From: Monty Keel

To: Water Draft Permit Comment

Subject: Opposition to Permit for C&H CAFO in Newton County

Date: Wednesday, March 15, 2017 9:58:17 AM

I am writing to explain why I **oppose** and ADEQ should deny the Regulation 5 permit presently under consideration for the C&H concentrated animal feeding operation in Newton County.

As a trained geologist and experienced cave explorer, I have seen firsthand that many conventionally trained geologists and hydrologists can have a flawed concept of water underground water transport in a karst landscape. C&H is in a proven karst landscape. In a conventional groundwater scenario, groundwater transport times can be thought of in terms of week to months to even years as water moves between soil and rock particles. In karst, groundwater transport times can be in minutes to hours as water moves though open channels in the bedrock. Rapid groundwater transport through karst does not require human passable caves. The excessive amount of cement needed to plug on the the recent test wells proves that there are voids in the rock below.

Much has been made of the proximity of C&H to, and the risk to the Buffalo River. While this is an important consideration, such a factory farm with mass volume discharge of animal waste should <u>never</u> be allowed on any karst landscape. **Not in my state.**

I am asking ADEQ the recognize that the process that allowed approval of the original permit for C&H was, by definition, flawed, since it allows the operation of this factory farm in an area that is geologically unsuitable. I am hesitant to use the term "flawed" but it does fit in this case since all the relevant factors (geological and otherwise) were clearly not taken into account in the original permit process. The current permit process should been seen as the opportunity for ADEQ to correct the result of that flawed process. ADEQ should deny the Regulation 5 permit, publicly apologize to the C&H family and, if there is a process that allows it, offer some compensation to this family that has invested a great deal of time and money in this ill advised factory farm.

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