

Pros and cons of fracas essay examples

[Environment](#), [Pollution](#)



Putting a mixture of water, sand and chemicals under high pressure under the ground to release locked up oil and gas deposits in deep reservoirs has been put to use for nearly 70 years. This method of crude oil extraction, known as Hydraulic fracturing, includes pumping water, some trace chemicals and sand under high pressure into a finished wellbore in order to create fissures in comparatively impermeable rock basin formations for example shale. These fissures so created allow oil or natural gas to then flow into the wellbores and pumped out for use. The sand supports the fissures to remain open, preventing the collapse of pathways formed for the gases and petroleum to flow. Combined with horizontal drilling at depths of more than one miles below the earth's surface, hydraulic fracturing has discovered vast reserves of natural gas.

This method is widely used in vertical and horizontal drilling in oil reservoirs with low permeability as well. The reason being that 75 percent of the oil and gas is left behind even in conventional oil reservoirs with permeable geologic formations, which allow oil to flow to the wellbore due to the natural pressure built for so many years. White in her article (2011) for National Review Online says, “ Fracking is one of several new ways to get at the ample resources remaining after natural pressure subsides.”

Fracking may seem a very good option to answer the oil crisis that perpetually bothers governments and people round the globe, as it extracts the best amount possible from otherwise impermeable reserves that constitute the major part of non-renewable source of energy forms like crude oil and natural gas. U. S. President Barack Obama said, “ After years of talking about it, we are finally poised to control our own energy future. We

produce more oil at home than we have in 15 years. We have doubled the distance our cars will go on a gallon of gas, and the amount of renewable energy we generate from sources like wind and solar – with tens of thousands of good, American jobs to show for it. We produce more natural gas than ever before – and nearly everyone’s energy bill is lower because of it.” (Helman)

These developments in fracking technology have led to nearly eightfold increase in shale gas production starting from a period of 1992 and a decreased rate of import. According to Energy Information Administration (EIA), shale gas will account for nearly half of the natural gas produced in the U. S. by 2035 (McGraw). The oil industry has seen an exponential rise in production from 2008 to this year with nearly 7 million barrels per day. Added to this fact that the consumption of petroleum based commodities, especially natural gas, has been at an all-time low owing to the emergence of the market from the recent recession. With people shifting to non-conventional renewable sources fracking has opened new avenues of global business profit for oil industries in the United States, as well providing the government a chance to provide its people the full supply of natural gas at low rates.

Another good aspect of fracking is the amount of employment it generates with more people shifting to fracking fields, which are otherwise farmlands or barren landscapes ushering consumer development markets, development of lifestyle etc. This comes as a chance of development in areas that yet have been untouched by the speed of modernization.

But this so called boom is not without controversy. Such a tried and tested

practice has become a matter of heated debated for environmental skeptics. In the process of extraction of natural gas by fracking in impermeable geographic formations like shale, wells are bored vertically as well as horizontally. Along the horizontal bores, extending for many thousands of meters, well modules are constructed for the collection of the escaping gas that collects in the vertical wells from the fractures in the shale. The vertical drills intersect with numerous gas pockets, distributed randomly along the whole shale contour.

For fracking to begin nearly 20 million gallons of high pressured fracking fluid is required. This mixture causes the shale to crack and remain open at a scale much bigger as compared to conventional fracking. With fracking in shale formations comes an inflow of companies, employees, digging and other equipment and operators etc. The magnitude of the shift is so great that it is uncontrollable at times and raises conflicts in the locale, which are basically rural areas with rather peaceful environs.

Human errors may lead to leaks and spills in the nearby areas, increasing chances of contamination of the environment, not to mention the damage to the fauna and flora that such contamination and barging in may produce. Everything from contamination of ground water to the probability of pipeline leaks is possible (Climate Desk). The equipment is known to emit pollutants and contaminants in the air. The fluids used for fracking, when returns to the surface, contains heavy amounts of chemicals and naturally occurring hazardous materials and are therefore unfit for disposal.

The biggest controversy that people pick up is the contamination of water. Surprisingly, many times there is no provision for facilities to store or dispose

of the fluids left out after fracking. Climatic alteration is another major worrying factor. Methane, a major greenhouse gas is emitted from the extraction (White). Yet another factor is the low maintenance of the equipment used for fracking which may surmount to disastrous effects (Purtle).

Research is insufficient and unreliable to point out the impending magnitude of damage that fracking practices may cause. Climate Desk reported that a research paper written by a professor regarding the environmental effects of fracking was re-examined on alleged reports that the professor “ pocketed hundreds of thousands of dollars from energy interests”. Oil organizations definitely find this new technology very useful and with dwindling sources of conventional energy resources there is a fair chance that some concerns may even resort to unethical ways of operation.

There are ways and means by which such problems may be dealt with. Precautionary measures at fracking sites should be enforced by default no matter what reports may say or how many people may voice the “ safeness” of the fracking process (Purtle). It is a must that corporations dealing in fracking and natural gas extraction must satisfy the environmental security demands of the people they take the fracking sites on lease from. The authority as a whole must implement stricter measures to prevent another situation of climatic disaster due to human errors (White). The time has not yet arrived for non-conventional sources to become the major players in the energy sector, the transition is slow. Till then conventional sources are the only option and there extraction and use must be done diligently and in the folds of responsibility and ethics.

Works cited

Climate Desk. 101: The Cozy Relationship Between the Natural-Gas Industry and Academic Researchers. The Atlantic. com. Jul, 2012. Accessed 28 Oct.

13. Online

Griswold, E. The Fracturing of Pennsylvania. The New York Times. 17 Nov. 2011. Accessed 28 Oct. 13. Online.

Helman, C. President Obama Gets It: Fracking Is Awesome. Forbes. com. 12 Feb, 2013. Accessed 28 Oct. 13. Online.

McGraw, S. Is Fracking Safe? The Top 10 Controversial Claims About Natural Gas Drilling. PopularMechanics. com. n. d. Accessed 28 Oct. 13. Online.

Purtle, J. Some states erring on the side of (pre)caution in the fracking debate. Philly. com. 27 June, 2012. Accessed 28 Oct. 13. Online.

White, K. H. The Fracas about Fracking. National Review Online.

Nationalreview. com. 20 June, 2011. Accessed 28 Oct. 13. Online.