

Summary of Assessment of Public Comment Part 597 & 598 (Chemical Bulk Storage – CBS)

Introduction

This summary reflects the responses of the New York State Department of Environmental Conservation (DEC) to the main comments submitted by the public regarding the newly adopted 6 NYCRR Parts 597 and 598, Chemical Bulk Storage (CBS) rule. This rulemaking was proposed on June 16, 2021, and included comment periods from June 16, through December 6, 2021, with public comment hearings on August 17 and November 30, 2021. To comply with regulatory timelines, the rulemaking was re-noticed on November 16, 2022. A public comment hearing was held on January 18, 2023, and the comment period ended on January 24. Across both comment periods, six comments were received regarding the CBS proposed regulations.

Reporting of spills to secondary containment (Comment 1.1.1)

One of the existing exemptions to reporting a spill to secondary containment was removed in the draft language. A commentator noted that this would impose a new requirement for facilities, which was something DEC claimed would not occur as part of this rulemaking, as they would now need to report these spills to the spill hotline.

DEC explained that the language that was removed was contradictory to another spill reporting requirement in a separate section of the CBS regulations. To fix this contradiction and eliminate confusion, DEC removed the less stringent and less environmentally protective provision in favor of the requirement that spills to secondary containment be reported. DEC's interpretation is that the more stringent requirement already takes precedent in existing regulation and therefore the removal of the noted exemption should not impose an additional requirement on facilities. Furthermore, this change brings CBS spill reporting more in-line with Petroleum Bulk Storage (PBS) spill reporting which helps further eliminate confusion between the two programs.

Climate change considerations (Comment 1.2.1)

Some commenters expressed their disappointment that DEC did not add new requirements aimed at mitigating climate risks in the Bulk Storage regulations, given updates to both §17-1015(1) and §40-0113(1)(b) of the Environmental Conservation Law. The primary objective of this rulemaking was to harmonize existing federal and state regulations on Bulk Storage (and address any discrepancies/conflicts between 40 CFR Part 280 and 6 NYCRR Parts 613 and 598). As a result, DEC did not perform an in-depth cost-benefit analysis for the rulemaking, which is required for new initiatives with significant associated costs (such as the provisions that the commenters called for to address climate risks). However, DEC will incorporate the updates to CRRRA, CLCPA, and other climate change policies in a subsequent rulemaking where those costs and other impacts can be properly evaluated.

Leak detection under tank bottoms for on-ground tanks (Comment 1.3.1)

A commentator requested that the required leak detection for the tank bottoms of on-ground tanks be more in-line with accepted design standards or for DEC to allow more alternative, equivalent methods to meet the requirements. DEC responded that the methods (i.e., foundational channel and perforated gravity piping) do not contradict accepted design standards, and they are an accepted design technology in the industry outside of CBS. Furthermore, CBS allows for various

alternatives to comply with the tank bottom leak detection requirement, including elevating the tank on a rack, saddle, or stilts or through an alternative method that provides equivalent protection as to the previously mentioned methods.

Monthly versus every 30 days (Comment 1.4.1)

DEC harmonized various periodic inspection requirements to instead be on a 30-day basis rather than monthly. This brought many of the periodic requirements in CBS more in-line with the federal requirements in 40 CFR 280, from which the CBS requirements are based on. A commentor suggested that the periodic requirements remain monthly as to avoid issues with staffing and inflexible schedules. DEC responded that the federal regulations already use the 30-day basis and that inspectors may use discretion if a facility is instead using a monthly basis and are off by a few days.

Out-of-service underground storage tanks and permanent closure (Comment 1.5.1)

A commentor requested clarification on the term “standby storage” as it pertains to out-of-service tanks and requested that more alternatives be available for tanks that are out-of-service for more than 12 months.

DEC clarified that the standby storage exemption is meant to apply to tanks used for intermittent purposes such as emergency heating or power generation. These types of tanks do not receive or dispense petroleum on a regular basis and thus the out-of-service definition would unduly apply to them which may hinder their ability to perform their designated function.

For out-of-service tanks, DEC explained that, unlike the PBS program, CBS tanks are afforded more flexibility when out-of-service for extended periods of time; CBS tanks do not need to be closed after 12 months if they follow certain rules, including protecting the tank from corrosion and testing it before bringing it back in service.

Operator training and retesting (Comment 1.6.1)

DEC has introduced a periodic (5 year) retesting requirement for Class A and B Operators. A commentor requested that this be at least changed to only require retesting each time the regulations are updated, noting that retesting places a new burden on facilities.

DEC responded that Operators are expected to know how to properly operate/maintain the tank system, which then leads to fewer preventable spills having to be reported/cleaned up and improvements to the facility’s compliance history; retesting sustains those benefits, thereby fostering a proactive mindset regarding regulatory compliance. The Operator Exams continue to be free of charge and can be taken online at the user’s convenience; additionally, passing the exam should not be difficult for “minimally competent” Operators. As such, DEC believes that retesting once every five years is not a burden.

Assessment of Public Comment

6 NYCRR Parts 597 and 598 (Chemical Bulk Storage – CBS)

1. General Comments on Part 598

1.1 Reporting of spills to secondary containment

Comment 1.1.1

The current language of 6 NYCRR Part 598.14(a)(4) should be included in both Parts 597 and 598 – *A person is not required to report a spill of a reportable quantity to secondary containment pursuant to paragraph (2) of this subdivision if all of the following conditions are met: (i) the secondary containment system meets the requirements of sections 599.9 and 599.17 of this Title; (ii) there is control over the spill or overflow, and it is completely contained within 24 hours; (iii) the total volume of the spill or overflow is recovered or accounted for, and; (iv) the spill will not result in any of the conditions listed in section 597.4(b)(1)(ii) of this Title.*

Engineered secondary containment that captures 100% of a spill from reaching the environment should provide adequate assurance to the agency that there was no harm to the environment. Also, by not having to immediately (within two hours) notify the Department, will allow the facility more opportunity to focus on correcting any issue(s) that may have contributed to the spill while not being burdened with making a notification to the agency. Requiring facilities to make notifications for these types of events subjects the facility to missed reporting deadlines and penalties without providing any benefit to the environment.

We understand that it is not “*DEC’s intention to establish any new requirements concerning the CBS program that would change the manner in which regulated entities operate under existing practices and applicable federal and State laws and regulations*” and therefore request that the existing language for non-reporting of chemical spills into engineered secondary containment remain in place.

Response 1.1.1: The commenter is referring to the spill reporting requirements in existing 6 NYCRR Parts 598.14(a), specifically the proposed removal of the exemption for reporting spills made to secondary containment (598.14(a)(4)).

The existing CBS regulations contain a contradiction for spill (release) reporting between Part 597.4 and Part 598.14. To fix this contradiction, DEC eliminated the 598.14(a)(4)

exemption in favor of the more stringent 597.4(b)(3) exemption. Furthermore, the decision to retain the 597.4(b)(3) exemption was also driven by the rulemaking goal of harmonizing the CBS and Petroleum Bulk Storage (PBS) programs; the existing 597.4(b)(3) reporting requirements better reflect the reporting requirements of PBS.

Currently, because both spill reporting exemptions exist simultaneously, the more stringent (more protective of the environment) option should be the option that facilities are following. Therefore, DEC does not see the removal of the existing 598.14(a)(4) spill reporting exemption to be a "...new requirements concerning the CBS program that would change the manner in which regulated entities operate under existing practices and applicable federal and State laws and regulations".

1.2 Part 598 and its corresponding guidance documents do not consider climate impacts on facilities that store hazardous substance.

Comment 1.2.1

The Department of Environmental Conservation has proposed amendments to its regulations on petroleum and chemical bulk storage facilities (*State Register* I.D. ##ENV-24-21-00008-P & ENV-24-21--00009-P). Comments on the petroleum bulk storage (PBS) and chemical bulk storage rules (CBS) were originally due in August, but the comment period was extended until December. Unfortunately, the hurricane season was not postponed, and since August our residents have experienced several more devastating weather events, including a storm surge warning for Long Island from Tropical Storm Henri, followed by record-breaking rainfall and deadly flooding from Hurricane Ida. The accelerating pace of climate-driven extreme weather events makes it vitally important to strengthen our efforts to mitigate the impacts of flooding and storm surges.

These efforts must include requiring additional safeguards for installations that store petroleum products and hazardous substances. In 2014, the Legislature recognized the need for consideration of climate risk including sea level rise, storm surges and flooding and enacted the "Community Risk & Resiliency Act" (Ch.355, L. 2014). This law required agencies to incorporate assessments of such risks into their processes for making decisions on permitting and funding projects. The statute explicitly incorporated such consideration into the Department's regulatory oversight of PBS and CBS facilities, in recognition that by their very nature these

facilities pose hazards to health and safety which would be greatly exacerbated from climate-related disasters.

Specifically, Environmental Conservation Law §17-1015(1) was amended to require that, in “proposing, preparing and compiling” regulations for PBS facilities, “the department shall include consideration of the future physical climate risk due to sea level rise, and/or storm surges and/or flooding.” This statutory requirement applies to the development of regulations affecting existing as well as new tanks. Regarding CBS facilities, Environmental Conservation Law §40-0113(1)(b) was amended to include “future physical climate risk due to sea level rise, and/or storm surges and/or flooding” as environmental factors on which the Department’s regulations shall be based. Unlike other provisions of the Act, existing facilities are subject to climate risk reviews: the PBS provisions explicitly apply to regulations for “existing and new facilities,” while the CBS provisions require consideration of climate risk factors not just for design and construction but also operation, repair, maintenance, monitoring, testing and inspection of facilities, whether new or existing.

These statutory provisions explicitly require the Department to consider climate risks in developing regulations on PBS facilities and to factor consideration of such risks into its CBS facility regulations. If the Department gave any consideration to climate impacts in developing these proposals, it does not show in the proposed texts or supporting documents. All that appears are the following short sentences that would be added in new sections of the regulations:

§613-1.15 Future climate risk. In addition to the requirements set forth in this Part, facilities must take into account the provisions of ECL section 17-1015 to comply with the provisions of this Part.

§598-1.18 Future Climate Risk. In addition to the other requirements set forth in this Part, all facilities must take into account the provisions of ECL Article 17 Title 10 section 15 to comply with the provisions of this Part.” (It is unclear why this provision contains an apparent reference to the statutory provision on standards for PBS facilities. It should refer to §40-0113, which governs regulation of CBS facilities.)

The proposed PBS regulations include one climate-related addition: a new requirement for uplift protection for certain “tanks that may become buoyant because of a rise in the water table, flooding, or accumulation of water“(renumbered §613-2.2(k)(2)). However, this provision is based on an industry standard that was updated about 10 years ago and would only apply to

tanks installed since October 11, 2015. Other than this, nothing in either proposal provides any information on how facility operators should “take into account” the statutory requirement for consideration of climate risks.

In fact, it appears that the only guidance that the Department has developed to date on sea level/storm surge/flooding issues concerns elevation of newly proposed structures. This dearth of guidance is especially problematic in light of the potential risks of inaction on this topic and only marginally relevant to registered PBS and CBS facilities. Perhaps more importantly, the existing guidance does nothing to enhance protection for existing tanks. This stands in marked contrast to guidance that has been released by other jurisdictions up and down the Atlantic Coast, including the Environmental Protection Agency Region 6’s regional response team and the Province of Nova Scotia, as well as the flood guide issued by the Environmental Protection Agency’s underground storage tank (UST) program that provides detailed guidance on both underground and aboveground storage tanks at UST facilities.

In limiting its focus to new structures only, the Department ignores the fact that older tanks typically pose a greater risk of failure due to climate-related damage. Even under the proposed regulations, tanks and components installed before October 11, 2015, must meet less stringent standards than those installed after that date, and tanks and components installed before December 27, 1986 are subject to even less stringent requirements. These tanks, which have fewer safety features and are more likely to be located near our neighborhoods and schools, would appear to present the greatest need for retrofitting and action plans to prevent climate-related failures. Addressing the risk of toxic releases from such operations is a core purpose of the Community Risk & Resiliency Act.

Instead of merely requiring facility operators to “take the statute into account,” the Department should incorporate climate hardening and response requirements into the regulations to the maximum extent practicable. DEC should include clear language in the regulations that the enforcement measures provided for in law may be used if it is determined that the location, design and condition of a tank or tanks indicate that leaking due to climate-related damage is probable. In addition, the regulations should specify that the Department will issue supplemental industry-specific guidance on mitigation measures that must be taken if, in the determination of the facility or the Department, the level of risks requires such actions.

This guidance should require consideration of physical improvements such as berm standards, secondary containment of aboveground piping and the use of stiffening rings to prevent buckling, as well as operational standards to prevent tank rupture. When significant risks are identified, a facility-specific plan for implementing protective measures should be submitted to the Department for approval. The regulations and all guidance should clearly indicate that these guidance documents are “requirements prescribed by regulation” within the meaning of Environmental Conservation Law §17-1007 (4) or §40-0011(2), and that any failures by a tank operator to take the required steps set forth in the guidance to assess climate risk and undertake any indicated equipment or operational changes may be found to constitute violations under these statutory provisions. This will ensure that the requirements of the Community Risk & Resiliency Act for PBS and CBS facilities are fully implemented.

The Department should also rethink its current reliance on the concept of a “100-year floodplain,” which is continued in the proposed regulations, since recent storms have made it clear that many more locations are vulnerable to storm surge and flooding than previously thought.

Response 1.2.1: The issues that the commenter raised are valid and require careful consideration as part of the Community Risk and Resiliency Act (CRRA). However, the primary objective of this limited rulemaking is to consolidate existing federal and state regulations on hazardous substance bulk storage. The commenter’s suggested additions would impose new initiatives with significant associated costs which, in turn, will necessitate an in-depth cost-benefit analysis. Both of these are beyond the scope of this rulemaking.

DEC will reflect the updates to CRRA, CLCPA, and other climate change policies in better detail in a subsequent update to Part 598 so they can be addressed as more substantive changes. CBS is part of the DEC Bulk Storage programs, which includes PBS and the Major Oil Storage Facility (MOSF) regulations. Addressing the bulk storage regulations regarding climate change will be a multi-tiered process.

The commenter correctly pointed out a citation error in 598-1.18 in which a section of the ECL was erroneously being referenced. This citation is amended and now references the correct ECL provision for CBS facilities, Article 40 Section 40-0113.

1.3 Leak detection under tank bottoms for on-ground tanks

Comment 1.3.1 proposed language

New subdivision 598-2.1(b)(1)(ii) Category 2 tank requirements. *Every tank must meet the following requirements:*

(a) Tank design and construction standards.

(1) Except for tanks described in subclause (2) of this clause, all Category 2 tanks must be designed, constructed, and installed or certified by a qualified engineer or technician in accordance with one of the following:

(i) ULC Standard S603;

(ii) ASTM D4021-92 (see section 1.16 of this Part); or

(iii) a code of practice developed by a nationally recognized association or independent testing laboratory and approved by the department.

New subdivision 598-3.2(a)(2)(ix)

(2) Category 2 requirements. Tank systems must be installed in accordance with the following:

(ix) Installation Instructions. In addition to the above requirements, all tank systems must be installed in strict accordance with the manufacturer's instructions and a consensus code, standard, or practice developed by a nationally recognized association or independent testing laboratory consistent with the standards of this subparagraph, such as API 1615. (See section 1.16 of this Part). This includes repair of any damaged coatings prior to backfilling... (emphasis added).

New subdivision 598-3.3(b)(1)(ii)(b) Leak detection

(b) Category 2 tanks must have a system for monitoring leakage between the tank bottom and the secondary containment system. This may include perforated gravity collection piping or channels in a concrete foundation, or other equivalent method acceptable to the department. Monitoring may be accomplished by visual, mechanical, electronic or other means acceptable to the department. Tanks which are entirely aboveground, such as tanks on racks, cradles or stilts, may be visually monitored for leakage to meet this requirement.

Comment: Proposed §598-3.2(a)(2)(ix) requires tank systems to be installed in strict accordance with the manufacturer's instructions and a consensus code, standard, or practice developed by a nationally recognized association or independent testing laboratory.

Tank design professionals have indicated that the requirement for channels in §598-3.3(b)(1)(ii)(b) (current §599.10(a)) is inconsistent with accepted ASME/ASTM consensus standards (ASME RTP-1 Appendix on installation; ASTM 3299 and 4097), which call for a support base "free of depressions" for such tank installations. Accordingly, these consensus standards conflict with the regulatory leak detection guidance to install "perforated gravity collection piping or channels in a concrete foundation," which results in a support base with "depressions" and decreases stability. [Commenter] suggests eliminating or further clarifying these conflicting requirements. In addition, DEC should include other equivalent methods or options besides the piping or channels if DEC chooses to retain those methods in the regulations even though they conflict with consensus standards.

Response 1.3.1: DEC does not consider the installation of “perforated gravity collection piping or channels” to be depressions in the tank foundation which undermine the stability of the tank system. These methods of leak detection between the tank bottom and secondary containment (impervious barrier) are used across both the CBS and PBS programs and have been longstanding requirements in both regulatory programs. To date, these technologies have not caused any issue in the stability of the tank foundation.

Furthermore, leak detection between the tank bottom and secondary containment is not limited to only “perforated gravity collection piping or channels in a concrete foundation”. DEC allows for alternative methods when they provide an equal level of protection and leak detection. Additionally, tanks may be elevated, such as on racks, cradles, or stilts, to comply with this leak detection requirement.

1.4 Change from monthly to 30-day inspection intervals

Comment 1.4.1 proposed language

PBS USTs

New subdivision Section 613-2.2(g) Periodic inspection/testing of leak detection equipment.

(1) Connectivity inspections for electronic equipment. *All electronic monitoring systems must be inspected for connectivity at 30-day intervals.*

New subdivision Section 613-2.2 (h) Periodic operation and maintenance walkthrough inspections.

(1) Walkthrough inspection practices. *One of the following types of walkthrough inspections must be performed to ensure proper operation and maintenance of UST systems:*

(i) *walkthrough inspections that, at a minimum, checks the following equipment at intervals specified below:*

(a) *every 30 days (note: fill port catch basins receiving deliveries less frequent than every 30 days may be inspected prior to each delivery):*

(1) Fill port catch basins. ...

(2) Leak detection equipment ...

CBS USTs

New subdivision 598-(f)(1)(i) Periodic operation and maintenance walkthrough inspections.

Walkthrough inspections that, at a minimum, check the following equipment at intervals specified below:

(a) *every 30 days ... fill port catch basins ... leak detection equipment ... other equipment... .*

PBS ASTs

New subdivision Section 613-4.2(h) Periodic operation and maintenance walkthrough inspections.

(1) Walkthrough inspection practices. *Walkthrough inspections that, at a minimum, check the following equipment at 30-day intervals, must be performed to ensure proper operation and maintenance of AST systems:*

(i) *leak detection equipment/systems;*

(ii) *cathodic protection equipment/systems;*

(iii) *overflow prevention equipment ...*

Comment: [Commenter] requests that the term "monthly" inspection requirements in the current regulations remains as the regulatory requirement rather than the term "at 30-day intervals." The change from monthly in the current regulations (see, e.g., 613-4.3(a)(1)(i)) to 30-day inspection requirements in the proposed regulations is problematic due to the nature of work at a utility.

Walkthroughs require staff travel and coordination in part because not all PBS or CBS facilities are staffed 24-hours a day. Having a 30-day interval rather than a monthly inspection that is tied to the daily calendar is problematic as there may be emergencies, low staffing and/or weather events that disrupt the ability to inspect PBS and CBS USTs on such an inflexible schedule. Tying the inspection schedule to the monthly calendar is more practical and easier for compliance staff to follow, reducing the risk that agencies will make mistakes that result in violations.

Response 1.4.1: The UST system walkthrough inspection requirements under clauses 613-2.2(h)(1)(i)(a) and 598-2.2(f)(1)(i)(a) were taken from 40 CFR 280.36(a)(1)(i), which specifies a frequency of 30 days. The connectivity and AST system walkthrough inspection language was amended for consistency by eliminating having “every 30 days” and “monthly” in the same regulations. These requirements pertain to periodic reviews of the tank system (and its components); if the inspections are performed on a regular basis (i.e., reasonably close to every 30 days). DEC will use its discretion if off by a few days.

1.5 Out-of-service CBS USTs & permanent closure

Comment 1.5.1 proposed language

New subdivision 598-2.6(a)(4) and (b)(4) UST systems that are out-of-service for more than one year must be permanently closed if the tank system has not been protected from corrosion as required in clause 2.1(b)(1)(ii)(b) of this Subpart. The department may grant a time extension based on the findings of a site assessment performed by the owner or operator in accordance with subdivision (d) of this section. UST systems that are-of-service for more than one year must be inspected or tested in accordance with paragraphs 2.3(c)(1) and 2.3(d)(2) of this Subpart and determined to be structurally sound and tight before being returned to service. (b) Permanent closure of tank systems. To permanently close a tank system, the tank must be removed from the ground or closed in place in accordance with paragraph(1) of this subdivision or undergo a change-in-service in accordance with paragraph (2) of this subdivision.

Comment: The [commentor] requests that an alternative to removing or filling the UST tank in

place be allowed as discussed above. The [commentor] also requests that the term “standby storage” be clarified as discussed above.

Response 1.5.1: Unlike the Petroleum Bulk Storage program, the Chemical Bulk Storage (CBS) program does not explicitly require that tank systems, underground or aboveground, be permanently closed after 12 months of being out-of-service. Underground tanks, per 598-2.6(a)(4), may remain out-of-service for more than 12 months and be brought back into service as long as they have been adequately protected from corrosion during this period and are tested before being brought back into service. Similarly, aboveground tanks may remain open past 12 months by following the requirements in 598-3.6(a)(4). Please note that the NYS Fire Code may require certain flammable and combustible liquid tanks be closed following 12-months of out-of-service.

DEC understands that while most PBS tanks store petroleum to dispense in sustained activities (e.g., feeding a heater/boiler/furnace, dispensing gasoline to customers at a gas station), some tank systems hold petroleum for specific intermittent purposes. These include emergency power generation and backup heating, which are examples of “standby storage”. Standby storage tanks exclude seasonal storage tanks as the latter sees frequent use during part of the year, where the former may not see any use during the entire year.

1.6 Operator Training and retesting

Comment 1.6.1 proposed language

Additional Operator Testing- CBS USTs

New subdivision 598-2.5(c)(4) Periodic retesting. *Class A and B Operators who possess a current and valid operator training credential by passing the Department’s exam must retake the exam five years after the date of the last valid Operator authorization certificate until the Department receives written notice and documentation that the individual either is no longer the designated Operator or inactivates their authorization.*

Comment: The [commentor] submits the same comments regarding the proposed training requirements for CBS as those for the PBS USTs. Current CBS UST regulations also only require one training and no re-testing (current regulations 598.12, et seq.) except where the

Department determines a UST to be in significant non-compliance. The [commentor] supports keeping the existing training regulations in place and, in the alternative, when new regulations are adopted, additional one-time training should only be required to assure familiarity with the new regulations.

Response 1.6.1: Good tank system equipment will only prevent leaks if operated and maintained properly and knowing how to properly operate/maintain the tank system is part of the Operator's job. That is, having a competent, knowledgeable Operator will lead to fewer preventable spills having to be reported and improve the site's compliance with the PBS regulations.

To sustain the benefits of having a competent Operator (and to help them retain the knowledge necessary to be one), retesting will be required. This also fosters a proactive mindset regarding compliance with Part 598, as opposed to relying on the results of a periodic DEC inspection to tell what areas the facility must improve upon.

The Operator Exams are free of charge, has 80 questions at most (with a 2.5-hour time limit), and can be taken online at the user's convenience. Those considered to be "minimally competent" will consistently pass the Exam; however, those who are not – and perhaps applied for reciprocity to avoid taking the Exam – will fail the Exam and thus will no longer be responsible for tank systems they cannot properly operate and maintain.

DEC believes that the demonstration of competency as a Class A/B Operator (by passing the Exam) once every five years is not a burden.