

## THE SKY IS BLUE: SETTING THE RECORD STRAIGHT

*Activist filmmaker Josh Fox has produced another highly misleading video and accompanying op-ed about natural gas development in the United States. Here are some message points as well as specific information as it relates to specific claims. Additionally, we have posted our statement on the ANGA and Friends of Natural Gas NY websites.*

**FEAR:** *"The part of the gas well that they're relying on to protect groundwater is simply cement...a 1-inch layer could never be adequate when groundwater is at risk."<sup>1</sup>*

**FACT:** It is a gross misrepresentation to suggest that one-inch of cement is the only thing protecting fresh water aquifers from natural gas development. There are multiple layers of steel and cement shielding natural gas operations from any below-ground fresh water. These redundancies help ensure that if one layer "fails," other barriers remain in place to protect the water supply.

**FEAR:** *"(Industry documents) show you how they've been trying to solve it for decades and how they have no way of completely fixing or preventing the problem." (7:24)*

**FACT:** Most of these documents are available to the public and some are quite old. Additionally, we heavily dispute Mr. Fox's characterization of their purpose. It should come as no surprise that our industry, just like any other, would routinely explore any development issues and work toward appropriate and perhaps innovative new mitigation methods. That is an essential part of our day-to-day work.

**FEAR:** *"The gas industry's own documents and case studies show that about 6 percent of cement jobs fail immediately upon installation...When the cement fails, it opens a pathway for gas and other toxins involved in the drilling and fracking process to migrate into groundwater."<sup>2</sup>*

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<sup>1</sup> Op-ed accompanying his video: "Fracking is hardly leakproof," *Albany Times-Union*, June 20, 2012

<sup>2</sup> Ibid

**FACT:** Fox is clearly not familiar with industry terminology or practices, nor does he care to be. Some of the materials he highlights as “secret industry” documents are in fact marketing materials advertising products that help producers maintain well integrity. In fact, many of the chemicals he complains about are the tools used to ensure the well bores do not succumb to corrosion. Natural gas companies are required to carefully monitor well integrity before, during and after hydraulic fracturing occurs. Over the lifetime of the well, mechanical integrity tests and pressure tests are required at regular intervals. If the high standards required of these tests are not met, then the well is determined to have “failed.” This is NOT synonymous with contamination of water. It means that mitigation measures must be put in place before the well’s operations can proceed. Finding weaknesses and proactively fixing them, in accordance with state requirements, shows the system works.

**FEAR:** *“These well casings and these gas wells have to last forever or else they pose an immediate and constant risk to ground water.” (09:01)*

**FACT:** Wells need to be safe for their operational lifespan—typically no more than 50 years. At that time, modern wells are required to be plugged. This is a highly technical process in which the well is filled with cement and then pressure and other integrity tests are conducted to ensure the well has been properly sealed. It should also be noted that the Portland cement used in natural gas operations actually becomes *more* impermeable with time—creating a stronger and stronger protective barrier.

**FEAR:** *“So now the shallow gas goes into an open annulus, pressurizes the annulus, gas migrates into an underground source of drinking water, somebody’s water well.” (1:47) –Anthony Ingraffea*

**FACT:** This is an extremely far-flung “what if.” Pressure in onshore wells is routinely monitored. Well integrity tests are performed before any fracturing operations occur. And, companies are perfectly capable of addressing any concerns that arise either through established risk mitigation measures or, in rare cases, plugging the well.

**FEAR:** *“Gas drilling, and hydraulic fracturing, is an inherently contaminating and industrial process.” (2:00)*

**FACT:** This is a patently false statement. There have been more than 1 million hydraulically fractured wells in the U.S., but even Josh Fox himself has to go back nearly 30 years to suggest one potential incident, but hydraulic fracturing was not shown to be the cause and older drilling practices were in place. Here is the Congressional testimony of EPA Administrator Lisa Jackson: “I am not aware of any proven case where the fracking process has affected water.

*FEAR: "Safe fracking' is a contradiction in terms."*<sup>3</sup>

**FACT:** This statement is far outside mainstream, credible debate about our energy choices as a nation. There is broad scientific consensus, history and day-to-day activity that indicate natural gas can be responsibly developed and, specifically, that hydraulic fracturing can be safely utilized. From Energy Secretary Steven Chu, to MIT's Energy Initiative, to the many states embracing responsible natural gas development, to the validations of the multi-stakeholder STRONGER process, there is simply no credible basis for making such an extreme claim.

*FEAR: "The gas industry is saying that according to the Colorado Oil and Gas Conservation Commission, Mike Markham's methane was biogenic, or shallow gas...But as it turns out, the whole argument is misleading. Even though the gas company wasn't drilling for biogenic gas, the drilling process could have caused biogenic gas to leak up into the aquifer." (9:36)*

**FACT:** The Colorado Oil and Gas Conservation Commission (COGCC) tested Mr. Markham's water in 2008 and found that there were "no indications of oil & gas related impacts to water well." Instead the investigation found that the methane was "biogenic" in nature, meaning it was naturally occurring and that his water well was improperly drilled through several shallow and naturally occurring gas pockets. Specifically, the COGCC has stated that:

"the water well completion report for Mr. Markham's well shows that it penetrated at least four different coal beds. The occurrence of methane in the coals of the Laramie Formation has been well documented in numerous publications by the Colorado Geological Survey, the United States Geological Survey, and the Rocky Mountain Association of Geologists dating back more than 30 years."

*FEAR: "If it's not safe for the New York City watershed, then why is it safe for somebody else's?" (15:56)*

**FACT:** We take great care to ensure we understand the local geology and hydrology where we operate, and we customize our operations accordingly. With the appropriate safeguards and mitigation measures in place, hydraulic fracturing can be conducted safely and responsibly. There were a number of factors that went into this particular decision, not the least of which was political compromise.

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<sup>3</sup> Ibid

*FEAR: "And in their (COGCC) groundwater report is something interesting. Accounts of orphaned or abandoned gas wells. Some of these gas wells were drilled as early as 1911, or in the 1920's. Who knows how long those abandoned wells have been leaking gas, and other contaminants, into groundwater." (11:12)*

**FACT:** Mr. Fox is well aware that this issue is an historic one. In the early part of the 20<sup>th</sup> century, there were wells built that did not have state oversight. Many of these wells were abandoned. However, states now have remediation programs in place to plug these wells, which means they fill them with cement and conduct pressure/integrity tests to ensure the job's done right. These are typically funded through the oil and gas revenues states receive, or through assessments on operators. This is not an issue with today's wells. Today, at the end of a working well's life the operator is required to plug the well according to strict safety standards.

*FEAR: "In 2011, the Environmental Working Group released a report showing that EPA actually confirmed that fracking could contaminate a water supply, as it did in one case in West Virginia, where a lateral fracture hit an abandoned gas well with a cracked casing." (11:12)*

**FACT:** This was based on a 1987 report by the Environmental Protection Agency before current drilling practices were in place, and relies on a single alleged incident in West Virginia. In fact, even the Environmental Working Group, which claimed credit for uncovering the EPA study, has stated that they did not find conclusive evidence that this case was a result of hydraulic fracturing.

*FEAR: "The first major health study on the effects of gas drilling was done in Garfield County, Colorado. Researchers found the potential for acute health problems related to gas drilling activities in the water and in the air. The Colorado School of Public Health found that there was a likelihood of health effects from pollution from gas drilling and that the magnitude of these health effects was moderate to high."*

**FACT:** Not a single human being's health was evaluated in this study. This was a theoretical exercise using arbitrary measures and a more detailed assessment would have to be performed before drawing any conclusions about any potential human health risks. The most important point for the public to understand is that lifetime cancer risks were virtually identical for residents living inside or outside the half-mile radius of natural gas development compared in this paper.

*FEAR: "The New York Times put star investigator Ian Urbina on the case. Their investigation uncovered thousands of internal documents showing that radioactive wastewater and harmful carcinogens such as benzene were being inadequately treated and being put back into drinking water supplies all over Pennsylvania." (4:18)*

*Doug Shields, Pittsburgh City Council: "They allowed them to just go dump the stuff in the river."  
(3:40)*

FACT: The paper's public editor, Arthur Brisbane, published two rebukes of Urbina's series, citing selective and anonymous sourcing and lack of substantiation. Brisbane characterized Urbina's work as a "journalistic gamble" that "only invokes mistrust." Urbina's coverage raised serious concerns among a wide array of stakeholders. From factual inaccuracies to misquoted sources, serious questions were raised about the paper's opposition to natural gas development.

Josh Fox knows very well that the state of Pennsylvania has rules in place preventing the discharge of wastes unless they meet drinking water standards. He also knows that the industry has voluntarily stopped such discharges and is recycling and reusing much of the water generated from the process. This is another major distortion in a long list of them that demonstrates that Fox has no interest in the truth.

After allegations of contamination were made in *The New York Times*, the Pennsylvania Department of Environmental Protection released test results of water supplies taken downstream of water-treatment plants between November and December of 2010 and found that "all samples were at or below background levels of radioactivity; and all samples showed below the federal drinking water standard."