NEW UST REQUIREMENTS (AND POTENTIAL "BURIED HAZARDS")

IN CONNECTICUT'S REVISED UNDERGROUND STORAGE TANK REGULATIONS

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Note: This article only summarizes select parts of complex regulations and other legal requirements. It is not legal advice or a substitute for legal advice, or for reviewing the actual regulations and other legal sources.

Gas station cleanup from Billings Gazette

It's been almost a year now since Connecticut Department of Energy and Environmental Protection (DEEP) did a major overhaul of the state's two sets of regulations for underground storage tank (UST) systems. The revisions (effective May 7, 2025) include a number of welcome features — such as extended life expectancy for certain UST systems, and improved organization and clarity in certain parts of the regulations. But the sheer scope of the revisions and the lack of a reader-friendly "blackline" from the revision process make it difficult to discern what has changed and how. The result is a risk of "buried hazards" in the revised regulations that may have been previously under-appreciated or missed.

This article highlights the revised regulatory landscape and focuses on key changes and compliance risks that may have been under-appreciated or overlooked for day-to-day UST operations.

A Complicated Regulatory Backdrop

First, a little background to set the stage: Connecticut's UST program operates on two parallel regulatory tracks. The primary and more complex set of regulations is based on a federal baseline, with many DEEP additions and tightenings. These regulations, found in sections 22a-449(d)-101 through -114 of the Regulations of Connecticut State Agencies (RCSA), apply to essentially all nonresidential petroleum UST systems in the state, with a few exceptions. (This primary set of regulations will be referred to in this article as "(d)-101.")

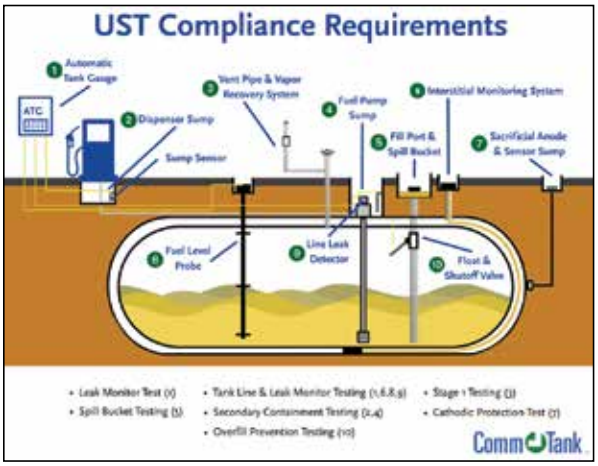
The exceptions — heating oil tanks for on-site heating use, certain smaller motor fuel tanks on farms, and a few uncommon types of specialized tank systems — are subject to the second set of regulations, found at RCSA 22a-449(d)-1. (This second set of regulations will be referred to in this article as "(d)-1.")

But wait, there's more: beyond the DEEP regulations, some additional standards regarding UST systems are still found in the Connecticut General Statutes. The 2025 regulation revisions did not fully incorporate these standards. They include: authority for DEEP inspectors to "redtag" noncompliant UST systems believed to present a release risk, requirements for offsite storage of certain UST system records, and certain design and construction standards for new UST systems.

Key Changes to the (d)-1 Regulations

Narrowed Exemptions

The (d)-1 regulations have long provided exemptions from parts of (d)-1 for certain types of UST systems. Under the revised regulations, only two such exemptions remain. First, a heating oil tank used for onsite heating with a capacity under 2,100 gallons is now exempt from reporting and life expectancy requirements only if the tank and connected piping are double-walled and were installed on or after October 1, 2003. Second, a heating oil tank used for on-site heating is exempt from release detection requirements only if installed before October 1, 2003.



Tank monitoring systems as shown by CommTank

Expanded and Tightened Design, Construction, and Monitoring Requirements

While still less complex than the (d)-101 rules, the revised (d)-1 rules now incorporate certain requirements previously limited to the (d)-101 rules.

Particularly notable here are new standards for interstitial monitoring for double-walled tanks. The degree and timing of interstitial monitoring requirements depend on when the tank was installed. A tank installed after August 5, 2025, must use interstitial monitoring methods capable of continuously monitoring both the primary and secondary walls. As a practical matter, this typically means an inert gas, liquid, vacuum, or brine system. A tank installed on or after October 1, 2003, but before August 5, 2025, may either conduct continuous "dry space" interstitial monitoring or meet the aforementioned, more rigorous standard for post-August 5, 2025, tanks. For a tank installed before October 1, 2003, a compliance clock is now ticking: they must get into compliance with one of these monitoring options by May 7, 2027.

As for a single-walled UST system (which had been allowed to be installed until October 1, 2003), failure determination must be conducted every five (5) years beginning November 3, 2025, until the system reaches its applicable life expectancy.

Several new equipment standards must be met by May 7, 2027. These include under-dispenser containment sumps, piping containment sumps, and breakaway devices and shear valves or crash valves for dispensers.

Other operational requirements have also expanded. Postinstallation testing is now required for all UST systems, cathodic protection must be tested annually, and rectifiers on impressed current systems must be checked monthly.

UST System Closure: Now Similar to (d)-101 Standards

Previously, closure for UST systems subject to the (d)-1 rules was based on the closure standards in NFPA 30, with some limited additional gloss. It's now a new ballgame. As in the more complex (d)-101 rules, closure under (d)-1 is now specified in detail (sampling locations, analytical data quality/data usability evaluations, closure report standards, and more).

Key Changes to the (d)-101 Regulations

Performance Standards and Equipment Requirements

The revised (d)-101 regulations significantly expand performance standards for tanks, piping, dispensers, and containment systems. As with the (d)-1 regulations, the standards for interstitial monitoring are significantly more rigorous and are keyed to UST system installation date. The standards here are similar to those in (d)-1 but should be carefully scrutinized with respect to each particular situation.

The (d)-101 rules also include some unique wrinkles not found in the (d)-1 rules. For example, while a new tank installed after August 5, 2025, must conduct continuous interstitial monitoring of both primary and secondary containment, a narrow exception is provided to allow for "dry space" monitoring for tanks installed after May 7, 2025, that meet a long list of conditions. These conditions concern not only equipment and operation, but also location: the tank cannot be within an Aquifer Protection Area or within 1,000 feet of an off-site potable well.

Beyond the tank itself, the revised regulations include numerous new or expanded requirements for other UST system components. For example: dispensers must now be equipped with breakaway devices and shear valves or crash valves, underdispenser containment and piping sumps must be liquidtight and monitored, spill buckets must have at least five gallons of capacity, and dispensing hoses must be kept from contact with the ground when not in use (with an exception for marinas).

Expanded Testing and Inspection Obligations

New annual and three-year testing requirements apply across many UST system components. Monthly inspections must be conducted by Class B operators, while annual inspections must be completed by qualified third parties. Compliance with these obligations must be documented using new DEEP forms, which are outlined in the new consolidated notification and recordkeeping section in the revised regulations (RCSA 22a-449(d)-114) and are available on DEEP's website.

Containment, Overfill Protection and Release Detection

Both new and existing UST systems subject to (d)-101 face immediate equipment and operational requirements. While some standards here are similar to those in the (d)-1 regulations, others are more detailed and stringent. For example, overfill alarms for (d)-101 UST systems must be both audible and visual. As elsewhere, the regulations here will need to be reviewed in detail to ensure your compliance plan is complete.

Sump pump as shown by Fuels Market News

> "While still less complex than the (d)-101 rules, the revised (d)-1 rules now incorporate certain requirements previously limited to the (d)-101 rules."

"Release" and "Suspected Release": A Broader Net

One section of the revised (d)-101 regulations that deserves particular attention is the expanded definition of "release" and "suspected release." The regulations now specify a much wider range of "unusual operating conditions" that constitute a "suspected release," which would trigger investigation and reporting obligations. Some of these conditions (ex.: liquid in sumps that is "indicative of a potential release") highlight the need to ensure site personnel are aware of these new, more explicit requirements. The requirements also highlight the need for a systematic approach to assessing "unusual operating conditions," and the premium on clearly documenting why a particular condition has been determined not to be "indicative of a potential release."

The reference above to a release into a sump may cause some puzzlement: Isn't the purpose of secondary containment to prevent a release? That may have been a common understanding, but beware: the revised UST regulations (as well as DEEP's general-applicability release reporting regulations adopted in 2022) take a different approach. There, "release" is expressly defined to include a release into secondary containment. This point is likely worth highlighting to personnel involved with UST operations.

If an "unusual operating condition" or other potential "suspected release" indicator can't be favorably resolved, the UST system owner or operator must report the suspected release to DEEP within 24 hours after discovery of the condition or indicator. Stated otherwise, a UST system owner or operator has no more than 24 hours from discovery to internally investigate and, if appropriate, determine the condition or indicator does not in fact indicate a suspected release. If a report must be made to DEEP, requirements for specific further investigation and response actions also immediately kick in.

Connecticut Department of Energy & Environmental Protection

Release Response and Corrective Action: More Detailed, More Forms, Less Flexibility, Tighter Deadlines

The release response requirements, set out in revised RCSA 22a-449(d)-106, are lengthy and reflect extensive rewriting. As such, these requirements in particular require careful review to identify what's new or different. UST owners and operators should be aware that reporting timelines are now shorter than before; some that used to be "within 24 hours" are now "immediate" or "within one hour." The revised release response rules are also significantly more prescriptive than before, specifying response steps in detail and thereby reducing the professional discretion of the owner or operator's environmental consultant.

The revised rules also require a DEEP review of remediation that includes Monitored Natural Attenuation (MNA). In revising the regulations, DEEP clearly advised that it now disfavors MNA, in part due to pressure from DEEP's overseers at EPA. This is one of several signals of how the revised regulations seem geared towards a more conservative approach to remedy selection.

The release response protocol detailed by the revised regulations has significant ongoing documentation and reporting requirements. Many of these require the use of newly developed or updated DEEP forms, available on DEEP's website. The heightened documentation and reporting emphasis reflects DEEP's agency-wide efforts at more systematized, trackable, and publicly accessible remediation in Connecticut.

Lastly, some readers may be wondering how this new UST release remediation scheme relates to DEEP's new Release-Based Cleanup Regulations (RBCRs), which took effect on March 1, 2026. However, the RBCRs expressly do not apply to releases from a regulated UST. This carve-out reflects a policy choice by DEEP to keep UST cleanups governed by the UST regulations (which, as noted above, are based on a federal template). DEEP's intent here may be to avoid potential issues with EPA's approval of (d)-101 UST regulations and EPA's related delegation to DEEP the enforcement of the federal UST program.

Cleanup Contractors and Environmental Professionals

Under the revised (d)-101 regulations, UST owners and operators must now retain an "Environmental Professional" throughout the remediation process. That professional must be either a Licensed Environmental Professional (LEP) or a new category, a Permitted Environmental Professional (PEP). A PEP is a third party who has a DEEP permit issued under Conn. Gen. Stat. 22a-454 (a/k/a "454 permit") to do business as a release response contractor. The 454 permit requirement for such businesses has been on the books for a long while, but has not been consistently enforced. However, since revising the UST regulations, DEEP has been actively enforcing the requirement (in one case we're aware of, forcing a UST system owner/operator to halt soil excavation at an old UST release site by the owner/operator's longtime but non-454-permitted contractor).

Connecticut's designated environmental justice communities

Public Notice Obligations Shift to Owners and Operators

This is a good example of a small "buried hazard" that could create unwelcome headaches.

Where remedial action is required, the revised regulations have shifted responsibility for public notice from DEEP to the UST system owner or operator.

On the plus side, the rules identify various acceptable forms of notice and eliminate express references to public meetings.

On the minus side, the rules add complicated and practically unworkable requirements where the UST remediation site is located in an "environmental justice community" (a/k/a "EJ community"). The rules import this term wholesale from a state statute aimed primarily at large industrial facilities in complex permitting contexts. Determining whether a particular site is in an EJ community is not straightforward and includes counterintuitive legal wrinkles. For example, the EJ statute defines "EJ community" to include a city or town on a "distressed municipality" list updated annually by the Department of Economic and Community Development (DECD). But even after a municipality no longer meets the criteria for a "distressed municipality," it may still be regarded as one — and therefore also an EJ community — for several more years.

For another example, the UST regulations now require that for a remediation site in an EJ community the UST system owner or operator must provide public notice in all languages spoken by no less than15% of the residents within a half-mile of the site. There seems to be no practical way to determine this with any certainty (shy of digging into address-by-address data from the last U.S. census). As a result, UST system owners and operators may be forced to make some conservative guesses from general census data.

Investigation and Remediation Deadlines, with Automatic "Fees" (Read: Penalties)

One of the wholly new aspects of the revised regulations is the introduction of automatic, escalating "fees" tied to investigation and remediation timelines.

Essentially, these "fees" are penalties for failure to meet one-size-fits-all remediation deadlines and submission of related forms to DEEP. Failure to complete investigation and achieve applicable remediation standards for soil and other "impacted material" within one year of release discovery will trigger an annual $1,000 charge, escalating by $1,000 in each subsequent year to a maximum of $5,000 per year. Separate annual charges apply to post-remedial groundwater monitoring. Failure to achieve applicable groundwater standards within two years after achieving soil and other standards will trigger similar $1,000/year charges, with similar escalation up to $5,000/year.

Notably, these fees are purely schedule-driven and disregard cost-efficiency considerations in remediation. DEEP's response to public comments regarding the revised regulations makes plain that MNA is a particular target here.

Closure Requirements

UST system closure requirements under (d)-101 are now significantly more prescriptive. For example, individuals conducting closures must have HAZWOPER training and pass specific decommissioning exams. For closure assessment and sampling, the UST system owner or operator must hire a person with at least three years' experience and training, who must adhere to more detailed closure standards. As with all the other sections of the revised regulations, the level of new detail in these rules necessitates a close read.

Specified Penalties – Operational Noncompliance

Finally, primarily for (d)-101-regulated UST systems, there is now an entirely new set of pre-determined noncompliance penalties. (Note: These are codified outside the UST regulations, at RCSA 22a-6b-8(c).) The penalty amounts range from $100 to $1,000 for each of a dozen-plus types of noncompliance with UST systems requirements. Some of these penalties are specified as "per record" or "per UST system." However, others are stated as "per violation," which, depending on the context, may be less clear as to scope. Examples of violations targeted include: failure to submit certain notifications, a "false statement" in a UST notification form, failure to maintain red-tag disabling devices, late release reporting, lack of Class A, B and C operators, financial responsibility, and operating beyond life expectancy (including escalating penalties for each additional year).

Lastly, note that these amounts account only for the "gravity-based penalty component." Therefore, DEEP apparently still has authority to assess an additional "economic benefit penalty component," to offset what DEEP believes was the UST system owner's or operator's potential savings from noncompliance.

"… shift toward greater prescription, tighter timelines, and reduced flexibility."

Conclusion: Heightened Compliance Risk in a More Prescriptive Regime

For professionals familiar with Connecticut's UST programs, the 2025 revisions in many respects represent an unmistakable shift toward greater prescription, tighter timelines, and reduced flexibility. While some revised standards and organizational improvements are welcome, the revised regulatory framework warrants close attention to ensure your compliance program has been fully updated to keep pace with the revised rules.