

Thank you for the opportunity to speak today. My name is Melissa Ostroff and I am the Pennsylvania Policy and Field Advocate at Earthworks. I use an industry-standard optical gas imaging camera to hunt down invisible methane pollution from oil and gas wells, compressor stations, and other facilities that move oil and gas across Pennsylvania. What I have witnessed through my camera lens demonstrates that climate and health-harming pollution is inseparable from every stage of the oil and gas industry. **There can be no oil and gas production, processing, transportation, or distribution without pollution that damages our health and safety, and the health and safety of generations to come.**

The FLIR GF320 optical gas imaging camera is designed specifically to locate methane gas and dangerous volatile organic compounds that are emitted into the atmosphere, making visible this otherwise invisible pollution. It's the industry and regulatory standard for leak detection and repair.

While I live in Philadelphia, Much of my fieldwork is conducted in other Pennsylvania counties. In addition to Philadelphia, I have inspected oil and gas facilities in 18 other counties, including Allegheny County, Armstrong County, Beaver County, Bradford County, Butler County, Centre County, Chester County, Delaware County, Fayette County, Forest County, Lycoming County, McKean County, Potter County, Sullivan County, Susquehanna County, Warren County, Washington County, and Westmoreland County. I find pollution from this industry everywhere I go. No place is unaffected.

Consider Pennsylvania's Allegheny National Forest. It is home to thousands of leaky wells, neglected by their operators, and on the brink of abandonment. During fieldwork investigations in August, I found gas leaking from $\frac{2}{3}$ of the active sites I visited. And I saw terrible leaks from orphan wells, abandoned by operators; open holes and pipes in the ground pouring out methane. The Allegheny National Forest is full of these kinds of wells, and the sour smell of leaking hydrocarbons has become part of the experience of visiting these public lands. I've seen this same pattern in our state gamelands and state forests. All of this methane pollution, being emitted from thousands of well sites across the states, is heating up our planet and propelling us forward into a climate crisis.

But let's be clear: this pollution is not only in the middle of forests. Oil and gas production happens in backyards, on school properties, in community parks, shopping centers, cemeteries...seemingly no place is off limits in Pennsylvania. Last summer, I joined community members for a walk through Boyce Park in Allegheny County. The trails in this park were populated by runners, cyclists, and families with children taking a walk in the otherwise pristine community park. While in the park, we noted a strong sulfuric odor and eventually found the source: a well owned by Diversified Energy. Methane and volatile organic compounds were gushing out of the well and into the open air, like someone aiming a hose of carcinogenic pollution directly at a popular park trail.

What we witnessed was a serious equipment failure and a hazard to public health and climate. The emissions made visible by the camera had been occurring for an unknown amount of time.

Based on production data, it is possible that methane and carcinogenic pollution had been gushing out of the well for nearly a year before Earthworks made this discovery.

In Westmoreland County, I've made three visits to a well site located on an elementary school property over the course of three years and found leaking equipment every time. I reported each issue to DEP, who conducted their own inspections and asked the operators to make repairs. And yet the emissions continued; if it's not leaking from one part, it finds another. Like a game of whack-a-mole, the methane pollution from this well – and so many others – seemingly cannot or will not be stopped. In some cases, the methane is not leaking, but venting – an intentional practice of releasing methane from tanks and other equipment to prevent explosion. Whether intentional or not, methane emissions are inseparable from the industry.

When I started in my role almost three years ago, I never imagined the possibility of using an optical gas imaging camera on my own block in Philadelphia. But I soon learned that well pads and compressor stations are not the only places where dangerous methane gas leaks into the open air. Two years ago, the block where I was living next to an elementary school in Philadelphia experienced dozens of gas leaks and failed repairs. The gas utility couldn't find or fix the leaks, and I ended up helping them with my optical gas imaging camera. Eventually, the entire pipeline needed to be replaced. But the city continues to experience gas leaks every day.

And, in fact, when I bought my first home in Philadelphia last year, in a different neighborhood, I found a new gas leak. This time it was inside of my home, coming from a loose pipe fitting on my home's gas meter.

My camera makes the truth unavoidable: *gas leaks*. At every stage of the oil and gas industry, from extraction to processing to distribution into our homes. And when gas leaks, it hurts us all, whether directly or indirectly. Harming our health – worsening asthma and increasing cancer diagnoses. Causing explosions and loss of life. Heating up our climate, bringing floods, wildfires, and numerous other life-changing impacts for generations to come.

We can do better than continuing to invest in more of the same extraction. We can build a clean energy economy in Pennsylvania, creating good-paying union jobs while protecting the health of Pennsylvania today and for future generations. Clean air and water is a birthright for Pennsylvanians under the Environmental Rights Amendment. The oil and gas industry violates this right every day and has no place in a clean energy future.