

# Example of hydraulic fracturing argumentative essay

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



There is a high demand for gas in the United States. Due to this high demand, many gas and oil companies have developed a new process of drilling natural gas. This process is known as Hydraulic Fracturing. Hydraulic Fracturing refers to the process of drilling horizontally by injecting a mixture of water, sand and chemicals- in high rate of concentration or pressure- into rocks as a means of creating new fissures for extracting gas and oil. This process of drilling is applied in difficult-to-reach areas. The technique was developed to stimulate oil production from wells, especially in declining oil reservoirs. However, improvement in the drilling process has enabled oil and gas production in unconventional reservoirs, which were previously inaccessible. According to Tiemann (2011), hydraulic fracturing is now used in more than 90% of new gas and oil production wells.

Hydraulic fracturing technique was initially developed in the early 1940 as a means of stimulating production of oil from reservoirs with declining productivity. However, as demand for gas and oil increased in the United States, the technique was extended to initiate gas and oil production in low permeability formations. Developments in the technique include breakthrough advances in horizontal drilling for production of natural gas, identification of less toxic chemicals for drilling and new techniques of injecting water and chemicals underground. There is a House Bill known as FRAC in the United States which regulates the hydraulic fracturing process; also known as Fracking Responsibility and Awareness to Chemical Act. In addition it is a well stimulation process that is used to acquire natural resources from geological formations that are underground or on Earth's surface. With the hydraulic fracturing process, it is easier to extract valuable

natural resources that are buried deep in the crust of Earth.

Hydraulic Fracturing is a process that was commercially used by Halliburth in 1947 (Charlez 24). Having observed that it successfully boosted production of oil and gas wells, it was quickly adopted and commercially developed. This process is used in many wells in the United States. Natural gas is very valuable to Americans because of its widespread domestic and commercial use. It is through hydraulic fracturing process that natural gas is extracted from the Earth's crust. Not all people have information on hydraulic fracturing process except for a good portion who has heard of it but fear the process because of the controversies surrounding it. This is because they are misinformed by environmental groups and the media about the process. Media always projects the process as a new technique to the public, but according to Charlez (25), it has actually been there since 1947.

As hydraulic fracturing process expanded, the media and the congress expressed rising concerns about the process. What they are forgetting is that, the process has been around for a long time. Furthermore, there has been no complains except for a few filed very recently. There are allegations in the media that, because of the hydraulic fracturing process, natural gas enters private water supplies and pollutes streams. This sparked further controversy about the process. Hydraulic fracturing is not an environmental danger as the media claims it to be. It is a process that is well regulated and if it causes environmental concerns, measures will be taken by the regulatory bodies to stop it. This is because it has been used for a considerably long period of time and in more than one million wells across United States (Brown 112). Industry experts point out that, frack wells are

generally drilled thousands of feet below the water table, making the possible chemicals leak into ground water unlikely to be broadly true. Not to mention myriad safety measures taken to prevent possible leakage-like cementing and sealing well walls. Moreover, the natural gases extracted from the process are Hydrocarbon.

As a widespread misconception, it is assumed that hydraulic fracturing process causes worse air pollution to the environment than conventional gas and oil developments (Atkinson 143). This is untrue. Natural gases are hydrocarbon. The United States is in need of natural gas in order to reduce air pollution caused by conventional gas sources. And in order to get quick access to unconventional natural gas, this process is needed. Natural gases are cleaner when burnt, compared to coal-generated one, and it is easily produced domestically. Factually considering, natural gas emits half as much as carbon dioxide as coal and less than 30% of oil (Brown 116). Therefore, media should stop insisting that hydraulic fracturing process poses environmental dangers and should rather encourage its use in order to produce more natural gas to avoid air pollution caused by conventional gases.

The media continues misinforming people that, hydraulic fracturing ruins water tables and causes air pollution and death of animals. This is very misleading from the media to the public since people can be the cause of water contamination if they do not take care of their water wells and if they are near gas wells. According to Weinhold, "Methane concentrations in drinking water were much higher if the homeowner was near an active gas well" (89). It should be known that, hydraulic fracturing is a safe technology

and people should not take decisions or form opinions based on anything media says. The fact is that, the hydraulic fracturing process is a safe technique for natural gas extraction. Unlike what the media attempts to misinform them, drinking water is not polluted through this process since the ingredients used do not come into contact with drinking water because of being applied way deeper into earth from the level of water body. Therefore, it is very clear that, hydraulic fracturing is not an environmental danger and has many positive effects on the United States. Hydraulic fracturing process takes place a thousand feet away from water tables. According to King, Fracking does not contaminate drinking water because studies done on causes of water contamination have proven that the chemicals used in hydraulic fracking do not reach or spread beyond the spatial scope where they are applied. There has been only one complain found in more than 10,000 wells studied and the problems were in Alabama. It was found that well contamination there was not linked to the hydraulic fracking process but to natural sources (Biello). There was also a complain that it spreads cancer backed up by media of course. This misinformation has been disapproved by highly qualified epidemiologists.

Media seems to ignore that there is a high demand of natural gas in the United States. According to Weinhold (156), this high demand of natural gas can only be met by the hydraulic fracturing process, which produces natural gas that does not emit lots of carbon. Also, hydraulic fracturing process should be encouraged in the United States because it will not only impact the gas and oil industry, but also provide with a valuable source of cleaner domestic fuel for the people of the United States. The high demand requires

that masses of natural gas should be produced. If it is not by the hydraulic fracturing process, the use of conventional gas will lead to high levels of air pollution due to its high carbon emissions. It should be noted that, without the hydraulic fracturing process whereby natural gas is extracted, the people will continue using conventional sources and this will mean high pollution rates which can lead to further global warming. Moreover, there is an obvious need of an adequate storage of gas since conventional gas sources will not be enough to meet the increasing demand of gas:

“ Consumers strongly support increased production of energy from domestic sources, particularly natural gas and renewables, according to the University of Texas at Austin Energy Poll that was released today. This is the second release of the poll, a twice-annual national online survey of energy issues. Posted by Renee Hopkins” ( [http://www. utexas. edu/news/tag/hydraulic-fracturing/](http://www.utexas.edu/news/tag/hydraulic-fracturing/))

According to King, the use of hydraulic fracturing will reduce the cost of natural oil and gas resources. Therefore as the media claims that it causes environmental danger, this should be put into consideration. If natural gas production is increased, there will be job opportunities and this will help alleviate unemployment and poverty in the United States. The lower class people and the youth who are unemployed will be able to find jobs and the unemployment rate will be decreased. Furthermore, it will have a huge effect on the public’s wallet as the price of gas will be lower and at regulated price. When the gas price is reduced, the cost of living for many Americans will be affordable as gas is used daily by all Americans. The money that was spent on gas, can be used for other purposes. Truly, the media should refrain from

misleading the people. If hydraulic fracturing is expanded, it will affect the lives of American citizens for the better:

“ According to the National Conference of State Legislatures, a bipartisan organization that serves the legislators and staffs of the nation’s states, commonwealths and territories, hydraulic fracturing can contribute to increases in job creation, capital expenditures, gross domestic product and tax revenues, while also creating savings through lower natural gas and electric power prices.” (<http://www.environmental-expert.com/news/hydraulic-fracturing-323058>)

Although the media sees hydraulic fracturing as an environmental danger, the environmental protection agency has proven that it is not so. It has just had a bad reputation from the media especially from the Gas Land movie. The media, through documentaries, continues misleading people that this process is an environmental concern, whereas it is undeniable that the future of natural gas production depends on hydraulic process. The Gas Land movie depicts a very grim picture of hydraulic fracturing gas industry. The Gas Land movie and the Promised Land movie have been used by the media to paint a bad picture of this process by scenes showing that the hydraulic fracturing process contaminates water and is an environmental threat. It should be noted that Fracking lessens air pollution and effectively utilizes the environment’s natural resources.

The hydraulic fracturing process has no serious threats to the environment because the process is highly monitored and regulated by the state; local and federal regulations. Therefore, because it is regulated, the companies in charge of the process will take all the measures to protect the environment

and people's lives. The regulatory board will make sure that it poses no risks to the people but brings positive effects to the United States:

“ A major focus of D18. 26 efforts will be the development of guidelines and practices that will help protect overall environmental safety and public health.

### **Assist the oil and gas industry in the safe management and disposal of drilling fluids;**

Support effective groundwater monitoring and remediation; and

Provide practices that facilitate proper reinjection of produced well fluids.

Providing valuable assistance to D18. 26 members will be the vast body of work of other D18 subcommittees who have created numerous standards over the years that have direct applicability to the area of hydraulic fracturing. An initial area of emphasis for D18. 26 will be integrating these existing D18 standards into its new standard practices and guides for hydraulic fracturing.” (<http://www.environmental-expert.com/news/hydraulic-fracturing-323058>)

In the past, natural gas was mainly extracted from conventional sources alone but the population has grown and the demand is very high. If the media continues advocating for the negative effects of this process while their claims are not valid, there will be shortage of gas in the country.

Besides, if more natural gas is produced, the demand for gas will be met and the carbon emissions within the country will significantly reduce since conventional gases will not be used by many Americans. This will also lower dependence on foreign countries for energy since the United States has abundant natural gas resources.



As much as hydraulic fracturing process may seem risky and expensive, there is a possibility that, with this process, America can produce unimaginable amount of energy which could help it become more energy dependent and self sustainig. Moreover, it will create job opportunities as the country is in great need of more jobs for the high population. So, it is not bad as the media portrays it. Hydraulic fracturing process will stimulate America's economy:

“ extracting natural resources can also produce significant benefits for local economies. According to the National Conference of State Legislatures, a bipartisan organization that serves the legislators and staffs of the nation's states, commonwealths and territories, hydraulic fracturing can contribute to increases in job creation, capital expenditures, gross domestic product and tax revenues, while also creating savings through lower natural gas and electric power prices.” (<http://www.environmental-expert.com/news/hydraulic-fracturing-323058>)

Additionally, it will lower domestic energy cost. The demand for natural gas in the United States has increased in the last decades and can only be met through the hydraulic fracturing process or else there will be little gas shortage in the country.

In conclusion, experts and gas industry are contending as to whether hydraulic fracturing is an environmental concern as the media claims. It is very important for the United States oil and gas industry to develop energy resources here in the US in order to reduce their dependence on foreign energy sources. This can only be done by expanding hydraulic fracturing to meet the demands on natural gas in the United States. However, the gas

industry needs to do so by assuring the people that there will be minimal damage to the environment and the chemical used are safe and not harmful.

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