

July 8, 2009

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WV Department of Environmental Protection

Dear Gene.

Thank you and Jamie for taking the time to meet with Terry Wycoff and me to discuss Hall Drilling's plans for the reuse and disposal of Marcellus flowback and produced water. As a follow up to our meeting July 1, 2009, the following is a recap of our conversation.

Hall Drilling has purchased 80 acres + / - to set up a site on which we will build storage ponds to hold conditioned or cleaned Marcellus flowback and produced water to be recycled and reused in additional frac jobs. The flow back water which will be held in these ponds will be conditioned / treated to eliminate minerals, metals, bacteria and frac fluids. The water once treated will be clean enough for reuse to frac additional wells. Of note, the water after conditioning will have the same concentration of salt it had prior to it being conditioned. This will be addressed in a secondary process described below.

To accomplish the above, Hall Drilling will purchase equipment that will condition the flowback and produced water to a level satisfactory for reuse on additional frac jobs. The equipment is insensitive to the composite of the flowback and produced water coming from the formation. It will oxidize the majority of hydrocarbons, remove metals and kill bacteria producing very clean brine water that you can then mix with the appropriate amount of clean surface water and friction reducers designed to work in the Marcellus formation. As a note, since the metals have been removed and the bacteria killed, there is little need for additional frac chemicals to reduce scaling and deposits forming down hole.

At this time, it is unknown how many times the water can be conditioned and reused. It is Hall Drilling's intent to reuse the conditioned water until such a time as the salt content requires far more lubricant and horsepower than feasible to frac with. It is at this point the water will ultimately be disposed of into an injection well on the same site.

In order to accomplish the proper segregation of water containing different levels of salt, we will have ponds with differing salt levels as well as have a pond with clean surface water. This is so we can mix the appropriate amounts of clean surface water with the water containing salt to get the desired brine level for the next frac. Once we add the appropriate amount of clean surface water, essentially cutting the salt content to the desirable ratio, appropriate amounts of friction reducer will be added prior to the frac.

As we discussed, the bottom line is that by utilizing this type of process, Hall Drilling will recycle conditioned flowback and produced water using less water yearly to frac wells. And, the disposal of this water into an injection well after its final use will be done at the conditioning / recycle site. As a result, this will reduce the number of trucks hauling water to remote disposal sites reducing the potential for accidents and virtually eliminating the potential for this water to make it into State waters as it will be injected into the appropriate and allowable formations.

Once again, thank you for meeting with us to hear our plans. We look forward to working with you and the State in helping make this a reality and a success for all concerned.

Best regards,

Jøhn A. Brunett

Vice President Operations

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