

## Jeff Ingram's comment

Becky Keogh, Director  
Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock, Arkansas 72118-5317  
**Re: C&H Hog Farms 2015 Annual Report, Permit ARG590001**

Director Keogh,

The C&H 2015 Annual Report contains unexplained omissions, discrepancies and deviations from previous reports, which require explanation, including the following:

- The report is based on soil data collected in April, 2015 rather than on the more recent December, 2015 soil analysis. The April data does not provide a true picture of soil conditions subsequent to the bulk of waste applications throughout the year. The API should be recalculated based on the most recent 2015 soil data.
- No soil data is provided for fields 1, 2 or 3. This omission should be corrected.
- There are unexplained variations in field acreages. An explanation for these deviations is required.
- The stated amount of waste produced (2,529,136 gallons) differs from the amount of waste applied (3,225,000 gallons). This discrepancy requires explanation.
- The nutrient management planner shows a surplus of phosphorus on all fields throughout the year. Soil test results (Dec. 2015) show that phosphorus levels are "above optimum" on nearly all fields, indicating that waste is being applied in excess of agronomic requirements. This is contrary to the terms of the C&H NMP which states on page 4, *"Timing, Rate, and Frequency of Liquid and Solid Manure Applications. a. Liquid and solid manure will be applied **at agronomic rates**."* This discrepancy should be addressed.
- The API planner is based upon unrealistic crop yields. Also, field usage for grazing rather than hay production will lead to reduced nutrient export and more rapid buildup of nutrients in the soil. An explanation for utilizing these high projected yields in lieu of actual yields should be provided and the planner should be revised to reflect realistic yields and actual land usage.
- Higher than projected rates of waste application are leading to a rapid increase and surplus of soil test phosphorus. This is reflected in the increase in the API risk factor, particularly for fields 3, 7 and 12, and a significant increase in STP for almost all fields. An explanation is required for how current application rates in excess of agronomic rates can be sustained without risking runoff and degradation of waters of the state.
- Field 7 is especially problematic. 985,000 gallons of waste, or approximately 30% of the total, were applied to Field 7. It now has the highest API risk factor of all fields and is also flood-prone. According to the NMP, field 7 is to be used for emergency applications. Increased waste applications to this field during emergency situations could result in excessive API risk, runoff and discharge to waters of the state. Applications to field 7 should be reduced or eliminated and an alternative field should be designated for

emergency applications.

- Of greatest concern is the fact that waste applications at C&H are based solely on the Arkansas Phosphorus Index as a risk reduction tool. The API does not take into account risks associated with karst topography. C&H and its application fields are located atop karst. Therefore the API does not adequately evaluate the risks associated with waste management at C&H, particularly given its proximity to the Buffalo National River. The API, when used in karst regions, is not adequate to protect the waters of the state and an alternative risk assessment and management tool should be implemented.

In recent months, letters to ADEQ from our organizations have gone unanswered.

We respectfully request a reply to our concerns at your earliest convenience.

**From:** [Jeffrey Ingram](#)  
**To:** [Water Draft Permit Comments](#)  
**Subject:** Jeff Ingram"s comment ARG590000  
**Date:** Wednesday, April 06, 2016 10:39:33 PM  
**Attachments:** [Jeff Ingram"s comment.docx](#)

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