Yohance Basdeo

Hydraulic-fracturing has created a way for the oil and gas companies and government to make a lot of money with a lot of different consequences to the environment. Domestic oil from natural resources is a great concept but there are many different safety concerns. Hydraulic fracking should be banned or heavily regulated regarding the safety of the public and wildlife environments. This whole process uses millions of gallons of water per well and included with the water is a lot of different chemicals that are needed to break apart the shale. As these chemicals are blasted in the ground beneath us there is a big chance that it can contaminate the water supply for many people. The worst type of chemicals that are being used have hazards related to reproductive and developmental toxicity. Out of about 1021 chemicals used in the fracking fluid 67 different chemicals are of developmental toxicity (Elliott et al. 93). This worries me deeply because these types of chemicals can affect our children that are the future of the world and it can also affect every human being in terms of new sicknesses that may develop. Wildlife is also affected as well because we are the ones in their natural habitat, and fracking fluids after being pumped into the ground is then left as wastewater, either in brines or accidental spills and leaks that may or may not be reported. Birds fly everywhere, and it is seen that the riparian songbird in Marcellus and Fayetteville shale regions have an increase in metals which is associated to the fracking chemicals used in those areas (Latta et al. 1).

Not only does fracking affect land wildlife but it also affects the aquatic wildlife. Millions of gallons of fresh water are being used for fracking for each well station. The fresh water will be taken from the Delaware basin and river flow will be affected. River flow is very important for the organism's biodiversity and the ecosystem. In an article on the effect of the water stress in Arkansas it is stated that it does have potential to affect the aquatic biodiversity but also states that in the Marcellus shale region it is more humid, and this plays a bigger role in since stream flow is considerably lower. (Entrekin et al. 1) So, it is important that regulations are in place as to when freshwater is to be used for this process.

Lastly natural gas is much cleaner than coal but evidentially methane is 100 times greater to absorb heat than carbon dioxide. This methane is being leaked into the air because of the increase of hydraulic fracturing in the world. In the process of fracking an estimated 12% o total production of methane is leaked in the atmosphere (Howarth 48). This number is very large, and it is just influencing climate change which is certainly happening because of greenhouse gasses. In addition, since the fracking process requires so much water there is a lot of energy being used to transport the water to these sites, which ends up burning more fossil fuels, negatively impacting the environment.

It is great that we can harvest domestic oil, but the safety of people should always come first. Regulations should be followed strictly to make sure that rules are not broken for the safety of many. There should be efforts to introduce new engineering methods that have a better use of the amount of water used, as this will impact humans, wildlife and our future generations wellbeing.

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