### BUFFALO RIVER WATERSHED ALLIANCE PO Box 101, Jasper, AR 72641 (870) 446-5783 buffalowatershed@gmail.com

August 12, 2015

VIA ELECTRONIC DELIVERY

Becky Keogh Director Arkansas Department of Environmental Quality 5301 Northshore Drive North Little Rock, Arkansas 72118-5317 Email: Keogh@adeq.state.ar.us

## Re: Permit violation complaint against C&H Hog Farms, Inc. NPDES Permit No. ARG590001, File AFIN 51-00164

Dear Director Keough,

As you know, the Big Creek Research and Extension Team (BCRET), under a Memorandum of Agreement with your office, is conducting a monitoring and mitigation study at C&H Hog Farm and has issued several quarterly reports on their findings:

http://www.bigcreekresearch.org/project\_reports/default.aspx

These reports have provided little in the way of interpretation of the data, nor have they reached any conclusions, but they nevertheless show some alarming trends, which we believe reveal permit violations regarding the improper storage and handling of swine waste at this facility.

# Please consider this a formal complaint requesting that your department initiate an investigation independent of BCRET and then require corrective action and full compliance by the facility owners with the permit.

While there are numerous red flags contained in the BCRET reports, we find the following of greatest concern, which require your immediate attention and form the basis for the complaint:

#### House Well: E. coli and Total Coliform Levels

The first house well samples appear in the BCRET April-June, 2014 Quarterly Report. With a few exceptions, E. coli levels are <1.0 during that sampling period. However, over the past year these levels have steadily risen and, as shown in the latest April 1-June 30, 2015 report (see page 45), ALL house well samples are now positive for E. coli, with levels ranging from 1.0 (a single sample) to 248.1. Total Coliform levels are similarly high. The Arkansas Department of Health would consider this well water "unsafe to drink" yet it is being used for both watering swine and for human consumption. Presumably, the water is treated to make it safe for use by humans, but the presence of E. coli and total coliforms in the well water, particularly at these steadily increasing levels, is an indication of persistent contamination and a significant danger to human health. The most obvious

source is leakage from the waste lagoons. Where else could these levels originate?

#### **Ephemeral Stream/Culvert and Interceptor Trenches**

E. coli levels at the ephemeral stream/culvert sampling location likewise have risen over time and are also suggestive that pond leakage is occurring. See pages 44 and 45. In the most recent report, both interceptor trenches show consistently high total coliforms, and Trench 2 (North) shows only one E. coli sample of <1. All other recent E. coli samples for this trench range from 5.2 to 105.4, again indicative of pond leakage. See pages 46 and 47.

The fact that the house well shows rising and persistent E. coli levels relative to the trenches indicates that pond leakage may be penetrating deeper than anticipated, possibly even bypassing the trenches. As opponents predicted, the trenches do not provide a true picture of the extent of leakage.

#### **Downstream Nitrate-N**

The latest BCRET report shows significantly higher Nitrate-N levels at the downstream sampling location compared to the upstream location. See page 56 of the report. This indicates that runoff or subsurface transport of field-applied swine waste is occurring.

Surely these data as well as other BCRET data show that C&H is mishandling the storage and application of its waste and is in violation of the terms of their permit and the NMP. This complaint and the BCRET report require that ADEQ investigate and require corrective action and full compliance with the permit to insure that receiving waters, both surface and subsurface, are properly protected.

Sincerely,

Gordon Watkins, President Buffalo River Watershed Alliance

cc: John Bailey Bailey@adeq.state.ar.us

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