I support the Buffalo River Watershed Alliance!

The Buffalo River Watershed Alliance asserts that the C&H Hog Farm draft permit 5264-W was improperly approved by ADEQ and should be denied for the following reasons:

**No-Discharge Permit Is Inappropriate**
C&H is currently covered under an NPDES permit which allows, and in fact presumes, waste discharge. C&H is by definition a CAFO. Under the Clean Water Act, CAFOs are considered point sources (U.S.C. 33 Section 1362 (14)). Point sources are regulated by the NPDES permitting program. In its application for a no-discharge permit C&H states that it is applying for an “administrative change from a Regulation 6 to a Regulation 5 permit…, The only change in operational management will be the addition of more land…”. Regulation 5.301 states, “The operator of a confined animal operation … shall not allow or cause a point source discharge from any part of the liquid animal waste management system.”. Without major operational changes in its liquid waste storage system there remains the same likelihood of point source discharge. In fact, ADEQ staff have stated that the same allowances for storm event discharge apply under both Reg 6 and Reg 5 permits. This is contrary to Reg 5.301 and therefore this no-discharge permit is inappropriate and should be denied.

**Failure to Acknowledge Karst**
While ADEQ and the applicant, via the Environmental Assessment (EA) prepared for their loan guarantees, have gone to great lengths to avoid acknowledging that karst underlies this facility, scientific data clearly and unequivocally shows otherwise. Both the ERI studies done by Dr Tod Hallihan in the fields and around the ponds, as well as the recent investigative drilling prove (as other reputable geologists have long contended and dye trace studies have shown) that most of the spreading fields as well as the facility itself are situated atop karst.

While concerning in its own right, the presence of karst has other implications. It points to the faulty EA which, rather than a FONSI, should have led to a full Environmental Impact Study, and it triggers the requirement for a detailed geologic investigation per the NRCS Agricultural Waste Management Field Handbook (AWMFH). (See below) Because of the inarguable presence of karst and the inordinate risks it poses, particularly in the watershed of the Buffalo National River, this permit should be denied.
Lack of Compliance With AWMFH
Regulation 5.402 states, Designs and waste management plans shall be in accordance with… the following United States Department of Agriculture Natural Resource Conservation Service technical publications:
(2) Agricultural Waste Management Field Handbook [AWMFH], as amended.

C&H did not comply with the AWMFH particularly in regards to:
1) The failure to acknowledge the presence of karst and follow the subsequent requirements for a detailed geologic investigation (Chapter 7).
2) Application of waste in excess of agronomic need (Ch 2-3).
3) Failure to perform a "substantive evaluation of the impact of sudden breach or accidental release from waste impoundments" (Ch 2-14).
4) Failure to “develop an emergency action plan which should be considered for waste impoundments where there is potential for significant impact from breach or accidental release” (Ch 2-15)
5) Inability to comply with guidance regarding waste application on flood prone and sloping (8-15%) fields. Guidance recommends injection or incorporation which is impractical in this terrain, requiring those fields be removed from the NMP (601.0504(f) and (m))
6) Failure to account for proximity of a waste impoundment to sensitive groundwater areas or to investigate groundwater flow direction, especially the failure to identify the presence of an improperly abandoned hand dug well located less than 600 feet downgradient from the ponds. (651.0703 and 651.0702)

These and numerous other examples which will be included in written comments show that C&H did not comply with guidance required under Reg. 5.402 and therefore this permit should be denied.

Evidence Of Discharge
This permit fails to take into account evidence that discharge into Big Creek, and possibly the Buffalo National River, is already occurring. Data collected by the Big Creek Research and Extension Team (BCRET) shows that nitrate levels are consistently higher downstream of this CAFO than above it. National Park Service, with concurrence of Arkansas Game and Fish Commission, has requested a 303(d) listing for Impaired status for Big Creek due to low dissolved oxygen (DO) levels, a consequence of nutrient overloading. A recent report by USGS confirmed low DO levels in Big Creek. While there may be multiple sources of impairment of Big Creek, the timing of both the increase in nitrates and decrease in DO correlates with the issuance of the initial C&H permit and logic requires that C&H be considered at the least a significant contributor. Discharge into Big Creek and its associated ERW, the Buffalo, violates regulations and therefore this permit should be denied.

Violates Current Moratorium
Reg 5.901(D) states, “A permit renewal, permit modification, or new permit issued
pursuant to Reg. 5.901(C) shall not increase the number of swine permitted at a facility." The current C&H NPDES permit allows for 2,500 sows and 4,000 pigs. The new draft permit includes 2,672 sows, an approximately 7% increase in gestating and lactating sows. But the number of pigs has been reduced from 4,000 to only 750, based on the estimated average present at any time. However, annual production is more meaningful and common sense indicates that an increase in the number of sows will result in an increase in the number of pigs (in this case 78,000 per year) and consequently the amount of waste produced annually. This violates both the spirit and the letter of the moratorium as described in Reg 5.901(D) and this permit should be denied.

**Deficient Nutrient Management Plan**
The Nutrient Management Plan uses optimistic and unrealistic assumptions. If management deviates even slightly the impact will be significantly higher than indicated.
1. Assumptions of forage production at 6 tons per acre are unrealistically high for the area.
2. Waste is applied in excess of agronomic need as evidenced by most recent soil tests showing that all fields have “above optimum” levels of phosphorus and U of A recommends no additional phosphorus be applied. Winter waste applications when forage is dormant is contrary to agronomic need.
3. Hay is not harvested from all fields so the nutrients are not removed efficiently.
4. Assumptions of rotational grazing are not correct. Grazing practices in the area are not as beneficial as projected, resulting in higher API than calculated. (API is Arkansas Phosphorus Index)
5. Soil Test Phosphorus is rising on most fields increasing the long term impact on receiving waters. This is not well accounted for in the API Planner.
6. The upland fields are so tortuous that the chance of applying to buffer areas is very high. Some of these fields have very high slopes and very thin soils that cannot meet the assumptions in the API.
7. The Arkansas Phosphorus Index does not adequately account for erosion of pasture. Erosion is very effective in transferring Phosphorus to receiving waters.
8. It appears that other nutrient sources (ie: poultry litter) are used in the area. These must be accounted for in the API planner.
9. Long-term waste application at rates indicated in the Planner will cause eutrophication in the receiving waters, specifically the Buffalo River. Based on these and other deficiencies in the NMP this permit should be denied.

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