

September 6, 2024

Chairman Christi Craddick
Commissioner Wayne Christian
Commissioner Jim Wright

Re: Statewide Rule 8

Dear Commissioners:

My Name is Spencer Brown, I am a licensed P.Geo with a M.Sc. background in Petroleum and Sedimentary Geology. My father was a Petroleum Exploration Geologist for 37 years. To say Oil and Gas is in my blood is an understatement. Over the last 6-7 years I have practiced as a wellsite geologist / onsite geosteering geologist. I cut my teeth in the Permian Basin where I grew quite fond of the Great State of Texas, it's vast expanse and wonderful people. What I did not grow fond of was the then, ca 2018, practice of pit storage and transfer of drilling fluids. Hearing of the recently proposed changes to Rule 8 regarding the construction of said pits disturbs me. Having read the comments of others, I will spare repeating the sources, health risks etc. and try to paint this in a clear to see picture.

Frankly, to say that liners are not required as long as there is no risk to ground water within a 50ft depth is ridiculous. Such is the claim that natural substrate/lithology prevent transfer to lower stratigraphic intervals. If there is one thing I have learned from my years of operations on drilling rigs, and geology in general, is that fluid will find a way; when you think it is contained, you had best think again.

To put this in a more geological context, the claim that natural conditions will prevent fluid from migrating to lower stratigraphic intervals is completely false. Even in the best case scenario that these zones are sufficient in preventing the vertical migration of fluid, we must consider a simple point – this is extremely localized. By retaining the fluid vertically, we then create a horizontal hazard. As fluid is retained by the impermeable layer it will spread laterally. With fluid spreading laterally towards variations and breaks in the impermeable layer it will eventually find a way to let gravity prevail. Further, any occurrence of faulting, Karstic or cavernous subsurface features exacerbates the problem allowing said fluid to migrate deeper faster.

Think of this as spreading a slip-n-slide across a wooden deck with the tongue hanging off the edge. Sure, the fluid won't go through the slide nor the boards, some will run off the sides and trickle through the gaps in the boards, while greater amounts will spill of the tongue hanging over the edge.

Commissioners, I truly do not mean to patronize, but the picture is really that simple.

Further to this point, even lined pits have problems. Texas is the only place I have seen them used. In other basins all fluids must be constrained to a tank farm or c-ring. If operators are concerned about

evaporative processes to reduce transport load, I would strongly suggest the latter as they are open to the surface, easily assembled and broken down for transport and thus reusable. In the long run this is less waste, and less material cost to the operator. Further, these systems are above ground allowing for visual confirmation of leaks, seeps and breaches not possible in a lined pit construction.

Commissioners, I hope you take these and others comments seriously. Texas is a beautiful state, part of God's Country and I, as one of many, would like to keep it that way.