From: <u>Jeffrey Short</u>

To: Water Draft Permit Comment
Subject: [BULK] C&H Hog Farm

Date: Thursday, March 16, 2017 10:01:58 PM

The C&H combined animal feeding operations (CAFO) should continue to monitor—and report—on its operations and activities that involve potential pollutants. The CAFO applies millions of gallons of waters contaminated with hog feces and urine so they will have room in their lagoons. The request to extend the acreage for application should send up a red flag: the lagoons are reaching their limit for storage and the land has reached its ability to accommodate the application of manure slurry. That is why levels of pollutants (e.g., nitrates) are increasing in that karst terrain. Deny the request for a less-restrictive permit for C&H and implement a rigorous process to ensure compliance with a new permit.

Swine operations release a potpourri of gases into the air such as ammonia, hydrogen sulfide, volatile organic chemicals, and stink. While certain agricultural menageries are exempted from reporting on hazardous waste releases reportable under CERCLA and EPCRA, the state could independently monitor effluent and air releases associated with the C&H CAFO. Aside from the liquid, anaerobic wastes in the lagoons, the CAFO releases ammonia wastes from the buildings and the sprayapplication activities. Ammonia is an alkaline gaseous pollutant created by hog farms and other confined animal sites. When released into the air, ammonium-based fine particles are formed in aerosols that create haze and adverse respiratory effects at high levels. Increased haze levels—which are more accentuated in the summer—could foreseeably be another concern for recreational use of the nearby Buffalo River. ADEQ should monitor the aerosols emanating from the swine CAFO as well at the land applications of the manure slurry to ensure there are not adverse effects on human health or the environment, especially at nearby schools or other populated areas.

Another concern is that the nasty slurry of anti-biotic laden manure and urine so necessary in CAFOs, can lead to antibiotic-resistant bacteria in the environment. If these bacteria reach the Buffalo River, then a prick from a fishhook, could lead to a life-threatening situation for the fisherman. The primary concern is to prohibit CAFO pollution—in all its forms—from reaching environmental media (water, air) that can transfer the harmful aspects of the wastes to the environs and people.

Lessons-learned about swine CAFOs from other states can provide an informed-process to ensure protection of human health and the environment. The new North Carolina Swine Waste Management System NPDES General Permit (NPDES Permit Number NCA 200000, effective July 1, 2017) provides a superior approach to maintain due diligence with regards to swine operations. Employing some intelligent rules and performance standards should allow the swine farm to continue to operate safely. Periodic monitoring of appropriate chemical releases is a relatively inexpensive means to ensure the existing wastes—hazardous, toxic, or biological—do not affect human health and the environment. Continued periodic monitoring is imperative and will provide a positive return-on-investment. It is far more cost-effective to prevent pollution than to deal with it once it is released!

Continued operation of the CAFO should adhere to performance accomplishments as a part of an approved confined animal waste management plan overseen by ADEQ.

As a minimum, the State of Arkansas is responsible to design, develop and employ best management practices (BMP) for the site to prevent release to surface or subsurface waters. BMPs will require periodic monitoring to ensure that there are no releases. Many more performance standards are important to the primary standard prohibiting waste from reaching receptors such as, ensuring adequate freeboard of lagoons with an impending precipitation event; cessation of land application before a significant precipitation event; adequate vegetative cover on land application areas; no human ingestion of waste from crops; immediate tilling of bare soil used for waste application; proper disposal of dead animals; proper sludge removal and deposal, and adherence to all air and water quality standards.

ADEQ should continue to monitor the activities at the hog farm as a part of a permit to continue operations. This monitoring data can provide additional management information quality improvements.

The Buffalo river creates beautiful experiences as well as jobs. According to National Park statistics, the Buffalo River brought in over \$62 million to local Arkansas communities in 2015. Perhaps the comparison should be how much revenue does the C&H CAFO produce for the state versus the recreational enjoyment of the Buffalo River? Or, is the CAFO a costly liability?

The Buffalo National River is like a pearl necklace adorning one of the most beautiful, historic, and revered parts of Arkansas. Let's not cast these pearls to the swine. We must continue to protect human health and the environment as long as the C&H hog-farm operates.

I have sent a version of this message to the Governor