
Waterless Fracking?

May 26, 2012

While the New York hydraulic fracturing moratorium is still in place as the DEC is working on the Supplemental Generic Environmental Impact Statement, it is believed that the use of liquefied petroleum gas (LPG) may sidestep the New York ban.

The controversial and traditional method of extracting natural gas from deep shale formations utilizes a mixture of water, sand and chemicals. The debate surrounding hydraulic fracturing focuses on the huge amounts of water needed to break up the deep rock underground that contains the natural gas and the amount of polluted water returned to the surface after the process is completed.

In 2008, a Canadian energy company based in Calgary, Alberta developed a waterless fracking method known as LPG fracking. According to GasFrac Energy Services (“GasFrac”), LPG fracking pumps a thick gel made from propane that is pressurized to the consistency of a gel. The gel is injected through pipes at high pressure underground to release oil and gas by cracking open rocks using sand or another proppant. Unlike water, the LPG reverts to vapor while still underground and returns to the surface with the oil or gas being extracted, in a recoverable form. The advantage of LPG over the water-based method is that the chemicals used during the drilling process are not carried back to the surface from the “flowback” water. LPG fracking also claims to require 75 percent fewer truck trips and a smaller well-pad than hydraulic fracturing. This technique has already been used mainly in gas wells in Canada, Texas, Pennsylvania, Colorado, Oklahoma and New Mexico.

LPG fracking does not fall under New York’s current hydraulic fracturing moratorium but it has been met with skepticism and environmental groups have asked New York DEC to perform an environmental impact statement prior to allowing any LPG wells in New York. While waterless fracking is believed to be a step in right direction in reducing environmental impacts from fracking and developing this resource, there are still concerns that LPG fracking is substituting one set of problems for another set. The DEC has acknowledged that applications for drilling permits utilizing LPG fracking may require additional review and analysis. Until LPG fracking is permitted or the DEC gives the green light, New York continues to wait.