| From: | Bailey, John |
|----------|--|
| To: | Vickerson, Casey; Deardoff, Amy |
| Subject: | FW: C&H Hog Farm A Geologist"s Perspective |
| Date: | Tuesday, March 25, 2014 8:36:55 AM |

From: Marks, Teresa
Sent: Tuesday, March 25, 2014 8:24 AM
To: Bailey, John; Carpenter, Ellen; Benefield, Ryan
Cc: Marc Harrison
Subject: FW: C&H Hog Farm -- A Geologist's Perspective

Another perspective.

From: John Svendsen [mailto:cadronboy@sbcglobal.net] Sent: Monday, March 24, 2014 4:11 PM To: Marks, Teresa Subject: C&H Hog Farm -- A Geologist's Perspective

Teresa -

The Geological Society of America had a field trip to Big Creek and C&H Farms this past weekend. We spent nearly a day walking across the Big Creek watershed looking at rock formations, water chemistry studies, etc. Albeit nearly everyone had concerns with regard to the potential for possible stream contamination I am happy to report that the vast majority of the geologists there were not catagorically opposed to the CAFO -- albeit all seemed to prefer free-range husbandry. We noted fecal contamination upstream of C&H and in other tributaries isolated from C&H so C&H is not currently the number one contributor to contaminants within Big Creek -- septic lines and open range stock are currently placing the creek at more risk than C&H.

There was also a strong dichotomy that exists between gelogists based upon their upbringing and residency. Those that grew up on a farm or within the Big Creek / Buffalo River watershed are consistently more supportive of C&H -- primamrily due on jobs and money being brought into their local communities. Some of these geologists were nearly militant in their support of C&H and served as a counter force to other anti-C&H militants. I am also happy to report that Dr. Van Brahana and his group from U of A were very careful not to make any erroneous conclusions or statements. They spoke of their concerns but could offer no evidence or proof that some type of "accident" can be expected in the near future.

Conclusion: Please note that although I refrain from offering my unconditional support I can certainly stand behind C&H and ADEQ with respect to this one specific CAFO -- especially knowing that in the future these operations will solicit a more thorough review and assessment in the future if they are perched on karst (1.4 the state is karst and another 1'4 is intensely fractured, i.e. the Ouachitas. At toher sites the groundwater often approaches the surface -- and they too would be comprimised sites. In fact there is no place in the entire state where one can claim that any CAFO

or other emission releasing factory/plant can be placed without some type of environmental impact.

Anyway just wanted you to know that there are quite a few geologists (and environmentalists) still standing in your corner. Keep your head up and shoulder through this mess and things be right on the other side. Best wishes,

John Svendsen http://www.springsofarkansas.com/ 1-800-530-8504