Comments on Rule 8 Final Draft on Authorized Pits
10/9/2024

- My comments address sections 4.111 through 4.114 concerning the regulation of temporary pits.
- Industry and regulators alike recognize the many advances in the oil and gas industry from horizontal drilling to water recycling. These advances are terrific for the consumers of oil and gas, as well as the Texas economy and state revenue. But clearly, regulations needed to be properly updated to keep up with these advances, especially concerning commercial water recycling and waste disposal. The Oil & Gas Industry has a shared goal with the Texas Railroad Commission and the public of preventing water contamination and environmental impacts.
- It was important for the Railroad Commission to determine in detail how changes in the industry might affect groundwater so that the regulations could be appropriately updated. The creation of new regulations should always begin with recognition of existing problems and tailored to proper solutions. On the other hand, regulations should never be promulgated for the potential gain of special interests.
- Through the Rule 8 updating process, it is evident that the Railroad Commission researched, evaluated, and recognized the differences between temporary pits (i.e. drilling reserve, completion, and workover) and permanent commercial pits. The Railroad Commission made a distinction between temporary pits and permanent commercial pits, as exhibited by the separate Schedule A and Schedule B regulations, in an intelligent, effective way since each category has a very different environmental risk profile.
- Schedule A (temporary) pits have not shown any risk for water contamination, as seen from industry experience and TCEQ's GIS Groundwater Contamination website. Water contamination has not occurred from temporary drilling, completion, and workover pits during the 40 years that the original Rule 8 has been in effect in Texas. The Texas Railroad Commission attested to this in a 2014 NPR State-Impact article entitled "*Are Drilling Waste Pits a Threat to Texas Groundwater?*". Because of the lack of historical groundwater contamination after the drilling of tens of thousands of wells over decades in the state, it appears that there is no risk associated with these temporary pits. Therefore, the Railroad Commission has correctly developed the Schedule A regulations, recognizing their nature. Concerning Schedule A authorized pits, the specifications for pit contents, construction, depth to groundwater, and closure will allow operators to utilize local experience, industry standards and flexibility to accomplish the common goal of good environmental stewardship while complying with the RRC's regulations. Timeframes specified in the new Rule 8 for dewatering, backfilling and compacting are reasonable and will be effective. Registration of the pits will ensure that the timeframes will be met.
- Schedule B (permanent) pits have a higher risk for water contamination and the regulations recognize the fact that the risk of water contamination mainly occurs from long-term exposure to large fluid volumes. Currently, the predominate exposure occurs via irrigation wells with a pathway down the wellbore annulus, surface casing leaks in oilfield wellbores, or underground storage tanks with leaks that result in the release of large volumes of fluids

over extended periods of time, allowing direct communication to the water table. However, now surface pits are being used for water recycling and waste management. These pits store produced fluids over extended periods of time. The Schedule B regulations were rightly developed to protect against the potential of groundwater contamination due to large volumes of produced fluids being stored in permanent surface pits. It is my understanding that, almost a century ago, production pits which held produced fluids were unregulated. Then, they were later not allowed due to their potential for groundwater contamination. Currently, commercial facilities are utilizing a similar type of pit (long duration and large volume) for water recycling and waste management. The Schedule B regulations will control these pit designs so that groundwater contamination will not occur. Because of the nature of these pits, regulations should be more stringent because of the potential for groundwater contamination.

- If no delineation is made between Schedule A and Schedule B pits, there will be a deleterious effect on the economics of operators, mineral interest owners, landowners, and Texas revenues. An example of a poorly crafted, high-cost regulatory solution is the New Mexico Pit Rule. The New Mexico pit rule has resulted in Operators using Closed Loop Systems exclusively and hauling cuttings to commercial disposal facilities. The use of these systems adds an additional $250,000 to $300,000 on a $1,100,000 drilling project. Because of mandatory soil sampling if an inground pit is used, operators are unwilling to assume the risk of having expensive cleanups if a liner leak occurs. Any liner leak, no matter the size, will result in additional soil sampling, excavation and replacement of the soil at very high cost (risk-adjusted average cost of a liner leak is about $590,000 in New Mexico). This additional cost has greatly decreased development by independent operators because of the unfavorable economics. An additional consideration with Closed Loop Systems is the limited availability of equipment. Over-regulation results in a major change in operations, causing an increase in demand for cuttings-control equipment, haul trucks, roll-off bins, fluids storage tanks, commercial waste disposal facilities, environmental services and lab resources. This increases costs for all of these services and could result in project delays due to availability. Additionally, as experienced in New Mexico, real damage was caused by the wear and tear of increased truck traffic on roads and highways while hauling cuttings. Noise, dust and fuel usage have increased as well. When drilling in areas close to or in towns or cities occurs, this leads to nuisance issues and road repairs. Lastly, with regard to Closed Loop Systems, the increased costs to drill and complete wells would be devastating to conventional project economics at a time when Federal regulations on GHG (OOOOa, b and c), the Methane Tax, and the ESA are hitting Texas operators with large expenses. As experienced by operators in New Mexico, overregulation caused a decrease in development of oilfield properties by independent operators. This would have a similar dramatic negative effect on revenues to the state of Texas through decreased severance and ad valorem taxes, as well as the need for more regulatory staff.
- Fortunately, the Railroad Commission staff and Commissioners have chosen a much more commonsense approach with the recognition of Schedule A and Schedule B pits. Because there has been no historical evidence of groundwater contamination from temporary drilling, completion and workover pits, Schedule A applies the proper level of regulation to minimize the risk of water contamination without unnecessary high costs. The treatment of

temporary pits as prescribed by the original Rule 8 had proven over a 40 year period to be effective in preventing groundwater contamination. Otherwise, modifications to the rule would have occurred during that time. Additionally, with the advent of water recycling and permanent waste storage pits, Schedule B pit regulations clearly needed to be updated and made stringent since these pits have a higher risk for environmental impacts.

- I commend the Railroad Commission staff and Commissioners for their detailed work on the Rule 8 regulations. I believe the result is appropriate and justified.

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