

From: [Yarberry, Katherine](#)
To: [Deardoff, Amy](#)
Subject: FW: C&H Hog Farm - Land App Areas Questions
Date: Tuesday, December 10, 2013 9:11:27 AM

Website, please.

ARG590001 AFIN 51-00164

Katherine Yarberry, PE
501-682-0647

From: Bailey, John
Sent: Wednesday, November 20, 2013 3:56 PM
To: Yarberry, Katherine
Subject: FW: C&H Hog Farm - Land App Areas Questions

Mr. Watkins,

I apologize for the time taken for this response. Please find answers to your questions below.

1. When looking at pages 2 and 3 of the Arkansas Nutrient Management Planner, I see that data is missing for Fields 5,6,7, and 9 regarding RUSLE 1, Pre BMP PI Value, and P Index Range. Can you tell me why this data is missing?

When the consultant filled in the cell titled Soil Map Unit in the spreadsheet that was created by UAEX, he manually typed the number. The spreadsheet only recognizes the value in this cell when it is selected from the drop menu for that cell. Since the Soil Map Unit value was not recognized by the spreadsheet, the spreadsheet failed to complete the remaining information to yield a P-Index Value.

2. If I understand the data correctly, these fields have some of the highest P2O5 levels yet will receive the highest application rates with the highest resulting P surpluses. Can you tell me if I am interpreting the data correctly and, if so, why this is acceptable?

The land application rates are determined by the Phosphorus Index (P-Index). The P-Index is a risk assessment; it calculates the probability of phosphorus leaving a land application site in surface runoff. In the case of C&H, it was calculated to show the worst case scenario. By worst case scenario I mean the application rates stated on the P-Index Calculation Pages are **the highest rates** allowable for this facility. The actual land application rates will be significantly lower in order to meet the requirements in section 4.2.1 of the General Permit.

3. Regarding "substantial" vs. "non-substantial" changes to the permit, I see that removal of a field is considered non-substantial. However, if enough acreage was removed such that the remaining fields then received excessive nutrient applications, would this increase the risk of discharge thus elevating the change to substantial?

The facility could remove all land from the permit and it still would be non-substantial. If significant land was removed, the facility would then have to account in their CNMP for how they plan to dispose of the manure they produce that they cannot land apply under their permit. For example, the manure can be sent to other permitted disposal facilities.

4. Would adding additional fields be considered a substantial change?

As stated in Section 3.2.6.3(a) of the ARG590000 General Permit, the addition of previously unpermitted sites to this permit is a substantial change and requires public notice. If they are adding land to reduce PAN then it is not major modification. However, for this permit it will be.

5. Am I correct that the C & H NMP uses a Narrative rather than Linear approach?

Yes, most facilities use the narrative approach because it allows for more flexibility, however this approach does require more recordkeeping to demonstrate compliance.

6. One more question: During our telephone conversation you indicated you would determine if the removal of Field 5 from the NMP would be a substantial change such that additional acreage would be required in order to comply with the permit. Please let me know if you have been able to do the necessary calculations to make this determination.

At this time the permittee has elected not to apply on Field 5, however in the event the facility is unable to land apply in accordance with the P-index and as specified by the permit the permittee may be required to send waste to other permitted facilities. The Department will continue to look at the annual reports and determine if additional action may be necessary.

If you have any additional questions, please let me know.

Thanks,

Katherine Yarberry, PE

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