The Honorable Wayne Christian The Honorable Christi Craddick The Honorable Ryan Sitton Railroad Commission of Texas P.O. Box 12967 Austin, Texas 78711-2967

Dear Chairman Christian and Commissioners Craddick and Sitton,

We, the undersigned, write to express our deep disappointment in your unanimous decision at your October 22, 2019 meeting to continue the Commission practice of routinely issuing flaring exceptions. This practice encourages gross waste, significant harm to the environment and public health, and contravenes historic Commission precedent to prohibit flaring and venting.

As you have previously stated Chairman Christian, in approving flaring exemptions, the Railroad Commission of Texas (RRC) creates an "incentive to flare out of convenience and economics rather than necessity." We appreciate your concern, which is well-justified. The data shows that routine flaring and venting wastes valuable natural resources, reduces local air quality, and significantly contributes to climate change.²

Flaring is a destructive industry practice that diminishes Texas' natural resources and comes at the expense of west Texas communities.

Flaring emits numerous air pollutants such as soot, formaldehyde and other, highly reactive Volatile Organic Compounds (VOCs), and nitrogen oxides. The latter combine with VOCs and sunlight to form ground-level ozone (or smog), hurting public health and contributing to slower ozone pollution reduction progress.³ According to analysis from Environment Texas Research and Policy Center, if we continue to flare at 752 million cubic feet of natural gas per day⁴, by the end of this year, flaring in the Permian Basin will emit the equivalent amount of smog-forming nitrogen oxide pollution as nearly 3 mid-size coal-fired power plants in Texas release annually.⁵ And analyses show that flaring volumes are actually much higher than the RRC numbers show⁶.

¹ Addison, Velda "Flaring Concerns Rise Again Before Texas Railroad Commissioners," https://www.hartenergy.com/exclusives/flaring-concerns-rise-again-texas-railroad-commissioners-183585

² Palacios, Leyden. "Vast energy resources wasting away in the Texas Permian Basin," Version 1, No.1, Environmental Defense Fund, November 14th 2017, location

 $^{(\}underline{http://blogs.edf.org/energyexchange/files/2018/06/Permian-Flaring-Report-2017-3.pdf\&sa=D\&ust=1538704374003000}, page 4, paragraph 1).$

³ "Ground-level Ozone Basics." EPA. October 31, 2018. Accessed December 05, 2018. https://www.epa.gov/ground-level-ozone-pollution/ground-level-ozonebasics#formation.

⁴ Blum, Jordan. "Permian flaring spikes to new record highs again," Houston Chronicle, November 6, 2019, location (https://www.chron.com/business/energy/article/Permian-flaring-spikes-to-new-record-highs-again-14813539.php, paragraph 2).

⁵ Calculated using EPA emissions factor of 0.068 pounds of NOx per million british thermal units, located (https://www3.epa.gov/ttnchie1/ap42/ch13/final/c13s05.pdf, page 4).

⁶ Willyard, Katherine Ann and Schade, Gunnar "Flaring in two Texas shale areas: Comparison of bottom-up with top-down volume estimates for 2012 to 2015," Science of the Total Environment, 2019

Moreover, at current prices, flaring in the Permian Basin burns an excess of 1.8 million dollars a day worth of natural gas. Annual waste of gas is sufficient to power 400,000 Texan homes for two and a half years. Irresponsible actors in isolation disproportionately burn 24.8 billion cubic feet of natural gas per year.

The RRC's mission is to support Texas's economic vitality, be good stewards of Texas's natural resources and the environment, and promote community safety. This means that the Commission should curtail burning excess gas and prevent, without fail, venting of gas. It has done so in the past.

From 1934 to the early 1950s, the Commission issued broad "no flare" orders to dozens of oil producers across the state. The Commission's authority was bolstered by successful litigation in the Texas supreme court and the later adoption of Rule 32. Flaring and venting were strictly prohibited in Texas. The RRC prevented operators from acting recklessly for their own benefit and through universal enforcement, acted as fair and balanced government. Now is the time for the Commission to assume its regulatory responsibility and once again do its job. The stakes are too high for half measures. Therefore, we request that the Commission investigate whether producers are flaring in excess of permit conditions and take appropriate action consistent with its mission of promoting community safety, environmental protection, and economic vitality.

If we continue to flare even just 661 million cubic feet of natural gas per day, by the end of this year, flaring will contribute to 2.76% of projected U.S. greenhouse gas emissions. ¹⁰ The National Climate Assessment, released in 2017, found that climate change resulting from greenhouse gas emissions will flood up to \$20.9 billion in property along Texas' coast by 2030, and result in an additional 1,300 Texan deaths per year by the end of the century. ¹¹

Seven of the top ten counties in the United States most at risk for asthma attacks are in the Permian Basin, ¹² and according to the Texas Commission on Environmental Quality, air pollution from sulfur dioxide - a known trigger for coughing, shortness of breath, and wheezing ¹³ - repeatedly exceeded safe levels in Texas' Permian Basin. ¹⁴

⁷ Elliot. "Texas Showdown Flares Up Over Natural-Gas Waste," Version 1, No.1, The Wall Street Journal, July 17th 2019, location (https://www.wsj.com/articles/texas-showdown-flares-up-over-natural-gas-waste-11563361201 page 1, paragraph 10).

⁸ Palacios, Leyden. "Vast energy resources wasting away in the Texas Permian Basin," Version 1, No.1, Environmental Defense Fund, November 14th 2017, location

⁽http://blogs.edf.org/energyexchange/files/2018/06/Permian-Flaring-Report-2017-3.pdf&sa=D&ust=1538704374003000, page 4, paragraph 1).

⁹ Leyden. "New Permian data show how worst offenders prevent progress on flaring," Environmental Defense Fund, Version 1, No.1, August 14th 2019. location

 $^{(\}underline{http://blogs.edf.org/texascleanairmatters/2019/08/14/new-permian-data-show-how-worst-offenders-prevent-progress-on-flaring/}, page 1, paragraph 10-14)$

¹⁰ Plumber. "Coal Plants Closed, but Carbon Emissions Rose," Section B, Page 1, The New York Times, January 8th 2019, location (https://www.nytimes.com/2019/01/08/climate/greenhouse-gas-emissions-increase.html, page 1, paragraph 6).

¹¹ National Climate Assessment. "INFRASTRUCTURE CHAPTER 23: SOUTHERN GREAT PLAINS", 2018, location (Infrastructure Section, Paragraph 6, Human Health Section, Paragraph 1, https://nca2018.globalchange.gov/chapter/23/).

¹² Leyden. "New Texas Permian Oil and Gas Flaring Report Reveals Excessive Gas Waste and Major Gaps in Operator Flaring Practices," Version 1. No.1, Clean Air Task Force via energycentral.com, location

⁽https://www.energycentral.com/c/ec/new-texas-permian-oil-and-gas-flaring-report-reveals-excessive-gas-waste-and) page 1, paragraph 9)

¹³ "Sulfur Dioxide and Asthma," Version 1. No.1, Journal of the Asthma Education Clinic, August 4th 2015, location (http://www.asthmaed.com/journal/2015/7/27/sulphur-dioxide-and-asthma, page 1, paragraph 4)

¹⁴ "Sour Wind in West Texas," Environmental Integrity Project, May 9th 2019, available at: https://www.environmentalintegrity.org/wp-content/uploads/2019/05/West-Texas-Air-Pollution-Report-5.9.19.pdf

Three months ago, the commission voted to accept the request of Exco Resources Inc. to flare a majority of their excess natural gas produced at their 71 oil wells in Dimmit and Zavala county. This ruling, among thousands of others by the Commission, allows Texas companies to burn millions of dollars worth of viable natural gas, regardless of pre existing pipeline infrastructure.

History can repeat itself. The Commission can vote against issuing and extending licenses to flare and vent excess natural gas produced by shale oil extraction. We recommend that the Commission cease issuing flaring and venting permits, and return to its strong legacy of waste prevention, where the RRC strictly prohibited the destruction of Texan assets.

Sincerely,

Luke Metzger
Executive Director
Environment Texas

Emma Pabst Global Warming Solutions Associate Environment Texas

Senator José R. Rodríguez, District 29 Member, Texas Senate Natural Resources and Economic Development Committee

John Hofmeister President – Retired Shell Oil Company

Trammell S. Crow Founder, EarthX

Colin Leyden Senior Manager State Regulatory & Legislative Affairs, Oil & Gas Environmental Defense Fund

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