exterior of all bulk and hydrant piping, and any other related piping components shall be conducted and documented at least once a month, but not exceeding 35 days.  Piping is exempt from secondary containment if it contains high viscosity products (#5, #6, bunker C, intermediate fuel oils).  The exemption from secondary containment also includes Category-A bulk product piping in contact with soil [.510(3)(d)T(2)(b)] and integral piping in contact with soil when connected to ASTs with high viscosity products [.500(4)(e)4].  Mark this as out of compliance if visual inspections are not performed.  Item #104 covers release detection for both Category-C UST and AST systems.  #106 deals with release detection for Category-A and B UST only.  #107 deals with release detection for Category-A and B AST only.  #108 deals with visual release detection method for AST systems.  #109-115 deals with all piping release detection. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B, C  Piping associated with UST and AST systems  Bulk piping  Hydrant piping  Secondarily contained piping in contact with soil | **Item #115** Secondarily contained piping in contact with soil has interstitial monitoring and breach of integrity. Rule: 761.610(4)(d)3 (d) Bulk product and hydrant piping  3. Piping with secondary containment that is in contact with the soil, such as double-walled piping or single-walled piping with secondary containment, shall be equipped with the following release detection systems:  a. Interstitial monitoring; and, if applicable,  b. For Category-C systems, a method of testing for a breach of integrity that meets the requirements of Rule 62-761.640(3)(a)2., F.A.C., for piping with closed interstitial spaces.  **Comment:**  Mark this as out of compliance if secondarily contained bulk/hydrant piping in contact with soil does not have interstitial monitoring for release detection.  Is interstitial monitoring performed on all applicable bulk and hydrant piping systems?  Which of the four breach of integrity tests will be performed if required every five years?  Have the boots been removed, thereby creating an open interstice? (This will negate need for a breach of integrity test.)  Item #104 covers release detection for both Category-C UST and AST systems.  #106 deals with release detection for Category-A and B UST only.  #107 deals with release detection for Category-A and B AST only.  #108 deals with visual release detection method for AST systems.  #109-115 deals with all piping release detection. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat C  UST and AST systems  TIN | **Item #116:** Release detection methods meet overall specified performance standards.  **Rule: 761.640(1)(a)**  (1) General. Methods of release detection shall:  (a) Be capable of detecting a release of 0.2 gallons per hour or 150 gallons within 30 days with a probability of detection of 0.95, and a probability of false alarm of 0.05, with the exception of:  1. Tightness testing requirements in Rule 62-761.640(3)(c)4. and (3)(d)2., F.A.C.;  2. Visual inspections in Rule 62-761.640(2)(e), F.A.C.;  3. Groundwater or vapor monitoring in Rule 62-761.640(2), F.A.C.; and  4. Manual tank gauging in Rule 62-761.640(3)(c)1., F.A.C.    **Comment:**  Mark this as out of compliance if the release detection method does not meet .640 standards. This should be a rare violation, since methods approved through .850 and are on approved equipment list already meet standards.  The EQ number demonstrates that the release detection system meets standards.  Check equipment approvals, and document EQ numbers if necessary. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  TCI | **Item #117:** Release detection method has DEP Equipment Approval in accordance with 62-761.850(2).  Rule: 761.640(1)(b)  (b) With the exception of bailers and monitoring wells, be approved in accordance with  Rule 62-761.850(2), F.A.C.    **Interpretation:**  Is there an Equipment Approval?  **Comment:**  During compliance inspections, check that the method installed is still the method in use.  Items exempt from equipment approval include vacuum gauges, sight glass gauges that register volume level in ASTs.  During the installation process, Category-C systems have already satisfied this question under Item #116. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  AST and UST systems  TIN .600(1)(b)  TCI .640(1)(c)  RDRL | **Item #118:** Written release detection response level developed.  **Rule: 761.600(1)(b); and 761.640(1)(c)**  .600(1)(b) A release detection response level shall be described in writing for each method or combination of methods of release detection used for a storage tank system.    .640(1)(c) Have a release detection response level described in writing for each method or combination of methods.    **Interpretation:**  Make sure the owner/operator understands what release detection methods are in use, and what should be done if it detects something.  **Comment:**  Mark this as out of compliance if the RDRL hasn’t been written, or if the RDRL presented doesn’t match the release detection methods used.  Is reality different from their plan?  Note that an SPCC or groundwater monitoring plan will suffice as an RDRL.  See following sample form. |

### RELEASE DETECTION RESPONSE LEVELS

FACILITY NAME: FACILITY #

In accordance with 62-761.600(1)(b), Florida Administrative Code (F.A.C.) the following Release Detection Response Level (RDRL) has been established for the checked method(s) of Release Detection:

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|  | RELEASE DETECTION METHOD | RDRL |
|  | Statistical Inventory Reconciliation (SIR) with a tank tightness test every three years | One failed SIR report or two consecutive inconclusive SIR reports. A failed tank tightness test. |
| Check all that apply | Continuous Automatic Tank Gauge System | A failed 0.2 gph leak test report/printout. |
|  | Automatic Tank Gauge System with a tank tightness test every three years | A failed 0.2 gph leak test report/printout. A failed tank tightness test. |
|  | Vacuum Monitoring | A sudden loss of vacuum or a 20% loss of the original vacuum. |
|  | Electronic Monitoring of tank interstice | Alarm conditions, audible or visible. |
|  | Visual Monitoring of tank interstice | Presence of free product or water. |
|  | Annual Tank and Line Tightness Tests used with daily inventory reconciliation (available until 10 yrs. after last tank upgrade) | Failed tank and/or line tightness test, unexplained water fluctuations exceeding one inch; significant loss or gain. |
|  | Groundwater Monitoring Wells | Presence of free product or sheen.  Discharge Report Form must be submitted within 24 hours. |
|  | Vapor Monitoring Wells | Vapor concentrations ≥500 ppm for gasoline,  Vapor concentrations ≥50 ppm for diesel |
|  | Manual Tank Gauging  (Only valid for tanks up to 2000 gals) | Readings exceeding the standards described in 62-761.640 Table MTG, F.A.C.. |
|  | Electronic Monitoring of sumps and/or dispenser liners | Alarm conditions, audible or visible. |
|  | Visual Monitoring of sumps and/or dispenser liners | Water above the entrance of double-wall piping or presence of free product. |
|  | Line Leak Detector | Tripping/Activation of leak detector. |
|  | Annual Line Tightness Test | Failed tightness test |

As required by 62-761.200(71), F.A.C., if the RDRL is measured or observed, we will initiate activities to determine if an incident, release, or discharge has occurred. If within 24 hours we can not determine if a discharge occurred, an Incident Notification Form will be submitted.

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B  UST and AST systems  Well construction standards | **Item #119:** Monitoring well construction standards met.  **Rule: 761.640(2)(a)**  (2) External release detection methods.  (a) Well construction standards.  1. Monitoring well requirements. Monitoring wells shall be constructed and installed by a licensed water well contractor when required by Chapter 62-531, F.A.C.  Monitoring wells shall:  a. Be a minimum of two inches in interior diameter;  b. Be slotted from the bottom to two feet below ground surface;  c. Have a minimum slot size of 0.010 inch;  d. Be backfilled with clean sand or a gravel filter pack to prevent blockage of the slots;  e. Be constructed of at least schedule 40 PVC without any joints, or of another  corrosion protected material;  f. Be grouted into the borehole from the surface to the top of the filter pack plug  with neat cement grout or other equivalent materials. Grouting shall not extend  below the top of the well slotting. Bentonite slurry grouts shall not be used;  g. Unless the monitoring well has an extended exterior casing, be equipped with a minimum six inch diameter manhole designed to prevent water intrusion with a one inch minimum grade increase above the surrounding surface. The well opening  shall extend at least one inch above the bottom of the manhole;  h. Be equipped with a watertight cap. The well shall be kept locked or secured  to prevent tampering at all times except when the monitoring well is being sampled  or maintained. Monitoring wells shall be marked in accordance with API RP 1615;  i. Extend no deeper than 20 feet below ground surface. If such a depth penetrates a confining layer below the excavation, the monitoring well shall extend no deeper than to within six inches of the confining layer. Any well that penetrates a confining layer shall immediately be properly abandoned in accordance with Rule 62-532.500, F.A.C.; and  j. If installed within a secondary containment liner system, extend no deeper than six inches from the liner.  2. Groundwater monitoring wells shall:  a. Extend at least five feet below the normal groundwater surface level; and  b. Be properly developed by a licensed water well contractor before the initial sampling.  3. Vapor monitoring wells shall meet the requirements specified in DEP’s “Guidelines for Vapor Monitoring.”  4. Electronic sensors, probes, or fiber-optic systems shall be tested at least annually to verify that they operate in accordance with the Department’s approval given pursuant to  Rule 62-761.850(2), F.A.C.  5. Groundwater and vapor monitoring wells using the placement of sensors or probes in vertical, horizontal, or directionally-drilled wells shall be designed and installed in accordance with the equipment approval for that system granted in Rule 62-761.850(2), F.A.C.    **Comment:**  Look at the visible parts of the well, such as depth of well, depth of screening, grouting, etc. Compare your observations to any documents that the facility provides. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B  UST and AST systems  TCI  External release detection method | **Item #120:** No free product or sheen present in wells.  **Rule: 761.640(2)(c)2**  2. Groundwater monitoring shall not be used for release detection after free product or a sheen is discovered in a monitoring well, unless:  a. A Site Rehabilitation Completion Order has been issued by the Department following the remediation of the free product or sheen, and there is no longer any free product in the monitoring well; or  b. Free product or sheen is not present and has not been observed in the well within the previous thirty (30) months, as demonstrated by records of at least six (6) monthly ground water monitoring sampling events, and within the previous two years, the system has been tested tight with tank and line piping tests or another internal method of release detection performed in accordance with Rule 62-761.640(3), F.A.C.    **Comment:**  See Rule definition #75 for sheen.  See Rule definition #32 for free product. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B  UST and AST systems  TCI  External release detection method | **Item #121:** Another method used if <1 foot of water in well, or water is above slotting.  **Rule: 761.640(2)(c)3**  3. Another method of release detection specified in Rule 62-761.610, F.A.C., other than groundwater monitoring, shall be used when:  a. There is less than one foot of groundwater present in the well; or  b. The groundwater level is above the slotted portion of the well.  Interpretation:  This item sets requirements for groundwater level in monitoring wells.  **Comment:**  Mark this as out of compliance if the groundwater levels are such that the monitoring wells won’t function properly.  The records maintenance requirement (item #122) requires the measurement of depth to groundwater for each monthly sample.  If the groundwater condition becomes too high or too low for an extended time in the monitoring wells, the monitoring wells may no longer be an approved method. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B  UST and AST systems  TCI  External release detection method | **Item #122:** Monitoring well records meet recording requirements.  **Rule: 761.640(2)(c)4**  4. Records. The following information shall be maintained in accordance with the record keeping requirements of this chapter:  a. Date of sampling;  b. Depth of well;  c. Depth to groundwater;  d. Any presence of odor of stored regulated substances; and  e. Any sheen or free product found.  **Comment:**  The monthly sampling record must contain this information.  The depth of well should to be recorded at least yearly to ensure that the screening intersects the groundwater. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B  UST and AST systems  TCI  External release detection method | **Item #123:** Vapor monitoring wells not rendered inoperative.  **Rule: 761.640(2)(d)**  (d) Vapor monitoring.  1. Vapor monitoring can only be used to monitor regulated substances that are sufficiently volatile to be detected in soils or groundwater by vapor monitoring equipment.  2. The measurement of vapors in a vapor monitoring well shall not be rendered inoperative by groundwater, rainfall, soil moisture or other known interference so that a discharge could go undetected for more than 30 days.    **Interpretation:**  The vapor monitoring guidelines along with a site suitability determination will determine if the geologic conditions and the product stored will be suitable for vapor monitoring.  Comment:  Mark this as out of compliance if the site conditions make vapor monitoring unusable.  Any significant changes to site conditions may affect the vapor monitoring plan. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B  UST and AST systems  TCI  External release detection method | **Item #124:** Equipment can detect appropriate contaminant levels in parts per million units.  **Rule: 761.640(2)(d)3**  3. Sampling equipment shall be capable of detecting:  a. A vapor concentration of 500 parts per million total petroleum hydrocarbons, as measured by a flame ionization detector, for storage tank systems containing gasoline or equivalent petroleum substances;  b. A vapor concentration of 50 parts per million total petroleum hydrocarbons, as measured by a flame ionization detector, for storage tank systems containing kerosene, diesel or equivalent petroleum substances;  c. Vapor concentrations of hazardous substances or their constituents that would indicate a release; or  d. Vapor concentrations of tracer compounds used for release detection.    **Interpretation:**  This item requires that proper equipment is used for vapor monitoring.  **Comment:**  All sampling equipment results must be in FID equivalent values. Sampling equipment used must be on the approved equipment list.  Examine the site suitability determination and the vapor monitoring plan for the facility, and note what equipment is used. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B  UST and AST systems  TCI  External release detection method | **Item #125:** Vapor monitoring not used where existing contamination interferes with the ability to detect a new release.  **Rule: 761.640(2)(d)4**  4. Vapor monitoring shall not be used for release detection if existing contamination interferes with the ability to detect a new release.    **Comment:**  If a new discharge occurs at the facility, then a new vapor monitoring plan will have to be written to account for the new conditions. The facility is expected to change methods of release detection while the vapor monitoring plan and site suitability determination report are rewritten. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B  UST and AST systems  TCI  External release detection method | **Item #126:** Vapor monitoring plan developed and implemented according to guidelines.  Rule: 761.640(2)(d)5  5. The vapor monitoring plan shall be developed and performed in accordance with DEP’s “Guidelines for Vapor Monitoring.” The plan shall include a description of monitoring wells or probes, the method of sampling, the establishment of a release detection response level and the data management procedures. Facilities with monitoring wells located in the tank excavation do not have to meet the requirements for DEP’s “Guidelines for Site-Suitability Determinations for External Monitoring,” provided that a demonstration can be made that the excavation contains sand or gravel backfill, and the wells were properly constructed and installed within the backfill.  Interpretation:  This item deals with vapor monitoring plans, site suitability determination reports, and whether they were written and implemented properly.  Comment:  Mark this as out of compliance if the vapor monitoring plan appears to be implemented or maintained incorrectly.  Vapor monitoring records must document the following for each sampling:   1. Date of sampling 2. Name of person performing the sampling 3. Weather conditions (relative humidity, ambient air temperature) 4. Sampling instrument 5. Readings of ambient air vapor levels 6. Initial reading (undiluted/unfiltered) 7. Dilution factor 8. Filtered reading 9. Diluted reading 10. Final reading 11. Any spills, overfills or other superficial sources of contamination since the last sampling event   At sites where groundwater levels can reach above the bottom of the storage tank, the record must also include:   1. Depth to groundwater 2. Maximum product level in the tank since the last sampling event   Verify that the vapor monitoring plan is updated annually. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  UST and AST systems  UST and AST  TCI  External release detection method | **Item #127:** Results of visual inspections noted.  **Rule: 761.640(2)(e)**  (e) Visual inspections. Any visual inspection of the storage tank system or its secondary containment that reveals signs of corrosion, cracks, structural damage, leakage, or other similar problems shall be noted. Repairs shall be made in accordance with the requirements of Rule 62-761.700, F.A.C.    **Interpretation:**  Does the facility record of visual inspections coincide with your visual observation of the condition of the storage tank system? Are they doing it right?  **Comment:**  Note repair issues in items #144-149.  Also note record keeping problems in item #170, 171. |

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| **KEYWORDS** | **SPECIFICS Non SNC (Part 1 of 2)** |
| Cat A, B, C  UST and AST systems  TCI  TIN  Internal release detection method | **Item #128:** Interstitial monitoring of secondarily contained systems properly designed and constructed with approved method.  **Rule:**  **761.600(1)(h)**  (h) Any component of a storage tank system with secondary containment shall have an interstitial monitoring method meeting the requirements of Rule 62-761.640(3)(a), F.A.C.  **761.640(3)(a)1**  (3) Internal release detection methods.  (a) Interstitial monitoring for UST and AST systems.  1. Interstitial monitoring for double-walled tanks, double-walled integral piping, dispenser liners, piping sumps, and other secondary containment systems, shall be designed and constructed to allow monitoring of the space between the primary and secondary containment. One or more of the following methods of interstitial monitoring shall be used:  a. Manual sampling of, or visual monitoring for, liquids;  b. Continuous electronic sensing equipment;  c. Hydrostatic monitoring systems; or  d. Vacuum monitoring.    **Comment:**  During an installation, mark this as out of compliance if interstitial monitoring is not installed properly.  During a compliance inspection, mark this as out of compliance if interstitial monitoring is not being used for a secondarily contained system or is not functioning, or if the interstitial space is monitored improperly.  Interstitial spaces can be either closed or open.  Manual/Visual – monthly visual inspection, dry-sticking, liquid or vapor sensor, mechanical liquid level gauge.  Continuous Electronic- vapor, liquid, optical sensor; discriminating or non-discriminating (of water versus petroleum). Signal triggers a visual or audible alarm on a wall mounted panel or horn.  Hydrostatic- probe or sensor monitors brine level in brine filled interstice tank (Must follow manufacturer’s instructions).  Vacuum- Gauges are calibrated and operational at all times; vacuum readings recorded monthly. A continuous vacuum monitoring system must be equipped with a visual or audible alarm. |

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| **KEYWORDS** | **SPECIFICS Non SNC (Part 2 of 2)** |
| Cat A, B, C  UST and AST systems  TCI  TIN  Internal release detection method | **Item #128:**  **More Comments:**  Piping and dispenser sumps:  Can the surface and inner lids be removed or accessed to allow viewing?  Does the reality of your observation agree with the facility’s current record?  Does the sump contain liquid?  Are liquids in the sump above the invert point of the secondary piping penetration? Has the sump integrity been compromised?  If a sensor is used, where is it located relative to the sump base? (It must be able to detect a release within 30 days).  Has the movement of the float activated sensors been impaired?  Transitional sumps occur where aboveground piping goes underground. The facility must provide a means of access to this area, or use a remote release detection method. Additional piping sumps may be present along the remainder of the piping run, especially where a piping run changes elevation.  Interstitial tank ports may be either straight through or around the shell.  Piping interstitial monitoring may be: open boots to a sump, a J-sampling port, a FRP termination fitting with a sampling port/pipe, fibertrench.  Not all dispenser pans drain back to the piping sump, especially satellite dispensers.  ASTs may utilize some form of sight glass. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  UST and AST systems  TCI  Internal release detection method | **Item #130:** Meets vacuum monitoring requirements. Rule: 761.640(3)(a)3 3. Vacuum monitoring of the interstice shall meet the following requirements:  a. Liquid-filled gauges and air-filled gauges shall be calibrated in accordance with the National Institute of Standards and Technology. The gauges shall be operational at all times.  b. Vacuum monitoring may be used as a continuous method of release detection provided that the vacuum system is equipped with an audible or visual alarm. The alarm shall indicate when the minimum vacuum level allowed is reached as provided in the equipment approval granted in accordance Rule 62-761.850(2), F.A.C.  c. Vacuum readings shall be recorded monthly. Upon discovery of any significant vacuum level decrease, or any loss of vacuum exceeding 20% of the initial level, or any loss in excess of the levels established in the test protocols provided in the third party certification for the test method, the tank manufacturer shall be contacted and the vacuum refreshed in accordance with the storage tank system’s equipment approval in Rule 62-761.850(2), F.A.C. If the loss of vacuum persists, an investigation shall be initiated and an incident reported in accordance with Rule 62-761.450(2), F.A.C. The source of the loss shall be repaired in accordance with Rule 62-761.700, F.A.C.    **Interpretation:**  If vacuum monitoring is performed, verify it is done properly.  **Comment:**  Look at the equipment and the records. Compare the current vacuum readings with the original vacuum readings at installation (if available). Mark this as out of compliance if the vacuum has decreased by more than 20%.  Repairs should be noted under items #144-149. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  TCI  TIN | **Item #131:** Meets interstitial monitoring requirements for lined systems. Rule: 761.640(3)(a)4 4. Interstitial monitoring for storage tanks and integral piping equipped with liners shall be designed and constructed to allow monitoring of the space between the primary and secondary containment and shall:  a. Be capable of detecting a release through the inner wall into the interstice;  b. Be constructed and installed so that groundwater, rainfall, or soil moisture will not render the testing or sampling method used inoperative; and  c. Be equipped with an external release detection method meeting the standards of Rule 62-761.640(2)(a)-(d), F.A.C., except for the groundwater level and excavation zone assessment requirements; or  d. Be visually inspected in accordance with Rule 62-761.640 (2)(e), F.A.C.; or  e. Be equipped with a monitoring device approved in accordance with Rule 62-761.850(2), F.A.C., installed at the monitoring point within the liner.  Interpretation:  This is meant to include external liner systems (bag liners, concrete, or any other preapproved containment component).  **Comment:**  Mark this as out of compliance if an owner installs an external liner system that meets 62-761.500 standards, and fails to set up an interstitial monitoring system for release detection that meets the above criteria. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B  USTs and ASTs with vehicular fuel  Standard Exemptions  TCI | **Item #132:** Inventory control maintained for single-walled vehicular systems.  **Rule: 761.640(3)(b)1-2**  (b) Inventory control.  1. General.  a. Inventory control shall be maintained for each single-walled tank that contains vehicular fuel.  b. Storage tank systems that are elevated above the soil or that have secondary containment are exempt from inventory control requirements. ASTs that rest on an impervious surface are also exempt.  2. Inventory control for USTs and shop-fabricated ASTs shall be performed and recorded in accordance with API RP 1621, as applicable. Manifolded tanks may be treated as a single tank for the purposes of inventory control. Inventory control shall be performed in the following manner:  a. Volume measurements for product inputs, withdrawals, and the amount remaining in each tank shall be recorded each operating day;  b. Measurements of product levels shall be recorded to the nearest one-eighth of an inch;  c. Product inputs shall be reconciled with delivery receipts by measurement of the tank product volume before and after delivery;  d. Product dispensed shall be metered as required by Chapters 525 and 531, F.S., and in accordance with the standards established by the Florida Department of Agriculture and Consumer Services in Chapter 5F-2, F.A.C.;  e. The measurement of water level in the bottom of the tank shall be made at least once a week to the nearest one-eighth of an inch;    **Comment:**  Mark this as out of compliance if inventory records are not properly performed.  For inventory reconciliation, list the type of product on the top of the form along with tank volume.  Volume measurements of product in tank, amount used or sold and amount delivered are to be in gallons.  ATGs can be used to collect tank volume/water level data. (It is recommended that the facility compare ATG volume to actual stick measurements on a routine basis; this can also be done by dispensing a measured amount of fuel.)  If the facility does not use an ATG to collect water volume, do they have the appropriate gauging stick and paste? What is the condition of their stick?  .700(1)(c)6 methods of inventory control includes: inventory reconciliation, SIR, ATG, and MTG. (See item #158). |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  USTs  TCI | **Item #133:** Water fluctuations >1.0-inch investigated, system tested.  **Rule: 761.640(3)(b)3**  3.Inventory control requirements for USTs. Water fluctuations exceeding one inch not attributed to deliveries shall be investigated in the following manner:  a. The accessible parts of the storage system shall be inspected for damage or openings;  b. Release detection systems shall be checked for signs of a discharge; and  c. If, within a week, the investigation does not reveal the source of the water fluctuation, the entire storage tank system shall be tested in accordance with Rule 62-761.640(3), F.A.C.    **Comment:**  Mark this as out of compliance if you discover significant water fluctuations, and the owner has done nothing to investigate.  Although .640(3) is encompassing, it gives you the authority to request any test (including, but not limited to, a breach of integrity test and tightness test) you feel is needed to investigate an incident.  The facility needs to provide some specifics to the inspector describing what steps they took in their investigation, rather than saying it passed no problem found.  The inspector needs to check the water level values on the ATG printouts and look for repair/maintenance invoices describing the removal of any water. Compare these items to the recorded water level.  The water level must be measured to the 1/8”. Water finding paste should be applied to the bottom several inches of the tank stick. Generally mustard colored out of the tube, it will change to a reddish purple color in the presence of water. (Kolor-Kut is the usual brand name) |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B  Field-erected ASTs in contact with soil  Vehicular fuel  TCI | **Item #134:** Inventory control performed for field-erected ASTs.  **Rule: 761.640(3)(b)4**  4. Inventory control requirements for field-erected ASTs.  a. Bulk product facilities may use product inventory control for multiple tanks provided that a demonstration of equivalent protection is made in accordance with Rule 62-761.850(1), F.A.C.  b. Inventory measurements for field-erected systems, manifolded systems, and non-manifolded systems with a capacity of 30,000 gallons or greater shall be reconciled to detect the presence of a significant loss or gain. The equipment and method used shall be capable of accurately measuring the level or volume of product over the full range of the tank's usable storage capacity, to the nearest one fourth of an inch.    **Comment:**  Mark this as out of compliance if inventory control is not done at all, or is maintained improperly for field-erected vehicular fuel ASTs in contact with soil.  Inventory values may include product from more than one tank.  Same process used for these tanks as for the shop-fabricated and USTs, although the volume of product may be significantly higher.  See Rule definition #77 of significant loss or gain. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B  USTs  Internal release detection method | **Item #135:** Manual tank gauging meets requirements.  **Rule: 761.640(3)(c)1**  (c) Underground storage tanks.  1. Manual tank gauging. Manual tank gauging for tanks of 2000 gallons or less containing regulated substances shall meet the following requirements:  a. Tank liquid level measurements shall be taken weekly at the beginning and ending of a period between 36 hours and 58 hours in accordance with Table MTG, during which no liquid is added to or removed from the tank;  b. Level measurements shall be based on an average of two consecutive stick readings taken at both the beginning and ending of the period; and  c. The equipment used shall be capable of measuring the level of product over the full range of the tank's height to the nearest  one-eighth of an inch.  d. Readings exceeding the standards described in Table MTG shall be investigated in accordance with Rule 62-761.820, F.A.C.  **Comments:**  Mark this as out of compliance if manual tank gauging is not performed properly.  If manual tank gauging is done for a tank system that is not qualified for it, then mark a violation for improper release detection method #103.  Note that there are tank size requirements for using manual tank gauging for tanks with volumes between 550-1000 gallons listed in .610(2)(g).  Manual tank gauging can be used for tanks of less than or equal to 2,000 gallons provided that a tank tightness test is performed every five years for tanks installed with corrosion protection, or for tanks that were upgraded with corrosion protection prior to June 30, 1992.  However, this method is only available for the first 10 years after:  -The tank is upgraded with cathodic protection, or  -A single-walled corrosion protected tank is installed, or  -December 22, 1998, whichever is later. |

Table MTG

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| Nominal  tank capacity | Minimum duration of test | Weekly standard  (one test) | Monthly standard  (average of four tests) |
| 550 gallons or less | 36 hours | 10 gallons | 5 gallons |
| 551-1,000 gallons  (Tank diameter is < to 64”) | 44 hours | 9 gallons | 4 gallons |
| 551-1,000 gallons  (Tank diameter is < to 48”) | 58 hours | 12 gallons | 6 gallons |
| 551-1,000 gallons  (Tank diameter unknown) | 36 hours | 13 gallons | 7 gallons |
| 1,001-2,000 gallons | 36 hours | 26 gallons | 13 gallons |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B  USTs  Internal release detection method  TCI | **Item #136:** ATG-system in test mode every 30 days or operated continuously.  **Rule: 761.640(3)(c)2**  2. Automatic tank gauge systems.  a. Automatic tank gauge systems that do not analyze data in a continuous manner shall be placed in a test mode at least once every 30 days.  b. Automatic tank gauge systems that continuously analyze the data collected by the system shall be operated in continuous test mode at all times and shall provide test results daily.    **Interpretation:**  This item deals with properly operating an automatic tank gauge system for release detection.  **Comment:**  Mark this as out of compliance if there are no records or other evidence that the ATG is functioning properly for release detection.  An ATG consists of the level sensor probe (which monitors product level inside the tank and may also be used for release detection), and the electronic box mounted on a wall.  The ATG system compares the calculated leak rate to the threshold value. The threshold value used is ATG probe dependent. Many ATG systems have both 0.2 gph and 0.1 gph threshold values, with the level sensor probe being the determining factor.  Review the installation records or invoices to determine the type of level sensor probe that was installed. Additionally, the invoice, the original system set up tape, and/or the characteristics of the system can assist you in determining which probes are present. Look at the DEP Master Equipment book for more specific information.    Continuous Method – The Veeder-Root TLS 350 CSLD is a common model. Any continuous ATG must be able to demonstrate release detection results daily. This rule requires one passing recorded test result per tank per month. All failing results and alarms must be investigated as incidents. If not resolved within 24 hours an INF must be submitted to the local program. Usually installed at high volume stations that are open 24 hours.  Periodic or Static Method – ATGs without continuous test method must be manually put into test mode once a month. Such ATGs require quiet time both after product delivery and after the end of dispensing. Runs are for a set period, generally 2-8 hours. Requires one passing test per tank per month. Does not have to be run daily. Generally run during station downtime late at night. May be once a month, once weekly, or daily. All failing results must be investigated as incidents. Additionally, a tank tightness test is required every three years if this periodic/static method is used.  Note that most ATGs are not approved for use with manifolded tanks, unless each tank contains a separate probe using the periodic/static method. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B  USTs  Internal release detection method  SIR  TCI  Check with EPA document | **Item #137:** Monthly SIR analyses to provide: Leak Threshold, Minimum Detectable Leak Rate, Calculated Leak Rate, and a result determination.  **Rule: 761.640(3)(c)3.a.-e.**  3. Statistical Inventory Reconciliation (SIR). SIR shall be conducted according to the following requirements:  a. Data submitted for SIR analysis must be gathered in accordance with the requirements of Rule 62-761.640(3)(b)1.a.-e., F.A.C.;  b. Results of each monthly analyses must include the calculated results from the data set for leak threshold, the minimum detectable leak rate, the calculated leak rate, and a determination of whether the result of the test was “Pass,” “Fail,” or “Inconclusive.” For the purposes of this section, the “leak threshold” is defined as the specific leak threshold of the SIR method approved in accordance with Rule 62-761.850(2), F.A.C., to meet the release detection level specified in Rule 62-761.640(1)(a), F.A.C.;  c. “Pass” means that the calculated leak rate for the data set is less than the leak threshold and the minimum detectable leak rate is less than or equal to the certified performance standard (0.2 gph);  d. “Fail” means that the calculated leak rate for the data set is equal to or greater than the leak threshold;  e. “Inconclusive” means that the minimum detectable leak rate exceeds the certified performance standard (0.2 gph) and the calculated leak rate is less than the leak threshold. If for any other reason the test result is not a “pass” or “fail,” the result is “inconclusive”;    **Comment:**  Mark this as out of compliance if SIR results are not calculated properly.  Calculated Leak Rate [CLR]– a quantitative expression in gph, calculated to determine the leak status of a tank. A positive gph value may be indicative of product leaking out of the tank system and a negative gph value may be indicative of a volume gain to the tank.  Leak Threshold [LT]– represents the action level portion of the leak rate. While the performance standard is 0.2 gph, the threshold is generally one half that rate. Examine the DEP Master Equipment book for the SIR version in use.  Minimum Detectable Leak Rate [MDL]- is the smallest leak rate the vendor can determine for the data provided with a Pd of 95% or higher.  If the CLR < LT **and** MDL < 0.2 gph, then the result is a PASS  If the MDL > 0.2 gph **and** CLR < LT, then the result is an INCONCLUSIVE  If the CLR > LT, then the result is a FAIL |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B  USTs  Internal release detection method  SIR Form  TCI | **Item #140:** Monthly SIR evaluations recorded on Form .900(8) or equivalent.  **Rule: 761.640(3)(c)3.i.**  i. Results of monthly evaluations shall be recorded on Form 62-761.900(8), F.A.C., or on another similar form that provides the same information. These forms shall be kept as records in accordance with Rule 62-761.710, F.A.C.    Comment:  May use the approved form, or if another form is used, then verify that the form used contains all data from Form .900(8). |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B  UST systems  Internal release detection method  TCI  NFPA 329,  Chapter 4 | **Item #141:** Tightness testing operational requirements met when used as release detection.  Rule: 761.640(3)(c)4.  4. Tightness testing.  Tightness testing for all tanks shall be capable of detecting a 0.1 gph leak rate with a probability of detection of 0.95 and a probability of false alarm of 0.05 from any portion of the tank. Tightness testing shall account for the effects of thermal expansion or contraction of the regulated substance, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.  b. If any volumetric tank tightness test is conducted at a level lower than the overfill protection device set point, a non-volumetric test shall also be used to test the ullage portion of the tank. When volumetric tests are conducted, there must be a minimum pressure differential of plus or minus one psig (pounds per square inch gauge), measured at the bottom of the tank, between the product hydrostatic pressure inside the tank and the hydrostatic pressure due to the external water table. When using this method, positive field verification of the depth of the water table must be performed, and the minimum liquid level of product in the tank shall be at least 30% of tank capacity, provided that the third party evaluation for the test method verifies detection capability at this level. If the water table depth can not be verified, the minimum liquid level for volumetric tank testing shall be 65% of tank capacity.  c. Tank and line tightness testing shall be performed in accordance with Chapter 4 of NFPA 329.  d. Overfill protection and spill containment devices shall be inspected before a tightness test is performed to ensure that these devices do not interfere with the test, and after the test to ensure that the devices are operating properly.    **Interpretation:**  This is not a general how to perform tightness testing question, although all those pertinent criteria are listed. This item asks if tightness testing performed as the release detection method met the operational criteria.  **Comment:**  a. Tightness test method meets 0.1 gph performance standard. What is the pass/fail threshold? Look up the test method in the DEP Master Equipment book. Compare the threshold to the actual test data.  b. The various test effects are compensated for by the test developer. Request a copy of the operation manual from the RQ tester or the test developer. While not specifically mentioned, the amount of water present in the tank at the start of the test is required to be recorded.  c. Test methods generally test the: wetted portion of the tank (product), and the ullage (air space above the product).  d. Define which test method is used: volumetric or non volumetric.  e. The tester, especially with single-walled tanks, must know the depth to groundwater especially relative to the tank and the product level. The rule compensates for this by setting two minimum product volume values. 30% if depth actually known, 65% if unknown.  f. Do overfill and spill containment devices interfere with the test method? This is something the RQ tester must determine, and they may remove these pieces of equipment. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  UST small diameter pressurized piping in contact with soil  Piping section  Line leak detector  function test  TIN  TCI | **Item #142:** UST line leak detector can detect 3.0 gph discharge; tested annually.  **Rule:** **761.640(3)(d)1.a.-d.**  (d) Small diameter integral piping in contact with the soil.  1. Line leak detectors for USTs. Line leak detectors shall:  a. Be capable of detecting a discharge of 3.0 gph with a probability of detection of 0.95 and a probability of false alarm of 0.05 at a line pressure of 10 psi within one hour;  b. Have an annual test of the operation of the leak detector conducted in accordance with the manufacturer's requirements by an individual certified or trained by the manufacturer to determine whether the device is functioning as designed. Remote testing of the leak detector can be performed by the manufacturer if the remote test is approved under Rule 62-761.850(2), F.A.C.;  c. Restrict flow within one hour if designed with mechanical flow restriction;  d. When a discharge of 3.0 gph is detected, shut off power to the pump if designed with automatic electronic shutoff. When in test mode, line leak detectors with automatic electronic shutoff shall also be able to detect a discharge of 0.2 gph at a line pressure of 150% of operating pressure, or an equivalent leak rate, with a probability of detection within a one month period of at least 0.95 and a probability of false alarm of no more than 0.05. When a discharge of 0.2 gph is detected, the leak detector shall provide audible or visual alarms that can be clearly heard or seen by the operator of the facility, or if monitored remotely on a real time basis, the alarm condition must be immediately transmitted from the remote location to the facility operator; and    **Interpretation:**  Is a line leak detector present when required and is it functional?  Comment:  Installation – verify that the line leak detector has been installed during the final installation inspection.  Compliance – check to see that the unit is present. Examine the annual function test data – a pass alone is not sufficient. The tester must demonstrate 3.0 gph discharge detection for the mechanical (flow restrictor). Note that the electronic (auto shut off) line leak detector does not need an annual test, but must still be able to detect a 0.2 gph leak after it has been tripped at 150% line operating pressure.  Replacements – unit must be tested out of the box – function must be proven.  3.0 gph = 185.4 ml/min (To convert milliliters/minute to gallons/hour, multiple the milliliters by 0.0162162; or, 1 gph equals 61.8 ml/min). Values greater than 186 ml/min fail. Values less than 185 ml/min mean that the line leak detector will activate at a more restrictive rate. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  Piping associated with UST systems  Small diameter piping section  TCI  TIN | **Item #143:** Continuously operating interstitial monitor can detect 10 gal/hr and shut off pump.  **Rule: 761.640(3)(d)1.e.**  e. Instead of using a line leak detector as a method of release detection for pressurized small diameter piping associated with double-walled integral piping, a continuously operating interstitial monitoring device can be used. Continuously operating interstitial monitoring devices shall be capable of detecting a release of 10 gallons within one hour and shutting off the pump.    **Interpretation:**  This option can be used instead of a line leak detector.  **Comment:**  Have the 10 gph leak detection rate proven. The sensor needs to be placed at a height so that it would detect a loss of 10 gallons or less of product, within one hour, and shut off the pump.  Installation inspection – document demonstration of capability. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  TCI  TDI | **Item #144:** Repaired component which has or could cause a discharge or release.  **Rule: 761.700(1)(a)1**  (1) General.  (a) Repairs.  1. Repairs shall be performed if any component of a storage tank system is discovered to have:  a. Discharged or contributed to the discharge of a regulated substance;  b. A release of regulated substances or AST water bottoms into secondary containment;  c. The presence of groundwater in the interstice of a double-walled UST or pipe; or  d. An operational or structural problem that could potentially result in a discharge or release.    **Comment:**  Mark this as out of compliance if you observe a needed repair that hasn’t been completed, and the potential for a release exists.  Examples of components that would need repair include (but are not limited to) leaking dispensers, cracked spill containment, improperly anchored shear valves, or any compromised containment component.  Upon the detection of one of the above conditions, has the facility initiated and completed repairs? |

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| **KEYWORDS** | SPECIFICS SNC B |
| Cat A, B, C  UST and AST systems  Prevention of  on going discharge or release  TCI  TDI | **Item #145:** Taken out-of-operation until repair is made.  **Rule: 761.700(1)(a)2.**  2. If repairs are required for any component or part of a storage tank system, and the nature of the repair activities or the condition of the component or part of the system requiring a repair may result in a release, and the component or part can not be otherwise isolated from the system, the storage tank system shall be taken out of operation until the tank has been repaired or replaced. The restrictions against storage tank system operation shall not apply if the system contains heating oil or other fuels used solely for the generation of electricity where the removal of the storage system from service would result in the shut down of electrical generating units serviced by the system.    **Interpretation:**  Prevent the continued discharge/release of substances.  **Comment:**  For systems or components that were required to shut down, check the product inventory data to confirm. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  TCI  TDI  TIN  Appropriate repair made | **Item #146:** Repaired per NFPA 30, mfg specs or other applicable standards.  Rule: 761.700(1)(a)3.  3. Repairs shall be made:  a. In a manner that will prevent discharges from structural failure or corrosion for the remaining operational life of the storage tank system;  b. In accordance with manufacturer’s specifications, NFPA 30 or other applicable reference standards; and  c. To restore the structural integrity of the storage tank system.    **Interpretation:**  Perform a thorough and complete repair, not a temporary measure.  **Comment:**  Inspect the quality and extent of the repair in accordance with the pertinent specifications and all applicable reference standards.  For installations, this item is important when the initial test fails. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  Post repair testing  TCI  TDI  TIN | **Item #147:** Repaired components tested, as applicable.  **Rule: 761.700(1)(a)4.**  4. Repaired components shall be tightness tested, pressure tested,  or tested for a breach of integrity, as applicable, before being placed back into service.    Comment:  For installations, this item is important when the initial test fails.  Know what component failed. Verify that the appropriate test method was used, that it was tested correctly, and that the results indicate a pass. Check inventory records against test date to verify that the system was not used until after testing was performed. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  TCI  TDI  TIN | **Item #148:** Repairs to tanks made by authorized representative. Rule: 761.700(1)(a)5 5. Repairs to fiberglass reinforced plastic tanks and steel tanks coated with a fiberglass reinforced plastic composite shall be made by an authorized representative of the tank manufacturer or its successor, or in accordance with Rule 62-761.500(2), F.A.C.    **Comment:**  Not everyone can make a repair. Some tank manufacturers require their own representatives to make or certify repairs.  The Rule 761.500(2) reference allows the PSSC to perform some of the repairs.  Who made the repair? Know who did the work and indicate it on the form.  For installations, check for damage during shipment. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  Piping associated with UST and AST systems  Replacement of damaged piping  TCI  TDI  TIN | **Item #149:** Piping that is damaged or has caused a discharge is replaced or repaired.  **Rule: 761.700(1)(a)6.**  6. Piping that is damaged or that has caused a discharge of a regulated substance shall be replaced or repaired. Pipe sections and fittings may be repaired in accordance with applicable standards in Rule 62-761.500(4), F.A.C. Replacement of additional lengths of piping in contact with the soil are exempt from the requirements for secondary containment, provided that:  a. The piping system does not have, or will not have to install, secondary containment until the deadlines established in Rule 62-761.510, F.A.C.; and  b. The length of replacement or additional piping is less than 25% of the total length of the existing integral piping for the individual tank, or 100 feet, whichever is less.    **Interpretation:**  This item deals both with installation of additional piping as well as the repair of damaged piping.  The rule is intended to prevent short double-walled piping sections at facilities that presently have single-walled piping.  **Comment:**  Discusses when repaired piping must be installed as double-walled. The piping at fault – has it been repaired or replaced?  Note that the 25% rule applies to any replacement or installed additional length of piping, whether or not it has been damaged.  Repair the problem. Do not allow a patch job. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  TCI  Cathodic protection operation and maintenance | **Item #150:** Operated and maintained to provide continuous protection.  **Rule: 761.700(1)(b)1.-2.**  (b) Cathodic protection.  1. Cathodic protection systems shall be installed, operated and maintained to provide continuous corrosion protection to the metal components of those portions of the tank and integral piping in contact with the soil.  2. Inspection and testing requirements.  a. General. Storage tank systems equipped with any type of cathodic protection must be inspected and tested by a Corrosion Professional or a Cathodic Protection Tester within six months of installation or repair and at least every year thereafter in accordance with the criteria contained in NACE International RP-0169-96, RP-0193-93, and RP-0285-95, as applicable. Factory-installed (galvanic) cathodic protection systems may be tested every three years.  b. Impressed current systems. Storage tank systems with impressed current systems shall be inspected at intervals not exceeding two months. All sources of impressed current shall be inspected. Evidence of proper functioning shall be current output, normal power consumption, a signal indicating normal operation, or satisfactory electrical state of the protected structure. Impressed current systems that are inoperative for a cumulative period exceeding 1440 hours shall be assessed by a Corrosion Professional to ensure that the storage tank system is structurally sound, free of corrosion holes, and operating in accordance with the design criteria.  c. Sacrificial anode systems. Storage tank systems with sacrificial anodes shall either have permanent test stations for soil-to-structure potential measurements or use temporary field test stations for annual testing in accordance with Rule 62-761.700(1)(b)2.a., F.A.C.  **Interpretation:**  Has continuous protection been maintained? This item deals with the operation and maintenance of cathodic protection systems.  **Comment:**  The Rule requires the performance of a yearly structure to soil potential measurement for both galvanic sacrificial anode and impressed current systems, with the exception of factory installed systems where the cycle is every three years.  The structure to soil measurement results will vary with the type of cathodic protection systems, how the measurement was obtained as well as the type of structure being protected.  If you are reviewing structure to soil potential galvanic measurements, providing continuous corrosion protection means a value of negative 0.85 volts or negative 850 milivolts.  Impressed current systems may utilize the 100 milivolt polarization decay method also known as instant on/instant off as described in NACE RP-0285-95.  During the inspection of the impressed current system, document the following: location of the electrical breaker and rectifier box; presence of a system function light (red/green); presence of a clock hour gauge (if so, has the hour value changed since the last 60 day period or since your last inspection); condition of outside wiring. Other records: date of installation, date of last structure to soil test, test results, name and license number of tester. See the following chart. Note that impressed current systems may use the galvanic measurement process too.  See item #23 and #66 for test stations. |

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NACE RP-0285-95 describes the use of the 100 millivolt (0.1 volt) polarization decay criterion, as follows:

1. The test monitors the change in voltage of the structure that occurs after the power to the rectifier is shut-off. This procedure requires two people to execute properly.
2. When the power to the rectifier is interrupted, there will be an immediate drop in the voltage reading at the tank, followed by a continuing slow decline in the voltage. The person monitoring the voltmeter must note the reading immediately after the power to the rectifier is interrupted.
3. If the meter is digital, the numbers will change rapidly. The reading you want is the second number that appears on the meter’s display, after the immediate drop. The voltage is then monitored for several minutes with the rectifier turned off.
4. The criterion for cathodic protection is a voltage shift of at least 0.1 volt from the initial reading AFTER the power to the rectifier is cut off. For example: A system might have a voltage of –1.1 volts with the power to the rectifier turned on. Immediately after shutting off the power, the voltage might drop to –0.83 volt. The voltage MUST then drop below –0.73 volt to meet the criterion for effective cathodic protection.
5. Another way to determine if this criterion was met is to know the original voltage of the tank before any cathodic protection was applied. If the voltage IMMEDIATELY after the rectifier is turned off is at least 100 mv, more negative, the criterion has been met.

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“Interesting What Your Voltmeter is Telling You”

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| READING | INTERPRETATION |
| > -1.65 volts with magnesium anodes | The maximum voltage output from a magnesium anode is 1.65 volts. If your reading is greater than this, the system could have impressed current versus galvanic protection, or there could be stray currents in the vicinity. If this is not an Impressed Current system, have a corrosion engineer investigate immediately. |
| > -1.1 volts with zinc anodes | Same rationale as the above section, just change anode material and voltages. |
| > -0.88 volt | Structure is adequately protected. |
| -0.85 volt to –0.88 volt | Structure meets corrosion standard, but there is little safety margin. Monitor closely. |
| < -0.85 volt | Structure does not meet corrosion standard. This does not mean that the system is leaking. |
| -0.4 volt to –0.6 volt | Expect this voltage range from steel that has no cathodic protection. This may indicate that the structure was not protected originally, or that the anodes are completely shot. |
| -0.3 volt to –0.4 volt | Rusty steel will sometimes register in this range. |
| 0.0 volt to –0.1 volt | Reading likely to occur is measuring copper. |
| Variable | Could indicate stray current. Check meter operation. Check that test lead connections are in solid contact with shiny metal surfaces. |
| Widely Fluctuating Readings (digital meters) | One of the test connections is not good or the reference cell is dry. Extremely dry conditions in the backfill. Insure all connections are metal-to-metal. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  TCI  Structure to soil  test cycle frequency | **Item #151:** Tested by professional 6 months after installation or repair and annually/3 years.  **Rule: 761.700(1)(b)2.a.**  2. Inspection and testing requirements.  a. General. Storage tank systems equipped with any type of cathodic protection must be inspected and tested by a Corrosion Professional or a Cathodic Protection Tester within six months of installation or repair and at least every year thereafter in accordance with the criteria contained in NACE International RP-0169-96, RP-0193-93, and RP-0285-95, as applicable. Factory-installed (galvanic) cathodic protection systems may be tested every three years.    **Interpretation:**  Has the test frequency been met?  Has testing been done by a Corrosion Professional or a Cathodic Protection Tester?  **Comment:**  Review documentation to confirm the test cycle. Has construction at the facility occurred in the area of the cathodic protection system? This activity may warrant testing of the system to ensure continued operation of the system.  If a tank with factory installed anodes (such as a STP3), and cathodic protection was installed on the piping during installation, then the tank would need a structure to soil test every three years and the piping would be tested every year. Note that Florida does not have any equipment approval for piping with factory installed anodes. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  Impressed current  60 day test  TCI | **Item #152:** Impressed current system inspected every 2 months.  **Rule: 761.700(1)(b)2.b.**  b. Impressed current systems. Storage tank systems with impressed current systems shall be inspected at intervals not exceeding two months.  **Comment:**  Check the log sheet for continuity. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  Repaired or taken  out-of-service  when CP not maintained  TCI | **Item #153:** Systems that do not meet requirements repaired or taken out-of-service.  **Rule: 761.700(1)(b)3**  3. Storage tank systems with cathodic protection systems that can not achieve or maintain protection levels in accordance with the design criteria shall:  a. Be repaired in accordance with Rule 62-761.700(1)(b)2.a., F.A.C., or  b. Be placed out-of-service in accordance with Rule 62-761.800(2), F.A.C.    **Comment:**  Examine the records to determine when the cathodic protection was no longer functioning. If not functioning, verify that immediate repairs were made, or that the system was placed out-of-service. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  TCI  Access to interior components.  Liquid removal from: containment,  sumps, liners | **Item #155:** Spill containment, dispenser liners and piping sumps accessible; water and regulated substances removed. Rule: 761.700(1)(c)1 (c) Operation and maintenance.  1. Spill containment devices, dispenser liners, and piping sumps shall be maintained to provide access for monthly examination and water removal as necessary. Water collected in spill containment devices, or in piping sumps and dispenser liners that is above the opening of the integral piping connection, or any regulated substances collected in these storage tank system components shall be removed and be either reused or properly disposed of.  **Comment:**  Facility equipment shall be maintained to a degree to allow you access.  Water in spill containment units, especially above the fill cap shall be removed.  Water in any sumps and dispenser liners above the piping opening/penetration (invert) shall be removed.  All regulated substance shall be removed from any of the specified system components. Regulated substances: sheen, free product, mixed product water.  Petroleum contact water shall be disposed of in accordance with the Department Hazardous Waste Section’s Ch. 62-740 F.A.C., “Petroleum Contact Water”. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  USTs and ASTs  Overfill events  TCI  TDI, TCDI | **Item #156:** Volume in tank is greater than the volume transferred and/or failure to monitor during product transfer operation.  **Rule: 761.700(1)(c)2**  2. Owners or operators shall ensure that the volume available in the tank is greater than the volume of regulated substances to be transferred to the tank before the transfer is made and shall ensure that any transfer is repeatedly monitored to prevent overfilling and spilling.    **Interpretation:**  It is the owner/operator’s responsibility to insure that the regulated substance being transferred can fit into the system.  **Comment:**  Mark this as out of compliance if an overfill was caused by faulty transfer monitoring, or if you find evidence of a lack transfer monitoring that could result in an overfill.  They must check the system prior to delivery, and they must keep an eye on it during delivery. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  Annual test of  release detection equipment.  TCI | **Item #157:** Release detection devices tested annually.  **Rule: 761.700(1)(c)3**  3. All release detection devices shall be tested annually to ensure proper operation. The test shall be conducted according to manufacturer's specifications, and shall include, at a minimum, a determination of whether the device operates as designed.  **Comment:**  Facility must prove that all release detection devices, such as in line leak detectors, sump and liner sensors, ATGs, etc. function properly. Sensing devices may be optical, vapor, float activated, discriminating, non discriminating, or tied into electrical circuits.  ATG probes inside of tanks require calibration testing, if used for release detection as well as inventory measurements. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B  USTs and ASTs  Vehicular fuel only  TCI  Methods of inventory control:  -Standard  -SIR  -ATG  -MTG | Item #158: Method of inventory control for vehicular fuel tank without secondary containment.  **Rule: 761.700(1)(c)6**  6. Regardless of the method of release detection used, inventory control shall be performed for USTs and ASTs containing vehicular fuel that do not have secondary containment. One of the following methods of inventory control shall be used:  a. Inventory control in accordance with Rule 62-761.640(3)(b), F.A.C.;  b. Statistical inventory reconciliation in accordance with Rule 62-761.640(3)(c)3., F.A.C.;  c. Automatic tank gauging in accordance with Rule 62-761.640(3)(c)2., F.A.C.; or  d. Manual tank gauging in accordance with Rule 62-761.640(3)(c)1., F.A.C.    **Interpretation:**  Does the applicable facility use one of these methods? This question does not focus on whether inventory is performed properly or not.  **Comment:**  The actual calculation of the inventory is addressed in items #132 and #134. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST systems  Precision tightness  tested prior to return to service from repair  TCI | **Item #159:** Tightness tested before placing back into service.  Rule: 761.700(2)(b)  (b) Tanks shall be tightness tested before being placed back in service, unless another testing method has been approved in accordance with Rule 62-761.850(2), F.A.C. Small diameter piping shall be tightness tested before being placed back into service whenever dispensers connected to that piping are replaced or whenever the piping has been disconnected and then reconnected.  Interpretation:  Note that this item is intended for repaired components only.    **Comment:**  Tanks and piping shall be tightness tested before being placed back in service following a repair.  See item #166 for small diameter piping on AST systems. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  USTs  TCI  Criteria for repair and testing - by lining and/or  cathodic  protection tester  Precision tightness  tested | **Item #160:** Tank repaired by lining per API 1631, inspected per NLPA 631 Ch. B, and cathodic  protection installed properly, tested in stated time frames.  **Rule: 761.700(2)(c), (d)**  (c) Tanks may be repaired with internal lining if:  1. The internal lining is installed in accordance with API RP 1631, and documentation is available from the installer that demonstrates these requirements have been met; and  2. Within 10 years after the installation of internal lining, and every five years thereafter, the internally lined tank is:  a. Inspected internally in accordance with NLPA 631, Chapter B, and found to be structurally sound with the internal lining still performing in accordance with original design specifications, or repaired to original design specifications in accordance with API RP 1631. If the tank fails to meet these criteria, the owner or operator shall close the storage tank system in accordance with  Rule 62-761.800(3), F.A.C.; or  b. Evaluated in accordance with ASTM Designation ES40-94, and determined by a Corrosion Professional to be suitable for the installation of cathodic protection. If a determination is made that the system is suitable, cathodic protection shall be designed by a Corrosion Professional, installed by a Certified Contractor, and operated in accordance with Rule 62-761.500, F.A.C. If the system is determined to be unsuitable, it shall be closed in accordance with Rule 62-761.800(3), F.A.C.; and  c. Tightness tested in accordance with Rule 62-761.640(3), F.A.C., before the tank is placed back into service and every five years after installation of the internal lining.  (d) Tanks may be repaired with internal lining and cathodic protection if:  1. The internal lining is installed in accordance with API RP 1631;  2. The cathodic protection system meets the requirements of  Rule 62-761.500(1)(a)2.b.-d., F.A.C.; and  3. A tightness test that meets the requirements of Rule 62-761.640(3), F.A.C.,  is performed before the tank is placed back into service and every five years after installation of the internal lining.    **Interpretation:**  Describes the conditions under which internal lining can be used as a repair, and describes options related to the 10/5 year post installation inspection schedule.  **Comment:**  Repairs involving the use of internal lining may be made in two instances: the tank had been previously lined or equipped with cathodic protection before June 30, 1992, or the tank is secondarily contained. Note that a tank repaired with cathodic protection and internal lining does not need the periodic internal lining inspection.  Be familiar with API 1631, NLPA and ASTM reference standards.  Repairs to lining on single-walled tanks do not change the upgrade date regarding secondary containment (December 31, 2009).  For single-walled systems, the inspector must check the date of initial lining and/or installation of cathodic protection relative to June 30, 1992. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A  USTs  TCI  Internal lining inspection 10 year and 5 year thereafter  and associated tightness test | **Item #161:** Tanks upgraded with internal lining inspected and tightness tested 10/5 years.  **Rule: 761.700(2)(e)**  (2) Underground storage tank systems.  (e) UST Category-A tanks that were upgraded with internal lining or cathodic protection, or both, shall be internally inspected or tightness tested, as applicable, in accordance with Rule 62-761.700(2)(c)2., F.A.C.  **Comments:**  Internal lining must be inspected internally 10 years after being installed as an upgrade, and 5 years thereafter. Note that internal lining was a valid upgrade until June 30, 1992. A tightness test must also be performed at the same time as the internal lining inspection. This internal inspection must be performed per NLPA 631, Chapter B.  Note that a tank repaired with cathodic protection and internal lining does not need the periodic internal lining inspection. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  AST systems  TCI | **Item #162:** Stormwater drawn off within one week**.**  Rule: 761.700(3)(a)2.a.  (3) Aboveground storage tank systems.  (a) Stormwater management for secondary containment systems  2. Accumulated stormwater shall:  a. Be drawn off within one week after a rainfall event unless another frequency is allowed by the facility’s stormwater discharge permit or by another instrument, such as a Spill Prevention Control Countermeasure Plan or a Department permit; and    **Interpretation:**  Draw off stormwater as weather permits and conditions allow, within one week of its accumulation.  Comment:  Accumulated liquids reduce the 110% containment capacity.  This applies to dispenser liners, piping sumps, and spill containment.  To prevent stormwater from becoming contaminated, advise the facility to clean all spills and discharges within the secondary containment promptly. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  AST systems  TCI  How is contaminated stormwater disposed? | **Item #163:** Stormwater not discharged untreated if it has a visible sheen.  Rule: 761.700(3)(a)2.b.  (3) Aboveground storage tank systems.  (a) Stormwater management for secondary containment systems  b. Not be discharged without treatment if it has a visible sheen.    **Comment:**  Ask for and review copies of disposal manifests when the presence of contaminated stormwater is known or suspected. Examine the area around drain valves for evidence of staining.  To prevent stormwater from becoming contaminated, advise the facility to clean all spills and discharges within the secondary containment promptly.  Petroleum contact water shall be disposed of in accordance with the Department Hazardous Waste Section’s Ch. 62-740 F.A.C., “Petroleum Contact Water”. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  AST systems  TCI  Containment drain valves closed. | **Item #164:** Drain valves kept closed except when drawing off stormwater.  Rule: 761.700(3)(a)3.  3. If gravity drain pipes are used to remove water from the dike field areas, all valves shall be kept closed except when the operator is in the process of draining water.    **Interpretation:**  Unless actively monitored, the valve shall be kept in a closed position.  **Comment:**  This applies to secondary containment areas, although spill containment boxes for ASTs may also be equipped with a drain valve. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  field-erected ASTs  When API 653 due  Initial exam sets  retest schedule  Cat B, C on install.  Cat A, B by 12/31/99  TCI | **Item #165:** Field-erected tanks evaluated, re-tested, and/or repaired per API 653.  Rule: 761.700(3)(b)  (3) Aboveground storage tank systems  (b) API 653 inspections. Field-erected tanks shall be evaluated and the re-testing frequency established and implemented in accordance with API Standard 653. AST Category-B and Category-C tanks shall be evaluated at the time of installation. Initial examinations for AST Category-A and Category-B tanks shall be completed by December 31, 1999. Evaluations shall be certified by a professional engineer registered in the State of Florida, or approved by an API 653 inspector. Non-destructive testing shall be performed by qualified personnel as specified in API 653 and API 650. All field-erected tanks shall be repaired in accordance with API Standard 653.    **Comment:**  Review the API 653 test results in a report, which includes a summary with recommendations, as necessary. Question the owner/operator about problems revealed by the report. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  Piping associated with AST systems  TCI  Tightness tested prior to return to service. | **Item #166:** Small diameter piping tightness tested before returning to service.  Rule: 761.700(3)(c)  (3) Aboveground storage tank systems  (c) Testing for piping in contact with soil.  1. Small diameter piping shall be tightness tested before being placed back into service whenever dispensers connected to that piping are replaced or whenever the piping has been disconnected and then reconnected.    Interpretation:  Note that this item is intended for repaired components.    **Comment:**  Tanks and piping shall be tightness tested before being placed back in service following a repair.  Note that a registered precision tightness tester is not required to perform this test for piping associated with an AST.  See item #159 for small diameter piping on UST systems. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  Piping associated with AST systems only  Bulk piping  Hydrant piping  TCI | **Item #167:** Bulk/Hydrant piping pressure tested before returning to service. Rule: 761.700(3)(c)2 (3) Aboveground storage tank systems  (c) Testing for piping in contact with soil.  2. Hydrant piping and bulk product piping shall be pressure tested in accordance with Rule 62-761.640(3)(e), F.A.C., before being placed back into service.    **Interpretation:**  Pressure test bulk/hydrant piping prior to use.  Comment:  The test methods to be used are the test methods listed under 62-761.640(3)(e)1:  -API RP1110 hydrostatic,  -ASME B31.4 hydrostatic  -DEP 761.850 alternate requirement (generally a modification of the time duration and test pressure).  Note that a registered precision tightness tester is not required to perform this test for piping associated with an AST, except that the referenced standards do maintain their own tester standards. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  Piping associated with AST systems only  TCI | **Item #168:** Bulk product piping over water tested annually; maintained per Title 33, CFR.  Rule: 761.700(3)(d)  (3) Aboveground storage tank systems  (d) Bulk product piping extending over surface water shall:  1. Be tested annually in accordance with Title 33, Part 156.170, Code of Federal Regulation; and  2. Be maintained and operated in accordance with Title 33, Part 154, as applicable.    Comment:  The test methods to be used are the test methods listed under 62-761.640(3)(e)1:  -API RP1110 hydrostatic,  -ASME B31.4 hydrostatic  -DEP 761.850 alternate requirement (generally a modification of the time duration and test pressure).  Note that a registered precision tightness tester is not required to perform this test for piping associated with an AST, except that the referenced standards do maintain their own tester standards. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  AST systems  TCI | **Item #169:** Secondary containment repaired per 761.500(1)(e).  Rule: 761.700(3)(e)  (3) Aboveground storage tank systems  (e) Secondary containment systems shall be repaired as necessary to maintain product tightness and containment volume of the system, including sealing cracks in concrete, repairing punctures, and maintaining containment walls. If the storage tank secondary containment system has a crack, puncture, or other defect that compromises the system’s product tightness, the system shall be repaired in accordance with Rule 62-761.500(1)(e), F.A.C.    **Interpretation:**  Repair Category-A, B, C systems to Category-C standards.  **Comment:**  Refer to inspection items #16-21 for information on .500(1)(e) issues. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  UST and AST systems  Records available  5 day notice  TCI | **Item #170:** Permanent records available within 5 working-days notice; reasonable facility access.  **Rule: 761.710(1)**  (1) All records shall be dated, maintained in permanent form, and available for inspection by the Department or County. If records are not kept at the facility, they shall be made available at the facility or another agreed upon location upon five working days notice. Site access to the facility shall be provided for compliance inspections conducted at reasonable times.  Comment:  Was reasonable access to the facility granted? If not, document the circumstances.  Were the records available within the specified time frame? If five day pre-inspection notice was not given by the inspector, this item can not be marked as a discrepancy. Make note of the missing documents, and arrange a review period. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  2 year records  TCI | **Item #171:** Records requiring 2 year documentation period kept by facility.  **Rule: 761.710(2)**  (2) Records of the following are required to be kept for two years:  (a) Measurements and reconciliations of inventory, as applicable;  (b) Repair, operation, and maintenance records;  (c) Release detection results, including electronic test results, regardless of the frequency, and monthly visual inspections performed in accordance with Rule 62-761.640(2)(e), F.A.C. The presence of a regulated substance's odor, sheen, or free product shall be recorded for each sampling event;  (d) Release detection response level descriptions;  (e) A copy of all test data and results gathered during tightness tests, pressure tests, and breach of integrity tests, and the name and type of the test approved under Rule 62-761.850, F.A.C.;  (f) Certification of Financial Responsibility on Form 62-761.900(3);  (g) Records of types of fuels stored per tank; and  (h) The repair or replacement of gaskets, valve packings, valves, flanges, and connection/disconnection fittings for bulk product piping if the repair or replacement is performed in response to a discharge or loss of regulated substances.    **Interpretation:**  This question is the major record keeping item. If any of the listed required records are not available, and adequate notice of the inspection was given, this item must be marked as out of compliance.  Comment:  If the problem involves failure to perform according to the standards in each of the following areas, then note these items in addition to the paperwork item #171:  a. and g. Inventory - items #132, 134, 135, 158  b. Repair, operation, and maintenance - items #144, 147, 149, 157  c. Release detection - items #87, 102, 108, 111, 114, 122, 127, 136, 137, 140  d. Release detection response level descriptions - item #118  e. Tightness, pressure, and breach of integrity tests - items #109, 113, 116, 142  f. Financial responsibility – item #3;  g. Repairs and replacements - item #149  The following are not #171 issues:  Items #4-7 are verbal notices of activities that may also be written  Item #8 is a registration issue  Items #9-11 are INF/DRF reporting issues  Items #83 and #88 are covered by #172  Anything with cathodic protection is covered by #172 |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  Life of system records  TCI | **Item #172:** Records required for life of system kept by facility.  **Rule: 761.710(3)**  (3) Records of the following, generated after July 13, 1998, shall be maintained for the life of the storage tank system:  (a) Results of internal inspections and non-destructive testing;  (b) Any performance claims for release detection equipment described in writing by the equipment manufacturer or installer;  (c) Records of storage tank system installations, replacements, and upgrades;  (d) Records of installation, maintenance, inspections, and testing of cathodic protection systems in accordance with NACE standards;  (e) Site suitability determinations in accordance with Rule 62-761.640(2), F.A.C.;  (f) Vapor monitoring plans and all records kept pursuant to the plan;  (g) Closure assessment reports if the location continues as a facility; and  (h) Verification from a Certified Contractor of the existence of a single check valve beneath the suction pump for suction piping systems.  **Interpretation:**  Records must to be available for review by the inspector with five day prior notice from the inspector.  Comment:  The Rule cite does not list routine operation and maintenance records.  If the problem involves failure to perform according to the standards in each of the following areas, then note these items in addition to the paperwork item #172:  a. Periodic inspections and tank system measurements - item #109, 160, 161, 165.  b. Supporting claims for equipment in use at facility. - item #83.  c. History of what has been done at facility – see .500 items.  d. Cathodic protection system history - item #22, 154.  e. Site suitability determination – this document must be updated when site conditions change- item #88.  f. Vapor monitoring plan – this document must be updated annually - item # 89.  g. Closure reports – item #196.  h. Single check valve – PSSC documentation that no other buried valves exist - item #109. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  Field-erected ASTs  Out-of-service  Conditions:  cleaning,  routine maintenance  product change  TCI | **Item #173:** Requirements met for field-erected tanks placed temporarily out of service.  **Rule: 761.800(1)**  (1) Temporary out-of-service. Field-erected storage tank systems taken temporarily out-of-service shall:  (a) Continue to operate and maintain corrosion protection in accordance with  Rule 62-761.700(1)(b), F.A.C;  (b) If the tank system has an external release detection method, perform release detection monthly in accordance with applicable provisions of Rule 62-761.600-640, F.A.C.; and  (c) Leave venting systems open and functioning.    Interpretation:  Per Rule definition #82, “Temporary out-of-service” is a designation of a service status for a field-erected storage tank system that is emptied solely for the purpose of cleaning, routine maintenance, or change of product for a time period exceeding thirty days, but less than six months.  **Comment:**  Document the reason for placement in this status.  Monitor the time limitations.  Do not confuse this with item #174, which covers extended out-of-service requirements. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  UST and AST systems  Extended out-of-service  TCI | **Item #174:** Requirements for systems taken out of service are met.  **Rule: 761.800(2)(a)1, 3.**  (2) Out-of-service storage tank systems.  (a) General.  1. Storage tank systems that are taken out-of-service, as defined in Rule 62-761.200(54), F.A.C., shall:  a. Continue to operate and maintain corrosion protection in accordance with Rule 62-761.700(1)(b), F.A.C;  b. Perform external release detection for sites without contamination, as applicable, every six months in accordance with provisions of Rule 62-761.640(2), F.A.C.;  c. Leave vent lines open and functioning;  d. Empty the system and cap or secure all lines, pumps, manways, and ancillary equipment, as applicable; and  e. Secure or close off the system to outside access.  3. Systems with secondary containment installed and operated in accordance with this chapter may remain in a continuous out-of-service status for ten years. After this period, the system shall be returned to service or closed in accordance with Rule 62-761.800(3), F.A.C.  Comment:  Per Rule definition #54, "Out-of-service" means a storage tank system that:  (a) Is designated as an out-of-service system by owner or operator notification to the Department on Form 62-761.900(2), F.A.C.;  (b) Is empty as defined in Rule 62-761.200(27), F.A.C. "Empty" means all regulated substances have been removed so that no more than one inch in depth or 0.3 percent by weight of total system capacity of regulated substances remains in the storage tank system.; and  (c) Does not have regulated substances transferred into or withdrawn from the tank as specified in Rule 62-761.800(2), F.A.C., for a maximum time of:  1. Two years of being taken out-of-service for USTs; or  2. Five years of being taken out-of-service for ASTs; or  3. Ten years of being taken out-of-service for storage tank systems with secondary containment.  If all of the above are not met, then consider the system as still in service status for enforcement purposes. Record discrepancies accordingly.  Do not confuse this with item #173, which covers temporary out-of-service requirements.  Document the reason for placement in this status.  Monitor the time limitations.  Verify that the tank has been emptied. Have the tank stuck or check the gauging device. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  TCI | **Item #175:** Upgrades and testing performed before returning ~~a~~ system to in service status.  **Rule: 761.800(2)(a)2, 4**  2. If the storage tank system is required to be upgraded during the time that it is out-of-service, it shall be upgraded or replaced in accordance with this chapter before it is returned to service.  4. Tightness, pressure, or other tests shall be performed in accordance with Rule 62-761.640(3), F.A.C., as applicable, on any systems being returned to service.    **Comment:**  Upgrade and test the system before you return it to in service status. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  UST systems  Testing prior to use for out-of-service  TCI | **Item #176:** Tightness/Breach of Integrity test before returning to service.  **Rule: 761.800(2)(b)1**  (b) Underground storage tank systems.  1. Before being returned to service, the following tests shall be performed in accordance with Rule 62-761.640(3), F.A.C., for systems that are taken out-of-service for more than 180 days:  a. A tightness test for single-walled systems; or  b. A breach of integrity test for double-walled Category-C systems.    **Comment:**  Ensure that the appropriate test is completed before returning the system to service. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  UST systems  Out-of-service time frame  TCI | **Item #177:** System out-of-service no longer than required time limit.  **Rule: 761.800(2)(b)2**  2. Single-walled systems that are taken out-of-service shall not be kept out-of-service longer than two years for corrosion-protected systems or one year for unprotected bare steel systems. After the end of these time periods, the systems shall either be upgraded or permanently closed.    **Comment:**  Know the start date of the out-of-service period, and document it.  Keep track of the time period and advise the facility owner/operator of approaching deadline.  Note: Rule definition #54 includes in the definition of “out-of-service – ten years for storage tank systems with secondary containment”. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  AST systems  Time frame for  out-of-service  TCI | Item #178: ASTs without secondary containment out-of-service no more than 5 years. Rule: 761.800(2)(c)1 (c) Aboveground storage tank systems.  1. Systems without secondary containment shall not remain in a continuous out-of-service status for more than five years. Before the expiration of this five year time period, any remaining product and sludges shall be removed, and a closure assessment shall be performed in accordance with Rule 62-761.800(4), F.A.C. for:  a. AST Category-A and Category-B systems, regardless of when taken out-of-service, by December 31, 1999; or  b. Systems taken out-of-service after July 13, 1998. [Editor Note: 5 year period begins with change of registration]    **Comment:**  Advise the facility owner/operator of the upcoming deadline.  The facility owner/operator can’t wait for the time frame to expire and must act prior to the deadline in order to complete the closure assessment. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  AST systems  TCI | **Item #179:** Shop-fab and field-erected ASTs receive inspection and evaluation prior to return to service.  **Rule: 761.800(2)(c)2**  2. Out-of-service tanks that are returned to service shall be:  a. Inspected and evaluated in accordance with Rule 62-761.500(3)(b)1., F.A.C., for shop-fabricated tanks; or  b. Structurally evaluated in accordance with API Standard 653 for field-erected tanks, unless the system has been out-of-service for less than six months.    **Comment:**  761.500(3)(b)1 contains shop-fabricated tank construction standards.  See item #173 for field-erected exemption.  Review the reports prior to the systems being returned to active status. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  Field erected ASTs  Field-erected  Changing product, influencing factors  TCI | **Item #180:** Field-erected tank product change complies with API 653. Rule: 761.800(2)(c)3 3. Field-erected tanks changing the type of product stored within the tank shall comply with API Standard 653, Section 2.2.4.    **Interpretation:**  Section 2.2.4, API 653, deals with “change of service” which is defined as “a change from previous operating conditions involving different properties of the stored product such as specific gravity or corrosivity and/or different service conditions of temperature and/or pressure.”  **Comment:**  Mark this as out of compliance if a field-erected tank is storing new product without a incorporating changes due to the following.  Changing product affects a tank in the following ways:  -internal/external pressure,  -product operating temperatures, and  -normal/emergency venting requirements.  API Standards 620 and 650 will also apply to these tanks. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  USTs and ASTs  Cleaned prior to closure.  TXI | **Item #182:** Liquids and sludge removed from tank(s).  **Rule: 761.800(3)(a)1.a.**  (3) Closure of storage tank systems.  (a) General.  1. Closure of storage tank systems shall be performed by:  a. Removing all liquids and accumulated sludges;    Comment:  Refer to API RP 1604 for closure standards for UST systems.  The removal of product is a critical concern. The contractor needs to perform this task prior to digging out the system. Failure to remove all of the product is a fire hazard, and a potential contamination concern.  The removal of sludges is also required prior to system closure. Document the extent of the cleaning process, or the lack of it. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  TXI | **Item #183:** Integral piping properly closed; manways secured.  **Rule: 761.800(3)(a)1.b.**  b. Disconnecting and capping, or removing, all integral piping. Manways shall be secured to prevent access;    **Comment:**  Did the contractor permanently cap both ends of the piping run, or remove the piping?  Ensure manways are secured. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  TXI  62-532 closing of wells upon system closure. | **Item #184:** Monitoring wells properly closed upon system closure.  **Rule: 761.800(3)(a)3**  3. Monitoring wells associated with closed systems that are not being used for release detection or site assessment purposes shall be closed in accordance with Rule 62-761.600(1)(k), F.A.C.    **Interpretation:**  Refer to 62-532.500(4) which states, “Plugging. All abandoned wells shall be plugged by filling them from bottom to top with neat cement grout. An alternate method providing equivalent protection shall be approved in writing by the Department or the permitting authority.”  Comment:  Document the number of wells remaining intact following the tank excavation process.  A subsequent site visit may be warranted to verify that those wells have been properly closed/plugged.  Pulling the casing out of the ground is not a proper method. However, this may occur as the backhoe/trackhoe widens the excavation, or removes the overburden to extract the tank(s).  The wells must be closed in accordance with the local water management district guidelines.  See item #92 – same method applies upon change of release detection method. |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B, C  UST and AST systems  When closure assessments are  required or not.  TCI  TXI | **Item #185:** Closure assessment required and performed.  Rule: 761.800(4)(a)  (4) Closure assessment of storage tank systems.  (a) At time of closure, replacement, installation of secondary containment, or change in service from a regulated substance to a non-regulated substance, an assessment shall be performed to determine if a discharge from the system or system components has occurred  1. If a Site Rehabilitation Completion Order (SRCO) or a Monitoring Only Plan (MOP) Approval Order has been issued by the Department for a contaminated area of a site, a closure assessment shall be performed for any subsequent storage tank system removal, replacement, or installation of secondary containment.  2. Tanks, pipes, or other system components in contact with soil at any site are subject to closure assessment requirements.    **Interpretation**:  Mark this as out of compliance if a closure assessment was not performed when required.    **Comment:**  Refer to .800(4)(b) for exemptions to a full closure assessment report. In cases of existing contamination, a limited summary closure report may be all that is required.  Note that closure of ASTs less than 1100 gallons not in contact with soil are exempt from performing a closure assessment. Instead, a visual certification may be performed, and the report must be submitted within ten days to the local program.  The inspector needs to make a thorough examination of the system file history prior to the closure event. Research prior discharges, information on STCM and PCT. Check for the cleanup program disposition of all reported discharges. Look at any readily available CAR/SAR documents that show where contamination is present.  If the local program performs plan reviews, this is a good time to discuss the extent of closure that will be required at the facility.  See item #186 for closure assessment requirements. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  TCI  TXI  Sampling per April 1998 requirements | **Item #186:** Sampling in accordance with April 1998 “Storage Tank System Closure Assessment Requirements”.  **Rule: 761.800(4)(c); and 761.210(2)(e)1.**  .800(4)(c) Closure assessment sampling and analysis shall be conducted according to DEP’s “Storage Tank System Closure Assessment Requirements.”    .210(2)(e) Florida Department of Environmental Protection:  1. "Storage Tank System Closure Assessment Requirements" April, 1998;  Comment:  Mark this as out of compliance if the closure assessment was not performed according to the storage tank system closure assessment requirements.  Review the closure assessment requirements to become familiar with the field sampling procedures. Do not tell the consultant/contractor/owner/operator how or what to sample. Refer them to the DEP Publication concerning required procedures. You may advise those parties that you think sampling may be needed in certain areas, but the selection or omission is their responsibility.  Some of the observations during the inspection should include: what the consultant did/did not do; where samples were taken; type of devices used; field procedure. Write down any OVA data collected, especially high values.  Observe conditions during closure that may indicate new contamination. |

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| **KEYWORDS** | SPECIFICS SNC B |
| Cat A, B, C  UST systems  90 day period to close unmaintained tanks  TCI  TXI | **Item #187:** Unmaintained USTs closed within 90 days of discovery.  **Rule: 761.800(3)(b)1.**  (b) Underground storage tank systems.  1. Unmaintained systems shall be permanently closed within 90 days of discovery.    **Comment:**  Unmaintained systems are defined in Rule definition #88 as: "a storage tank system that was not closed in accordance with Department rules”; or, “an out-of-service tank system that was not returned to service within the 2, 5 or 10 year period."  Note that a system can be out-of-service for 1, 2, 5 or 10 years before becoming unmaintained, and should be in compliance if out-of-service requirements are met. Unmaintained systems are not in violation until after being unmaintained for more than 90 days without closure or being returned to service.  This item also covers tank systems found on a piece of property that were not previously registered.  Document all time frames discussed with the facility owner/operator.  See Rule definition #21 “Discovery” |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  UST systems  TCI  TXI | **Item #189:** Closure performed according to API RP 1604 Chapters 1, 3, 4, 5, and 7 - permanent closure requirements, storage, disposal and according to NFPA 30 Appendix C  **Rule: 761.800(3)(b)2.a.**  2. System removal, closure in-place, and disposal shall be performed:  a. In accordance with API RP 1604 and NFPA 30;    **Interpretation:**  This item covers the system removal or closure in place standards.  **Comment:**  API 1604 - Review this reference standard and in particular Section 4 which describes: preparation of the system for closure, purging and inerting, vapor space testing, closure in place, and removal. Section 5 discusses the storage of used tanks.  NFPA 30 Appendix C "Closure in Place or Closure by Removal of Underground Tanks" focuses on the fire safety hazards associated with these processes.  Ensure that the systems are properly purged and inerted.  Remember, this Rule does not regulate the PSSC or the consultant. However, you can bring your concerns to the attention of the owner/operator and the Fire Marshall. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST systems  Close in place  TCI  TXI | **Item #190:** Properly closed in place or certified contractor performed tank removal.  **Rule: 761.800(3)(b)2.b.**  2. System removal, closure in-place, and disposal shall be performed:  b. By a Certified Contractor if the system is removed from the ground, unless it is closed in place by filling it with a solid inert material of sufficient density to prevent a structural collapse of the closed system.  **Comment:**  Excavation - use of a PSSC is required for USTs.  Fill in place - advise owner/operator that the tank must still be thoroughly cleaned prior to introducing the fill material. Filling tanks in place is generally used when a building or other limitation prevents tank system removal.  Document what you observed in the field.  Read the Equipment Approval information/limitations if a foam fill is planned for the tank system. Generally this type of closure material is prohibited at contaminated facilities. |

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| **KEYWORDS** | **SPECIFICS**  **SNC B** |
| Cat A, B, C  AST systems  90 day period to close unmaintained tanks  TCI  TXI | **Item #192:** Unmaintained ASTs closed within 90 days of discovery.  **Rule: 761.800(3)(c)1.**  (c) Aboveground storage tank systems.  1. Unmaintained systems shall be permanently closed within 90 days of discovery.  **Comment:**  Unmaintained systems are defined in 761.200(88) as: "a storage tank system that was not closed in accordance with Department rules”; or, “an out-of-service tank system that was not returned to service within the 2, 5 or 10 year period."  Note that a system can be out-of-service for 1, 2, 5 or 10 years before becoming unmaintained, and should be in compliance if out-of-service requirements are met. Unmaintained systems are not in violation until after being unmaintained for more than 90 days without closure or being returned to service.  This section also covers tank systems found on a piece of property that were not previously registered.  Document all time frames discussed with the facility owner.  See Rule definition #21 “Discovery” |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  ASTs  Vapor free  TCI  TXI | **Item #193:** Rendered free of explosive vapors.  **Rule: 761.800(3)(c)2**  2. The tank shall be rendered free of pollutant vapors at the time of closure to prevent hazardous explosive conditions, and maintained to prevent future explosive conditions.    **Comment:**  Shop-fabricated tanks may be purged and inerted by the same methods used for USTs.  Field-erected tanks are typically purged by forced air evacuation with a fan placed in an open manway.  Both types of tanks require vapor test methods to confirm that the confined spaces are safe for entry.  Document what you observe.  Ensure that the systems are properly purged and inerted. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  ASTs  Prevent flotation  TCI  TXI | **Item #194:** Protected from flotation in accordance with NFPA 30, Section 2-6.  **Rule: 761.800(3)(c)3**  3. The tank shall be protected from flotation in accordance with NFPA 30, Section 2-6.  **Comment:**  Mark this as out of compliance if the tank is not secured properly after closure in place.  This is a concern mainly in flood prone areas. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  AST systems  Closure assessment certification of tanks <1100 gallons  TCI  TIN  TXI | **Item #195:** Written certification within 10 days of secondary containment upgrade for ASTs <1100 gallons, in lieu of closure.  **Rule: 761.800(4)(b)5**  5. Aboveground systems with storage capacities less than 1,100 gallons that are upgrading with secondary containment, and that are elevated from and not in contact with the soil. Instead of performing a closure assessment, a visual inspection may be performed of the system and the ground surface underneath it for signs of a discharge. Written certification shall be provided to the County within 10 days after installation of the secondary containment, documenting that there has been no discharge.    **Comment:**  Mark this as out of compliance if the visual inspection report is not received in completeness within ten days of upgrade or closure.  Note that closure of ASTs less than 1100 gallons not in contact with soil are also exempt from performing a closure assessment. Instead, a visual certification may be performed, and the report must be submitted within ten days to the local program.  Is there any file documentation of discharge/spillage events around the AST prior to closure or the planned installation of the containment?  Does the soil exhibit any evidence of staining? |

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| **KEYWORDS** | **SPECIFICS SNC B** |
| Cat A, B, C  UST and AST systems  TXI  TCI | **Item #196:** Closure Assessment submitted within 60 days.  **Rule: 761.800(4)(d)**  (d) A closure assessment report shall be submitted to the  County within 60 days of completion of any of the  activities listed in Rule 62-761.800(4)(a), F.A.C. The  report shall include sample types, sample locations and  measurement methods, a site map, methods of maintaining  quality assurance and quality control, and any  analytical results obtained during the assessment in  accordance with DEP’s “Storage Tank System Closure  Assessment Requirements.”  **Comment:**  Was the report received within 60 days of the date of physical closure? |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  AST and UST systems  TCI  TDI, TCDI | **Item #197:** Incident promptly investigated.  **Rule: 761.820(1)(a), (c)**  (a) If an incident occurs at a facility, actions shall be taken promptly to investigate the incident to determine if a discharge has occurred. Notification of the incident shall be sent to the County on Form 62-761.900(6). A discharge shall be reported in accordance with Rule 62-761.450(3), F.A.C., if one is discovered during the incident investigation.  (c) The investigation shall be completed within two weeks of the date of discovery of the incident. At the end of this time period, either a discharge report form or a written confirmation and explanation that the release was not a discharge shall be submitted to the County.    **Comment**:  Mark this as out of compliance if an incident was not investigated, or not investigated properly.  See item #9 for incident reporting requirements. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  UST and AST systems  TCI  TDI, TCDI | **Item #198:** Spill or loss of regulated substance into secondary containment removed within three days of discovery.  **Rule: 761.820(1)(d)**  (d) Any spill or loss of regulated substance into secondary containment shall be removed within three days of discovery.  **Comment:**  Calculate if the facility owner/operator acted within this time frame.  Request manifests to verify proper disposal.  Record in the inspection report if the facility disposed of the regulated substance improperly.  Note that secondary containment refers to interstices, liners (both dispenser and piping sump), as well as dike field containment. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  UST and AST systems  Contain, remove, abate  Free product recovery  TDI, TCDI  TXI | **Item #199:** Actions taken immediately to contain, remove, and abate the discharge; free product present being removed.  **Rule: 761.820(2)(a)**  (2) Discharge response.  (a) If a discharge of a regulated substance occurs at a facility, actions shall be taken immediately to contain, remove, and abate the discharge under all applicable Department rules (for example, Chapter 62-770, F.A.C., Petroleum Contamination Site Cleanup Criteria). Owners and operators are advised that other federal, state, or local requirements may apply to these activities. If the contamination present is subject to the provisions of Chapter 62-770, F.A.C., corrective action, including free product recovery, shall be performed in accordance with that chapter.    **Interpretation:**  Ensure that the responsible party responds immediately.  **Comment:**  Explain to the facility owner/operator the options that they have. Do not make a decision for them.  Free product must be removed according to Chapter 62-770, F.A.C.  Document when and what actions were taken.  Consult with the local program cleanup staff, local program Emergency Response, DEP District Emergency Response, or DEP Tallahassee. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  Discharge  source tracking  TDI, TCDI | **Item #200:** Unknown discharge source investigated per NFPA 329, Ch. 3 and 5.  **Rule: 761.820(2)(b)1**  (b) When evidence of a discharge from a storage tank system is discovered and reported in accordance with Rule 62-761.450(3), F.A.C., the following actions shall be taken:  1. If the source or cause of the discharge is unknown, the discharge shall be investigated in accordance with NFPA 329, Chapters 3 and 5;    **Interpretation**:  NFPA 329, Ch. 3 and 5 provides clues on how to investigate.  **Comment:**  Review this reference standard. These chapters outline a plan for the facility to follow when the source is unknown. These chapters discuss surface survey of potential businesses, possible impacted utility corridors, the subsurface movement of petroleum products through the soil and groundwater, and recommends methods to back trace the source of contamination. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  UST and AST systems  Removal of product to prevent ongoing release  TDI, TCDI | **Item #201:** Regulated substance removed from system to prevent further discharge to the environment.  **Rule: 761.820(2)(b)2**  2. The regulated substance shall be removed from the system as necessary to prevent further discharge to the environment. Notice of the need to take the system out-of-service on an emergency basis shall be made to the County in accordance with Rule 62-761.450(1), F.A.C.;    **Interpretation:**  Ensure responsible party takes necessary steps to prevent continued release.  **Comment:**  Mark this as out of compliance if the responsible party causes further contamination by failing to remove product from a damaged system.  .450(1)(a)4. Requires that the system out-of-service status be reported within the close of the next business day. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  Fire safety issues  TDI, TCDI | **Item #202:** Fire, explosion, and vapor hazards identified and mitigated.  **Rule: 761.820(2)(b)3**  3. Fire, explosion, and vapor hazards shall be identified and mitigated.    **Comment:**  Did the facility take steps to identify and mitigate these potential hazards.    If and when hazards are identified by the inspector, notify the proper authorities and remove yourself to safety. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  UST and AST systems  Repaired or closed after discharge.  TDI, TCDI | **Item #203:** System repaired or closed. Rule: 761.820(2)(b)4 4. The system shall be repaired in accordance with Rule 62-761.700, F.A.C. If the system can not be repaired, it shall be closed in accordance with Rule 62-76l.800(3), F.A.C.    **Interpretation:**  Fix it or close it!  **Comment:**  Facility must provide documentation (invoices, work orders from PSSC) that the system defect has been repaired. These invoices will typically describe the problem, and how the repair was made.  If it can not or will not be repaired, was the system closed? |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  UST and AST systems  Agency requires system test.  TCI  TDI, TCDI | **Item #204:** System tested upon agency determination of discharge or release detection issue.  Rule: 761.820(2)(c)  (c) The system shall be tested if the Department or County determines that:  1. There has been a failure to comply with the release detection requirements of Rules 62-761.600-640, F.A.C.;  2. A release detection device, well, or method indicates that a discharge of a regulated substance has occurred, and the discharge was not previously reported; or  3. Groundwater contamination that is not associated with previously known contamination is present in the vicinity of the system and the system is likely to be a source of the contamination.    **Interpretation:**  If inspector suspects a new discharge or contamination, or there is a failure to monitor release detection, the inspector can instruct facility owner/operator to initiate appropriate testing.  **Comment:**  Testing methods can include air pressure, hydrostatic, precision tightness, breach of integrity, or any other approved methodology. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  UST and AST systems  Confirmation of discharge by system test  TDI, TCDI | **Item #205:** System tested within 3 days to confirm the discharge, if necessary. Rule: 761.820(2)(d)1 (d) Within three days of the discovery of a discharge, the following steps shall be initiated:  1. A test on the system in accordance with Rule 62-761.640(3), F.A.C., if the test is necessary to confirm a discharge; and    **Comment:**  Applies to out of sight components.  Contamination has been verified (discovered) but the source is unknown. Testing will confirm or deny that the active system components are at fault.  Be careful about requesting a precision tightness test. Usually this type of testing calls for the addition of product, which could lead to a further release. If a tightness test is not performed, then another evaluation is needed to confirm a discharge. |

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| **KEYWORDS** | **SPECIFICS Non SNC** |
| Cat A, B, C  UST and AST systems  Leaking systems  3 day action  TDI, TCDI | **Item #206:** Leaking system placed out-of-service within 3 days of discovery. Rule: 761.820(2)(d)2 2. If found to be leaking, placement of the system out-of-service in accordance with Rule 62-761.800(2), F.A.C., until repaired, replaced or closed.    **Interpretation:**  This is intended to prevent further release.  **Comment:**  Verify that the facility met the three day time frame.  Verify the repair, replacement, or closure actions taken by the facility. |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  TXI | **Item #207:** Contaminated soil: excavated, stockpiled, disposed in accordance with Chapter 62-770  **Rule: 761.820(2)(e)**  (e) Contaminated soil excavated, disposed of, or stockpiled on site during the closure of a storage tank system shall be managed in accordance with Chapter 62-770, F.A.C.  **Comment:**  Refer to 62-770.300(2) source removal.  If possible, document the disposal of the contaminated soil.  Per 770.300(2)(a)5, stockpiled soils can not remain on site for more than 60 days. |

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| **KEYWORDS** | **SPECIFICS** |
| Cat A, B, C  UST and AST systems  Alternate procedures | **Item #208:** Facility in compliance with Alternate Procedure.  **Rule: 761.850(1)**  (1) Alternative requirements.  (a) Any person subject to the provisions of this chapter may request in writing a determination by the Secretary or the Secretary’s designee that any requirement of this chapter shall not apply to a regulated storage tank system at a facility, and shall request approval of alternate procedures or requirements.    **Comment:**  Read the alternate procedure prior to the performance of your inspection. Check to see if special conditions or equipment apply. Examine those specific records and/or equipment when you are in the field.  Contact John Stout, DEP Tallahassee at 850-488-3935 |

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| **KEYWORDS** | SPECIFICS Non SNC |
| Cat A, B, C  UST and AST systems  TCI  TIN  Approved equipment with  list of exemptions | **Item #209:** Equipment approved by DEP before installation or use.  **Rule: 761.850(2)**  (2) Equipment approvals.  (a) Storage tank system equipment used in the State of Florida must have the approval of the Department before installation or use, with the exception of:  1. Dispensers, dispenser islands, nozzles, and hoses;  2. Monitoring well bailers;  3. Manhole and fillbox covers;  4. Valves;  5. Cathodic protection test stations;  6. Metallic bulk product piping;  7. Small diameter piping not in contact with soil, unless the piping extends over or into surface waters;  8. Vent lines; and  9. AST vents.  (b) Equipment approval requests shall be submitted to the Department with a demonstration that the equipment will provide equivalent protection or meet the appropriate performance standards contained in this chapter. Any approvals or denials received from other states shall be included in the approval request to the Department.  (c) A third-party demonstration by a Nationally Recognized Laboratory shall be submitted to the Department with the application. The third-party demonstration shall provide:  1. A technical evaluation of the equipment;  2. Test results that verify that the equipment will function as designed; and  3. A professional certification that the equipment meets the performance standards contained in Rule 62-761.500, F.A.C.  (d) Within 60 days of the receipt of a request for an equipment approval, the Department shall approve the request or notify the responsible party in writing that the request does not demonstrate that the requirements of Rule 62-761.850(2), F.A.C., are met.  (e) The Secretary or the Secretary’s designee shall specify by order each equipment approval that is approved in accordance with this rule or shall issue an order denying the request for such approval. The Department’s order shall be agency action, reviewable in accordance with Section 120.569 and 120.57, F.S.  **Interpretation:**  Does the piece of equipment in service or being installed have DEP Equipment Approval?  **Comment:**  If the piece of equipment is not approved, it may just mean that the proper documentation has not yet been submitted. It still represents a violation though.  Contact: Farid Moghadam or John Svec at 850-488-3935, DEP Tallahassee |