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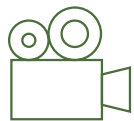
Earthworks' Optical Gas Imaging Brings Dangers of VOCs and Methane to Light

Footage uncovers the true extent of pollution at Pennsylvania's natural gas sites



OGI footage reveals dangerous air pollution

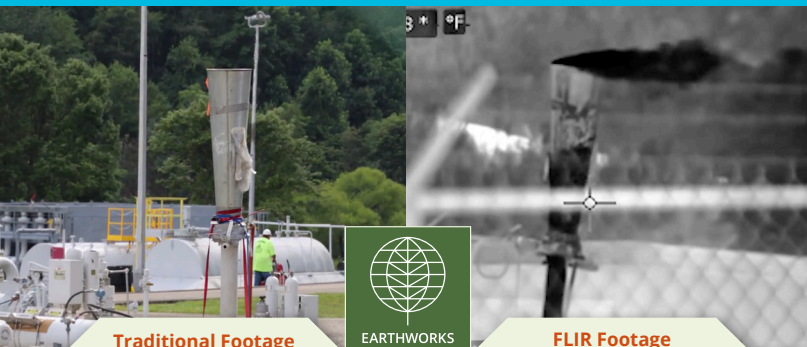
Much of the pollution that occurs in the natural gas production process is invisible to the naked eye, yet it has a devastating impact on Pennsylvania's environment, communities and climate. Earthworks' FLIR footage documents uncontrolled, powerful emissions and equipment leaks and failures. These leaks consist of volatile organic compound (VOC) emissions, including methane.



Revealing harmful methane emissions through imaging

Using optical gas imaging (OGI) technology, these dangerous emissions can be documented.

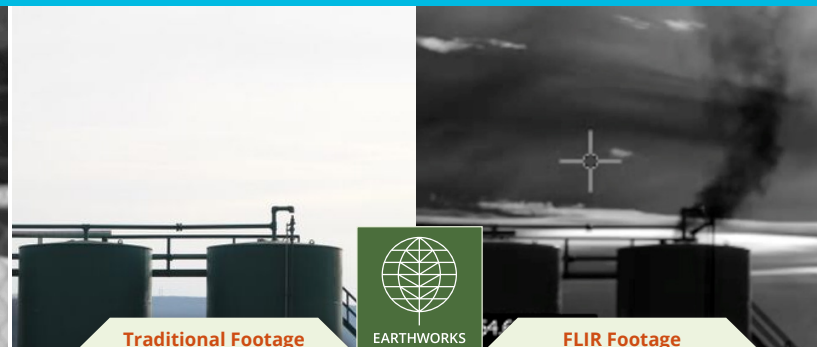
Earthworks' FLIR (forward looking infrared) cameras are industry-standard technology designed to detect and reveal VOC and methane pollution.



Traditional Footage

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FLIR Footage



Traditional Footage

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FLIR Footage



Understanding the impact of pollution in Pennsylvania

These emissions can come from an unlit flare, an open tank hatch, or a leaking valve. Pollution plumes can drift toward homes, schools, businesses, farms, and other places where people live, work, and play.



A threat to our environment

Methane – the primary component of natural gas – is a powerful greenhouse gas that’s 86 times more damaging to our climate than carbon dioxide over a 20-year time frame. Pennsylvania is the second-largest natural gas producer in the nation. Reducing air pollution here would have a positive, global impact on climate change.



A threat to our public health

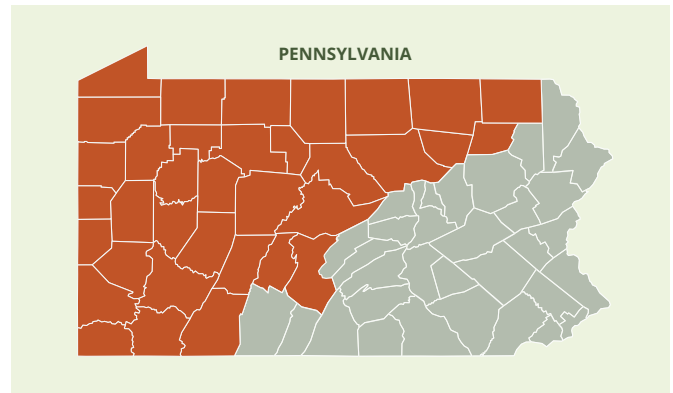
Other emissions documented include health-harming and cancer-causing chemicals, such as benzene, toluene, ethylbenzene, xylene and formaldehyde. Symptoms of long-term exposure to these chemicals include respiratory issues as well as kidney and liver damage.



The true impact of natural gas

These videos make it plain to see – the industry needs to clean up its act.

- ✎ The oil and gas industry and its proponents have misled the public by denying and downplaying its pollution and calling natural gas a “clean” energy source.
- ✎ The industry claims it effectively contains methane emissions and other pollution. It doesn’t. In fact, research suggests methane emissions are nearly five times higher than what Pennsylvania operators self-report to the state.



■ Counties with oil and gas drilling

Source: Pennsylvania Department of Environmental Protection



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Stopping leaks and holding the industry accountable

Earthworks has captured footage through repeat visits to the most problematic facilities and to date have filed dozens of formal complaints with state regulators. We work to empower local residents to document issues, file complaints and demand more from the oil and gas industry and our elected officials in creating safe, healthy communities throughout Pennsylvania.

SEE THE FOOTAGE: bit.ly/CEP-PA | **LEARN MORE:** cep.earthworks.org

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