Shale Gas Fracking

Sample essay prepared by www.dissertationdeal.com on 15th NOV 2011.

TABLE OF CONTENTS

Introduction

The term "hydraulic fracturing or fracking" implies the operation of utilizing high-pressure pumps to infuse a combination of sand, water and compounds into bore wells for the purpose of fracturing rocks and to unbolt cracks there in the coal ridges in so doing discharging natural gas in the practice, where a well might be repetitively 'fracked' (Lloyd-Smith and Senjen, 2011). Theoretically recognized as hydraulic fracturing, 'fracking' entails making use of water force to bring in fractures into the gas-bearing layers of rock surrounding ensnared natural gas, setting aside it to flow out, and additionally in order to create the fracturing, the water is first of all muddled up with sand, together with additives to tempo the practice up. These are infused down kilometre-long steel pipelines that are concreted into place to put off connection with water aquifers on the way down to the layers of gas-bearing (Focus, n.d.). Hydraulic fracking has the prospect combining the additional methods in the forms of horizontal drilling and automated well controls offering the countries in the regions of the world with natural gas for numerous decades to come. A good number new-fangled natural-gas wells in the regions of the world makes use of fracking systems, where shale gas is found to be one of the few dazzling spots in the US particularly in very recent years (Costello, 2011).

Meanwhile, the effect of fracking on society and environment is an up-and-coming matter of greater concern not only for US but for the entire world. More importantly, the issue has significantly drawn the attention of general society all over the world specifically in US and Europe, but the issue is soon to become a burning issue in several parts of the world. The major issues of concern US and European world in relation to hydraulic fracturing or fracking, as according to Lloyd-Smith and Senjen (2011), are change of climate, sustainable/renewable

energy; hazardous waste dumping, air pollution, soil and water contamination. Clearly, hydraulic fracturing or fracking is an innovation in the world of natural gas and it has already achieved momentous in US and some parts of Europe. Though fracking is yet to revolutionise the world of natural gas, it has become an issue of greater concern for the community in these parts of the world as far as its social and environmental effects are concerned. Everyday different studies are published reveling advantages and disadvantages shale gas created by fracking, but researchers are yet to arrive on a common agreement. The process of conducting studies and making revelations will continue for some, but we need to have close look on pros and cons of this natural gas before justifying or denying it as natural gas of tomorrow.

There is found ample treasury of shale gas in diverse geographical parts of US and taking notice of this fact, there is consent in the country presently that shale gas will help out to guarantee adequate US gas stores over the coming countless decades . more importantly, the studies conducted by the researcher in the country present enthusiastic results revealing that the whole risk of shale-gas making from the mixture of horizontal drilling and hydraulic fracturing are not there. Moreover, there is probability of improved information and results in the years to come. More importantly, there is common view among the researchers and practitioners in US that hanging around for fresh proof does not give good reason for proscription fracking or striking major ceilings on shale-gas, as the cost to the country is apparently too great comparative to the advantages (Costello, 2011). Nevertheless, policymakers in this framework require being attentive of drills to make use of studies as a way to hang up or restrain shale-gas making. This is for the reason that a few group of people may well argue, for case in point, that shale-gas making must bring to an end by the time the communities have improved information when it comes to

public-health dangers. Nevertheless it is possible that the revelation by studies may not give the exact information that policymakers look forward to acquire. As a result, they will still have to make choices in improbability, even though the level of improbability must be lower as more methodically conducted studies happen to accessible. Even though such a policy comes out as sensible currently, fresh facts demonstrating grave hazards from fracking and shale-gas making possibly will rationalize firm boundaries, therefore we must wait for a final call, but there is nothing wrong to throw light on the negative side on the basis of presented testimonies.

Shale gas is argued contentious for the reason that it necessitates huge sum of water to discharge it from rocks, and the utilization of potentially hazardous compounds that might filter into the water reserve. For illustration, many cases in the US, which has directed the system in letting go gas from shale rocks applying fracking technology, have revealed proof of contagion and hazardous pouring out of methane gas (Harvey, 2011). Based on this revelation we may assume that shale gas is propped up far ahead of the point substantiation of what it might and might not execute, and that is why the suggestion comes as stepping back shale gas, and impartially look closely into the fact as whether shale gas is a realistic energy know-how for generation to come, moreover we must closely scrutinize how environmental harms linked with the fracking technology may well be cut giving least possible cost. However, the worry is that, as according to Heller (2011), that the greenhouse gas "footprint for shale gas is larger than that for conservative gas or oil in relation to any time horizon, and more importantly when it comes to the comparison with the coal, the footprint of shale gas is minimum 20 percent larger and possibly more than two times as huge on the 20-year horizon and is as good as whilst compared over 100 years. Obviously creating consensus is a tough call currently when it comes to using

natural gas in the form of shale gas, and let fracking goes for more and more scrutinisation from the social and environment hazard perspective.

References

- Costello, K., 2011. *Hydraulic Fracturing: Placing What We Know Today in Perspective*. [online]. Available at: <http://www.nrri.org/pubs/gas/NRRI_Hydraulic_Fracturing_Oct11-16.pdf> [Accessed on December 2, 2011].

- Harvey, F., 2011. Fossil fuel firms use 'biased' study in massive gas lobbying push. *The Guardian*, Wednesday 20 April 2011 London, UK.

- Heller, M., 2011. *Fracking Emissions Erase 'Clean' Advantage of Natural Gas.* [online]. Available at <http://www.fairwarning.org/2011/04/fracking-emissions-erase-clean-advantage-of-natural-gas-study-says/> [Accessed on December 2, 2011].

- Lloyd-Smith, M. & Senjen, R., 2011. *Hydraulic Fracturing in Coal Seam Gas Mining: The Risks to Our Health, Communities, Environment and Climate.* [online]. Available at >http://ntn.org.au/wp-content/uploads/2011/02/NTN-Fracking-Briefing-Paper-2011.pdf> [Accessed on December 2, 2011]

- Focus, n.d. *How it works: Shale gas fracking*. [online]. Available at <http://sciencefocus.com/blog/how-it-works-shale-gas-fracking> [Accessed on December 2, 2011].