



OFFICE OF THE  
HARRIS COUNTY ATTORNEY  
**CHRISTIAN D. MENELEE**

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April 10, 2023

Via Fax: [fax4808@tceq.texas.gov](mailto:fax4808@tceq.texas.gov)

Via Fax: 512-239-4808

Laurie Gharis, Chief Clerk

Texas Commission on Environmental Quality

Office of the Chief Clerk, MC 105

PO Box 13087

Austin, TX 78711-3087

Re: Harris County Attorney's Office Comment on Proposed Rulemaking Chapter 338, Aboveground Storage Vessel Safety Program Rule; Rule Project No. 2022-015-338-CE; Docket No. 2022-0989-RUL

Dear Ms. Gharis,

The Harris County Attorney's Office (HCA) appreciates the opportunity to comment on the proposed Chapter 338, Aboveground Storage Vessel Safety Program (ASVS Program or the Program). Senate Bill (SB) 900 requires the Texas Commission on Environmental Quality (TCEQ) to establish an ASVS Program to provide for the protection of groundwater and surface water resources in the event of an accident or natural disaster. HCA writes in general support of the rule. However, HCA is concerned that exemption §338.3(b) does not best serve the protective purpose of the Program.

***Harris County is Especially Affected by Aboveground Storage Vessel Failure***

With a population of over 4.7 million residents, Harris County is the most populous county in Texas and along the Gulf of Mexico. As a flat-lying coastal area, the County is especially prone to natural disasters like flooding, tropical storms, and hurricanes. Harris County has about 2,500 miles of channels and has classified 22 major watersheds that drain into four major waterways.<sup>1</sup> These identified watersheds are small areas, and water in these creeks and bayous can rise and fall quickly.<sup>2</sup> Thus, more than a third of the County falls within a FEMA-designated flood plain.

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<sup>1</sup> Harris County Flood Control District, More information available at: <https://www.hcfcd.org/About/Flooding-andFloodplains/Drainage-Network>

<sup>2</sup> SSPEED Center, Houston A Year After Harvey: Houston Where Are and Where we Need to Be (SSPEED Center After Harvey Report), Rice University's Baker Institute for Public Policy, Jim Blackburn and Phil Bedient, PhD., (August 2018).

Available at: <https://8ed4fb93-0a65-4904>

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The County also has a particularly large concentration of industry, including the proliferation of industry in the Port of Houston, which is a 25-mile-long complex of 200 terminals along the 52-mile-long Houston Ship Channel, which are at high risk from storm surge and hurricanes. Modeling from the SSPEED Center at Rice University estimates that should a small category 4 storm hit the ship channel, “upwards of 2,200 petroleum and chemical storage tanks would experience some form of inundation, potentially releasing updates of 90 million gallons of oil and hazardous substances.”<sup>3</sup> Thus, the combination of our County’s geography and heavy industrialization make us uniquely likely to experience aboveground storage vessel failure.

The consequences of these failures can be catastrophic, especially in the event of failure due to natural disasters. For example, hazardous chemicals released into flood waters can come into contact with people’s homes and skin and can eventually flow into the Gulf of Mexico through one of its local tributaries.

According to the Houston Chronicle, there were more than 15 incidents of floating roofs failing atop oil storage tanks during Hurricane Harvey. Many of these incidents occurred in the Houston area.<sup>4</sup> For example, a tank in Valero Energy’s Houston refinery near the Manchester neighborhood released more than 235,000 pounds of emissions from the “partial sinking” of a roof. The multiple floating roof failures across the areas affected by Hurricane Harvey allowed a combined 3.1 million pounds of volatile chemicals to spew into the air across the region.<sup>5</sup>

While Harvey was unprecedented at the time, Harris County is historically prone to frequent extreme flooding and rain events. A major flood event occurs somewhere in Harris County about every two years.<sup>6</sup> Since 2015, the County has seen six major federal disaster declarations due to rain events.<sup>7</sup> These events will only become more frequent and more intense due to climate change, thus strengthening the need for regulatory oversight of aboveground tanks to protect the ecological and human health of the coast.

### ***Accident-related Tank Failures Have Damaging Effects on Harris County.***

In March 2019, a large fire erupted at the Intercontinental Terminals Company, LLC (ITC) bulk liquid storage terminal in Deer Park, Texas. The fire originated in the vicinity of an 80,000-barrel

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<sup>3</sup> SSPEED Center After Harvey Report at Page 34

<sup>4</sup> Jordan Blum, *Failures of floating-roof oil tanks during Harvey raise concerns*, HOUS. CHRON., (Oct. 11, 2017) <https://www.houstonchronicle.com/business/energy/article/Failures-of-floating-roof-tanks-during-Harvey-12269513.php#:~:text=During%20Hurricane%20Harvey%2C%20there%20were,pounds%20of%20potentially%20dangerous%20emissions.>

<sup>5</sup> *Id.*

<sup>6</sup> *Harris County’s Flooding History, Flooded from the beginning*, HARRIS CNTY. FLOOD CONTROL DIST., <https://www.hcfcfd.org/About/Harris-Countys-Flooding-History> (last visited February 21, 2023).

<sup>7</sup> FEMA, Texas Tropical Storm Imelda (DR-4466) (October 4, 2019), Available at: <https://www.fema.gov/disaster/4466>; FEMA, Texas Hurricane Harvey (DR-4332) (August 25, 2017), Available at <https://www.fema.gov/disaster/4332>; FEMA, Texas Severe Storms and Flooding (DR-4272) (June 6, 2016), Available at <https://www.fema.gov/disaster/4272>; ; FEMA, Texas Severe Storms and Flooding (DR-4269)(April 25, 2016), Available at <https://www.fema.gov/disaster/4269>; FEMA, Texas Severe Storms, Tornadoes, Straight-line Winds, and Flooding (DR-4245) (November 25, 2015), Available at <https://www.fema.gov/disaster/4245>; FEMA, Texas Severe Storms, Tornadoes, Straight-line Winds, and Flooding (DR-4223) (May 29, 2015), Available at <https://www.fema.gov/disaster/4223>

aboveground storage tank. ITC was unable to isolate or stop the release of flammable liquid from the tank, and the fire continued to burn and intensify for days. The fire eventually involved other tanks and created a dark emissions plume that was visible for miles.<sup>8</sup>

While the incident did not result in any injuries to ITC personnel or emergency responders, local residents reported coughs and irritation.<sup>9</sup> The Cities of Deer Park and Galena Park issued shelters in place, multiple parks were closed, various school districts canceled classes, and Harris County closed two roads as a result of the disaster. The Harris County Lynchburg Ferry, a ferry across the Houston Ship Channel that connects North and South Independence Parkway and the San Jacinto Battleground Monument, was also closed. These incidents are only a brief, non-exhaustive summary of the consequences the communities in Harris County faced as a result of the 2019 Fire, which demanded a tremendous amount of County staff time and resources to respond to.

***HCA is Concerned Exemption §338.3(b) is Too Broad.***

Proposed §338.3 reads:

The owner or operator of an affected storage vessel may submit a written request to the executive director for a specific storage vessel to be exempted from the requirements of this chapter. The request must provide a demonstration that the storage vessel presents a sufficiently low risk of floods, storm surges, hurricanes, accidents, fires, explosions, or other hazards so that it does not warrant regulation under this chapter. The executive director must provide written approval before the storage vessel is considered to be exempt from the requirements of this chapter.

HCA is concerned that this exemption, as is, has the potential to undermine the intent of the rule. As outlined above, Harris County is natural disaster-prone and has a huge concentration of industry. SB 900 was introduced in part to address the unacceptable frequency of incidents at regulated facilities in the Houston area. State Senator Alvarado, who introduced SB 900 and represents Houston-area Senate District 6, has stated “Had these things been in place, that could have prevented the ITC fire” in reference to the new performance standards.

Accordingly, HCA believes there are very few, if any, tanks in the County that have a low enough risk of floods, storm surges, hurricanes, or other disasters to warrant an exemption. Thus, HCA asks that Harris County or the Gulf region as a whole be explicitly excluded from this exemption. HCA also asks that facilities with previous aboveground tank failures be excluded from applying for this exemption.

Should the exemption remain in place for Harris County located facilities, HCA is concerned that there is not a specific standard for the executive director to determine whether any particular

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<sup>8</sup> U.S. Chemical Safety and Hazard Investigations Board, Storage Tank Fire at Intercontinental Terminals Company, LLC (ITC) Terminal: Factual Update, 5 (2019) [https://www.csb.gov/assets/1/20/itc\\_factual\\_update\\_2019-10-30.pdf?16522](https://www.csb.gov/assets/1/20/itc_factual_update_2019-10-30.pdf?16522)

<sup>9</sup> Kiah Collier, *State regulators: No ‘immediate health concerns’ from Deer Park terminal fire*, TEX. TRIB., (Mar. 18, 2010) <https://www.texastribune.org/2019/03/18/texas-deer-park-fire-regulators-health-concerns/>; Heyreoun An Han et al., *The Intercontinental Terminals Chemical Fire Study: A Rapid Response to an Industrial Disaster to Address Resident Concerns in Deer Park, Texas*, 17:986 Int’l J. Env’t Rsch. Pub. Health (2020).

storage vessel is to be considered low risk. Therefore, HCA recommends specific criteria be added for what type of demonstration, documentation or “other information” is needed to support a claim that the storage vessel is “sufficiently low risk.” To address varying risk across the State, TCEQ should consider regional or geographically-specific standards, with a higher burden for locations that are disaster-prone, in a flood plain, etc. As is, HCA is concerned this exemption creates too much discretion in the Program’s implementation.

Local governments must regularly interact with the regulated facilities within their boundaries and are likely to have relevant information regarding the appropriateness of a specific facility’s exemption request. HCA asks that local governments are given notice of and the opportunity to comment on exemption applications from facilities in their county or municipality.

*HCA Requests the API Standards Be Made Publicly Accessible*

HCA is concerned about the lack of public access to American Petroleum Institute (API) 653: Tank Inspection, Repair, Alteration, and Reconstruction, Fifth Edition, November 2014, which is incorporated by reference into the rule. These standards currently cost \$235.00 to access. HCA asks the API Standard be made available for public viewing at libraries proximal to affected facilities or at the TCEQ regional offices.

HCA would like to note that the communities neighboring the facilities affected by this rule are overburdened by the effects of tank failure and industrial pollution generally and thus warrant the highest level of protectiveness this rule can provide. Similarly, these communities should know what rules and standards their industrial neighbors are bound by.

HCA appreciates the work TCEQ has done to implement the ASVS Program and the opportunity to comment. If you have any questions, please contact me at [elizabeth.hidalgo@harriscountytexas.gov](mailto:elizabeth.hidalgo@harriscountytexas.gov) or 713-274-5394.

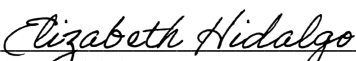
Sincerely,

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