



COLORADO
OIL & GAS
ASSOCIATION

COGA | The Truth About “GasLand” Whitepaper

On Monday, June 21st, HBO aired “GasLand” a documentary by Josh Fox which discusses the natural gas industry. While Mr. Fox’s original film was changed after the screenings in response to factual critiques, it is still filled with much misleading information.

Natural gas is a clean, abundant, and domestic energy source that has created 2.8 million American jobs and is vital to our nation’s clean-energy future and economy. Colorado is fifth in the country in natural gas employment by supporting 137,000 Colorado jobs which adds \$8.4 billion in labor income and \$18.3 billion in annual contribution to the economy.

Natural gas is the cleanest-burning hydrocarbon fuel on earth. Natural gas at the burnertip is methane (CH₄), a molecule containing one carbon atom and four hydrogen atoms. By transitioning from wood, to coal, to oil, to natural gas, industrial economies have been steadily moving away from carbon-based energy for two centuries. The primary combustion products of natural gas are nitrogen oxide (NO_x), CO₂, and water vapor. Most air pollution in the United States comes from the transportation and utility sectors. We could reduce total air pollution by nearly 30% using natural gas vehicles. In the electric power sector, by using natural gas-fired generation we can reduce carbon monoxide (CO) and emissions of particulates by 90% and emit 80% less nitrogen oxide (NO_x) with virtually no SO₂, or Mercury.

Drilling for natural gas leaves a small footprint, and most of the infrastructure is underground. Technological advances in the last few years have allowed us to extract 10 times the natural gas with 1/10 of the footprint.

THE REAL STORY OF HYDRAULIC FRACTURING’S SAFETY AND REGULATIONS

Hydraulic fracturing (often referred to as “fracking”) is a proven technology that has been refined over 60 years. It has allowed companies to safely produce natural gas from more than one million U.S. wells. The Environmental Protection Agency, Ground Water Protection Council, Interstate Oil and Gas Compact Commission and others have all examined the process and found it to be safe. The essential factor with respect to the safety of hydraulic fracturing is proper well construction, including casing and cementing to isolate the production formations being stimulated from shallow groundwater aquifers.

Contrary to the film’s assertions, natural gas production is subject to federal, state, and local regulations that cover everything from initial permits to well construction to water disposal. The natural gas industry is committed to ongoing environmental stewardship and ensuring that we are an excellent neighbor in the communities in which we live and work. We also are committed to answering the public’s questions and concerns in a factual and science-based way. While there are many examples of erroneous claims in the film, the following are just a few examples.

“GASLAND” CLAIMS HYDRAULIC FRACTURING IS EXEMPT FROM THE SAFE DRINKING WATER ACT

Mr. Fox claims that the 2005 energy bill pushed through Congress by Dick Cheney exempts the oil and natural gas industries from the Safe Drinking Water Act (SDWA). While the 2005 energy bill does contain language relating to hydraulic fracturing and the SDWA, it does not exempt the industry from the SDWA but reiterates Congress’s long-standing position that hydraulic fracturing was never intended to be regulated under SDWA, and that the process is best regulated by state experts and officials on the ground, not by Environmental Protection Agency (EPA) staff. It was simply a restatement of current law.

The Energy Policy Act of 2005 received 74 “yea” votes in the United State Senate including the top Democrat on the Energy Committee; current Interior secretary and then Senator Ken Salazar, from Colorado; and President Barack Obama, then a senator from Illinois. In the U.S. House, 75 Democrats joined 200 Republicans in supporting the final bill, including the top Democratic members on both the Energy & Commerce and Resources Committees. In reality, this effort was a bipartisan achievement.

“GASLAND” CLAIMS THAT THERE ARE HUNDREDS OF CHEMICALS USED IN HYDRAULIC FRACTURING

“GasLand” also asserts that that fracturing fluid is a mix of over 596 unknown and proprietary chemicals. The truth is, the fracturing process uses a mixture comprised almost entirely (99.5%) of water and sand. The remaining materials, used to condition the water, are typically found and used around the house. The average fracturing operation use fewer than 12 of these additives, according to the Ground Water Protection Council — not 596. The entire universe of additives used in the fracturing process is known to the public and the state agencies that represent them.

FLUIDS DISCLOSURE IN COLORADO

Colorado requires companies to maintain a well-by-well chemical inventory for the life of the well plus five years. While the list does not have to be filed with state regulators as a matter of course, it is required to be made available to the Colorado Oil and Gas Conservation Commission (COGCC) upon request, in order to investigate a spill or release, a landowner complaint of well contamination, or an incident of personnel exposure. The Commission shares the information with local health officials, or a treating physician, subject to a confidentiality agreement. The inventory can be shared more broadly if the company does not request trade secret protection.

Not only do individual states mandate disclosure, the federal government does as well. The Occupational Safety and Health Administration (OSHA) mandates that chemical information be kept at every wellsite, and made readily available to response and medical personnel in case of an emergency. Over the course of its history, fracturing has been used to access water and geothermal energy as well as by EPA to cleanup Superfund sites.

COLORADO FLAMING FAUCET NATURALLY OCCURRING METHANE

Locally, in Fort Lupton, CO, the film shows a resident igniting his tap water, leaving the impression that the flaming tap water is a result of natural gas drilling. However, according to the Colorado Oil and Gas Conservation Commission (COGCC), which tested this resident’s water in 2008, at his request; “Dissolved methane in well water appears to be biogenic [naturally occurring] in origin. ...There are no indications of oil & gas related impacts to water well.”(COGCC 9/30/08). This means that the natural gas in the resident’s well water is of recent bacterial origin, which could result from the poor well completion and hygiene, or penetration

of shallow coal seams. The film's implication that natural gas production and hydraulic fracturing are to blame is blatantly false.

COLORADO CREEK METHANE ALSO NATURALLY OCCURING

"GasLand" blamed natural gas development for methane in West Divide Creek, Colorado. Again, the truth is the COGCC visited the site six separate times over 13 months and confirmed that: "Stable isotopes from 2007 consistent with 2004 samples indicating gas bubbling in surface water features is of biogenic origin." (July 2009, COGCC environmental protection supervisor Margaret Ash). In a follow-up email to the complainant: "As you know since 2004, the COGCC staff has responded to your concerns about potential gas seepage along West Divide Creek on your property and to date we have not found any indication that the seepage you have observed is related to oil and gas activity." (email from COGCC to Lisa Bracken, 06/30/08)

COLORADO INDUSTRY'S COMMITMENT TO SAFETY AND ENVIRONMENTAL PROTECTION

Do incidents occur? Yes. And in those rare cases, companies work with the appropriate regulatory authorities to identify and correct the issue, and to implement measures to ensure they don't happen again. We in the oil and gas industry understand and respect your concerns and questions about the safety of your water and air. We are committed to working with community members, policymakers, and stakeholders to ensure the safety of natural gas production.

We are committed to providing economy, environmental, and energy solutions to Colorado. Our state had more than 30,000 natural gas wells in production in 2009. Ten of the Nation's 100 largest natural gas fields and three of its 100 largest oil fields are found in Colorado. Severance tax is levied on extraction of metals, coal, oil and gas and is part of TABOR revenue base. Oil and gas pay over 90% of the state's severance tax. The total assessed values for taxable Oil and Gas property in 2009 was \$11.9 billion or 12.1% of the state total.

FOR MORE INFORMATION GO TO:

Debunking 'GasLand' (from www.EnergyInDepth.org)

The Truth About 'GasLand' (from America's Natural Gas Alliance)