

# Free essay on freshwater concerns in the drilling industry

[Business](#), [Company](#)



Drilling industry is responsible for the production and manufacture of oils and natural gas which fuel most of the machineries we use today. Drilling, as the main procedure used in the production of gas and oil, uses and exploits our natural resources—including freshwater. Recently, environmental concerns have been raised in connection to the large amount of freshwater used by drilling companies that affect the natural freshwater reservoirs (Begos).

Furthermore, unavailability of sufficient data that will keep track of the amount of freshwater being drawn from rivers and ponds is also becoming a concern for authorities and communities (Begos). This concern about the lack of data representing the amount of freshwater actually used in drilling industry stems from the worry that drilling companies are using more freshwater than they are permitted to—an event that will soon cause negative outcomes to communities (Begos).

Bringing light to this issue, we will see that extensive use of freshwater for drilling purposes is harmful to environment and to the citizens who are most exposed to this drawback of drilling industry. We will also see that lack of insufficient data that demonstrate the amount of freshwater actually used by drilling companies has its drawback for authorities and communities. A systematic way that will monitor the amount of freshwater used by drilling company will be helpful in determining whether or not permits issued regarding freshwater withdrawals from natural reservoirs are truthfully followed.

Over the years, drilling has been the benchmark procedure that enables the manufacture and production of oils and natural gas which bring life to the many types of machinery that we call technology nowadays. In order for

drilling to function and deliver desired results, drilling fluids in the form of muds are necessary (Khodja et al. 229; Rigzone). The water-based mud (WBM) is the most commonly utilized drilling fluid in industry—fueling 90-95% of all drilling procedures worldwide (Khodja et al. 229). The properties water has render a faster and easier drilling operation (Rigzone). Also, water-based drilling fluids are less harmful to the environment (Rigzone). Drilling using water results in lesser toxicity as compared to other types of muds as water lacks other components which are toxic and may be harmful to the site where drilling is done as well as to the inhabitants exposed to that area (Khodja et al. 244). Additionally, while other types of drilling fluids are harder—sometimes even impossible—to recycle due to their hydrocarbon and other toxic components, water-based mud has its advantage as more and better procedures of recycling are more applicable to it. But recently, recycled water deposits from drilling activities are making a fuss as they allegedly mirror a large of unreported amount water withdrawal.

In a report by Begos (no page), concerns have been centered to continuous drilling activities that make use of WBM and freshwater in Pennsylvania. Adding surprise to the article is that concerns are more focused on the less freshwater withdrawals but more recycled freshwater deposits (Begos). According to the newspaper article, Pennsylvania gas drilling industry is reported to have withdrawn 3.8 billion gallons of freshwater from the Susquehanna River Basin in 2011 which significantly declined to 3.1 billion gallons in 2013 (Begos). Despite this seemingly positive substantial difference in water withdrawals from the same river within just the span of two years, confusion and speculation arises as the recycled water deposits

do not reflect parallel to the water withdrawals. The problem arises from the lack of insufficient data that will relay the total amount of water withdrawals to the authorities and the public. Authorities rely only on data submitted by gas drilling companies which state that they conform to the permits issued to them (Begos). But the amount of freshwater recycled says otherwise. This created a rumpus among governing officials of the state and environmentalists. They fear that gas drilling companies statewide are in fact withdrawing more water from the natural reservoirs—as opposed to their claims of strictly adhering to the policy implemented by permits—but that which cannot be tracked due to the lack of an updated system of record-keeping which will enable them to accurately measure the amounts of water drawn from the natural reservoirs. Also, authorities are concerned on the possibilities that drilling companies are also using water from small rivers and streams extensively—an idea not digestible since these types of water resources are more susceptible to drainage in times of drought (Begos). This issue affects me and all other citizens to whom the drawbacks are projected. The issue is moving enough to compel each citizen to take a part in demanding a systematic way that will ensure that our water reservoirs are actually protected despite being used for drilling purposes. Extensive exploitations of freshwater resources will never be just and must be stopped if proven. But first, we need a system that will pin down companies that are actually violating their permits. We need a system that will make sure that our water reservoirs are protected. Also, ways to determine the safety of recycled water deposits must be developed. As the main beneficiaries of our

natural resources, it is important that we become primarily involved in protecting and preserving our natural resources.

## **Works Cited**

Begos, Kevin. "Gas drillers draw less water, but concerns linger." The Washington Times. The Washington Times, 2014. Web. 03 November 2014.

"How Do Drilling Fluids Work?" Rigzone. Web. 03 November 2014.

Khodja, Mohamed, et al. "Drilling Fluid Technology: Performances and Environmental Considerations." Products and Services; from R&D to Final Solutions. Ed. Igor Fuerstner. Europe: Sciyo, 2010. Print.