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To:

Oil and Gas Strategic Plan Comments/Oil and Gas Division

Railroad Commission of Texas (RRC)

P.O. Box 12967

Austin, Texas 78711-2967

From:

Earthworks

1612 K Street, NW

Suite 904

Washington, D.C. 20006

Subject:

RRC Draft Annual Oil and Gas Division Monitoring and Enforcement Plan for

Fiscal Year (FY) 2023

Dear RRC Oil and Natural Gas Division:

Thank you for the opportunity to comment on the RRC's draft Annual Oil and Gas Division Monitoring and Enforcement Plan for FY23 (RRC Plan). As stated on rrc.state.tx.us, "the Texas Legislature in 2017 directed the RRC to develop an annual plan to assess the most effective use of its limited resources to protect public safety and minimize damage to the environment. The RRC will always strive to strengthen it capabilities to track, measure, and analyze the effectiveness of its oil and gas monitoring and enforcement program. The purpose of the plan is to define and communicate the Oil and Gas Division's strategic priorities for its monitoring and enforcement efforts. The plan confirms many of the division's current priorities as well as establishing direction for data collection, stakeholder input, and new priorities for FY23."

Earthworks is a nonprofit organization dedicated to protecting communities and the environment from the adverse impacts of mineral and energy development while promoting sustainable solutions. We promote clean air, water and land, healthy communities, and corporate accountability. We work for solutions that protect both the Earth's resources and our communities. We fulfill our mission by working with communities and grassroots groups to reform government policies and improve corporate practices. We expose the health, environmental, economic, social, and cultural impacts of mining and energy extraction through work based on sound science.

Summary

The relevant technical comments that follow are organized by the chronology of the details described by the draft RRC Plan that is dated March 29, 2022. After given the opportunity to review the document, there are significant areas of improvement that are needed in the RRC Plan before it is finalized. Many of the document's current details are scant and the presentation of the narratives are clunky. Earthworks used two of its own technical reports based on actual field documentation and RRC's own records for comparison to comments and statements made in this draft RRC Plan. In reality, the RRC systemically fails to regulate flaring and its recordkeeping

and tracking mechanisms are lacking thus, there is an inability to ensure public safety and environmental protection.

Relevant Technical Comments

As described in the RRC Plan's preface on page 2 (presumably because there is no page number on the first three pages and the fourth is labeled as page 5), "The Commission will never cease to strengthen its capabilities to track, measure, and analyze the effectiveness of its oil and gas monitoring and enforcement program." With that in mind, these relevant technical comments are being provided to identify shortcomings and places for improvement in the RRC's current program and in more thoroughly developing, strategizing, and improving the RRC Plan and thus, monitoring and enforcement for Texas' citizens and the surrounding environment in FY23. In a ground-truth reality check of recent observations and findings, Earthworks' report titled *Flaring in Texas – A Comprehensive Government Failure*, August 2021, will be referenced in the following technical comments where relevant.

In the Strategic Priorities for FY2023 narrative on page 5, it states that the ".... Plan includes two goals: to accurately demonstrate the Commission's oil and gas monitoring and enforcement priorities; and to strategically use the Commission's oil and gas monitoring and enforcement resources to ensure public safety and environmental protection." Though these comments are listed in an introductory paragraph, there is no specificity to the statements just generalizations. Though the narrative indicates that the concepts are further developed later in the document, further review of the RRC Plan reveals few details.

The Plan states on page 8 under the Inspections header that "The Commission continues to strengthen recruitment efforts to maintain a staff of approximately 185 oil and gas inspectors," and "in fiscal year 2021, the Commission conducted 308,922 inspections." This is a bit curious as the RRC Plan declares on page 9 that the "...... 308,922 oil and gas well and facility inspections for the fiscal year comprised of 177,455 well level inspections of 122,824 unique wells and 131,677 inspections of other oil and natural gas facilities." The numbers do not add up, and there is an inconsistency here as there is a 210-site difference. Is this a mistake or is there a RRC tracking problem? And how does RRC define "...... other oil and gas facilities"? Clarification on this matter would be helpful considering there can be significant differences when comparing single wellheads with complex infrastructure.

In making reasonable assumptions and given the benefit of the doubt, 185 inspectors (with full RRC staffing) making 309,000 inspections over a 335-day period (accounting for 27 days off involving state holidays, annual leave, sick leave, and perhaps compensatory time) calculated to an average of five oil and gas inspections per day not counting other assigned work duties and travel time. In using these assumptions for an average 7-hour workday (minus an hour for logistics, driving time, communications, etc.), RRC inspectors spend an average of 1.5 hours at each site regardless of whether the Inspection, Compliance, and Enforcement (ICE) system that is used to document real-time inspections of oil and gas facilities electronically is available in the field via laptop computer or tablet or not. Moreover, although page 14 of the RRC Plan mentions

that "The General Appropriations Act appropriated \$25,548.454 and 281.9 FTEs for the oil and gas monitoring and inspection strategy and \$56,151,742 and 139.6 FTEs for the oil and gas plugging and remediation strategy for fiscal year 2023," there is no mention of hiring more field inspectors to conduct more thorough inspections.

This lack of transparency is troubling especially considering that the RRC Plan includes ".... a target to inspect 345,000 wells and other facilities in fiscal year 2023," as stated on page 8. One might wonder whether the RRC plans to use the same 185 field inspectors to survey 36,000 additional sites with the same resources or whether additional field staff will be hired. It would help to add this detail because if not, 185 inspectors would on average be required to conduct some 5.5 inspections per each workday. Inspection speed and daily quantity does not equal quality, as documented by the abundance of oil and gas field emissions documented by Earthworks and other non-governmental organizations by traditional monitoring, optical gas imaging (OGI), and other remote sensing technologies.

As described on page 11 of the RRC Plan, "the Office of the General Counsel administers, and tracks voluntarily self-audits conducted by oil and gas operators under the Texas Health and Safety Code......" and "....... The Commission encourages all operators to take advantage of the Audit Privilege Act to ensure that their regulated facilities are safe and in compliance with Commission rules." There is little detail in the paragraph other than the website and email addresses. Realizing the specific details on individual companies/sites is considered confidential, it would be useful to provide more detail on this subject matter since the RRC is strongly promoting its use. How many sites took advantage of the Audit Privilege Act by year and what are some examples of the declarations made? Did the RRC follow up on facility repairs, and if so, what were the general findings on these inspections? In addition, does the RRC actively coordinate with the Texas Commission on Environmental Quality (TCEQ) on these relevant declarations/findings, and if so, what are the coordination details in these matters since oil and gas emissions and maintenance activities are relevant to both regulatory agencies?

As continuously demonstrated throughout the RRC's Plan, there is a lack of transparent information within the document. Under the complaints narrative on page 11, the RRC states that "The Oil and Gas Division Operations receives between 500 and 600 complaints each year," including some 478 for FY21. Though it states that 450 of the 478 were resolved in the same FY, there is no specificity on the topic. It would be useful to share what type of complaints were received, if the RRC holds workshops to promote the opportunity, and how many of the complaints had merit to better understand the overall success to the RRC's implemented program. Again, though confidential company information cannot be shared, additional details would shore up this narrative with the RRC Plan.

In the Goal 1: Accurately demonstrate the Commission's oil and gas monitoring and enforcement activities narrative starting on page 14, the Action Item 1: Improve Data Transparency section describes that "In fiscal year 2023, the Commission's progress towards transforming all applications out of its legacy mainframe environment will continue" statement

provide few details beyond pursuing "..... cloud-based software to provide improved data access and reporting options for staff, operators, and the public." It also states that ".... new systems allow for online filings and tracking of regulatory Oil and Gas Division information, including filings for Form P-5 Organization Reports...." Though the paragraph uses the word "transparency," there is little of it in the narrative, as there are no details on recent accomplishments or what a full transition of technologies would look like and with what affects.

Though there is little detailed information in the Action Item 3: Disseminate study findings section on page 15, it does state "The General Appropriations Act directed the Commission to develop a strategic plan on flaring data....." so that the "..... Commission will disseminate the findings to the legislature and interested stakeholders, evaluate potential solutions to clarify any discrepancies identified by the flaring study....." It is curious to see that although the 87th Legislature in 2021 directed a flaring study, the RRC has yet to pursue this important directive that will result in incomplete/unfinished/not started yet conclusions for the 88th Legislative session in 2023.

This is even more troubling considering key findings on Earthworks' report titled *Flaring in Texas – A Comprehensive Government Failure* in August 2021 where 227 flares were directed observed and recorded during helicopter flyovers with OGI cameras. This scientific study documented that 84% observed flares were illegal – i.e., did not have required flaring permits (Rule 32 exception). The study design - removed sites from the flyovers that never documented flaring (i.e., the flare was not operating; flares that were active but unlit were still included), removed sites from the flyovers not in the state of Texas (the Permian crosses into Mexico), and removed any flare not within 200m of a well site. After the data was cleaned, every site within 200m of every flare was cross referenced with the RRC Master Flaring and Venting Document to determine which sites ever had a permit to flare and for what time period they were permitted. These dates were then cross referenced with the dates of the flyovers.

When prompted with these facts, the RRC was able to identify an additional 36 flare exceptions applicable to those 227 locations. Thus, if the RRC correctly identified that its real-time recordkeeping is insufficient, then 69% of the 227 directly monitored flares were not compliant with permitting requirements. This Earthworks' report documented both poor recordkeeping and regulation compliance for actions that are designed to control emissions to ensure safety and minimizations of emissions.

Despite being a critically important topic to minimize the effects of harmful emissions that negatively affect the public and air quality in Texas, flaring has little mention within the RRC Plan. Venting/flaring is mentioned as a common complaint on page 34, though it does not seem to be an important topic for the RRC's Oil and Gas Division as there is practically no mention of the work "flaring" within the draft document. Beyond the troubling flare data issues that were uncovered and described within the Earthworks' report, there seems to be no focus on emphasizing proper flaring operations, representations, and maintenance activities for oil and gas sites in Texas.

Technologies to assess and minimize flare operations and emissions have developed over the last few years, though companies still need encouragement to use them to minimize emissions and damage to the environment. The RRC owns multiple Teledyne FLIR GF320 OGI cameras that could be used to assist industries in assessing its flares during RRC inspections, special projects, and/or audits. Earthworks has no ties to the company, but Providence Photonics' MantisTM Flare Monitor can be used to measure combustion efficiency, smoke index, flame stability, flame footprint, and heat release. It would be extremely helpful for safety and the environment if folks in the oil and gas field used the technology and/or if its use was encouraged by the RRC for regulatory benefits.

Moreover, drones equipped with OGI cameras and/or chemical sensors could add companies and/or the RRC to quickly assess oil and gas sites. As stated, the RRC could use the tools as described, though benefits to companies for the use of technologies would achieve the same goals. And finally, the TCEQ conducted a steam-assisted flare study back in 2010 that led to the creation of a flare operator training course by a partnership between the TCEQ, the University of Texas, and a technical stakeholder group that included energy representatives. The RRC is certainly capable of leading an effort to help develop an on-line oil and site training course on flare operations and maintenance activities that would include both lit and unlit flares as the TCEQ did. A proactive concept like this is relevant to the Educational Opportunities section on page 16, also.

On page 15, it states, "As of August 31, 2021, the Commission's schedule of wells contained 440, 874 wells" and "the Commission will inspect at least 88,000 wells during fiscal year 2023 to meet the performance target for inspection frequency." This number of wells and the inspection goals do not seem consistent with the references to "...... 308,922 oil and gas well and facility inspections for the fiscal year comprised of 177,455 well level inspections of 122,824 unique wells and 131,677 inspections of other oil and gas facilities" on page 9. The numbers may be accurate (or not) but outwardly the numbers are either incorrect or need further clarification as the thoughts are muddled.

The Action Item 2: Orphaned Well Site Plugging, Remediation, and Restoration Federal Funding section on page 15 states that "In fiscal year 2023, the Commission will begin to implement a new federally funded orphaned well plugging program" and that "during Phase One, Texas anticipates funding of nearly \$83 million of formula funds and \$25 million of initial grant funds." Despite this narrative, there is no estimation the number of Texas wells that may be plugged with these funds. This stands in contrast to the Action Item 3: State-Managed Well Plugging Program section on page 16 that states "With revenue from assessments on the state's oil and gas industry deposited in the Oil and Gas Regulation and Cleanup Account, the Commission anticipates plugging 1,000 wells during fiscal year 2023." The wording in Action Items 2 and 3 is not clear on how they relate to each other (or not). How are Texas' monies to be spent both in the Cleanup Account and from the Texas Legislature in relation to the new federal funded orphaned well plugging program?

In the Data section information listed on pages 17 – 21, multiple tables compare statistics from Fiscal Year 2020 (actual as of March 16, 2021) and Fiscal Year 2021 (actual as of February 16, 2022). On page 18, the RRC Plan states "The data presented below for fiscal year 2020 was current as of March 16, 2021, and for fiscal year 2021 as of February 23, 2022." The time period comparisons are ineffective as presented. It would be more helpful to have 12-months of data for FY20 rather than a shortened timeframe. And as currently presented, +7 months of data is being compared with +6 months of data so that does not make sense as it is not a one-to-one comparison. Moreover, since the draft RRC Plan was released on March 29, 2022, there appears there was time to calculate a one-to-one comparison if there was a robust tracking program.

In this same Data section on page 17, it states "The Commission collects data that accurately shows the Commission's oil and gas monitoring and enforcement activities. This edition of the annual *Oil and Gas Monitoring and Enforcement Strategic Plan* includes data from fiscal year 2021, alongside comparative data from fiscal year 2020." Well, the first obvious thing is the title just mentioned is not the same title of the RRC Plan that is being reviewed. Secondly, though it states the number of alleged oil and gas violations sent to the Office of General Counsel Legal Enforcement, it gives no information of how many of the violations were referred to the Texas Attorney General's Office. And finally, the word "monitoring" implies that environmental samples are collected when nothing is further from the truth as the data and narratives are currently presented. This is confirmed in Appendix A: Standard Operating Guidelines: Inspection Priorities section on page 22 where inspections are emphasized, as opposed to monitoring activities.

The RRC Plan states on page 23 that known compliance issues include "Spills and/or releases that impact or pose an imminent threat to sensitive areas." This phrasing and its meaning are very unclear as worded, as this can be applicable to the TCEQ, also. The word "releases" could include typical permitted emissions from a storage tank battery, flare, leak detection and repair components and fittings, et cetera that are in the field near or upwind of populated areas with downwind receptors. This narrative needs to be clarified, reworded, or needs to describe how the RRC's regulatory responsibilities are different than the TCEQ.

It is interesting to note that Appendix B: Definition of a Major Violation section on pages 26 – 27 says nothing about unlit flares. In addition to the tremendous emissions that are released by unlit flares that are many times unpermitted, the emissions have potential to dip down over downwind properties including the very same oil and gas site where from where the plumes originate. This scenario is prevalent during Earthworks OGI field activities in the Eagle Ford and the Permian Basin and needs to be resolved through regulatory efforts and/or voluntarily company assessments and improvement.

With regards to receiving complaints as referenced at the top of page 32, the RRC Plan states that "The staff member may refer the complainant to another entity such as the Sheriff's Department, the TCEQ, the legal system, or another resource." There is little doubt that the RRC

receives complaints from parties unsure of regulatory responsibilities, but it would be helpful to better describe the types of citizen complaints that the RRC receives so that these situations could be better resolved by RRC communications. Because of potential crossover between the regulatory responsibilities of the RRC and the TCEQ, it would be appropriate to understand the number of complaints that the RRC forwards to the TCEQ by FY.

The need to clarify complaint language and expectations runs deep within this RRC Plan, as exampled by the Subsequent Action section on pages 32-33 where it states that in cases of issued Notice of Violations (NOVs), "..... the operator is given a specified time in the NOV to bring the lease into compliance." This non-specificity is consistent with wording in a Notice of Intent (NOI) where a site is given "..... an additional period to bring the lease into compliance," and with the wording in possible lease severance where it states, "If the operator has made significant ongoing progress resolving the violations, an extension for enforcement action may be granted at the discretion of the District Director."

It is not at all clear in the RRC Plan if the Agency has full time discretion in enforcement timeframe matters or follows a set written protocols that establishes time limits for specific problems/issues. Without providing this technical information within this document and/or established time limits for repairs and modifications, it gives the impression that compliance issues have potential for unlevel play depending on company relationships. Moreover, per the wording in the RRC Plan, does the Agency coordinate with the TCEQ in matters of extended periods of significant emissions that are actively released under known circumstances to minimize impacts to the environment so that natural resources can be protected with minimal safety impacts to downwind/downstream receptors and so that issued permits and emission inventories can be updated? If this cross-agency coordination happens, it would be appropriate to clarify these matters in this document, and if not, the RRC and TCEQ have a glaring area for relationship and coordination improvement.

Though there is a description of the RRC's regulatory jurisdiction on page 5, there is scant complaint details regarding jurisdiction in the RRC Plan, as referenced in the Types of Complaints section narrative on the bottom of page 33 when it states that "The Commission has jurisdiction over activities associated with the exploration, development, or production of oil or gas or geothermal resources, including storage, handling, reclamation, gathering, transportation, or distribution of crude oil or by pipeline, prior to the refining of such oil or prior to the use of such gas in any manufacturing process or as a residential or industrial fuel." There is a reference to a state code immediately afterwards, but the RRC Plan in not clear in describing how the jurisdiction of the RRC and TCEQ relate and diverge from one another. It would certainly be helpful if this were further clarified for outside parties.

In addition, at the top of page 34, it states that "Some complaints may involve the complainant's lack of understanding of oil and gas operations or may be made with malicious intent. However, all complaints must be considered valid and pursued until resolution is achieved." Without knowing if it is a wide-spread problem, the "malicious intent" wording seems inappropriate for

the document and could be more effectively communicated with alternative phrasing such as "All complaints must be considered valid unless it is determined that they do not have merit. Regardless, all complaints are pursued until resolution is achieved."

In the Common Complaints section on page 34, the document states "Dust, noise, odors, and air contaminants, traffic – complaints of this nature may be under the jurisdiction of the TCEQ in the case of air quality or local authorities including law enforcement. Although the Commission does not regulate odors, it does regulate crude oil spills and releases of H₂S, which may cause odors." First, the TCEQ does not regulate noise and traffic, therefore the RRC Plan wording is at best incorrect and at worst deceiving. Secondly, the RRC and TCEQ do have crossover responsibilities for H₂S emissions, thus the phrasing of "releases of H₂S" does not clarify things. Sour oil and gas sites release H₂S emissions almost continuously from flares, separators, storage tanks, et cetera so what does the term "releases" mean?

Per details in the recent Earthworks' report titled Fatal Vapors – How Texas Oil and Gas Regulators Cause Avoidable Deaths in January 2022, the RRC does a poor job in tracking and regulating H₂S emissions in general. With the implementation of State Rule 36, the RRC is responsible to ensure the proper tracking of H₂S in well gas. A study of self-reported company data publicly available revealed that of the approximate 19,000 wells in RRC District 8 over 10,000 wells did not file the required H9 form. After filing a public information request to the RRC for its H9 tracking mechanism, the RRC reported that "After consulting with various staff members, the RRC does not generate a list of H9 request letters that are sent to operators. This indicates that the RRC has no system to make sure operators file required H9 forms.

Moreover, if the RRC regulates "H₂S releases," why does the Agency not enforce 30 Texas Administrative Code, Chapter 112 regulations for H₂S emissions? And finally, if the RRC regulates "H₂S releases," why does the RRC not feel a need to help establish/enforce/promote regulations/voluntary actions to minimize and prevent continuous emissions, that often include H₂S content, from unlit flares that negatively affect air quality in geographic areas like Luling, Texas and the Permian Basin?

The Closure of Complaints Referred to Enforcement section at the bottom of page 35 states that "A complaint can be closed provided there is no active pollution occurring" This phrasing seems very unclear as control equipment no matter how well it is working (or not) is designed to release emissions, thus this is why companies are required to obtain permits. If emissions are being actively released whether permitted or not, they are adding pollution to the airshed or on ground cover, so the phrasing is inappropriate and misguided, thus clarification is merited.

At the bottom of page 36, it states that "Complaints can be closed and referred to State-Managed Plugging (SMP) when there is no active pollution occurring, there is no current active operator available to bring the well into compliance with the plugging requirements, or the well is not being referred to Legal Enforcement" and ".... will be eligible for plugging consideration in accordance with the established priority system and budgetary complaints." The RRC Plan is

unclear as currently worded on how this information correlates with the Action Item 3: State-Managed Well Plugging Program narrative on page 16. The acronym SMP is not used on page 16, and there is no detailed discussion on the "budgetary constraints" mentioned on page 36. And moreover, since the narrative on page 36 refers to ".... no active pollution is occurring," how is the RRC determining that no active pollution is taking place?

Is the RRC using its OGI cameras to determine that there is no pollution and/or is it conducting downwind monitoring for volatile organic compounds including but not limited to methane and H₂S? A well-meaning regulatory agency would purchase QL320 tablets for its current fleet of OGI cameras to quantitate emissions so that findings and observations can be shared with the regulated community. By doing so, pollution can be minimized to better ensure the safety of the site and minimize the negative impacts to our natural resources. This would be consistent with the RRC Plan's preface on page 2 that states "The Commission will never cease to strengthen its capabilities to track, measure, and analyze the effectiveness of its oil and gas monitoring and enforcement program."

This technical assessment has been reviewed, approved and is being submitted on behalf of Earthworks.

Sincerely,

Jan Doty

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Commission Accepting Comments on Draft Oil and Gas Division Monitoring and Enforcement Plan

April 23, 2019

n 2017 the Texas Legislature (H.B. 1818, 85th Legislature, Regular Session, 2017) directed the Railroad Commission of Texas to develop an annual plan to assess the most effective use of its limited resources to ensure public safety and minimize damage to the environment. The Commission will never cease to strengthen its capabilities to track, measure, and analyze the effectiveness of its oil and gas monitoring and enforcement program.

The purpose of this plan is to define and communicate the Oil and Gas Division's strategic priorities for its monitoring and enforcement efforts. The plan confirms many of the Division's current priorities—to ensure public safety and protect the environment—as well as establishing direction for data collection, stakeholder input, and new priorities for fiscal year 2020.

House Bill 1818 directed the Commission to seek input from stakeholders in the development of this plan. We look forward to hearing from you as this planning process moves forward.

To view the draft plan, visit the Commission website (/oil-and-gas/compliance-enforcement/enforcement-activities/).

To submit comments online by 5 p.m. on May 23, 2019, complete the survey at (N/A)

Alternatively, please send written comments to:

Oil and Gas Strategic Plan Comments/Oil and Gas Division

Railroad Commission of Texas

P.O. Box 12967

Austin, Texas 78711-2967

Comments received by mail after May 23, 2019 may not be incorporated into the fiscal year 2020 iteration of the plan but will be reviewed.