

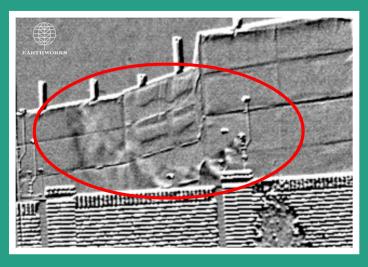
Overview

Right now, there are nearly 400,000 active oil and gas wells, compressor stations, and processing plants in the state of Texas. ¹Texas is also home to some of the worst methane pollution and ozone smog in the country. ² Each day, oil and gas activities across the state spring leaks that spew toxic pollution into the air, like an invisible oil spill. The smog that pollution forms is beginning to verge on a public health crisis: by 2025, Texas is expected to be the worst place in America for children who suffer from asthma caused by pollution from oil and gas activities. ³

Unfortunately, Texas lacks meaningful standards for detecting and repairing leaks, which reduce pollution from oil and gas activities and keep our children and families healthy. Texans rely on the protections provided by the federal New Source Performance Standards (NSPS), finalized by the Environmental Protection Agency (EPA) last year, that safeguard against methane and other toxic pollution in the air our children breathe. The EPA's pollution standards apply to 7,400 "new and modified" oil and gas wells across the state of Texas; in order to reduce toxic emissions and comply with the EPA's standards, "new and modified" facilities are required to install pollution control equipment when they are first built or when an older facility is modified and to regularly inspect and fix leaky equipment. ⁴

Now, EPA Administrator Scott Pruitt is attempting to suspend these common sense leak detection and repair requirements at the behest of the oil and gas lobby. If these safeguards are suspended, or even worse repealed, families and children in Texas will undoubtedly face an ever-growing public health crisis from unchecked pollution in their communities, near schools, churches, and neighborhoods.





A side-by-side visual comparison of the Vantage Yeandle Well in Arlington, Texas which is next to church property and an apartment complex. On the left is an image of a methane release, which to the naked eye, is invisible. On the right is an image of the same methane release using FLIR technology, which captures and depicts the methane gas as it is released into the atmosphere. **Please see Appendix A for additional side-by-side comparison photos.**

¹ http://www.oilandgasthreatmap.com/threat-map/texas/

² https://www.edf.org/sites/default/files/content/tx_fact_sheet_nsps.pdf

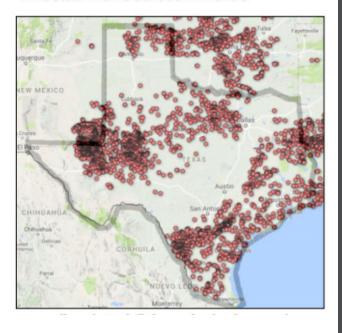
 $^{^3\} http://www.sacurrent.com/the-daily/archives/2016/08/31/report-texas-will-lead-the-nation-in-illness-caused-by-oil-and-gas-production-by-2025$

 $^{^4\} https://www.epa.gov/sites/production/files/2016-09/documents/source-determination-fs.pdf$

EPA's Oil & Gas Pollution Standards

The EPA's Oil & Gas Pollution Standards (officially called the "New Source Performance Standards") curb methane emissions, smog-forming VOCs, and other toxic air pollutants such as benzene - in new, reconstructed and modified oil and gas sources. ⁵ The EPA rule is a vital safeguard for American families, especially children, from toxic air pollution. Air pollution knows no borders.

Affected Well Sources in Texas



Public Health Threat

Ozone, more commonly known as smog, is formed by harmful air pollution from oil and gas activities and is an immediate threat to our communities' health. There are 23 million Americans who suffer from asthma, including an estimated 6.1 million children. Over 400,000 of these children live in Texas.⁶ Every year, increased ozone smog resulting from oil and gas pollution during the warm summer months causes 750,000 asthma attacks in children, more than 500,000 days of school missed, nearly 2,000 asth-ma-related emergency room visits, over 600 respi-ratory-related hospital admissions, and over 1.5 million days with restricted activity. ⁷Even healthy people who don't already suffer from asthma can be affected by ozone smog including suffering from reduced lung function, coughing, wheezing, and inflammation. 8

On the Ground In Texas

A team recently went out in Texas to document the impacts of methane pollution on communities across the state. Equipped with a Forward Looking Infrared (FLIR) camera, special technology created to visualize pollution from oil and gas facilities that is normally invisible to the naked eye.

Earthworks' Gulf Regional Organizer and certified FLIR camera operator Sharon Wilson with filmmaker Nicol Ragland in West, TX (Photo credit: Ramon Holguin)



⁵ https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry/new-source-performance-standards-and

⁶ https://www.epa.gov/sites/production/files/2016-04/documents/20151001healthfs.pdf & https://www.cdc.gov/asthma/brfss/2014/child/tablec3.htm

⁷ http://oilandgasthreatmap.com/wp-content/uploads/2016/06/Gasping-for-breath_PR.pdf

⁸ https://www.epa.gov/sites/production/files/2016-04/documents/20151001healthfs.pdf

Some of the footage the team collected was shocking. In Pecos, TX (Reeves County) they filmed a large tank spewing methane onto a worker. In Balmorhea, TX (Reeves County) the team filmed a well spewing methane into the air just miles from the San Solomon Springs, known as the "Oasis of West Texas."

In Arlington, Texas (Tarrant County) the team discovered a well leaking right next to a church property and several apartment buildings. Oil and gas companies are leaking methane just steps away from the schools our children attend, our churches, and our neighborhoods. These leaks have real and harmful effects on the health and well-being of families and children in these communities.

Raquel Lara, a resident of Karnes, Texas (click for interview) is concerned about the health of her four year old grandson, who she says he "notices the

smell.... and couldn't go to school" because of nosebleeds and headaches exacerbated by oil and gas pollution. Sometimes she takes him to play outside, but she says "he'll tell you... he gets scared [because he doesn't] know what

[the smell is] from."

In Denton, Texas an oil and gas well is located right next to a playground (Photo credit: Cathy McMullen)

Texas does not have meaningful state level safeguards to curb methane pollution from oil and gas activities, which is why federal standards like the EPA rule are vital to protecting public health and keeping families and children healthy. If the EPA rule is suspended, or even worse overturned, over 20 million Texans, including vulnerable children, who live in affected counties will continue to be at risk for serious health impacts including respiratory issues, cancer risk, and even death.

<u>Lucas Jasso, a resident of Karnes, Texas</u> (click for interview) has watched his community change, out of

nowhere it seems, in the years following the oil and gas boom. "I think part of the problem was, there was no preparation for this... We the residents, weren't told what to expect, what to see."

Pollution has hit very close to home for Lucas. He had never dealt with allergy symptoms or other health issues before, but that all changed recently. "I had surgery under my tongue a few weeks ago. They found some lesions.... I'm starting to worry a little about my health...I have one foot in the grave."

Once emitted, we cannot take methane pollution out of the atmosphere and because of Administrator Pruitt's actions, even more people in Tarrant,



from the 200 new and modified wells in this area. These affected wells could emit up to an estimated 521 tons of methane, 145 tons of VOCs, and close to 6 tons of hazardous air pollutants (HAPs) during the 90-day stay.

Harriet Irby, lives in Tarrant County (click for interview) and is one of

2 million people who could be exposed to air pollution from oil and gas activities in this area, including up to 237 tons of methane, 66 tons of VOCs, and 2.5 tons of HAPs during the stay. Harriet's health has deteriorated quickly from exposure to pollution, and if the EPA's pollution safeguards are suspended there is little hope that her health will improve.

"My pulmonologist has told me I will never get better, I will only get worse, and at the present date...he can't do anything more for me....I take my medications and pray I stay out of the hospital."



Harriet believes that "If [oil and gas companies] are dumping in our air, then they should stop, period." Harriet is not alone in her battle against harmful methane pollution. According to data from the oil and gas threat map, in Tarrant County alone, children under the age of 18 experience over 11,000 asthma attacks and over 8,000 days of missed school each year.

These serious health impacts should come as no surprise given the proximity of oil and gas facilities to schools in Tarrant County. Over half a million children live in this area¹¹-- and six schools, including three elementary schools, one middle school, and two high schools, sit less than a mile away from oil and gas producing wells affected by the EPA's pollution standards.

TARRANT COUNTY SCHOOLS NEAR AFFECTED WELLS	PRODUCING WELLS	APPROX DISTANCE (METERS)			
Miller Elementary Ditto Elementary Young Junior High Maudrie M. Walton Elementary	10 10 10 9	600 900 800 600			
			Dunbar High	9	700
			Jacquet Middle	9	1,300

Last year the EPA took a crucial step forward to protect these children in Texas, and across the country, by finalizing pollution standards to reduce harmful methane emissions from oil and gas facilities. If Administrator Pruitt's stay remains in effect, millions of people in Tarrant County, including hundreds of thousands of children, and millions more across the state, will continue to suffer serious health issues from preventable air pollution. Texas is already on a fast track to being the worst place for children with asthma in the country, suspending or repealing the EPA's oil and gas pollution safeguards will only speed up that timeline and make more Americans sick.

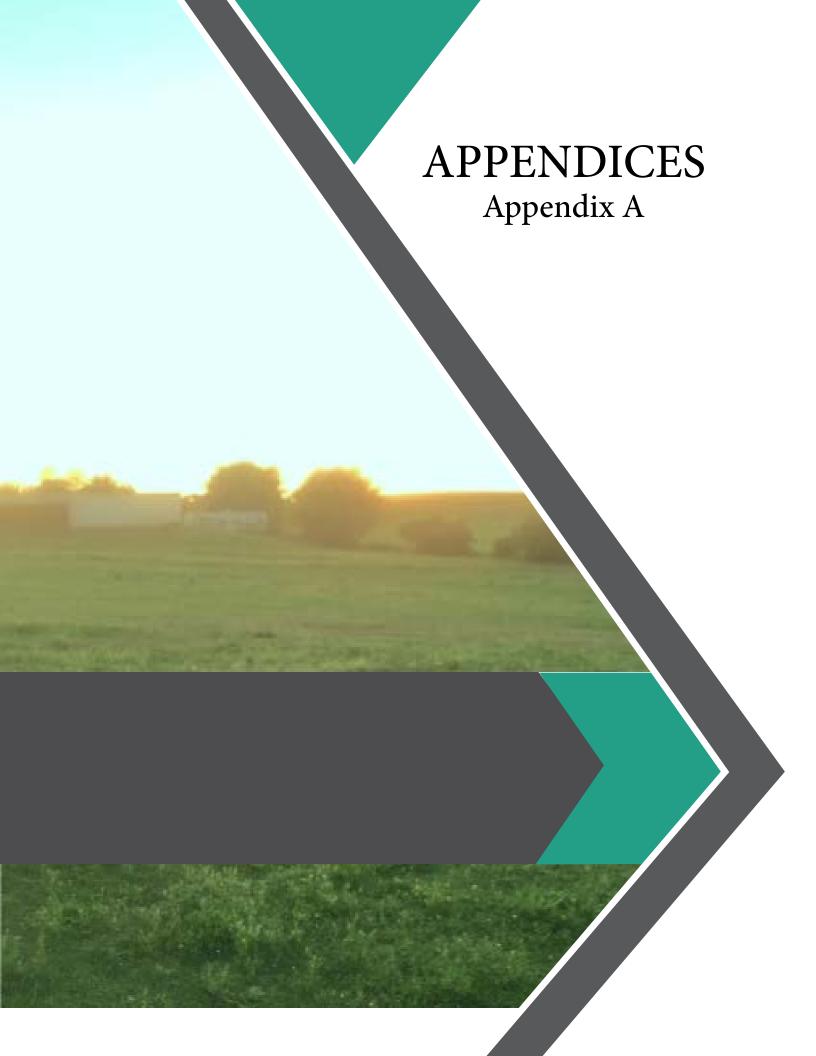
⁹ https://www.edf.org/sites/default/files/content/tx_fact_sheet_nsps.pdf

¹⁰ https://www.edf.org/sites/default/files/content/tx_fact_sheet_nsps.pdf ³ http://www.sacurrent.com/the-daily/archives/2016/08/31/report-texas-will-lead-the-nation-in-illness-caused-by-oil-and-gas-production-by-2025

¹¹ https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF



It's clear that Texans and Americans alike need EPA's New Source Performance Standards to protect them from methane and other harmful air pollution resulting from oil and gas activities. Our most vulnerable populations, especially children, will pay the price if we get rid of our vital pollution safeguards. Oil and gas industry pollution is dangerous; we know if the federal pollution standards are suspended or repealed, millions will face the same unfair health challenges as Raquel's four year-old grandson, Lucas Jasso, and Harriet Irby.



Vantage Baldinger Well in Denton, Denton County, Texas





Vantage Baldinger and AGF Ranch Well in Denton, Denton County, Texas





Surge Operating Wolfe McCann Unit in Big Spring, Howard County, Texas





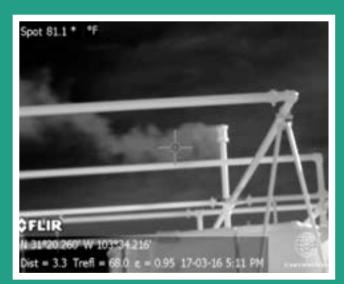
Surge Operating Garrett-Snell Unit in Big Spring, Howard County, Texas





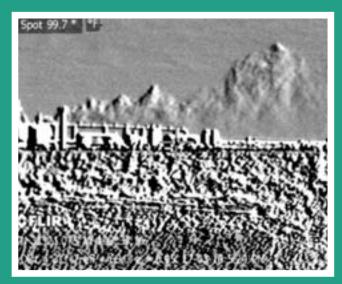
Rosetta Resources Man O' War Well in Pecos, Reeves County, Texas





Centennial Resource Production Parker 5 Well in Pecos, Reeves County, Texas





Apache Corporation Ortler Well in Balmorhea, Reeves County, Texas



