October 9, 2019

Chancellor John Sharp
Texas A&M University System 301 Tarrow Street
College Station 77840

Dear Chancellor Sharp,

We, the undersigned faculty and staff of Texas A&M University are writing to urge University Lands (UL) to develop and implement strategies to reduce methane emissions at oil production facilities on UL land.

Administered by the UT and A&M Systems, UL manages the surface and mineral interests of 2.1 million acres of land in West Texas and leases more than 9,000 oil and gas wells to more than 300 operators. If these wells were pooled into one entity, it would be the fifth largest oil company in Texas.[1] The revenue gathered from the university-owned lands is split between the 2 systems with two-thirds going towards UT and one-third going to A&M.[2]

Methane – the main ingredient of natural gas – is gaining visibility as an important greenhouse gas. Colorless and odorless, methane is more than 80 times more powerful a heat-trapper than carbon dioxide over a 20 year period; scientists tell us that 25% of the global warming we're experiencing today is due to methane.[3] Studies, including those done by A&M researchers, show that methane is often released or escapes into the atmosphere during the production of oil and natural gas.[4] $30 billion worth of methane is released into the atmosphere annually.[5] In fact, the oil and gas industry is the largest industrial source of methane emissions in Texas and the United States.[6]

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[1] Jeff Inglis and Luke Metzger, "Fracking on the University of Texas Lands: The Environmental Effects of Hydraulic Fracturing on Land Owned by the University of Texas System," *Frontier Group and Environment Texas*, 2015: 4
[2] ibid, 12.
[3] ibid, 10.
[4] Roest, G. and Schade, G.: Quantifying alkane emissions in the Eagle Ford Shale using boundary layer enhancement, Atmos. Chem. Phys., 17, 11163-11176, https://doi.org/10.5194/acp-17-11163-2017, 2017
[5] Tom, Zeller, Jr. "Natural Gas Leaks: A $30 Billion Opportunity and Global Warming Menace." Forbes. April 21, 2015. Accessed June 06, 2019.
[6] "Inventory of U.S Greenhouse Gas Emissions and Sinks." Environmental Protection Agency. United Nations Framework Convention on Climate Change April 11, 2019. Accessed June 06, 2019.

Estimates show that in 2017 alone 188 billion cubic feet of natural gas was developed on University Lands, releasing 5,600,000 metric tons of carbon dioxide equivalent (MT CO2e).[7] On the surface, that's a massive number. This number is even more alarming when compared to the emissions from Texas A&M's largest campus in College Station. According to a report by The Association for the Advancement of Sustainability in Higher Education, the gross emissions from Texas A&M University for 2017 was 307,178 MT CO2e.[8] In 2017, emissions from University Lands were *eighteen times more than that of Texas A&M campus*.

IPCC has announced that surface temperatures are likely to rise another 1.1 to 5.4°C during the 21st century.[9] Methane emissions have been found to be a major cause of global warming, which has been found to have detrimental effects on our environment and humans alike. In addition, studies have linked hydraulic fracturing to a number of health risks, such as asthma, birth defects and cancers, caused by air pollutants found on fracking sites. These pollutants include volatile organic compounds (VOCs) such as benzene, xylene and toluene and have been found to be extremely harmful to those communities living near and on University Lands in West Texas.[10]

Climate change represents one of the most significant and daunting challenges we face as a nation and a global community. We are proud of the leadership role A&M University has established in studying the impacts of climate change and spurring academic and commercial R&D for more sustainable and efficient energy solutions. We applaud the University for being recognized nationally for their sustainability practices and research. We support the A&M System's commitment, as outlined in its sustainability "master plan", to actively reduce carbon emissions throughout the University.[11]

These efforts and policies demonstrate A&M's commitment to a cleaner, lower carbon future. They are important, and we commend System and University leadership for embracing and encouraging them. While greenhouse gas-reducing measures are being practiced on A&M

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[7] Colin Leyden. "Satellite Data Confirms Permian Gas Flaring Is Double What Companies Report." Environmental Defense Fund. January 25, 2019. Accessed June 04, 2019.
[8] "Texas A&M University OP-1: Greenhouse Gas Emissions." The Sustainability Tracking, Assessment and Rating System. December 28, 2018. Accessed June 04, 2019.
[9] David Herring. "Climate Change: Global Temperature Projections." Climate.gov. March 06, 2012. Accessed June 24, 2019. https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature-projections.
[10] Lesley Fleischman et al, "Gasping for Breath: An analysis of the health effects from ozone pollution from the oil and gas industry," *Clean Air Task Force,* 2016: 20-23.
[11] "2018 Sustainability Master Plan." Texas A&M Sustainability. October 2018. Accessed June 06, 2019. http://sustainability.tamu.edu/Data/Sites/1/downloads/2018SMP.PDF.

campus, they are being undermined, if not negated many times over, by the methane emissions on UL land.

Solving this problem would not be complicated or expensive. Technology and industry practices exist now and are currently deployed by some companies to affordably detect, reduce or prevent methane leaks. By simply requiring oil and gas producers to use industry best practices on the land it manages, UL could not only make drastic cuts to current methane emissions, but also establish itself as a worthy extension of A&M's high standards and commitment to energy innovation and the environment. The Environmental Defense Fund reported that industry could cut 40% of methane emissions for only an annual cost of about 1% of annual industry capital expenditure.[12] Furthermore, capturing this gas, rather than wasting it, would generate additional revenue for the Permanent University Fund.

As researchers, educators and activists we believe that working to cut down our methane emissions and carbon footprint is not only necessary on Texas A&M campus but on the land of A&M systems as well. While University Lands has taken some steps in recent years to investigate methane emissions, including the purchase of an infrared camera and a forthcoming review of best practices for emissions reductions, UL has no plan in place to accurately quantify and characterize emissions and guarantee emissions are reduced. Empty promises from University Lands has not offered a concrete plan to how or when they will significantly cut emissions from their lands.[13]

We urge University Lands, the A&M System and the Board of Regents to take action on this important issue and show the world that we truly are a world leader in energy innovation. We push University Lands to develop a plan to reduce methane emissions by 50% in the next 5 years.

Gig 'em,

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[12] "Economic Analysis of Methane Emission Reduction Opportunities in the US Onshore Oil and Natural Gas Industries," *IFC International*, (March, 2014): 8-9.

[13] Dunning, Savana. "How University Lands Deals with Its Pollution." *The Daily Texan*, February 13, 2019. Accessed June 06, 2019. https://www.dailytexanonline.com/2019/02/13/how-university-lands-deals-with-its-pollution.

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