



November 12, 2014

Morgantown Utility Board  
Mr. Tim Ball, General Manager  
278 Greenbag Road, PO Box 852  
Morgantown, WV 26507-0852

Subject: Drilling Operations, Morgantown Industrial Park

Dear Mr. Ball,

I received your letter of October 3, 2014 regarding Northeast Natural Energy LLC's ("NNE") future drilling operations in the Morgantown Industrial Park in which you (1) set forth your understanding that NNE will utilize all safeguards that were negotiated with the Morgantown Utility Board ("MUB") in 2011 and (2) propose additional commitments from NNE.

As you know NNE, drilled and completed two wells in the industrial park in 2011. NNE intends to once again initiate drilling operations in the Morgantown Industrial Park sometime in early to mid-2015 and will utilize the existing pad (surface location) for the new wells.

Since the drilling and completion of the initial two wells, the West Virginia Legislature passed the Horizontal Well Act (WV Code §22-6A) and promulgated new rules that regulate the drilling and completion of unconventional formations. The new laws and rules are quite comprehensive and adequately protect the state's water resources. NNE conducts its operations in compliance with these new laws and rules as well as all applicable federal laws and rules. Furthermore, NNE employs industry best management practices that allow for safe and environmentally sound operations.

With that said, regarding the new wells, there are some procedures that NNE followed while drilling the initial wells that NNE will still adhere to even though they may not be required by state law or rule, but certain procedures utilized in 2011 are no longer considered to be best management practices. This is due to improved technology and evolving best management practices over the past three years. The following procedures are examples:

1. The drilling pit that was utilized in the drilling of the first wells has been reclaimed and no longer exists. NNE intends to use a closed loop drilling process for the new wells, which does not require a drilling pit (referred to as a "lined waste pit" in the original permit conditions). The closed loop system means that all drilling fluids are contained, reused and not exposed to the open air. However, the 2011 earthen berm surrounding the pad is intact and the pertinent sections of the pad will be lined and bermed for containment purposes.

2. NNE will be following industry best practices for frac valve assemblies which have redundant pressure control valves built in. These valves are placed at a certain height for accessibility, functionality and safety. The assembly consists of multiple valves designed and tested to ensure a safe working pressure of 10,000 psi. To ensure adequate redundancy, two lower master valves will be utilized. This will allow for one to be used in the normal course of operations and leaves a valve below any external tie-ins to the well to act solely as a backup. This has routinely been used by the industry and has been established as a successful best practice for safety of operations. Adding unnecessary valves to the process increases the height and weight of the valve assembly and can create a safety hazard for the workers that have to operate and service the valves. The attached design will be utilized for completion of the wells.

3. The production string of casing will not be cemented back to surface. The production string will be cemented back into the intermediate string of casing which is a more sound engineering and best management practice and conforms to current laws and regulations.

4. NNE will utilize a synthetic based drilling mud ("SBM") to drill the horizontal section of each well. Drilling with SBM results in more productive wells as demonstrated by the following:

- SBM has been proven to increase horizontal well bore stability because it does not chemically react to the formations like water based muds. This increase in stability reduces drilling time and leads to less overall risk.
- SBM also requires significantly less additives to keep parameters required for drilling in the Marcellus Shale, leading to chemical inventory being reduced on location.
- SBM is returned to the supplier to be re-used at future pads leading to minimized disposal and fewer loads being delivered to the drill site.
- SBM allows for longer laterals to be drilled, thereby reducing the need to build additional well pads to recover the natural gas reserves.
- SBM is synthesized down to an almost food grade quality and contains zero aromatic and polycyclic aromatic hydrocarbons.

Your first proposed additional commitment is that NNE pay the full cost of additional source water testing during drilling operations as may be required by MUB. NNE applauds your diligence in ensuring that source water quality is maintained; however, NNE does not agree that such additional testing is necessary or required. As stated above, NNE will comply with all state and federal requirements and utilize best management practices as outlined in past correspondence. If the Morgantown Utility Board wishes to conduct additional water quality testing, NNE does not agree to pay for it.

Your second proposed additional commitment is that NNE post a bond, drawn to MUB in the amount of \$1,000,000. Please be advised that NNE carries liability insurance including pollution insurance. Furthermore, NNE requires any contractor/sub-contractor conducting operations where there is a risk of pollution to carry pollution liability insurance. In addition, NNE also has a performance bond held by the State of WV in the amount of \$250,000. Therefore, NNE believes that it is adequately insured to address potential claims without posting an additional \$1,000,000 bond.

MUB's third proposal is to name MUB as an additional insured to NNE's general liability and pollution insurance policies. Because there is no relationship between MUB and NNE, MUB has no vested interest in NNE's operations that would allow an insurance underwriter to approve a request to name MUB as an additional insured.

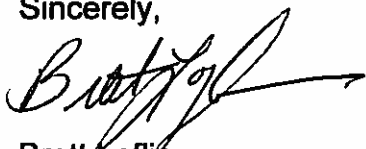
As you and I have discussed, the wells to be drilled in the Morgantown Industrial Park will be part of a long-term, comprehensive field study by the Marcellus Shale Energy and Environment Laboratory to be headed up by West Virginia University. You will be interested to know that part of that research will include baseline air, water, noise and light investigations. Others participating in the study are The Ohio State University and the U. S. Department of Energy.

Thus, with additional personnel onsite, should MUB personnel wish to visit the drill site, they will have to abide by established protocol for entering the premises.

As you have seen first-hand, NNE takes pride in the fact that it conducts its operations in a safe and environmentally sound manner. We will continue to strive to be the most diligent operator in all aspects of our operations and understand our duty to protect our state's water resources.

If you have any questions or need additional information please contact me at 304-414-7063 or by email at [bloflin@nne-llc.com](mailto:bloflin@nne-llc.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Brett Loflin", with a long horizontal flourish extending to the right.

Brett Loflin  
V. P. Regulatory Affairs