April 8, 2021

SB 900: A good start, but not good enough to protect frontline communities

The Sierra Club supports the need to add enforceable performance standards for the design, construction, operation, and maintenance of above-ground storage tanks for both existing and new storage tanks, as is contemplated in SB 900. We have reviewed CSSB 900 and believe while it is a good start it should be improved by:

1. **Covering more above-ground storage tanks by expanding the definition of the very narrowly tailored bill to include many more storage tanks.** We would specifically suggest lowering the capacity of the tanks covered from 8,000 barrels (336,000 gallons) to 10,000 gallons of capacity and including more types of chemicals beyond those contained in 40 CFR 68.130. Because companies that have tanks with 10,000 gallons or more are already required to perform certain self-reporting under federal code, we believe that 10,000 gallons is the correct number to cover.

![Capacity of Covered Tanks in CSSB 900](image)

2. **Create the Storage Performance Standard Program earlier.** CSSB 900 requires that the program be in place by September 1, 2023. We believe that September 1, 2022 would be a more reasonable date to provide protections to frontline communities.
3. Move up the compliance date for existing tanks. Under CSSB 900, existing tank operators have until September 1, 2027 to report their compliance status to the Commission, and then they will have 10 years to comply again. We would suggest a faster compliance period such as September 1, 2023, and that operators be required to certify compliance every 5 years rather than every 10 years.

4. Inspect more. The bill contemplates inspecting every five years but we would encourage the author to consider a more frequent inspection regime, such as once every two years. We would also encourage joint inspections with the County Fire Marshall.

5. Enforcement. There is no specific provision in the bill to make sure that companies that don’t comply with the requirements are subject to strict enforcement. We believe a section should be added to the bill that refers back to Chapter 7 of the Water Code, and also contemplates regular inspections and potentially expanded penalties if an operator does not comply and accidents, including injuries and deaths, occur.

Overview

Above-ground storage tanks that house petroleum and other products should be built to prevent fires, spills, and failure but are poorly regulated and the state requires no performance standards.

Recent floods and hurricanes have shown how vulnerable above-ground storage tanks are to failure during storms, leading to leaks, spills, and air emissions which were highlighted during Hurricane Harvey, the recent Trinity River floods and other disasters such as the TPC Group explosion in Port Neches.

Similarly, the ITC and KMCO fires show that many communities are living next to large above-ground storage tanks that do not even have adequate walls, fire suppression tools or maintenance requirements.

What Does CSSB 900 Do?

CSSB 900 creates an exception to an existing exception in Chapter 26.341 of the Water Code and requires that certain registered Above-Ground Storage Tanks at bulk storage facilities meet new TCEQ performance standards to avoid polluting surface and groundwater during floods, hurricanes, or human-made disasters. The bill would cover both existing and new above-ground storage tanks that are and require TCEQ to develop performance standards for both based upon existing API and other standards. While the bill does not dictate specific construction, we do believe this bill will create the standards to make sure that floating roofs and geodesic domes are used as appropriate, drain size is appropriate, and that containment and fire suppression are used.
Does CSSB 900 cover all Above-Ground Storage facilities?

No. Under the Committee Substitute it only covers bulk tanks over 8,000 barrels at refineries, certain chemical plants and pipelines storage terminals that carry substances regulated under 40 CFR 68.130. Again we would like to see the bill expanded to cover smaller tanks which can also be problematic.

Doesn’t TCEQ already require that Above-Ground Storage Tanks meet performance standards?

No. While TCEQ does require performance standards for underground storage tanks, and does require registration of larger above-ground storage tanks, and can potentially inspect such tanks, there are no specific standards. Certain above-ground storage tanks above the Edwards Aquifer do have some additional plan requirements. In addition, TCEQ does not require Above-Ground Storage Tanks to carry financial assurance.

Background on Water Pollution

Hurricane Harvey and previous events, like the Trinity River floods of 2015, revealed that older oil and gas storage tanks are subject to failure. Multiple large petroleum and related-product tanks failed, causing large spills and emissions events, particularly those with external floating roofs. In fact, a database kept by the US Coast Guard found dozens of spills related to failed aboveground storage tanks, in some cases releasing hydrocarbons directly into the environment, including in some neighborhoods in the Houston area. In addition, in other areas, some storage tanks actually floated away downriver. An Associated Press analysis of pollution reports submitted to state and federal regulators found more than two dozen storage tanks holding crude oil, gasoline and other contaminants ruptured or otherwise failed when Harvey
slammed into the Texas coast, spilling at least 145,000 gallons of fuel and spewing toxic pollutants into the air.

Some Recent Headlines

“Magellan gasoline leak is biggest known spill of Harvey aftermath”

“Valero underestimated Houston refinery leak during Harvey”

“Tank failures during Harvey reveal vulnerabilities in storm”

A recent interim report from 2019 from the Senate Committee on Natural Resources & Economic Development stated:

“Written testimony stated that more than 15 storage tanks holding crude oil, gasoline, and other hydrocarbons failed during the storm and that at least 400 storage tanks in the Houston regions have floating roofs, which were the cause of those failures. Although the failure rate cited above was only 3.75%, the written testimony also cited an article that said these 15 tank failures resulted in a combined 3.1 million pounds of pollutants into the atmosphere. The Committee was told that one possible option to eliminate roof failures in severe flooding events would be to retrofit all existing external floating-roof tanks with geodesic dome covers. TCEQ has provided follow-up information to the committee which confirms that this option is possible, however TCEQ lacks the regulatory or statutory authority to require external floating-roof tanks to be retrofitted with geodesic dome covers. Other options could also be explored, such as requiring internal floating roofs (versus external floating roofs) for all new tank installations in locations that may be affected by a hurricane, or requiring a certain drain pipe size to be utilized on floating roof tanks, as was suggested at the hearing.”

Many community members reported burning eyes, problems with asthma, hospital visits and missed school days from these failures. More recently, the multiple explosions and fires at Above-ground storage tanks has created even more health issues and resulting problems in the environment and nearby water bodies.
The Lone Star Chapter of the Sierra Club supports efforts to better regulate above-ground storage tanks. While we appreciate the initial effort found in CSSB 900, we believe that the bill should be strengthened by expanding the number of tanks covered by the bill, speeding up the timeline for rulemaking and compliance, increasing the timing of inspections, and adding specific enforcement and penalty provisions.