



SIERRA CLUB LONE STAR CHAPTER

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Texas Needs Leadership on Methane Pollution: Pass HB 896 and HB 897 by Reynolds

Methane is an invisible, odorless, organic compound comprised of a single carbon atom surrounded by four hydrogen atoms (CH₄), and is one of a family of compounds called **hydrocarbons**. It is found widely in nature, and is the main component of natural gas. Methane is also produced through digestive processes (agricultural feedlots, for example), as well as when bacteria **decompose** natural materials (landfills, for example), releasing the compound into the air.

When released into the atmosphere, methane acts as a greenhouse gas, trapping UV rays from the sun and heating the air, and is the **second most prevalent** greenhouse gas emitted in the U.S. behind carbon dioxide (CO₂). Although methane has a shorter lifespan in the atmosphere than CO₂ (approximately 12 years compared to CO₂'s potential of thousands of years), it is a much more potent greenhouse gas. On a 20-year timescale, it absorbs **86 times more heat than CO₂**, rapidly warming the planet and exacerbating climate disruption.

Methane is emitted from both natural processes and human activity. Human activities are the largest source of methane pollution, accounting for over **60 percent** of total emissions, and these include industrial processes, agriculture, and waste decomposition.

The oil and gas industry is the largest industrial source of methane pollution in the U.S. (nearly **30 percent** of total emissions), and in 2013, was responsible for **7.3 million metric tons** of methane emissions, or the equivalent of 160 coal-burning power plants. The amount of methane emissions from this sector is expected to increase **25 percent** in the next 10 years.

No state produces more oil and gas than Texas. And no state faces more issues with methane than Texas. Thousands of permitted flares, unlit flares, venting, fugitive emissions, and other sources of air pollution have impacted Texans, and our planet. In 2019, Texas ranked first, both in U.S. oil production and vented and flared natural gas. In 2018, Texas accounted for 51 percent of the total 1.28 Bcf/d. U.S. vented and flared

natural gas according to the Department of Energy. Independent studies and recent efforts by scientists suggest the total volume is much higher.

Unlike other states, Texas has not implemented any specific methane controls beyond what the federal government requires. **HB 896 and HB 897 by Reynolds are two solutions to these issues.**

HB 896 would direct the Texas Commission on Environmental Quality to adopt specific inspection and maintenance controls for certain oil and gas equipment. Under HB 896, the Commission would have to adopt rules that would require quarterly inspections using infrared camera technology to reveal leaks. In addition, the bill would require TCEQ to cut emissions from storage tanks, pneumatic devices, compressor engines and compressor stations, while banning venting and reducing flaring. In this way, Texas – the leading oil and gas state – would take action on air pollution from oil and gas facilities, protecting both public health and the planet.

HB 897 would direct TCEQ to provide a public analysis – with public input – of current state and federal regulations on methane pollution, as well as existing proposals. The analysis would also encourage TCEQ to look at best practices from other states, and look at both regulations and incentives that would lower emissions. TCEQ would be required to produce an initial analysis by January of 2022, seek public input and then publish a final version by June of 2022. In this way, TCEQ and the legislature could examine how to make Texas not just a leader on oil and gas production but a leader on reducing pollution as well.

Didn't the EPA already resolve this issue?

Beginning in 2012 and until 2016, the EPA began to require newly built or modified oil and gas infrastructure to trap more efficiently the methane that is released during the drilling process. However, under the Trump administration those rules were reinterpreted and partially rolled back. Currently, Congress is considering a Congressional Review Act to return the regulations back to the previous administration, and the Biden Administration is considering wider rules.

Although the EPA's regulations were a pivotal first step, because the limits only covered new and modified infrastructure, the **90 percent** of all methane pollution that comes from structures currently operating go unregulated. Indeed, the Trump rules on methane specifically excluded components outside the immediate upstream wellhead and associated equipment, meaning pipelines and processing plants were excluded.

What do methane limits mean for Texas?

Texas is the largest producer of oil and gas in the U.S., producing over 30 percent of U.S. domestic production. Consequently, this means that a significant portion of methane pollution is coming from Texas oil and gas development, and standards – whether from the federal government or Texas – would help improve the air.

In addition to producing climate-cooking methane pollution, fracking sites also negatively **contribute** to regional air quality by producing harmful ground-level ozone. Chemicals known as volatile organic compounds (VOCs) are released into the atmosphere throughout the production process, and upon reacting with sunlight and nitrogen oxides, form lung-irritating ozone that especially affects more susceptible groups such as the young and elderly, as well as those with lung problems such as asthma, emphysema, and chronic bronchitis. While methane pollution is a global issue, reducing VOC pollution is important for the health of local communities such as Denton.

A recent study found that latina mothers living in South Texas that lived near oil and gas wells that were flaring and venting were more likely to give birth to babies with health issues than those living further away. Another analysis by the Environmental Defense Fund found that flares are routinely not properly functioning as designed, or worse, unlit, meaning pollution is venting directly into the atmosphere. Methane --in short gas -- is released in staggering amounts throughout Texas, hurting Texans's health, wasting a resource and cooking our climate. According to the IPCC, methane is 87-times more impactful to our climate than even carbon dioxide over its first 20 years in the atmosphere. Getting it under control is important to our people and our planet.

More needs to be done

Uncontrolled flaring, venting and methane leaks in South and West Texas in the oil patch is not only impacting the health of marginalized rural and urban communities in a time of COVID, it's releasing methane and toxic volatile organic compounds into the atmosphere, cooking our climate and impacting lungs.

Whatever happens with methane and the new administration, Texas should lead, not follow. Under current TCEQ regulations, only about five percent of oil and gas sites are required to inspect for leaky equipment with infrared cameras. Millions of pounds of methane are being released every day in Texas, polluting our communities and cooking our planet.

The Sierra Club believes that after years of inaction, it is time for the Legislature to step up and require TCEQ to do something. At the very least, the Legislature should direct TCEQ to analyze state and federal regulations and learn from other oil and gas producing states, and publicly release that analysis. The Sierra Club is supportive of both additional regulations as well as incentives to encourage industry to adopt cleaner practices.

Links to Written Testimony provided by Sharon Wilson of Earthworks.

One only needs to look at some of the videos collected by experts like Sharon Wilson of Earthworks to see the widespread problems of unlit flares, venting and fugitive emissions.

Apache's Cheyenne Central Processing Facility on March 10, 2018 with emissions from a vapor recovery unit malfunction. The emissions were allowed to continue until May while waiting for a piece of equipment. Apache got no violation.

https://www.dropbox.com/s/ufb5zslmfxr6r9a/2018_03_Apache_Corp_Cheyenne_Central_Collection.mp4?dl=0

Diamondback Desperado State lease - unlit flare and tank venting. I first found the flare unlit in November 2019 and it was still unlit in three visits with journalists in January. In January 2020, I called the emergency number and spoke with a worker who confirmed they knew the flare was unlit for several months. The worker expressed frustration because his manager showed no interest in getting it fixed. A recorded call with TCEQ at the same visit revealed that they were unaware of the complaint I submitted in November. I have several similar examples from Diamondback sites.

https://www.dropbox.com/s/lg9tdz0q36asf07/DiamondBack_Desperado_State_C192118_Jan_-5e24a11dfab00f00018c772d_Jan_19_2020_19_03_26.mp4?dl=0

EagleClaw Midstream Pecos Bend Gas Plant - one of the worst facilities I've ever seen. Manfunctioning flares

https://www.dropbox.com/s/5mo3oefq389k8ji/1_EagleClaw_Midstream_Pecos_Bend_Gas_Plant-5e829d1ac86e7428fb85fc35_Mar_31_2020_1_36_39.mp4?dl=0

Tank and compressor

emissions https://www.dropbox.com/s/30qcymfmx1wp8n/EagleClaw_Midstream_Pecos_Bend_Gas_Plant-5e829ea4bf6ce41ea95878b7_Mar_31_2020_1_49_12.mp4?dl=0

TCEQ has found no violations. EDF has a magnificent video of an unlit flare from this facility.

MDC Texas Operator tank emissions and unlit flare March 2020

https://www.dropbox.com/s/ocubcgzjuqkz5vw/2020_03_06_TanksMDC_Texas_Operator_Pick_Pocket_21-.mp4?dl=0

September 26, 2020, unlit

flare https://www.dropbox.com/s/oxh40krey0ockaa/MDC_Texas_Operator_Pick_Pocket_21FLARE.mp4?dl=0

Here's a worker "thieving the tanks" to collect information and samples. The site has vapor recovery, but because workers let all the gas out of the tanks each time they do thieving which can be several times a day, the vapor recovery is useless. Nineteen workers have died doing this and OSHA issued a hazard alert.

https://www.dropbox.com/s/6x34gq7yenq49it/Oil_and_gas_worker_in_the_plumeSHORT.mp4?dl=0