Introduction

This document has been developed to assist UST owners and operators, in layman's terms, answer the questions contained in the UST program's Compliance Certification, required in accordance with 310 CMR 80.34.

This document tracks the UST Compliance Certification and includes the following sections: facility registration, financial responsibility, component operation and maintenance, leak detection monitoring, Class A/B/C Operators and monthly visual inspections. Where compliance options exist under the UST regulations (for example, leak detection systems, cathodic protection or financial responsibility), this document includes all the options and the applicable citations.

No UST system is subject to all of the requirements identified in this document (for example, fiberglass USTs are not required to have cathodic protection). To use this document effectively, UST owners and operators should review each section to determine what requirements apply to their UST system and whether he or she can answer each question "Yes."

In instances where a UST owner or operator cannot answer "Yes" to a question, he or she should make arrangements bring his or her UST system into compliance with the applicable requirements.

Disclaimer: This document is intended solely to assist owners and operators to fill out the Compliance Certification form and comply with the operational requirement of the UST system regulations at 310 CMR 80.00. This document is not intended and cannot be relied upon to create rights, substantive or procedural, enforceable by any party in any litigation with the Commonwealth. Nothing in this document relieves a UST facility owner or operator from compliance with all the applicable requirements in 310 CMR 80.00 as well as any other federal, state or local law or regulation. Nor does it limit MassDEP's authority in determining compliance with 310 CMR 80.00 or any other applicable law or regulation. MassDEP reserves the right to act at variance with this document and change it at any time without public notice.

Reminder: MassDEP's UST regulations at 310 CMR 80.00 <u>Underground Storage Tank Systems</u> became effective on January 2, 2015. Since it has been more than one year since 310 CMR 80.00 was adopted, UST system owners and operators should be in compliance with all applicable requirements, including "routine" requirements (i.e., applicable monthly, 90-day, quarterly or annual inspections, testing, monitoring, investigations, repairs, etc and associated recordkeeping).

Important UST Compliance Dates

Single-Wall Steel Tank Removal/Closure Requirement (310 CMR 80.15): All single-walled steel tanks must be closed in place or removed by August 7, 2017, except:

- A. Single-walled steel consumptive use tanks.
- B. Single-walled steel tanks that were relined prior to August 8, 2007, in accordance with API 1631, 1983 Edition, and the Owner or Operator has:
 - (a) A permit and approval issued by the Head of the local Fire Department for such relining, and
 - (b) A current, legally valid warranty for said relining.

For purposes of the August 7, 2017, closure requirement, MassDEP does not consider the following tanks to be single-walled steel tanks:

- single-walled steel tanks wrapped with fiberglass/aramid,
- single-walled steel tanks wrapped with carbon fiber or,
- single-walled steel tanks wrapped with plastic compounds

Soil Vapor Monitoring: Effective January 2, 2017, monitoring for vapors in the soil is prohibited from being used to satisfy leak detection requirements of 310 CMR 80.19(1). (310 CMR 80.19(3)(b)5.)

February 10, 2016 Page 1 of 15

Sumps:

- All installed turbine, intermediate and dispenser sumps must pass a sump integrity test conducted between January 2, 2015, and January 2, 2017. (310 CMR 80.27(7) and 310 CMR 80.27(8))
- USTs equipped with a submersible pump, that does not have a turbine sump, must be upgraded with a turbine sump by January 1, 2019, or when the tank top is upgraded, whichever is earlier, or that tank shall be removed or permanently closed. (310 CMR 80.20 (3))
- Turbine sump manhole covers installed after January 2, 2015, shall be designed and installed with a final grade that channels storm water away from the turbine sump cover. (310 CMR 80.20(5))
- Turbine, intermediate and dispenser sumps shall be constructed so that they are accessible for repairs and inspections. (310 CMR 80.20(6))

Spill Buckets:

- Spill buckets, including replacement spill buckets, installed on or after January 2, 2015, must have a minimum 5 gallon capacity, unless it is not physically possible to install a 5 gallon spill bucket. "Not physically possible" means the area where a three gallon spill bucket is installed cannot be made to accommodate a five gallon spill bucket by any physical means, including, but not limited to, digging or jack hammering. (310 CMR 80.21(1)(a))
- All spill buckets must pass a spill bucket test conducted between January 2, 2015, and January 2, 2017, and once every five years thereafter. (310 CMR 80.28(2)(f))

Ball Float Valves: On and after January 2, 2015, new or replacement ball float valves are prohibited from being used as the primary overfill prevention device. (310 CMR 80.21(2)(a))

Tightness Testing: On and after January 1, 2018, tank and piping/line tightness testing shall be capable of detecting a release or leakage of 0.05 gallons per hour, with a probability or detection shall be no less than 95 percent and a probability of false alarm shall be no more than 5 percent. (310 CMR 80.32(1)(b))

February 10, 2016 Page **2** of **15**

A. Facility Registration

Under the new UST program, there are new registration questions that all UST system owners and operators must answer through the UST online Data Management System (DMS). (310 CMR 80.23).

In the online DMS:

- 1. Is the Owner and Operator registration information complete and up to date?
- 2. Is the UST Facility registration information complete and up to date?
- 3. Is the UST system and related component registration information complete and up to date?
- 4. Is the Financial Responsibility registration information complete and up to date?

B. Financial Responsibility

All UST system owners and operators must maintain and demonstrate financial responsibility meeting minimum coverage requirements. (310 CMR 80.52)

- 1. Do you have a current Certification of Financial Responsibility in accordance with 310 CMR 80.59(3)?
- 2. Do you have the following documents for each financial responsibility mechanism you use to comply with the financial responsibility requirements? (310 CMR 80.36(6)
 - A. Underground Storage Tank Petroleum Product Cleanup Fund (21J Program) Certificate of Compliance in accordance with 310 CMR 80.59(2)(a)).
 - B. Commercial Insurance.

Signed insurance coverage policy, with the endorsement or certificate of insurance and any amendments to the agreements in accordance with 310 CMR 80.59(2)(b).

C. Financial Test of Self Insurance.

In accordance with 310 CMR 80.59(2)(j), for the most recently complete financial reporting year:

- 1. CFO's letter based on year-end financial statements; and
- 2. Year-end financial statements on which the financial test is based.
- Did you submit to MassDEP within 150 days of the close of your financial reporting year required financial responsibility documents and update your Financial Responsibility Registration in accordance with 310 CMR 80.58?
- D. Guarantee. In accordance with 310 CMR 80.59(2)(k):
 - 1. Chief Financial Officer's (CFO's) letter based on year-end financial statements for the most recent complete financial reporting year; and
 - 2. Signed standby trust fund agreement and any amendments, accompanied by certification of acknowledgement in accordance with 310 CMR 80.55(3).
 - 3. Did you submit to MassDEP within 150 days of the close of your financial reporting year required financial responsibility documents and update your Financial Responsibility Registration in accordance with 310 CMR 80.58?
- E. Risk Retention Group Coverage.

Signed risk retention group coverage policy, with the endorsement or certificate of insurance and any amendments to the agreements in accordance with 310 CMR 80.59(2)(b).

- F. Surety Bond. In accordance with 310 CMR 80.59(2)(c):
 - 1. Surety bond and any amendments; and
 - 2. Signed standby trust fund agreement and any amendments, accompanied by certification of acknowledgement in accordance with 310 CMR 80.55(3).
- G. Irrevocable Standby Letter of Credit. In accordance with 310 CMR 80.59(2)(d):
 - 1. Signed standby trust fund agreement and any amendments; and
 - 2. Signed standby trust fund agreement and any amendments, accompanied by certification of acknowledgement in accordance with 310 CMR 80.55(3).

H. Trust Fund.

In accordance with 310 CMR 80.59(2)(e), Signed trust fund agreement and any amendments, accompanied by certification of acknowledgement in accordance with 310 CMR 80.55(3).

February 10, 2016 Page **3** of **15**

- I. Local Government Financial Test of Insurance.
 In accordance with 310 CMR 80.59(2)(h), CFO's letter based on year-end financial statements for the most recent complete financial reporting year.
- J. Local Government Guarantee. In accordance with 310 CMR 80.59(i):
 - 1. (When supported by a local government financial test) CFO's letter based on yearend financial statements for the most recent complete financial reporting year.
 - 2. (When supported by a standby trust) Signed standby trust fund agreement and any amendments, accompanied by certification of acknowledgement in accordance with 310 CMR 80.55(3).
 - 3. (When supported by the local government's bond rating test) Guarantor's bond rating published within the last 12 months by Moody's or Standard & Poors.
 - 4. (When supported by the local government fund) Guarantor's year-end financial statements for the most recent completed financial reporting year showing the amount of the fund.
- K. Local Government Bond Rating Test. In accordance with 310 CMR 80.59(2)(f):
 - A copy of local government's bond rating published within the last 12 months by Moody's or Standard & Poors: and
 - 2. The letter signed by the CFO in accordance with 310 CMR 80.54(6)(d) or (e).
- L. Local Government Fund. In accordance with 310 CMR 80.59(2)(g):
 - 1. The state constitutional provision or local government statute, charter, ordinance, or order dedicating the fund;
 - 2. The signed letter by the CFO in accordance with 310 CMR 80.54(7)(d);
 - Year-end financial statements for the most recent completed financial reporting year showing the amount in the fund; and
 - 4. (When incremental funding is backed by bonding authority) documentation or the required bonding authority, including either the results of a voter referendum or attestation by the State Attorney General.

C. UST Component Operation & Maintenance

The Owner or Operator shall activate and keep in working condition all electrical equipment, components and alarms for UST systems and UST components. (310 CMR 80.24(2))

1. Leak Detection

- Owners and Operators shall equip UST systems with leak detection equipment. (310 CMR 80.19(1))
- Owners or operators shall operate and maintain leak detection systems at all times and in accordance with manufacturer's specifications and applicable requirements (310 CMR 80.26)
- A. Continuous Interstitial Space Monitoring System
 - 1. Did you conduct and pass required annual tests on the Continuous Interstitial Space Monitoring systems? (310 CMR 80.26(3)(d))
 - 2. For systems that failed annual required annual tests, did you repair or replace the systems in accordance with 310 CMR 80.33(4)?
 - 3. Did you conduct and pass operational tests on repaired or replaced Continuous Interstitial Space Monitoring systems prior to returning the systems to service? (310 CMR 80.26(12))
 - 4. Are all leak detection records maintained? (310 CMR 80.26(3)(d), 310 CMR 80.26(13), 310 CMR 80.36)

February 10, 2016 Page **4** of **15**

B.	In-Tank Monitoring System
	 Did you conduct and pass required annual tests on the in-tank monitoring systems? (310 CMR 80.26(4)(c))
	2. For systems that failed an annual in-tank monitoring system test, did you repair or
	replace the systems in compliance with 310 CMR 80.33(4)?
	3. Did you conduct and pass applicable operational tests on repaired or replaced In-
	Tank Monitoring systems prior to returning the system to service? (310 CMR
	80.26(12))
	 Are all leak detection records maintained? (310 CMR 80.26(4)(c), 310 CMR 80.26(13), 310 CMR 80.36)
C. (Continuous In-tank Leak Detection System
,	 Did you conduct and pass required annual tests on the continuous in-tank leak detection systems? (310 CMR 80.26(5)(f))
	2. For Continuous In-Tank Leak Detection Systems that failed an annual continuous in-
	tank leak detection system tests, did you repair or replace the systems in accordance with 310 CMR 80.33(4)?
;	3. Did you conduct and pass applicable operational tests on repaired or replaced
	Continuous In-Tank Leak Detection Systems prior to returning the system to
	service? (310 CMR 80.26(12))
· · · · ·	4. Are all leak detection records maintained? (310 CMR 80.26(5)(f), 310 CMR
	80.26(13), 310 CMR 80.36)
	In-Tank Monitoring System with SIR 1. Did you conduct and pass required annual tests on the in-tank monitoring system or
	continuous in-tank leak detection system? (310 CMR 80.26(4)(c) or 310 CMR
	80.26(6)(f))
	2. For systems that failed annual in-tank monitoring or continuous In-tank leak
	detection system tests, did you repair or replace the systems in accordance with 310
	CMR 80.33(4)?
	3. Did you conduct and pass applicable operational tests on repaired or replaced in-
	tank monitoring system or Continuous In-Tank Leak Detection System prior to
	returning the systems to service? (310 CMR 80.26(12))
· · · ·	4. Are all leak detection records maintained? (310 CMR 80.26(4)(c), 310 CMR
E	80.26(6)(f), 310 CMR 80.26(13), 310 CMR 80.36(4) Testing For Vapors In the Soil
	1. Did you calibrate all vapor monitoring devices in accordance with manufacturer's
	specifications? (310 CMR 80.19(2))
	2. Did you correctly install the number and location of monitoring wells to detect
	releases within the excavation zone, from any portion of the UST system that
	routinely contains product? (280.43(e)(6))
	3. Did you correctly install all vapor monitoring wells to be unaffected by water intrusion
	from high ground water, rain water and runoff? (280.43(e)(3))
	4. Did you clearly mark and secure all monitoring wells? (280.43(e)(7))

February 10, 2016 Page **5** of **15**

2. Cathodic Protection

- All metal components of a UST system and UST components (excluding manhole covers) that are subject to corrosion and are in contact with the ground shall have continuous cathodic protection. (310 CMR 80.22)
- Owners and Operators shall operate and maintain corrosion protection in accordance with 310 CMR 80.22 and 80.29. (310 CMR 80.29)
- A. Sacrificial or galvanic anode type cathodic protection system:
 - 1. Did you conduct and pass required cathodic protection system tests? (310 CMR 80.29(2))
 - 2. For cathodic protection systems that failed cathodic protection system tests, did you repair or replace the systems in accordance with 310 CMR 80.29(5)?
 - 3. Did you conduct and pass "proper operation" tests of the cathodic protection system within 60 days of a repair or excavation at the system? (310 CMR 80.29(6))
 - 4. Did a certified cathodic protection system tester conduct all required testing? (310 CMR 80.29(2), 310 CMR 80.29(6))
 - 5. Are all corrosion protection inspection, testing, repair, and replacement records maintained? (310 CMR 80.29(7) and 310 CMR 80.33(7)) and 310 CMR 80.36)
- B. Impressed current cathodic protection system:
 - 1. Did you conduct and pass required annual cathodic protection system tests? (310 CMR 80.29(4))
 - 2. Did you inspect the cathodic protection systems every 60 days, including recording of system voltage and amperage readings? (310 CMR 80.29(4)(a), 310 CMR 80.29(4)(b))
 - 3. For cathodic protection systems with voltage and amperage readings outside the acceptable range, did you repair or replace the systems within 120 days in accordance with 310 CMR 80.29(5)(a) and 310 CMR 80.29(5)(c))?
 - 4. Did you conduct and pass "proper operation" tests of the cathodic protection systems within 60 days of a repair or excavation at the systems? (310 CMR 80.29(6))
 - 5. Did a certified cathodic protection system tester conduct all required testing? (310 CMR 80.29(2), 310 CMR 80.29(6))
 - 6. Are all corrosion protection inspection, testing, repair, and replacement records maintained? (310 CMR 80.29(7) and 310 CMR 80.33(7)) and 310 CMR 80.36)

3. Turbine, Intermediate and Dispenser Sumps

After March 21, 2008, newly install, repaired or replaced product dispensers, intermediate sumps, and USTs installed with, or upgraded to submersible pumps are required to be equipped with sumps continuously monitored for liquids. (310 CMR 80.20)

Turbine, Intermediate and Dispenser sumps with continuous monitoring.

- a. Did you conduct and pass annual sump sensor tests? (310 CMR 80.27(5)(b)2.)
- b. If a sump sensor failed an annual sump sensor test, did you repair or replace the sump sensor in accordance with 310 CMR 80.33(4)?
- c. Are all turbine, intermediate and dispenser sump testing and repair records maintained? (310 CMR 80.27, 310 CMR 80.36)

February 10, 2016 Page **6** of **15**

4. Spill Buckets

All UST systems are required to be equipped with a spill bucket. (310 CMR 80.21(1))

- a. Did you keep your spill bucket(s) free and clear of solid and liquid material at all times? 310 CMR 80.28(2)(a))
- b. Did you maintain your spill bucket(s) and cover(s) so they are free of cracks and holes at all times? (310 CMR 80.28(2)(b))
- c. Did you remove and manage any solid or liquid material collected in a spill bucket in accordance with local, state and federal laws and regulations? (310 CMR 80.28(2)(c))
- d. Did you maintain your spill bucket(s) in accordance with manufacturer specifications? (310 CMR 80.28(2)(d))
- e. Did you visually inspect your spill bucket(s) monthly to determine if:
 - i. There is solid or liquid material in the spill bucket(s)?;
 - ii. The spill bucket(s) and cover(s) show signs of corrosion, breakage and wear?, and if applicable;
 - iii. Spill bucket sensor(s) are set in accordance with the manufacturer's specifications? (310 CMR 80.28(2)(e))
- f. For spill buckets that failed required spill bucket visual inspections, did you repair or replace the spill buckets in accordance with 310 CMR 80.33(4)?
- g. Are all spill bucket inspection, repair and replacement records maintained? (310 CMR 80.28(2)(i), 310 CMR 80.33(7) and 310 CMR 80.36)

5. Overfill Prevention

All UST systems must be equipped with an overfill prevention device. Such devices include: automatic shut off, floats or flapper valves, high level audible/visible alarms, or ball float valves which restrict flow of product into a UST. (310 CMR 80.21(2))

- a. Did you conduct and pass overfill prevention device "operational" inspection and testing annually, unless otherwise required by manufacturer's specifications? (310 CMR 80.28(3)(a))
- b. For devices that failed required operational inspection and tests, did you repair or replace the devices in accordance with 310 CMR 80.33(4)?

On and after January 2, 2015, new or replacement ball float valves are prohibited from being used as the primary overfill prevention device. (310 CMR 80.21(2)(a))

c. Are all overfill prevention device inspections, testing, repair and replacement records maintained? (310 CMR 80.28(3)(d), 310 CMR 80.33(7) and 310 CMR 80.36)

6. Automatic Line Leak Detection

Automatic Line Leak Detection systems are only required on for pressurized piping systems. (310 CMR 80.19(4))

- a. Did you conduct and pass annual automatic line leak detection operational tests? (310 CMR 80.26(9))
- b. For automatic line leak detection devices that failed an operational test, did you repair or replace the devices in accordance with 310 CMR 80.33(4)?
- Did you conduct and pass operational tests of repaired or replaced automatic line leak detection devices prior to returning the leak detection system to service? (310 CMR 80.26(12))
- d. Are all automatic line leak detection testing and repair records maintained? (310 CMR 80.26(9), 310 CMR 80.33(7), 310 CMR 80.36?

February 10, 2016 Page **7** of **15**

Leak Detection Monitoring All owners or operators shall respond to every UST system alarm that may indicate the presence of leakage or a release and document the response to each of those alarms in a report or log which shall include the date and any corrective action taken (310 CMR 80.24(3)) Tanks 1. Continuous Interstitial Space Monitoring System a. Did you conclude investigations of all indications of releases or leakage from the UST within 72 hours of the indication? (310 CMR 80.26(3)(c)) b. If an investigation was unable to determine there was not a release or leakage, did you conduct and pass a tightness test of the UST System within 72 hours of concluding the investigation? (80.26(3)(c)(1)) c. For UST systems that failed a tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3)) d. Are all leak detection records maintained? (310 CMR 80.26(13), 310 CMR 80.36) 2. In-Tank Monitoring System a. Did you conduct and pass in-tank monitoring tests on a calendar month basis? (310 CMR 80.26(4)(a)) b. For each calendar month there was not a passing in-tank monitoring test result, did you conduct and pass a tightness test on the UST system within 72 hours of the end of the month? (310 CMR 80.26(4)(b)) For UST systems that failed a tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3)) d. Are all leak detection records maintained? (310 CMR 80.26(13), 310 CMR 80.36) **Continuous In-tank Leak Detection System** a. At the end of each calendar month, did the continuous in-tank leak detection system indicate a release or leakage? (310 CMR 80.26(5)(c)) b. For each month the continuous in-tank leak detection system indicated a release or leakage, did you conduct and pass a tightness test within 72 hours of the end of the calendar month? (310 CMR 80.26(5)(c)) For UST systems that failed a tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3)) d. Are all leak detection records maintained? (310 CMR 80.26(13),310 CMR 80.36)

February 10, 2016 Page **8** of **15**

4. In-Tank Monitoring System with SIR

- a. Did you have a qualified SIR vendor conduct an inventory analysis each calendar month to determine whether a release or leakage occurred? (310 CMR 80.26(6)(a))
- b. For each <u>conclusively</u> determined release or leakage, did you conduct and pass a tightness test on the UST system within 72 hour of knowledge of the determination? (310 CMR 80.26(6)(c)
- c. For UST systems that failed a tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3))
- d. For each <u>inconclusively</u> determined release or leakage, did you conclude an investigation within 72 hours of knowledge of the determination? 310 CMR 80.26(6)(d))
- e. For any investigation unable to determine there was <u>not</u> a release or leakage, did you conduct and pass a tightness test of the UST system within 72 hours of the conclusion of the investigation? (310 CMR 80.26(d))
- f. For USTs that failed a tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3))
- g. Are all leak detection records maintained? (310 CMR 80.26(13), 310 CMR 80.36)

5. Manual Tank Gauging

Manual tank gauging is a leak detection method available only to emergency generator tanks and emergency engine driven pump installed before January 2, 2015.

- A. Emergency Generator Tanks, Emergency Engine Driven Pumps (1,000G or less) (310 CMR 80.26(7))
 - 1. Did you correctly take and record manual tank gauging every 7 days? (310 CMR 80.26(7)(a) and (b))
 - 2. Did any weekly tank gauging variation exceed the weekly or monthly standard (a suspected release or leakage)? (310 CMR 80.26(7)(b)4.)
 - Did you reconcile each suspected release or leakage with regulated substance inventory and/or regulated substance inventory input and outputs? (310 CMR 80.26(7)(b) and 310 CMR 80.31(1)(e))
 - 4. For each suspected release or leakage that cannot be reconciled, did you conduct and pass a tightness test of the UST system? (310 CMR 80.31(f))
 - 5. For UST systems that failed a tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3))
 - 6. Are all leak detection records maintained? (310 CMR 80.26(13), 310 CMR 80.36)
- B. Emergency Generator Tanks and Emergency Engine Driven Pumps (1,000G or more) (310 CMR 80.26(8))
 - 1. Did you correctly take and record manual tank gauging every 30 days? (310 CMR 80.26(8)(a) and (b))
 - 2. Did any monthly tank gauging variation exceed the monthly standard (a suspected release or leakage)? (310 CMR 80.26(8)(b)4.)
 - 3. Did you reconcile each suspected release or leakage, with regulated substance inventory and/or regulated substance inventory input and outputs? (310 CMR 80.26(8)(c) and 310 CMR 80.31(1)(e))
 - 4. For each suspected release or leakage that cannot be reconcile, did you conduct and pass a tightness test on the UST system? (310 CMR 80.31(1)(f))
 - 5. For UST systems that failed a tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3))
 - 6. Are all leak detection records maintained? (310 CMR 80.26(13), 310 CMR 80.36)

February 10, 2016 Page **9** of **15**

6. Inventory Monitoring

Inventory monitoring is required of all single-walled tanks and double-walled tanks that do not have continuous leak detection monitoring in accordance with 310 CMR 80.19(3). (310 CMR 80.31)

- Conducting required inventory monitoring is not a substitute for compliance with applicable requirements of 310 CMR 80.19.
- Facilities performing inventory monitoring in accordance with 310 CMR 80.31 must also conduct daily measurement for abnormal water gain (310 CMR 80.31(3)).

A. Daily Inventory Monitoring (310 CMR 80.31(1))

- 1. Did you correctly measure and reconcile regulated substance inventory daily? (310 CMR 80.31(1)(c))
- 2. For each calendar month, based on daily inventory records, did you make a determination of abnormal regulated substance loss? (310 CMR 80.31(1)(d))
- 3. Did you reconcile each determination of abnormal regulated substance loss, with regulated substance inventory and/or regulated substance inventory input and outputs? (310 CMR 80.31(1)(e))
- For each abnormal regulated substance loss that cannot be reconcile due to inventory error, did you conduct and pass a tightness test of the UST system? (310 CMR 80.31(1)(f))
- For UST systems that failed a tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3))
- 6. Did you conduct measurement for abnormal water gain once every 24 hours (daily)? (310 CMR 80.31(3))
- 7. Are all inventory monitoring records maintained? (310 CMR 80.31(4), 310 CMR 80.36)

B. Manual Tank Gauging for Small Tanks 1,000G or less. (310 CMR 80.31(2))

- 1. Did you correctly take and record manual tank gauging every 7 days? (310 CMR 80.31(2)(b))
- Did any weekly tank gauging variation exceed the weekly or monthly standard (a suspected release or leakage)? (310 CMR 80.31(2)(b)4.)
- Did you reconcile each suspected release or leakage, with regulated substance inventory and/or regulated substance inventory input and outputs? (310 CMR 80.31(2)(c))
- 4. For each suspected release or leakage that cannot be reconcile due to inventory error, did you conduct and pass a tightness test? (310 CMR 80.31(f))
- 5. For UST systems that failed a tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3))
- 6. Did you conduct measurement for abnormal water gain once every 24 hours (daily)? (310 CMR 80.31(3))
- 7. Are all inventory monitoring records maintained? (310 CMR 80.31(4), in accordance with 310 CMR 80.36)

February 10, 2016 Page **10** of **15**

310 CMR 80.00 Underground Storage Tank Systems

- Compliance Assistance: UST Compliance Certification Submittal C. Abnormal Water Gain (310 CMR 80.31(3)). 1. Did you conduct measurement for abnormal water gain once every 24 hours (daily)? (310 CMR 80.31(3)) 2. Did you make any determinations of abnormal water gain based on records of daily inventory? (310 CMR 80.31(3)(d)) Upon determination of abnormal water gain, did you remove water in accordance with applicable requirements? (310 CMR 80.31(3)(e)) Within 24 hours of removal of water, during which no regulated substance was added to the tank, did you re-measure the tank for abnormal water gain? (310 CMR 80.31(3)(f)) 5. Upon re-measuring, if there was abnormal water gain, did you conduct an investigation within 72 hours to determine the cause of the abnormal water gain and make repairs or replacements as necessary? (310 CMR 80.31(3)(g), 310 CMR 80.33)) 6. If an investigation cannot determine the cause of abnormal water gain, did you conduct and pass a tightness test of the UST system? (310 CMR 80.31(3)(g)) 7. For UST systems that failed a tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3)) 8. Are all inventory monitoring records maintained? (310 CMR 80.31(4), 310 CMR 80.36) Field Constructed Tanks. Field constructed tanks with a capacity of greater than 50,000 gallons may use one of the following methods of leak detection: Bulk Tank Tightness Test (Annual test) A. Did you conduct and pass required applicable bulk tank tightness test? (310 CMR 80.19(3)(c)1.) B. For UST systems that failed a tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3)) C. Are all leak detection records maintained? 310 CMR 80.36) In-Tank Monitor (Every three year test) A. Did you conduct and pass an in-tank monitoring test at least every thirty days (310 CMR 80.19(3)(c)2.) B. Did you conduct and pass applicable bulk tank tightness test at least every three years? (310 CMR 80.19(3)(c)2.) C. For UST systems that failed an in-tank monitoring test or "three year" bulk tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3)) D. Are all leak detection records maintained? 310 CMR 80.36) **In-Tank Monitor** (Every two year test) A. Did you conduct and pass an in-tank monitoring test at least every thirty days? (310
 - CMR 80.19(3)(c)3.)
 - B. Did you conduct and pass applicable bulk tank tightness test at least every two years? (310 CMR 80.19(3)(c)3.)
 - C. For UST systems that failed an in-tank monitoring test or "two year" bulk tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3))
 - D. Are all leak detection records maintained? 310 CMR 80.36)

February 10, 2016 Page 11 of 15

Piping

All UST piping systems must be equipped with leak detection except European suction systems and siphon lines(310 CMR 80.19(4))

1. Continuous Interstitial Space Monitoring System

- A. Did you conclude investigations of <u>all</u> indications of releases or leakage from the piping system within 72 hours of the indication? (310 CMR 80.26(3)(c))
- B. If an investigation was unable to determine there was not a release or leakage, did you conduct and pass a tightness test of the UST System within 72 hours of concluding the investigation? (80.26(3)(c)(1))
- C. For UST systems that failed a tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3))
- D. Are all leak detection records maintained? (310 CMR 80.26(13), 310 CMR 80.36)

2. In-Tank Monitoring with SIR (310 CMR 80.26(6))

Compliance with In-tank monitoring with SIR requirements for tanks and piping may be met with a single monthly inventory analysis conducted in accordance with 310 CMR 80.19(3)(b)4.

- A. For each <u>conclusively</u> determined release or leakage, did you conduct and pass a tightness test on the UST system within 72 hour of knowledge of the determination? (310 CMR 80.26(6)(c)
- B. For UST systems that failed a tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3))
- C. For each <u>inconclusively</u> determined release or leakage, did you conclude an investigation within 72 hours of knowledge of the determination? 310 CMR 80.26(6)(d))
- D. For any investigation unable to determine there was <u>not</u> a release or leakage, did you conduct and pass a tightness test of the UST system within 72 hours of the conclusion of the investigation? (310 CMR 80.26(d))
- E. For UST piping systems that failed a tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3))
- F. Are all leak detection records maintained? (310 CMR 80.26(13), 310 CMR 80.36)

3. Piping leak detection monitoring required for piping systems installed before January 1, 1989.

A. Quarterly visual inspection and annual product line tightness test (310 CMR 80.19(4)(b)1.b.)

This method of piping leak detection monitoring is applicable only to UST piping systems installed prior to January 1, 1989 and use

- 1. Did you conduct quarterly visual inspection of the secondary containment ports? (310 CMR 80.19(4)(b)1.b.)
- 2. Did you conduct and pass annual product line tightness testing? (310 CMR 80.19(4)(b)1.b.)
- For UST <u>systems</u> that failed a quarterly visual inspection or annual product line tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3))
- 4. Did you conduct and pass tightness tests on <u>repaired</u> piping within 30 days of completing repairs? (310 CMR 80.33(6))
- Did you conduct and pass tightness tests on <u>replaced</u> piping prior to regulated substance being put into the piping? (310 CMR 80.16(4), 310 CMR 80.16 (5))
- 6. Are all inspection, repair and testing records maintained in accordance with 310 CMR 80.36?

February 10, 2016 Page 12 of 15

- B. Single-Walled Pressurized Piping System (310 CMR 80.19(4)(c)1.d.)
 - 1. Did you conduct and pass an annual tightness test? (310 CMR 80.19(4)(c)1.d.)
 - 2. For piping systems that failed a tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3))
 - 3. Are all leak detection records maintained? (310 CMR 80.36)
- C. Non-European suction systems without secondary containment, tightness tested every three years (310 CMR 80.19(4)(c)1.e.)
 - Did you conduct required tightness test every three years? (310 CMR 80.19(4)(c)1.e.)
 - For UST <u>systems</u> that failed a tightness test, did you comply with the applicable requirements of 310 CMR 80.33, 310 CMR 80.38, 310 CMR 80.39 and 310 CMR 40.0300? (310 CMR 80.32(3))
 - 3. Are all repair and testing records in accordance with 310 CMR 80.36?

E. Turbine, Intermediate and Dispenser Sump Monitoring

Turbine, intermediate and dispenser sumps shall be clean and free of solid and liquid material at all times. If a sensor or visual observation indicates there is liquid in a sump, the liquid shall be removed immediately and managed in accordance with applicable local, state and federal requirements. If the liquid is a regulated substance, the owner or operator shall investigate the path of entry to the sump and make any necessary repairs. (310 CMR 80.27(2))

- 1. Tank with a submersible pump and does not have a turbine sump. (310 CMR 80.27(4))
 - a. Did you visually inspect the area around the submersible pump for release of regulated substances every 30 days? (310 CMR 80.27(4))
 - b. If the area around any submersible pump indicated a release of regulated substance, did you comply with 310 CMR 80.38?
 - c. Did you visually inspect the submersible pump and other components for corrosion, breakage and wear? (310 CMR 80.27(4)(a))
 - d. For submersible pump and other components determined to be corroded, broken or worn, did you repair or replace them in accordance with 310 CMR 80.33(4)? (310 CMR 80.27(4)(b))
 - e. Are all submersible pump inspection and repair records maintained? (310 CMR 80.27(4)(c), 310 CMR 80.36)
 - 2. Turbine, intermediate and dispenser sumps without continuous monitoring. (310 CMR 80.27(5)(a))
 - a. Did you inspect the turbine, intermediate and dispenser sumps every 90 days in accordance with 310 CMR 80.27(6)? (310 CMR 80.27(5))
 - b. If solid or liquid material was found, did you remove it in accordance with federal, state and local laws and regulations? (310 CMR 80.27(6)(b))
 - c. If the liquid is a regulated substance, did you investigate the source of the regulated substance and the path of entry to the sump? (310 CMR 80.27(2)(b))
 - d. As a result of an investigation, did you make any necessary repairs in accordance with 310 CMR 80.33? (310 CMR 80.27(2)(b))
 - e. If sump components were determined to be corroded, broken or worn, did you repair or replace them in accordance with 310 CMR 80.33(4)? (310 CMR 80.27(6)(c))
 - f. Did you perform and pass a sump "integrity" test of repaired or replaced turbine, intermediate or dispenser sumps? (310 CMR 80.27(9))
 - g. Are all turbine, intermediate and dispenser sump inspection, testing and repair records maintained? (310 CMR 80.27, 310 CMR 80.36)

February 10, 2016 Page **13** of **15**

- 3. Turbine, intermediate and dispenser sumps with continuous monitoring. (310 CMR 80.27(5)(b))
 - a. If at any time, a sensor or visual observation indicated there is liquid in a sump, did you remove the liquid immediately and managed in accordance with applicable local, state and federal requirements. (310 CMR 80.27(2), 310 CMR 80.27(6)(b))
 - b. Did you inspect the turbine, intermediate and dispenser sumps annually in accordance with 310 CMR 80.27(6)? (310 CMR 80.27(5))
 - c. Is the sump sensor placed in accordance with the manufacturer's specifications, or, if no specifications exist, is the sensor placed in the lowest possible location in the sump? (310 CMR 80.27(3))
 - d. If solid or liquid material was found, did you remove it in accordance with federal, state and local laws and regulations? (310 CMR 80.27(6)(b))
 - e. If the liquid is a regulated substance, did you investigate the source of the regulated substance and the path of entry to the sump? (310 CMR 80.27(2)(b))
 - f. As a result of an investigation, did you make any necessary repairs in accordance with 310 CMR 80.33? (310 CMR 80.27(2)(b))
 - g. If sump components (including sensors) were determined to be corroded, broken or worn, did you repair or replace them in accordance with 310 CMR 80.33(4)? (310 CMR 80.27(6)(c))
 - h. Did you perform and pass a sump "integrity" test of repaired turbine, intermediate and dispenser sumps? (310 CMR 80.27(9))
 - i. Are all turbine, intermediate and dispenser sump inspection, testing and repair records maintained? (310 CMR 80.27, 310 CMR 80.36)

F. Class A/B/C Operators

- A Class A operator shall ensure that appropriate individuals: 1. Properly operate and maintain the underground storage tank system. 2. Maintain required records. 3. Are trained to operate and maintain the underground storage tank system and keep records. 4. Properly respond to emergencies caused by leaks or releases from underground storage tank systems. 5. Make financial responsibility documents available to the Department as required. (3110 CMR 80.37(4))
- A Class B operator shall ensure implementation of the day-to-day aspects of operation and maintenance of, and recordkeeping for, underground storage tank systems and shall have general and site specific knowledge of the following: 1. Components of underground storage tank systems. 2. What material the underground storage tank system components are constructed of. 3. Methods of release detection and release prevention applied to the underground storage tank system. (310 CMR 80.37(5))
- A Class C operator shall: 1. immediately and properly respond to alarms or other indications
 of emergencies caused by leaks, or releases from underground storage tank systems. 2.
 Immediately notify a Class A or Class B operator and appropriate emergency responders.
 310 CMR 80.37(6))
- 1. Did you designate a certified A, B, and C Operator for each UST System? (310 CMR 80.37(1))
- 2. Did you ensure a certified Class A, B or C Operator is present (at the UST facility) when the UST system is in operation? (310 CMR 80.37(2))
- 3. Did you ensure that designated Class A, B and C Operators are certified in accordance with applicable requirements? (310 CMR 80.37(7), (8) and (9))
- 4. Did you maintain a list of designated Class A, B and C Operators in accordance with 310 CMR 80.37(11)?

February 10, 2016 Page **14** of **15**

G.	Monthly A/B Operator Visual Inspection	
	The monthly visual inspection of underground storage tank systems and UST components shall include, but not be limited to: (a) Verifying that the electronic monitoring equipment is currently on and properly operating. (b) Inspecting each spill bucket in accordance with 310 CMR 80.28(2)(e). (c) Verifying that grade level fill covers are properly color-coded. (310 CMR 80.35)	
	 Did you ensure monthly visual inspections were conducted of all UST systems in accordance with 310 CMR 80.35(2)? (310 CMR 80.35(1)) Did a designated Class A or B operator, or a person under the direction of a Class A or B operator, conduct each monthly visual inspections? (310 CMR 80.35(1)) If the inspection indicated an UST component was not properly operating or maintained, did you repair or replace UST components in accordance with 310 CMR 80.33? (310 CMR 80.35(3)) Are all monthly visual inspection records maintained? (310 CMR 80.35(4), 310 CMR 80.36) 	

Revision Tracking

First Published	February 9, 2016
Section Revised	Date Revision Published

February 10, 2016 Page **15** of **15**