

# DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

## DIVISION OF AIR AND WASTE MANAGEMENT

### TANK MANAGEMENT BRANCH

Statutory Authority: 7 Delaware Code, Chapters 60 and 74 (7 Del.C. Ch. 60 & 74)  
7 DE Admin. Code 1351

### PROPOSED

SAN # 2008-20 and 2008-23

**1. Title of the Regulations:**

1351 Delaware Regulations Governing Underground Storage Tank Systems

**2. Brief Synopsis of the Subject, Substance and Issues:**

The Delaware Regulations Governing Underground Storage Tank Systems were first effective July 11, 1986. The most recent revision date is January 11, 2008. The DNREC is proposing changes to the UST Regulations to incorporate federal requirements, to add clarifying language, and to ensure the greatest protection of human health, safety and the environment in Delaware.

The changes to the Delaware UST Regulations are proposed for the following reasons:

- Addition of requirements for a Tank Operator training program are required by the Federal Energy Policy Act of 2005 (EPACT). The EPACT requires the state to promulgate regulations by August 8, 2009.
- Requirements prohibiting the installation of new USTs within specific distances of public, industrial and domestic wells have been added to ensure protection of drinking water supplies.
- Clarification language added to specific sections in response to public comment requesting such.
- Corrections to errors in January 11, 2008 edition of the UST Regulations
- Corrections and Additions to conform to Federal requirement that State regulations are at least as stringent as the Federal UST regulations

**3. Possible Terms of the Agency Action:**

None

**4. Statutory Basis or Legal Authority to Act:**

7 Del.C. Chapter 74, 7 Del.C. Chapter 60

**5. Other Regulations that May be Affected by the Proposal:**

N/A

**6. Notice of Public Comment:**

The DNREC will conduct a Public Hearing on Tuesday, January 12, 2010. The hearing is scheduled to begin at 6:00pm in the conference room at the DNREC office located at 391 Lukens Drive, New Castle, DE. The public and interested parties are invited to attend the hearing and to make comments orally or in writing at the hearing. Written comments not presented at the hearing should be addressed to Ms. Jill Williams Hall, DNREC/TMB, 391 Lukens Drive, New Castle, DE 19720 and must be received by the Department by the end of the comment period, as designated by the hearing officer at the hearing.

Copies of the proposed regulations are available online at <http://www.dnrec.delaware.gov/info/Pages/Rules.aspx>

Copies may be viewed during regular business hours at the following DNREC offices:

DNREC, 391 Lukens Drive, New Castle, DE

DNREC, R&R Building, 89 Kings Highway, Dover, DE  
 DNREC, Route 113, Sussex Suites, Unit #6, Georgetown, DE

**7. Prepared by:**

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Regulation Reference	Proposed Change
"Effective Date of Regulations" throughout Regulations	Date these Regulations became effective inserted = January 11, 2008
<b>PART A</b>	
Part A, 1.2.2.	Add 1.2.2.5. " <i>Wastewater treatment tank systems</i> "
Part A, 1.2.2.	Add "with the exception of requirements in <i>Part A, 1.3. and Part E...</i> "
Part A, Definitions, Class A, B, C Operators	Class A,B and C Operator definitions for Operator Training
Part A, Definitions, Containment Sump	Added "Piping" to Containment Sump definition to capture transition sumps in the definition
Part A, Definitions Heating Fuel UST System	Clarification added to define Heating Fuel UST as one connected directly to heat generating equipment
Part A, Definitions, Domestic, Public and Industrial Wells	Added definition of Public well, Industrial well and Domestic well for new UST citing requirements
Part A, Definitions, Regulated Substance	Verbage in definition of "Petroleum" that was inadvertently deleted in Jan 2008 promulgation added.
Part A, Definitions -Secondary Containment	Deleted "primary containment"
Part A, Definitions, Tank	Clarification added to define a "tank" solely as the stationary storage vessel and not any of the Ancillary equipment
Part A, Definitions Pipe	Added "line" to mean the same as "pipe"
Part A, Definitions, UST System	means an Underground Storage Tank, connected underground product, vent and vapor recovery Piping and its associated Ancillary Equipment, and containment systems <i>and all appurtenances</i> . Appurtenances added to include equipment such as spill containment as part of the UST System.
Part A, definitions	Add " <i>Consumptive Use HF UST System</i> " and " <i>Non-Consumptive Use HF UST System</i> "
Part A, definitions	Delete "Heating Fuel UST"
Part A, Definitions	Modify definition of "Non-Commercial" to remove reference to specific Regulated Substances
Part A, definitions	Tangible net worth ... <i>and all probable future economic</i> benefits
Part A, 4.1.1.	Change "protection" to " <i>Detection</i> "
Part A, 4.1.5.	Add tank registration fee req.for Consumptive Use HF UST systems
Part A, Section 4.1.5.	change "tank fee" to "Tank registration fee" to mirror statute
Part A, Section 4.1.7.	"change in product stored" to defined term "Change in Substance Stored". Added Retrofit and Upgrade to list of changes to the UST System that require notification to the Dept.
Part A, Section 4.4.11.	Added Upgrade and Retrofit records to documentation that must be given to a new Owner
Part A, Section 4.6.10.	Correction of title of the State of Delaware Fire Regulations
Part A, Section 4.6.12., Installation Notification Requirements	changed 'tank' to 'UST System' for clarification

Part A, 5.1.3.3.	Added requirement that repair records be kept for the life of the UST system to comply with federal requirements
Part A, Section 10	Added Operator Training requirements as required by the federal Energy Policy Act
<b>PART B</b>	
Part B	All titles changed to "excluding <i>Consumptive Use Heating Fuel</i> "
All applicable sections	Spill protection and Overfill protection changed to <i>Spill prevention and Overfill prevention</i>
Part B, §1.2.4. & §1.2.5.	For UST Systems installed after the revised 2008 Regulations are effective - Added minimum distance requirements from domestic, public and industrial wells to a new UST System to mirror the Delaware Regulations Governing the Construction and Use of Water Wells.
Part B, Section 1.2.3.3.	change "tank location" to "UST System location" for clarification
Part B, Section 1.4.3.3.	Containment sumps installed to meet secondary containment requirements must comply with the testing and maintenance requirements for containment sumps
Part B, Section 1.4.3.4.	Interstitial monitoring installed to meet secondary containment requirements must comply with the preventative maintenance requirements for interstitial monitoring in Section 1.9.4.4.
Part B, Section 1.9.1.3.	change "tank tightness test" to "UST System tightness test"
Part B, 1.9.1.1.4.	Added .... Release Detection on all UST Systems.... " <i>Is operational prior to Regulated Substance being placed in the UST System</i> "
Part B, 1.9.2.1.2	Add ...Automatic tank gauge performing tank tightness testing <i>at a minimum of once every 30 calendar days</i> "
Part B, 1.9.3.1.1.7. and 1.9.3.1.1.8.	Add: For UST systems <i>storing ethanol blended Regulated Substance with a storage capacity ....</i>
Part B, 1.9.3.1.1.9.2.	Change "Regulated Substance" to "calculated daily inventory" ....For any day in which there is a loss of five percent (5%) or more of the <i>calculated daily inventory</i>
Part B, Section 1.9.3.1.1.	Changed "once a week" to "once every 7 calendar days" for clarification
Part B, Section 1.9.3.1.1.9.1.	Inventory reconciliation: Changed "once during each calendar month" to "at the end of each calendar month"
Part B, Section 1.9.3.3.	Automatic systems utilized for performing inventory procedures must comply with preventative maintenance program requirements in Section 1.9.5.3.
Part B, Section 1.9.4.2.	Change "once during each calendar month" to "once every 30 calendar days" for Interstitial monitoring testing when used for tank release detection to meet federal requirements
Part B, Section 1.9.4.3.	Added - interstitial monitoring equipment must be capable of producing are record of Release detection monitoring results.
Part B, Section 1.9.5.1.3.	Change "once during each calendar month" to "once every 30 calendar days" for ATG when used for tank release detection to meet federal requirements
Part B, Section 1.9.5.1.4.	Added - Records of ATG tests must be kept for the life of the UST System
Part B, 1.9.5.3.1.	words added: "Inspection of the ATG console for <i>proper printer operation</i> "

Part B, 1.17.1.	Add ...Suction Piping shall <i>operate at less than atmospheric pressure</i> and.."
Part B, Section 1.19.1.4.	Line Leak Detector Testing - Deleted "in accordance with manufacturer's test protocols" as not all manufacturer's have a test protocol. Added testing must be done in-line under normal operating conditions. Eliminates "bench testing" of LLD.
Part B, Section 1.19.2.3.	Added language to allow continuous interstitial monitoring of double wall piping in lieu of an annual piping tightness test. Inadvertently omitted in Jan 2008 draft.
Part B, 1.19.3. - 1.19.3.1.6.	Section deleted: "Line Leak Detector & Tightness Test Requirements for Double Wall Piping Systems"
Part B, Section 1.20.3.	Added requirements for D/W Suction Piping systems to utilize to comply with release detection requirements
Part B, 1.21.2.	Delete "one of"
Part B, 1.21.7.	Delete "calendar"
Part B, 1.21.8.	Added: Double wall spill containment with interstitial monitoring are exempt from annual testing if the sensors are tested annually.
Part B, 1.21.8.1. and 1.21.8.2.	Deleted
Part B, Section 1.21.8.	Added specific requirements for interstitial monitoring of double wall spill containment for clarification
Part B, 1.22.3.4.	Deleted "(s)"
Part B, 1.22.2.3.	Deleted "in a container"
Part B, 1.24.2.7.	Section divided into 2 sentences for clarification. No requirements changed.
Part B, Sections 1.24.2.8.	Added requirements: Before a repair can be made to a Sacrificial Anode CP system, results of the 2 most recent CP tests and release detection records must be submitted to the Dept.
Part B, 1.24.2.8.	Add " <i>Repair or replacement</i> "
Part B, Section 1.24.2.9.	Added: No internal assesment will be accepted for the purpose of deterring the integrity of an UST System if the tank has an internal lining.
Part B, 1.24.2.10.	Added " <i>Impressed Current Cathodic Protection systems shall not be utilized as a Repair, Upgrade or Replacement for a failed Sacrificial Anode Cathodic Protection system after January 1, 2008.</i>
Part B, 1.25.2.	Added: Double wall containment sumps with interstitial monitoring are exempt from annual testing if the sensors are tested annually.
Part B, Section 1.25.6	Added: "Owners and Operators shall immediately remove water, Regulated Substance or debris that accumulates in any Containment Sump"
Part B, 1.25.6. and 1.29.7.4.	change "immediately" to " <i>immediately upon discovery</i> "
Part B, 1.27.1.	Added " <i>sensors utilized for Release Detection</i> "
Part B, 1.27.2.	Owners and Operators shall perform a <i>functionality</i> test of all <i>sump and interstitial sensors</i> at a minimum of once every twelve (12) months in accordance with the manufacturer's specifications or as directed by the Department to verify proper sensor operation.
Part B, Section 1.27.3.	All sensors installed in a sump for the purpose of detecting a Release from the UST System shall be installed no more than 1" from the bottom of the sump.

Part B, Section 1.28.	Changed section to include Retrofit and Upgrade requirements in addition to Repair Requirements; added site assessment req. and record documentation
Part B, Section 1.28.2.	Cross referenced requirement to report abnormal operating conditions with Part E, Section 1.2.
Part B, 1.29.2.1.2	ATG performing tank tightness test " <i>at a minimum of once every 30 calendar days</i> "
Part B, Section 1.29.3.3	Added option to use modified inventory control procedures to comply with inventory control req. for Used Oil USTs.
Part B, 1.29.4.3.2.	Add requirement the stick readings for manual tank gauging must be <i>an average of 2 consecutive stick readings</i>
Part B, 1.29.4.3.3.	Added " the change in Tank volume shall be calculated <i>from the difference in the average beginning and average ending liquid level measurements and...</i> "
Part B, 1.29.4.3.4.	change "monthly tank volume" to " <i>4 most recent change in tank volume numbers calculated in 1.29.4.3.3. of this Part shall be averaged and this test average...</i> "
Part B, 1.29.4.3.5.	change "tank volume" to " <i>tank volume test average</i> "
Part B, Section 1.29.5.	Added requirements for modified inventory control for Used Oil USTs.
Part B, 1.29.5.1.2.	Deleted requirement for water removal within 7 days; Added requirement that DNREC be notified if water changes more than 2 inches
Part B, 1.29.6.1.4.	Added " <i>the amount of used oil removed from the UST shall be recorded</i> "
Part B, 1.29.7.7.	Added requirements for exemption from testing for double wall spill prevention devices with interstitial monitoring on Used Oil USTs
Part B, Section 1.30.4.	Added requirement for piping on emergency generator UST Systems that
Part B, 1.30.4.	Added requirement that emergency generators cannot utilize a piping tightness test to comply with piping release detection; must use interstitial monitoring
Part B, Section 1.31	Routine Inspection: Changed 'once every calendar month' to "an interval no less frequently than once every 28-31 calendar days" to accommodate months with days ranging from 28-31 days
Part B, 1.31.1.5.	Added: manual check of emergency shut off valves to routine inspection requirements
Part B, Section 1.32.3.3.	Deleted requirement that lined USTs be inspected as lining cannot be used to meet corrosion protection requirements.
Part B, Section 2.2.3.	change "Tank Facility" to "UST System Facility"
Part B, Section 2.4.2.3.	Change "once during each calendar month" to "once every 30 calendar days" for clarification
Part B, 2.4.4.	Deleted
Part B, 2.9.1.1.4.	Added .... Release Detection on all UST Systems.... " <i>Is operational prior to Regulated Substance being placed in the UST System</i> "
Part B, 2.9.2.1.2	Add ...Automatic tank gauge performing tank tightness testing at a <i>minimum of once every 30 calendar days</i> "
Part B, Section 2.9.3.1.1.	Changed "once a week" to "once every 7 calendar days" for clarification

Part B, Section 2.9.3.1.1.9.1.	Inventory reconciliation: Changed "once during each calendar month" to "at the end of each calendar month"
Part B, 2.9.3.1.1.9.2.	Change "Regulated Substance" to "calculated daily inventory" ....For any day in which there is a loss of five percent (5%) or more of the <i>calculated daily inventory</i>
Part B, Section 2.9.3.1.1.9.4.	Added requirement that automatic systems utilized for performing inventory must comply with preventative maintenance requirements
Part B, 2.9.5.1.5.1.	words added: "Inspection of the ATG console for <i>proper printer operation</i> "
Part B, Section 2.9.5.1.3.	Change "once during each calendar month" to "once every 30 calendar days" for ATG when used for tank release detection to meet federal requirements
Part B, 2.9.6.5.3. and 2.9.8.5.3.	Change "Free Product" to "LNAPL"
Part B, 2.9.6.6.3.2. and 2.9.8.6.3.2. and 2.9.10.4.3.2.	Add ..." <i>and the results reported to the owner or operator within 21 days</i> "
Part B, 2.9.8.6.2. & 2.9.8.6.3.	Changed "tested" to "testing" and "sampled" to "sampling"
Part B, 2.9.9.9.3.	Change "31" to "30" days
Part B, Section 2.9.9.9.2. And 2.9.9.9.5.	change "Tank system" to "UST System"
Part B, Section 2.9.10.4.3.	Change "once during each calendar month" to "once every 30 calendar days" for clarification
Part B, Section 2.16.1.3.	Changed time frame for repair of cathodic protection systems on metallic piping from 30 to 60 days to be consistent with time frames for repair of cathodic protection on Tanks.
Part B, Section 2.16.1.5.	Clarification language added to define what 'restore cathodic protection' requires
Part B, 2.18.1.	Added suction piping shall " <i>operate at less than atmospheric pressure</i> "
Part B, Section 2.20.1.4.	Line Leak Detector Testing - Deleted "in accordance with manufacturer's test protocols" as not all manufacturer's have a test protocol. Added testing must be done in-line under normal operating conditions. Eliminates "bench testing" of LLD.
Part B, Section 2.20.2.3.2.	Changed "automatic tank gauge" to "interstitial monitoring equipment" for clarification
Part B, Section 2.20.2.3.5.	Cross referenced with Section 2.26 for clarification
Part B, Section 2.21.3.	Added requirements for D/W Suction Piping systems to utilize to comply with release detection requirements
Part B, Section 2.22.7.	Added specific requirements for interstitial monitoring of double wall spill containment for clarification
Part B, 2.22.2.	Delete "one of"
Part B, 2.22.7.	Added: Double wall spill containment with interstitial monitoring are exempt from annual testing if the sensors are tested annually.
Part B, 2.22.7.1. and 2.22.7.2.	Deleted
Part B, 2.23.3.4.	Deleted "(s)"
Part B, 2.25.2.7.	Section divided into 2 sentences for clarification. No requirements changed.
Part B, Section 2.25.2.8.	Added requirements: Before a repair can be made to a Sacrificial Anode CP system, results of the 2 most recent CP tests and release detection records must be submitted to the Dept.
Part B, 2.25.2.8.	Add " <i>Repair or replacement</i> "

Part B, 2.25.2.12.	Added "Impressed Current Cathodic Protection systems shall not be utilized as a Repair, Upgrade or Replacement <i>for a failed Sacrificial Anode Cathodic Protection system</i> after January 1, 2008.
Part B, 2.25.3.7.	Section divided into 2 sentences for clarification. No requirements changed.
Part B, 2.25.3.8.	Add "Repair or replacement"
Part B, Section 2.25.2.9. and 2.25.3.9.	Added: No internal assesment will be accepted for the purpose of determining the integrity of an UST System if the tank has an internal lining.
Part B, Section 2.25.3.8.	Added requirement: Before a repair can be made to an impressed current CP system, results of the 2 most recent CP tests, rectifier reading records and release detection records must be submitted to the Dept.
Part B, Section 2.26.1.	Added containment sump testing for sumps with sensors used for compliance with Release Detection requirements for double wall suction piping - necessary after section 2.21.3. was added
Part B, Section 2.26.3.	Added: "Owners and Operators shall immediately remove water, Regulated Substance or debris that accumulates in any Containment Sump"
Part B, 2.26.3. and 2.30.7.4.	change "immediately" to " <i>immediately upon discovery</i> "
Part B, Section 2.28.1.	Added annual testing of sensors used for continuous IM monitoring of DW spill buckets when used instead of annual testing of spill containment
Part B, 2.28.1.	Owners and Operators shall perform a <i>functionality</i> test of all sump and interstitial sensors
Part B, Section 2.28.2.	Added: All sensors installed in a sump for the purpose of detecting a Release from the UST System shall be installed no more than 1" from the bottom of the sump
Part B, Section 2.29.	Changed section to include Retrofit and Upgrade requirements in addition to Repair Requirements. Includes req. for soil sampling and documentation submittal to DNREC.
Part B, Section 2.29.2.	Cross referenced requirement to report abnormal operating conditions with Part E, Section 1.2.
Part B 2.29.4.	Add "Retrofits or Upgrades"
Part B, Section 2.30.2.1.	Deleted "as prescribed in section 2.9. of this Part" as not all Used Oil Release detection methods are listed in section 2.9.
Part B, 2.30.2.1.3.	Delete tank tightness testing as a method of Release Detection for Used Oil USTs
Part B, Section 2.30.3.3.	Added option to use modified inventory control procedures to comply with inventory control req. for Used Oil USTs.
Part B, Section 2.30.4.	Changed heading to "Manual Tank Gauging Requirements for Used Oil USTs"
Part B, 2.30.4.3.2.	Add requirement that an <i>average of 2 stick readings</i> must be taken for MTG
Part B, 2.30.4.3.3.	Added " the change in Tank volume shall be calculated <i>from the difference in the average beginning and average ending liquid level measurements</i> and..."
Part B, 2.30.4.3.4.	change "monthly tank volume" to " <i>4 most recent change in tank volume numbers calculated in 1.29.4.3.3. of this Part shall be averaged and this test average...</i> "

Part B, 2.30.4.3.5.	change "tank volume" to " <i>tank volume test average</i> "
Part B, Section 2.30.5.	Added requirements for modified inventory control for Used Oil USTs.
Part B, 2.30.5.1.2.	Deleted requirement for water removal within 7 days; Added requirement that DNREC be notified if water changes more than 2 inches
Part B, Section 2.30.6.1.	Correct section reference that is incorrect; Section 1.22. changed to Section 2.23.
Part B, Section 2.30.6.1.3.	Deleted requirement that amount added to Used Oil be measured and recorded; added "2.30.6.1.3. The amount of Used Oil added shall be such that the UST is not more than ninety percent (90%) full"
Part B, Section 2.30.6.1.3.	Added requirement for overfill prevention on Used Oil USTs that amount of Used Oil added cannot be more that 90% of ullage in tank
Part B, 2.30.7.4.	change "immediately" to " <i>immediately upon discovery</i> "
Part B, 2.30.7.7.	Added requirements for exemption from testing for double wall spill prevention devices with interstitial monitoring on Used Oil USTs
Part B, Section 2.31.1.	Added language that emergency generator USTs must comply with all requirements of the Regulations except where modifications are specifically listed in section 2.32.
Part B, Section 2.31.3.	Added option to use tank tightness testing OR any other approved method in section 2.9.
Part B, Section 2.32.1.	Routine Inspection: Changed 'once every calendar month' to "an interval no less frequently than once every 28-31 calendar days" to accommodate months with days ranging from 28-31 days and listed minimal parts of the UST System that must be checked
Part B, 2.32.1.5.	Added: manual check of emergency shut off valves to routine inspection requirements
Part B, Section 2.33.3.4.	If an internally lined tank is not inspected on the required schedule and subsequently fails an internal inspection test the tank must be removed or closed in place.
Part B, Section 2.34.2.3.	Added "Internal Lining only" to allowable upgrades for existing tanks. Inadvertently ommitted in original
Part B, Section 3.2.4.	Routine inspections are required on an Out Of Service UST System if the system is not empty.
Part B, Section 3.3.1.	Modified requirements for USTs changing from out of service to in service, to require testing of the system only if the UST System has been out of service for 3 months or more
Part B, Section 3.3.1.1.	Added Section 1 to requirements to correct omission from Jan 2008 regulations
Part B, Section 3.3.1.2.	Deleted reference to Section 2.9.7. because this is only tank tightness testing and the requirement is for the entire UST System to be tightness tested as applicable.
Part B, Section 5.5.1.	5.5._____ "Owners and Operators shall comply with the requirements of Part F of these Regulations <i>until the UST System is permanently Removed or Closed In Place in accordance with these Regulations or does not store a Regulated Substance</i> and all requirements of Part E of these Regulations are completed." Italicized wording adding for clarification

<b>PART C</b>	
Part C	All titles changed to " <i>Consumptive Use Heating Fuel UST Systems</i> "
All applicable sections	Spill protection and Overfill protection changed to <i>Spill prevention and Overfill prevention</i>
Part C, Section 1.2.3.3.	change "tank location" to "UST System location" for clarification
Part C, Section 1.2.3.15.	Added Map of UST installation must include Domestic and Industrial Wells within 150 foot radius of the proposed UST location
Part C, Section 1.2.4. and 1.2.5.	For UST Systems installed after the revised 2008 Regulations are effective - Added minimum distance requirements from domestic, public and industrial wells to a new UST System to mirror the Delaware Regulations Governing the Construction and Use of Water Wells.
Part C, Section 1.4.3.3.	Containment sumps installed to meet secondary containment requirements must comply with the testing and maintenance requirements for containment sumps
Part C, Section 1.4.3.4.	Interstitial monitoring installed to meet secondary containment requirements must comply with the preventative maintenance program for interstitial monitoring in Section 1.9.4.3.
Part C, 1.9.1.1.4.	Added .... Release Detection on all UST Systems.... "Is operational prior to Regulated Substance being placed in the UST System"
Part C, 1.9.2.1.2	Add ...Automatic tank gauge performing tank tightness testing at a <i>minimum of once every 30 calendar days</i> "
Part C, 1.9.3.3.	Added: " interstitial monitoring equipment shall be capable of producing a record of release detection monitoring results.
Part C, Section 1.9.3.1.1.6.4.	Added requirement that automatic systems utilized for performing inventory must comply with preventative maintenance requirements
Part C, Section 1.9.4.1.3.	Change "once during each calendar month" to "once every 30 calendar days" for ATG when used for tank release detection
Part C, 1.9.4.3.1.	words added: "Inspection of the ATG console for <i>proper printer operation</i> "
Part C, 1.17.1	Added suction piping shall "operate at less than atmospheric pressure"
Part C Section 1.19.1.4.	Deleted "in accordance with manufacturer's test protocols" as not all manufacturer's have a test protocol. Added testing must be done in-line under normal operating conditions. Eliminates "bench testing" of LLD.
Part C, Section 1.19.2.3.	Added language to allow continuous interstitial monitoring of double wall piping in lieu of an annual piping tightness test. Inadvertently omitted in Jan 2008 draft.
Part C, 1.19.3. - 1.19.3.1.6.	Section deleted: "Line Leak Detector & Tightness Test Requirements for Double Wall Piping Systems"
Part C, Section 1.20.3.	Added requirements for Double wall Suction Piping systems to utilize to comply with release detection requirements
Part C, 1.21.2.	Delete "one of"
Part C, Section 1.21.8.	Added specific requirements for interstitial monitoring of double wall spill containment for clarification
Part C, 1.21.8.	Added: Double wall spill containment with interstitial monitoring are exempt from annual testing if the sensors are tested annually.
Part C, 1.21.8.1. and 1.21.8.2.	Deleted
Part C, 1.22.3.4.	Deleted "be" and changed "Lines" to "Piping"

Part C, 1.24.2.7.	Section divided into 2 sentences for clarification. No requirements changed.
Part C, Sections 1.24.2.8.	Before a repair can be made to a Sacrificial Anode CP system, results of the 2 most recent CP tests and release detection records must be submitted to the Dept.
Part C, 1.24.2.8.	Add " <i>Repair or replacement</i> "
Part C, Section 1.24.2.9.	Added: No internal assesment will be accepted for the purpose of determining the integrity of an UST System if the tank has an internal lining.
Part C, 1.24.2.10.	Added " <i>Impressed Current Cathodic Protection systems shall not be utilized as a Repair, Upgrade or Replacement for a failed Sacrificial Anode Cathodic Protection system after January 1, 2008.</i> "
Part C, 1.25.2.	Added: Double wall containment sumps with interstitial monitoring are exempt from annual testing if the sensors are tested annually.
Part C, Section 1.25.6.	Added: "Owners and Operators shall immediately remove water, Regulated Substance or debris that accumulates in any Containment Sump."
Part C, 1.25.6.	change "immediately" to " <i>immediately upon discovery</i> "
Part C, 1.26.1.	Added " <i>sensors utilized for Release Detection</i> "
Part C, 1.26.2.	Owners and Operators shall perform a <i>functionality</i> test of all <i>sump and interstitial sensors</i> at a minimum of once every twelve (12) months in accordance with the manufacturer's specifications or as directed by the Department to verify proper sensor operation.
Part C, Section 1.26.3.	All sensors installed in a sump for the purpose of detecting a Release from the UST System shall be installed no more than 1" from the bottom of the sump.
Part C, Section 1.27.	Changed section to include Retrofit and Upgrade requirements in addition to Repair Requirements; added requirements for soil sampling and documentation submittal to DNREC.
Part C, Section 1.27.2	Cross referenced requirement to report abnormal operating conditions with Part E, Section 1.2.
Part C, Section 1.27.3.	Added annual testing of sensors used for continuous IM monitoring of DW spill buckets when used instead of annual testing of spill containment
Part C, 1.27.4	Add " <i>Retrofits or Upgrades</i> "
Part C, Section 1.28.1	Routine Inspection: Changed 'once every calendar month' to "an interval no less frequently than once every 28-31 calendar days" to accommodate months with days ranging from 28-31 days
Part C, Section 1.29.3.3.	Deleted requirement that lined USTs be inspected as lining cannot be used to meet corrossion protection requirements.
Part C, Section 2.2.3.	change "Tank Facility" to "UST Facility"
Part C, 2.4.4.	Deleted
Part C, 2.5.2.	Corrected section references
Part C, 2.9.1.1.4.	Added .... Release Detection on all UST Systems.... " <i>Is operational prior to Regulated Substance being placed in the UST System</i> "
Part C, 2.9.2.1.2	Add ...Automatic tank gauge performing tank tightness testing <i>at a minimum of once every 30 calendar days</i> "
Part C, 2.9.4.1.4.1.	words added: " <i>Inspection of the ATG console for proper printer operation</i> "
Part C, Section 2.9.5.6.2.	changed "each calendar month" to "every thirty days"

Part C, 2.9.5.6.3.2.	Add ... <i>"and the results reported to the owner or operator within 21 days"</i>
Part C, Section 2.9.5.7.	Correct incorrect Section reference from 2.9.6.6. to 2.9.5.6.
Part C, 2.9.7.5.3.	Change "Free Product" to "LNAPL"
Part C, 2.9.7.6.2. & 2.9.7.6.3.	Changed "tested" to "testing" and "sampled" to "sampling"
Part C, 2.9.7.6.3.2.	Add ... <i>"and the results reported to the owner or operator within 21 days"</i>
Part C, Section 2.16.1.3.	Changed time frame for repair of cathodic protection systems on metallic piping from 30 to 60 days to be consistent with time frames for repair of cathodic protection on Tanks.
Part C, Section 2.16.1.5.	Clarification language added to define what "restore cathodic protection" requires
Part C, 2.18.1.	Added suction piping shall "operate at less than atmospheric pressure"
Part C, Section 2.20.1.4.	Deleted "in accordance with manufacturer's test protocols" as not all manufacturer's have a test protocol. Added testing must be done in-line under normal operating conditions. Eliminates "bench testing" of LLD.
Part C, Section 2.20.2.3.5.	Cross referenced with Section 2.26. for clarification
Part C, Section 2.21.3.	Added requirements for Double wall Suction Piping systems to utilize to comply with release detection requirements
Part C, 2.22.2.	Delete "one of"
Part C, Section 2.22.7.	Added specific requirements for interstitial monitoring of double wall spill containment for clarification
Part C, 2.22.7.	Added: Double wall spill containment with interstitial monitoring are exempt from annual testing if the sensors are tested annually.
Part C, 2.22.7.1. and 2.22.7.2.	Deleted
Part C, 2.23.3.5.	Changed "storage" to "UST" and changed "Lines" to "Piping"
Part C, 2.25.2.7.	Section divided into 2 sentences for clarification. No requirements changed.
Part C, Section 2.25.2.8.	Before a repair can be made to a Sacrificial Anode CP system, results of the 2 most recent CP tests and release detection records must be submitted to the Dept.
Part C, 2.25.2.8.	Add " <i>Repair or replacement</i> "
Part C, Section 2.25.2.9. and 2.25.3.9.	Added: No internal assesment will be accepted for the purpose of determing the integrity of an UST System if the tank has an internal lining.
Part C, Section 2.25.3.8.	Before a repair can be made to an impressed current CP system, results of the 2 most recent CP tests, rectifier reading records and release detection records must be submitted to the Dept.
Part C, 2.25.2.10.	Move last sentence of 2.25.2.7. to create 2.25.2.10.
Part C 2.25.2.12.	Added " <i>Impressed Current Cathodic Protection systems shall not be utilized as a Repair, Upgrade or Replacement for a failed Sacrificial Anode Cathodic Protection system after January 1, 2008.</i> "
Part C, 2.25.3.7.	Section divided into 2 sentences for clarification. No requirements changed.
Part C, 2.25.3.8.	Add " <i>Repair or replacement</i> "

Part C, 2.25.3.8.3.	Add "2.25.3.8.3. Records of required rectifier readings from the date of the most recent passed impressed current Cathodic Protection test"
Part C, 2.26.2.	Added requirements for exemption from testing for double wall containment sumps with interstitial monitoring
Part C, 2.26.3.	change "immediately" to "immediately <i>upon discovery</i> "
Part C, Section 2.26.3.	Added: "Owners and Operators shall immediately remove water, Regulated Substance or debris that accumulates in any Containment Sump."
Part C, Section 2.27.1.	Added annual testing of sensors used for continuous IM monitoring of DW spill buckets when used instead of annual testing of spill containment
Part C, 2.27.1.	Owners and Operators shall perform a <i>functionality</i> test of all sump and interstitial sensors
Part C, Section 2.27.2.	All sensors installed in a sump for the purpose of detecting a Release from the UST System shall be installed at the lowest point in the sump
Part C, Section 2.28.	Changed section to include Retrofit and Upgrade requirements in addition to Repair Requirements; added site assessment req. and record documentation
Part C, Section 2.28.2.	Cross referenced requirement to report abnormal operating conditions with Part E, Section 1.2.
Part C, 2.28.4	Add "Retrofits or Upgrades"
Part C, Section 2.29.	Routine Inspection: Changed 'once every calendar month' to "an interval no less frequently than once every 28-31 calendar days" to accommodate months with days ranging from 28-31 days
Part C, Section 2.31.3.4.	If an internally lined HF tank is not inspected on the required schedule and subsequently fails an internal inspection test the tank must be removed or closed in place.
Part C, Section 2.32.	Reworded for clarity and added "internal lining only" to allowable upgrades for existing tanks. Inadvertently omitted in original.
Part C, Section 3.2.3.	Section 3.2.3. is created by splitting 3.2.2. into 2 sections. The verbage is the same. ____
Part C, Section 3.2.4.	Routine inspections are required on an Out Of Service UST System if the system is not empty.
Part C Section 3.3.1.	Modified requirements for USTs changing from out of service to in service, to require testing of the system only if the UST System has been out of service for 3 months or more
Part C Section 3.3.1.1.	Added Section 1 to requirements to correct omission from Jan 2008 regulations
Part C, Section 3.3.1.2.	Deleted reference to Section 2.9.7. because this is only tank tightness testing and the requirement is for the entire UST System to be tightness tested as applicable.
<b>PART D</b>	
All applicable sections	Spill protection and Overfill protection changed to Spill <i>prevention</i> and Overfill <i>prevention</i>
Part D, 1.1.1.	Add "manufacturing defects"
Part D, Section 1.2.3.3.	change "Tank Facility" to "UST System Facility"

Part D, Sections 1.2.4. and 1.2.5.	For UST Systems installed after the revised 2008 Regulations are effective - Added minimum distance requirements from domestic, public and industrial wells to a new UST System to mirror the Delaware Regulations Governing the Construction and Use of Water Wells.
Part D, Section 1.4.3.3.	Containment sumps installed to meet secondary containment requirements must comply with the testing and maintenance requirements for containment sumps
Part D, Section 1.4.3.4.	Interstitial monitoring installed to meet secondary containment requirements must comply with the preventative maintenance program for interstitial monitoring in Section 1.9.4.3.
Part D, 1.9.1.1.4.	Added .... Release Detection on all UST Systems.... "Is operational prior to Regulated Substance being placed in the UST System"
Part D, Section 1.9.2.1.2.	Deleted ATG performing a tank tightness test as an option for Release Detection to comply with federal requirements which require interstitial monitoring
Part D, Section 1.9.3.1.1.	Changed "once a week" to "once every 7 calendar days" for clarification
Part D, Section 1.9.3.1.1.3.	Changed drop tube from 6 inches to 5.9 inches from tank bottom to be consistent with Part B and C
Part D, Section 1.9.3.1.1.6.1.	Inventory reconciliation: Changed "once during each calendar month" to "at the end of each calendar month"
Part D, 1.9.3.1.1.7.	Change "Regulated Substance" to "calculated daily inventory" ....For any day in which there is a loss of five percent (5%) or more of the <i>calculated daily inventory</i>
Part D, 1.9.4.4.1.	Add ..." <i>proper printer operation</i> "
Part D, Section 1.9.5.1.	Deleted ATG performing a tank tightness test as an option for Release Detection to comply with federal requirements which require interstitial monitoring
Part D, Section 1.9.5.1.2.	Change "once during each calendar month" to "once every 30 calendar days" for ATG when used for tank release detection to meet federal requirements
Part D, 1.17.1	Added suction piping shall "operate at less than atmospheric pressure"
Part D, Section 1.19.1.4.	Deleted "in accordance with manufacturer's test protocols" as not all manufacturer's have a test protocol. Added testing must be done in-line under normal operating conditions. Eliminates "bench testing" of LLD.
Part D, Section 1.19.2.	Deleted option for annual piping tightness test for Hazardous Substance piping to comply with Federal requirements that require interstitial monitoring
Part D, Section 1.19.2.1.	Added requirements for continuous interstitial monitoring of pressurized Piping systems to comply with federal release detection requirements.
Part D, Section 1.19.3.1.3.	Change "once during each calendar month" to "once every 30 calendar days"
Part D, 1.19.3. - 1.19.3.1.6.	Section deleted: "Line Leak Detector & Tightness Test Requirements for Double Wall Piping Systems"
Part D, Section 1.20.3.	Added requirements for D/W Suction Piping systems to utilize to comply with release detection requirements

Part D, 1.21.2.	Delete "one of"
Part D, 1.21.5.and 1.25.7.	change "immediately" to "immediately <i>upon discovery</i> "
Part D, Section 1.21.8.	Added specific requirements for interstitial monitoring of double wall spill containment for clarification
Part D, 1.21.8.	Added: Double wall spill containment with interstitial monitoring are exempt from annual testing if the sensors are tested annually.
Part D, 1.21.8.1. and 1.21.8.2.	Deleted
Part D,1.22.3.4.	Deleted "(s)"
Part D, 1.24.2.7.	Section divided into 2 sentences for clarification. No requirements changed.
Part D, 1.24.2.8.	Add " <i>Repair or replacement</i> "
Part D, Section 1.24.2.8.	Added: Before a repair can be made to an impressed current CP system, results of the 2 most recent CP tests, rectifier reading records and release detection records must be submitted to the Dept.
Part D, 1.24.2.10.	Added "Impressed Current Cathodic Protection systems shall not be utilized as a Repair, Upgrade or Replacement <i>for a failed Sacrificial Anode Cathodic Protection system</i> after January 1, 2008.
Part D, 1.25.2.	Added: Double wall containment sumps with interstitial monitoring are exempt from annual testing if the sensors are tested annually.
Part D, Section 1.25.7.	Added: "Owners and Operators shall immediately remove water, Regulated Substance or debris that accumulates in any Containment Sump."
Part D, 1.27.1	Added " <i>sensors utilized for Release Detection</i> "
Part D, 1.27.2. & 1.27.3.	Owners and Operators shall perform a <i>functionality</i> test of all <i>sump and interstitial sensors</i> at a minimum of once every twelve (12) months in accordance with the manufacturer's specifications or as directed by the Department to verify proper sensor operation.
Part D, Section 1.27.4.	All sensors installed in a sump for the purpose of detecting a Release from the UST System shall be installed at the lowest point in the sump
Part D, Section 1.28.	Changed section to include Retrofit and Upgrade requirements in addition to Repair Requirements including addition of site assessment req and documentation submittal
Part D, Section 1.28.2.	Cross referenced requirement to report abnormal operating conditions with Part E, Section 1.2.
Part D, 1.28.4.	Add " <i>Retrofits or Upgrades</i> "
Part D, Section 1.29.	Routine Inspection: Changed 'once every calendar month' to "an interval no less frequently than once every 28-31 calendar days" to accommodate months with days ranging from 28-31 days
Part D, Section 1.29.1.2.	Added " <i>intrusion of water</i> " to routine inspection requirements
Part D, Section 1.30.3.4.	If an internally lined Hazardous Substance tank is not inspected on the required schedule and subsequently fails an internal inspection test the tank must be removed or closed in place.
Part D, Section 2.2.3.	Section 2.2.3. is created by splitting 2.2.2. into 2 sections. The verbage is the same. ____
Part D, Section 2.2.4.	Routine inspections are required on an Out Of Service UST System if the system is not empty.

Part D Section 2.3.1.	Modified requirements for USTs changing from out of service to in service, to require testing of the system only if the UST System has been out of service for 3 months or more
Part D, Section 2.3.1.2.	Deleted reference to Section 2.9.7. because this is only tank tightness testing and the requirement is for the entire UST System to be tightness tested as applicable.
Part D, 3.3.3.	Change "Free Product" to "LNAPL"
Part D, 4.3.2.	Change "Free Product" to "LNAPL"
Part D, Section 4.5.	4.5._____ "Owners and Operators shall comply with the requirements of Part F of these Regulations <i>until the UST System is permanently Removed or Closed In Place in accordance with these Regulations or does not store a Regulated Substance</i> and all requirements of Part E of these Regulations are completed." Italicized wording adding for clarification
<b>PART E</b>	
Part E, Section 1.1.1.2.	Changed to require notification of the DNREC hotline of an indicated release only when required to do by Chapter 60 statute and regulations
Part E, Section 1.1.1.1. and 1.3.2.1.	Deleted in-state hot line number. 800 number is now nationwide.
Part E, Section 1.1.1.3.	If the phone numbers listed in these Regulations are not valid it is the responsibility of the <i>Person discovering the Release (changed from Responsible Party)</i> to take all reasonable steps to ascertain a valid phone number.
Part E, Section 1.1.3.1.	Added Repair and Upgrade to situations where a site assessment is required.
Part E. 1.1.3.10.	Added "1.1.3.10. Release Detection required under these Regulations indicates a Release may have occurred"
Part E, Section 1.3.2.1., Section 1.4. and Section 1.5.	Corrected phone number for release reporting
Part E, 1.3.2.	"Any Person, including but not limited to environmental consultants or contractors, utility companies, financial institutions or real estate transfer companies, that discovers any Release of Regulated Substance, shall report the discovery within 24 hours to:"
Part E, 1.3.3.	<i>Any Person</i> who discovers a Release of any quantity of a petroleum substance that produces a visible sheen on surface waters shall immediately notify the National Response Center (800-424-8802).
Part E, 1.5.2.	<i>Owners and Operators shall report....</i>
Part E, Section 1.6. Public Notice Requirements for Confirmed Releases	Requires DNREC to inform the public of any confirmed release that requires cleanup; posting on the internet is an appropriate mechanism
Part E, 1.6.2.	Added "1.6.2. <i>The DNREC shall ensure that relevant site release information relating to Remedial Action Plans is available to the public upon request.</i> "
Part E, Section 2.1.1. and 2.2.1.	Changed "Owner and Operator" to "Responsible Party"
Part E, Section 2.2.1.2.1.	Added additional relevant sections; Part C 1.13. and Part D, 1.13.
Part E, 2.2.1.3.	If the abnormal operating condition is the result of an equipment failure or malfunction, Owners and Operators shall Repair or replace all faulty equipment in accordance with <i>all applicable portions</i> of these Regulations.

Part E, Section 2.2.2.	Deleted section in Part E; included in Parts B, C and D in Repair, Retrofit and Upgrade requirements sections
Part E, 2.3.2.	Added " <i>Owners and Operators shall notify the Department....</i> "
Part E, Section 3.1.1.	Added situation where there is an Indicated Release to situations where the Dept can assume control.
Part E, Section 3.2.1.6.	Deleted "Owners and Operators" - redundant as they are included in Responsible Parties
Part E, Section 3.3.4.2.	Added "safety"; typo
Part E, Section 3.3.5.	Added req. that LCSM when updated must be submitted to the Dept.
Part E, Section 4.2.2.	Added path to go directly to a request for a NFA if the results of the investigation do not require remedial action.
Part E, Section 4.2.3.	Investigation reports must be organized in a report form in accordance with Department guidance
Part E, Section 4.4. and 5.4.	Site safety plans must be submitted only if the Department requests.
Part E, Sections 5 & 6	"Site Closure" changed to "No Further Action" throughout the Section
Part E, Section 6.1.3.	Request for NFA must be signed by a PG or PE when required by the Department.
<b>PART F</b>	
Part F, entire section	Added throughout Part F .... Identical to the wording specified in Part F, §.. " <i>of the Delaware Regulations Governing Underground Storage Tank Systems</i> "
Part F, entire section	Change "Secretary" to " <i>Department</i> "
Part F, Section 1.11.	Added requirement that Owners/Operators send documentation of current FR mechanism to the Dept within 30 days of confirmation of a Release, as req. by Federal regulations
Part F, Section 1.12.	Any UST System that does not have current FR must immediately empty the UST.
Part F	All Appendices changed to Forms and each Form given a section number to conform with the Del Registrar Style Manual
Part F	"Owner and Operator" changed to "Owner or Operator" - only one must show proof of compliance - are jointly and severally liable
Part F, 2.2.2.3.1.	Deleted "Board of Governors of the Federal Reserve System, the Comptroller of the Currency or the Federal Deposit Insurance Corporation"
Part F, 2.3.6.	Changed citation from 2.16 to 2.15
Part F, 2.4.3.	Added A.M. Best to the list of insurance ratings allowable.
Part F, 2.5.4.	change 2.16. to 2.15.
Part F, 2.6.1.	Add " <i>in the State of Delaware</i> "
Part F, 2.6.3.	change 2.16. to 2.15.
Part F, 2.10.1.	Change "Business" to " <i>Governmental</i> "
Part F, 2.14.2.2.	Add after Owner and Operator: " <i>as required under the terms of the guarantee</i> "
Part F, 2.14.2.3. & 2.14.2.4.	Add language from 40 CFR 280.114

Part F, Form A, Alternative I and II	Added specific types of liability "Amount of <u>corrective action, closure and post-closure care costs, plugging and abandonment costs</u> and other liability coverage covered by a financial test, and/or guarantee"
Part F, Form B	Add 2.2.1. to Recital 1 and 4 - "Guarantor meets or exceeds the financial test criteria of Part F, §2.2.1 and either §§2.2.2. or §2.2.3.
Part F, Form B	Change "business entity organized under the laws of the State of Delaware" to "State of _____".
Part F, Form B	Recital 3 - Add "owner or operator" to blank bracket
Part F, Form B	Recital 7 - change "shall" to "must"
Part F, Form G	Delete Section 2
Part F, Form M	(6) change "shall" to "must"
Part F, Form N	#3 change "Business" to "Governmental"
Part F, Form N	#3 change 2.12. to 2.15.
Part F, Form N	#7 change "shall" to "must"
Part F, Form O	(6) change "shall" to "must"
Part F, Form P	#7 change "shall" to "must"
Part F, Form Q	Change §24 to §2.11.1.3.
<b>PART G</b>	
Part G, Section 1.4.1.7.	Clarified reporting requirements
<b>PART H</b>	
No changes	

13 DE Reg. (12/01/09) (Prop.)

13 DE Reg. 796 (12/01/09) (Prop.)