



SIERRA CLUB

LONE STAR CHAPTER

Chairman Wayne Christian

Commissioner Christie Craddick

Commissioner Ryan Sitton

June 16th, 2020

Dear Commissioners,

I am pleased to present these preliminary ideas and comments from the Sierra Club on ways to limit and eventually eliminate routine flaring, as well as their associated byproducts, and any unburned gases in Texas. We see this as an initial discussion on the issue, and hope it will lead to a more robust process to look at regulatory, enforcement and incentive approaches to limit and eventually eliminate routine flaring. We do appreciate being invited to share our perspective but do believe the Commission would be well served by opening up the process to all stakeholders, perhaps by asking some basic questions and then beginning an informal rulemaking process.

First we join with our friends at Environment Texas, Environmental Defense Fund and many industry leaders in believing that ***Texas can and should set a goal to eliminate routine flaring by 2025, and begin that glide path now.*** We recognize that there may be the need to continue to allow some non-routine flaring for cases of operational upsets, high gas line pressures, or other safety issues, but believe the continued use of the so-called 32 (h) exceptions by the Commission allowing flaring for up to six months and in practice much longer is detrimental to Texas.

We believe that flaring should not be treated as a routine process, because it involves waste and pollution that impact our health, our skies and ultimately our climate.

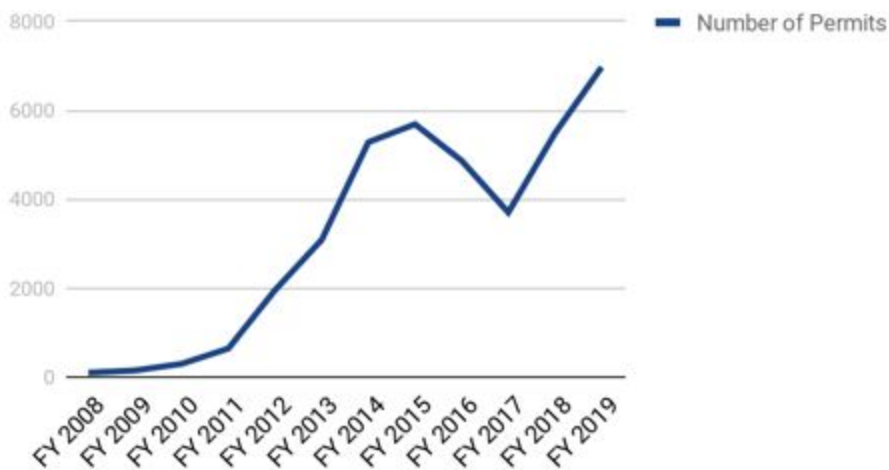
I. The Problem and the Commission's Role

Reported and unreported flaring has been increasing in Texas and now is the time to limit and eventually eliminate it.

First, as is obvious from the RRC's own website, reports like that of Commissioner Sitton, and recent reports and studies released by the Environmental Defense Fund, permits to flare (through the exception in Rule 32 (h)), and even of greater concern, unreported flares, continue to rise.

The figure below is from RRC data and shows that the number of permits granted has skyrocketed, reaching nearly 7,000 individual permits in 2019. About 27,000 permits in all were granted between 2012 and 2019. It is worth noting that it has also become standard practice for the Commission to allow operators to include multiple flares and leases within a single Rule 32 (h) application, meaning that nearly 7,000 permits does not equate to only 7,000 wells.

Exceptions to Statewide Rule 32 (Flaring Exceptions)



Along with those permits, come millions of cubic feet of flared and unflared gas. Natural gas flaring and venting has been especially prevalent in the Permian Basin. According to a recent report, oil and gas companies burned enough gas in 2019 to provide electricity to 7 million homes for a year. Recent reports from the Environmental Defense Fund put the amount of methane lost product at roughly 3.7 percent of all gas produced in the Permian, roughly twice previous estimates. Getting overall numbers is difficult, though the RRC reports about 97.9 billion cubic feet of gas was flared in 2018, although this number may not represent the total. In his report, Ryan Sitton uses the figure of

650,000 million cubic feet per day, which would correspond to a much higher figure for 2019. Industry reports suggest that in the Permian Basin in early 2019, some 650 million cubic feet of gas was being vented and flared every day, and in some counties as much as 30 percent of the gas produced was being wasted.

Indeed, many companies in the Permian Basin operate faulty flares that only partially burn natural gas and release methane directly into the atmosphere. Surveys of flares in February and March 2020 found that more than 10 percent of flares were malfunctioning, including 5 percent of flares that were not even lit.

It is also important to note that a subset of oil producers is responsible for a disproportionate share of flaring. According to the report commissioned by Commissioner Sitton, and other information from the Environmental Defense Fund, it is a relatively small number of producers that are flaring more than five to 10 percent of their total production.

The Legislature has given the RRC very specific authority to deal with waste broadly defined, and current policy is not in line with this authority

The RRC has very clear authority to prevent waste, and their recent decisions to allow operators to flare large volumes of gas appear to fly in the face of this statutory obligation.

Indeed, read clearly, Texas statutes declare that “waste” is illegal and prohibited.

Sec. 85.045. WASTE ILLEGAL AND PROHIBITED. The production, storage, or transportation of oil or gas in a manner, in an amount, or under conditions that constitute waste is unlawful and is prohibited.

Then, under Chapter 85.046 of the Natural Resources Code, there are very specific definitions of what constitutes waste. Among the items that constitute the very definition of “waste” related to flaring and venting waste include:

(1) operation of any oil well or wells with an inefficient gas-oil ratio and the commission may determine and prescribe by order the permitted gas-oil ratio for the operation of oil wells;

(4) permitting any natural gas well to burn wastefully;

(5) creation of unnecessary fire hazards;

(6) physical waste or loss incident to or resulting from drilling, equipping, locating, spacing, or operating a well or wells in a manner that reduces or tends to reduce the total ultimate recovery of oil or gas from any pool

(9) escape of gas into the open air in excess of the amount necessary in the efficient drilling or operation of the well from a well producing both oil and gas;

Furthermore, under Chapter 86 of the Natural Resources Code, there is a general prohibition against allowing gas in the air, with some exceptions, that states:

“Sec. 86.185. PROHIBITION AGAINST GAS IN AIR. No gas from a gas well may be permitted to escape into the air after the expiration of 10 days from the time the gas is encountered in the gas well, or from the time of perforating the casing opposite a gas-bearing zone if casing is set through the zone, whichever is later, but the commission may permit the escape of gas into the air for an additional time if the operator of a well or other facility presents information to show the necessity for the escape; provided that the amount of gas which is flared under that authority is charged to the operator's allowable production. “

Furthermore, the same chapter gives explicit guidance on this topic especially in the 86.042 (1) - (3), stating:

Sec. 86.042. RULES AND ORDERS. The commission shall adopt and enforce rules and orders to:

(1) conserve and prevent the waste of gas;

(2) prevent the waste of gas in drilling and producing operations and in the piping and distribution of gas;

(3) require dry or abandoned wells to be plugged in a way that confines gas and water in the strata in which they are found and prevents them from escaping into other strata;

Finally, clear guidance can also be found in Chapter 91 of the Natural Resources Code which states:

Sec. 91.015. PREVENTION OF WASTE. Operators, contractors, drillers, pipeline companies, and gas distributing companies that drill for or produce oil or gas or pipe oil or gas for any purpose shall use every possible precaution in accordance with the most approved methods to stop and prevent waste of oil, gas, or both oil and gas in drilling and producing operations, storage, piping, and distribution and shall not wastefully use oil or gas or allow oil or gas to leak or escape from natural reservoirs, wells, tanks, containers, or pipes.

Thus, we believe that the current policy of the RRC to “liberally” implement Rule 32, and indeed the very broad exceptions allowed within Rule 32 itself are not in keeping with these statutory provisions. **As a first step, we would suggest a broad review of Rule 32 itself. The Rule includes not only exceptions to flaring, but extensions of flaring well past six months.**

II. RRC must pay attention not just to waste, but pollution from that waste

While all Texans should be concerned about “wasting” that much gas, as a conservation organization we are very concerned about the pollution associated with that waste.

Flaring is the combustion of gases in an open air flame, and the release of both the combustion byproducts and any unburned gases into the air. Thus, by definition some of those byproducts and unburned gases are released into the atmosphere, damaging the environment, public health and our climate. This can include vast amounts of not only methane itself, but nitrogen oxide, hydrogen sulfide and sulfur dioxide.

The Sierra Club believes that the RRC policy of liberally allowing exceptions to Rule 32, and for long periods of time has actually led to a situation where key provisions of the Federal Clean Air Act and state air quality policy are being violated.

How? We are in a catch-22 regulatory loophole which neither the RRC nor the TCEQ is paying enough attention to the actual pollution resulting from flaring. Essentially, RRC is

charged with dealing with waste, and TCEQ with pollution so on the flaring issue, each agency points the finger at one another.

Depending on size of wells and related equipment, the TCEQ is granting “permit-by-rules” for most oil and gas wells, or general operating permits, or even individualized permit that allow certain amounts of pollution from those wells, and where flares are authorized, the efficiencies of those flares under its general air pollution authority.

But those permits do not contemplate the Rule 32 flares that are being authorized by Rule 32. Instead those operators report the flared volumes and associated pollutants to TCEQ as “upset emissions.”

However, flares that are included in applications for Rule 32 (h) exceptions can and do cause air pollution in excess of federal health-based ambient air standards.

Thus, particularly in West Texas, oil and gas operators are continually asking the Commission to authorize flaring that will release massive amounts of air contaminants.

Rule 32 itself clearly recognizes that clean air is within the parameters of the rule: “Activities authorized by this section may be subject to rules and regulations promulgated by the United States Environmental Protection Agency under the federal Clean Air Act or the Texas Commission on Environmental Quality under the Texas Clean Air Act.” 16 Tex. Admin. Code 3.32(b).

Thus, in exercising its authority under Statewide Rule 32, the Railroad Commission *does not* possess the authority to override or violate any federal or other state laws. This is especially true for the clean air laws which Statewide Rule itself explicitly warns must be considered when flaring gas under the Railroad Commission’s jurisdiction. (16 Tex. Admin. Code 3.32(b))

Essentially, we believe that on many occasions, the Commission has been granting flaring permits that run afoul of clean air laws.

We believe that in considering granting permits to flare, the Commission should take into consideration whether the level of flaring allowed in the individual applications could violate our own state laws. In other words, the total amount of authorized pollution that could arise from the flaring permits should not violate the limits that are contained in the individual permits or PRBs held by the operator.

We believe that either as a matter of practice or as part of an updated rule, specific language could be added to prevent this from occurring. In other words, the RRC should not be granting permits for flaring that violate the Clean Air Act. There should be a check with TCEQ when individual applications could violate provisions of the Clean Air Act. These provisions might need to be part of the MOU with the Commission.

III. Set an overall goal to reduce flaring to zero, but work to get there in stages

We join our colleagues at Environmental Defense Fund and Environment Texas in suggesting that Texas should adopt a formal policy goal to end routine flaring by 2025. At the same time we believe to get there we must work in stages.

First, let's work to reduce flaring now. Other states have set goals for flaring and waste. Thus, the State of North Dakota back in 2014 required that operators set gas capture goals by well and field, while other states like Colorado, Pennsylvania and Wyoming have passed state level flaring, methane control and gas reduction goals.

In the case of North Dakota, the Commission there put restrictions on production of oil if operators don't meet their gas capture goals. Specifically, under Order No. 24685, the North Dakota Commission states:

"The Commission will accept compliance with the gas capture goals by well, field, county, or statewide by operator. If such gas capture percentage is not attained at maximum efficient rate, the well(s) shall be restricted to 200 barrels of oil per day if at least 60% of the monthly volume of associated gas produced from the well is captured, otherwise oil production from such wells shall not exceed 100 barrels of oil per day."

While Texas has not passed any state-specific methane or gas capture rules, the Commission could start by in general not granting permits for flaring if gas capture capacity is not yet available on a given lease, or if that is not yet realistic, **setting a limit of the percent of gas to be flared from an individual well or lease.**

Gas capture requirements for operators could dramatically reduce unnecessary flaring in the Permian by setting firm limits on the percentage of gas companies are allowed to flare across the basin. The limits would address the "worst actor" problem and could increase over time to give industry ample opportunity to adjust.

We would suggest that the Commission set both a statewide goal for 2021 - such as no more than two percent of all gas produced -- as well as individual operator goals. With some Permian Basin operators flaring more than half of the gas they produce, setting limits such as five percent of the gas to be flared from individual wells or leases would dramatically cut the percent of gas that is being flared.

In addition, Texas is currently routinely granting extensions to existing flaring permits, which turns temporary permits into long-term permits. Thus, what begins as a six-month extension frequently turns into two or three- year ongoing flaring and sometimes even longer.

Require Vapor Recovery Units

Texas could require that storage tanks install vapor recovery units that would eliminate or reduce the need for flaring. A number of companies are already doing this and the Commission, either acting on its own, or through action by the TCEQ, could require the same.

IV. Inspections and enforcement need to be robust

The reported wide use of unlit flares, illegal vents or simply failed equipment means that increased inspections would help reduce illegal flaring and assuring that legal flaring is actually within prescribed limits. With wells only inspected normally every four or five years, discovering illegal vents or flares in the normal course of business would be difficult. However, as part of the “price” of allowing flaring through applications for exemptions to flaring, the Commission could require that companies are subject to a special inspection, as well as the use of thermal gas equipment inspections.

In addition, the Sierra Club is supportive of efforts to use drone equipment in the oil and gas patch to identify illegal flaring, improperly lit flares, and uncombusted flares (as well as illegal vents). We believe that added inspections and drones could help identify problems in the gas field, and eliminate flares that were not legally permitted, as well as assuring that legal flares were burning properly.

Thus, the Commission should vigorously enforce existing permits on flaring. We continue to believe that current statutory caps on penalties -- essentially \$10,000 per day - continue to be a problem for assuring compliance and we again suggest that the Legislature consider giving the Commission more tools by raising those maximum penalties to at least \$25,000 per day, and more explicitly require that the Commission be directed to recover the economic benefit of non-compliance, similar to what TCEQ is allowed to charge rule violators in egregious cases.

However, even without legislative change, the RRC should issue fines to companies that violate their permits by engaging in excessive flaring, operating faulty flares, or venting gas. Fines should be high enough to more than offset any economic value a company may have earned from non-compliance with its permit.

The Commission should also review its penalty guidelines and matrix to assure that those that illegally flare or vent are subject to the maximum penalties possible.

V. Offer programs and training to help operators learn best practices

We believe that many operators have taken steps to reduce methane emissions, flaring and other practices. We should learn from those operators, and the Commission has the authority to highlight and encourage all operators to use best practices. Indeed, the Texas legislature has directed the Commission to help train and provide flexibility to operators to pursue waste minimization goals.

Thus, under Chapter 91 of the Natural Resources Code, the Commission is ordered to implement such a program. While the RRC already provides some information and trainings on its website (<https://www.rrc.state.tx.us/oil-gas/publications-and-notices/publications/waste-minimization-program/operation-specific-documents/>), there is nothing that would prevent the Commission from pursuing a specific program focused on reducing methane emissions and flaring. We believe that the Commission could work with industry and other stakeholders to create such a training program and associated information.

Sec. 91.110. OIL AND GAS WASTE REDUCTION AND MINIMIZATION. To encourage the reduction and minimization of oil and gas waste, the commission shall implement a program to:

- (1) provide operators with training and technical assistance on oil and gas waste reduction and minimization;*
- (2) assist operators in developing oil and gas waste reduction and minimization plans; and*
- (3) by rule establish incentives for oil and gas waste reduction and minimization.*

VI. Look at incentives and grants to pay for waste reduction technologies

The Sierra Club believes that state incentives -- where appropriate and where accompanied by strong regulatory and enforcement provisions for those who violate the law -- can also play an important role.

In addition to sharing best practices and training on how to reduce emissions and flaring in the oil field, Sierra Club helped support adding provisions to the Texas Emissions Reduction Plan to allow grants to be used to help capture gas in the oil and gas fields. We believe this rather limited program could be expanded to encourage cleaner wells,

compressor stations, camera equipment that helps discover leaks and other technologies that are designed to clean up production.

Currently, under Chapter 391 of the Health and Safety Code, TCEQ can provide grants under the “New Technology Implementation for Facilities and Stationary Sources.” TCEQ can provide state grants for a variety of technologies, including:

“(3) new technology projects that reduce emissions from upstream and midstream oil and gas production, completions, gathering, storage, processing, and transmission activities through:

(A) the replacement, repower, or retrofit of stationary compressor engines;

(B) the installation of systems to reduce or eliminate the loss of gas, flaring of gas, or burning of gas using other combustion control devices; or

(C) the installation of systems that reduce flaring emissions and other site emissions by capturing waste heat to generate electricity solely for on-site service;”

See <https://www.tceq.texas.gov/airquality/terp/ntig.html>

Texas operators should take advantage of the funding that is currently available. The Texas Legislature should work with stakeholders to expand the scope and funding of the program to significantly expand the use of gas capture technology and other equipment to reduce flaring and other emissions in the oil and gas patch.

Conclusions

Flaring -- legal and illegal -- is a black eye for Texas, and should be phased out by 2025. We believe that the Commission should begin a stakeholder process to review the current rule 32, but also make some more immediate changes. Requiring inspections for those being granted Rule 32 (h) exceptions, the increased use of inspections by drones, increased enforcement and setting gas capture goals by operators and for the state are a few potential changes. Assuring that the applications could not lead to violation of Federal and State Clean Air laws is another. Ending the practice of continually granting 6-month extensions is another. Finally, the Commission should implement gas waste minimization training and best practices, as well as work with TCEQ and the Legislature to expand the use of TCEQ’s New Technology Implementation Grants.

By a combination of new regulations, an overall 2025 goal to eliminate flaring, increased inspections and enforcement and where appropriate, training and incentives, we believe Texas can and must end routine flaring - legal and illegal -- by the end of 2025.

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