

From: [Ginny Masullo](#)
To: [Water Draft Permit Comment](#)
Subject: C & H PERMIT 5264
Date: Monday, March 13, 2017 10:33:18 PM

Re: C & H Hog Farms, Inc. Regulation 5 Draft Permit - Number 5264

In a recent KUAF radio interview with Director Keogh of the Arkansas Department of Environmental Quality, the director referred to C& H hog factory farm as one of many such “farms” in the Buffalo River Watershed. This is in fact not the case. Any other swine entities are of much smaller scale.

In 1995 a Swine Demonstration Project, administered by the Arkansas Soil and Water Conservation Commission (ASWCC), had the purpose of helping insure the protection of the Buffalo River by working with the local swine farmers, the swine industry and government agencies to identify and address the problems associated with manure management. At the time, the number of sows at these facilities, located in the Buffalo River Watershed ranged from 250 to 550 per facility. The C&H facility is a departure from that study. C&H houses over 2,600 sows, in addition to boars and nursery pigs.

Hog farmers in 1995 could not adequately handle the waste produced in farms of 400-550 pigs.

A large Swine Concentrated Animal Feeding Operation (Concentration is a key word here: too many in one place and the wrong place, i.e. karst) in the watershed not only endangers water quality in the national river, it puts an undue burden on water resources in the watershed, the Ozark aquifer, and adjacent land use management and erosion control.

The State of Arkansas needs to step up and admit their mistake in permitting this concentrated swine feeding operation in the Buffalo River watershed. Denying the Reg 5 permit is an opportunity for the State to do. The State should compensate the operator of this misguided and wrongly permitted operation.

Failure to Acknowledge Karst

While it appears that ADEQ and the said permit, via the Environmental Assessment (EA) prepared for their loan guarantees, they have gone to considerable lengths to avoid acknowledging that karst underlies this facility. Scientific data clearly and unequivocally shows otherwise.

Using terms like "karst features", fractures, voids, sinkholes, dry creeks, losing streams, caves, epikarst, etc., without noting that all are individual characteristics of the chemical make up of the karst limestone, dolomite, etc.) out of which these features develop, appears to intentionally confuse and avoid the very real fact of karst terrain.

Both the Electric Resistivity investigation done by Dr Todd Hallihan in the fields and around the ponds, as well as the recent investigative drilling, inadequately done as it was with just one bore hole, prove (as other reputable geologists have long contended and dye trace studies have shown) that the spreading fields as well as the facility itself are situated atop karst.

To fully understand the water dynamics through karst, the Karst Hydrogeolgy of the Buffalo National River team headed up by Dr. Van Brahana in 2015 and 2016 conducted tests and procedures to determine where, when and how water, and potentially, liquid waste move on

the ground, go underground, and come back up again.

KHBNR dye tracing showed that water can travel as far as 2,500 feet per day in the Buffalo River karst watershed. Compared with non karst terrain groundwater, which, moving underground, travels only 10-15 feet per year.

While concerning in its own right, the presence of karst has other implications. It points to the faulty Environmental Assessment which, rather than a Finding Of No Significant impact, should have led to a full Environmental Impact Statement.

The undeniable presence of karst triggers the requirement for a detailed geologic investigation per the Natural Resources Conservation Service's Agricultural Waste Management Field Handbook (AWMFH). Because of the inarguable presence of karst and the inordinate risks it poses in the watershed of the Buffalo National River, this permit should be denied.

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