ADEQ
ARKANSAS
Department of Environmental Quality

CERTIFIED MAIL RETURN RECEIPT REQUESTED: (91719999917030491119 27)

Sandra Lowry
202 Township Dr
Centerton, AR 72719

RE: AFIN: 51-00164; Permit No.: ARG590001

Dear Ms. Lowry:

This letter constitutes notice of the Department's decision on the substantial change to the NMP for the above-referenced permit coverage. A copy of the revised Notice of Coverage and Response to Comments are attached.

The applicant, and any other person submitting written comments during the comment period, and any other person entitled to do so, may request an adjudicatory hearing and Commission review on whether the decision of the Department should be revised or modified. Such a request shall be in the form and manner required by Regulation 8.603, including filing a written Request for Hearing with the APC&E Commission Secretary at 101 E. Capitol Ave., Suite 205, Little Rock, Arkansas 72201 within thirty (30) calendar days of the date of issuance of this final permit decision as provided in Reg. 8.211(B)(1). If you have any questions about filing the request, please call the Commission at 501-682-7890.

I, Amy Deardoff, hereby certify that a copy of this permit has been mailed by first class mail to Sandra Lowry, 202 Township Dr, Centerton, AR, 72719.

Amy Deardoff

Amy Deardoff
Administrative Specialist, Water Division

June 5, 2014
Date Mailed

ADEQ

A R K A N S A S
Department of Environmental Quality

JUN 05 2014

Jason Henson
C & H Hog Farms
Hc 72 PO Box 10
Mount Judea, AR 72655

Re: Concentrated Animal Feeding Operations General Permit
(Tracking Number ARG590001 – AFIN 51-00164)

Dear Mr. Henson:

The Notice of Intent (NOI) package for a substantial change of coverage under the General Permit No. ARG590000, for a concentrated animal feeding operation, was received on 2/11/2014. In accordance with Department policy, the NOI has been reviewed and has been determined to be complete. The substantial change will be effective the date of this letter. A copy of the General Permit ARG590000 is available from the Department or at the website below.

http://www.adeq.state.ar.us/water/branch_permits/individual_permits/pdfs_forms/arg590000_draft.pdf

The Department responded to comments received during the public comment period in accordance with General Permit No. ARG590000 Part 5.1, and no changes to the nutrient management plan are required based on the comments received. Therefore, the Department is issuing coverage as submitted.

The NOC is for informational use only and if any information provided on the NOC is incorrect please notify the Department immediately so that our records may be corrected.

The Department requests that you read and familiarize yourself with the terms and conditions of the permit. Compliance with all conditions and limitations therein is required. Any permit-related correspondence must include the Tracking Number shown above.

Please be advised that **any discharge of pollutants from a manure or wastewater storage structure**, whether or not authorized by this permit, shall be sampled and analyzed for the parameters listed in Part 2.3.1 of the general permit. If a discharge occurs, you must notify ADEQ Water Enforcement Division within thirty (30) days of the discharge. In accordance with Part 3.2.4.6, all Discharge Monitoring Reports (DMR) shall be submitted with the annual report by the 31st of January each year. The Department will send you blank DMR forms for the remainder of the year and then a one year supply annually. In the event that the facility does not discharge during a given month, the DMR will still be required to be submitted with "No-Discharge" noted on the DMR form.

Thank you for your cooperation in this matter. Please contact the General Permits Section of the Water Division at (501) 682-0623, if you have any questions.

Sincerely,

Mo Shafii
Assistant Chief, Water Division

Enclosures

MS:cv

Cc: Electronic Filing (ARG590001)
Jason Bolenbaugh, Branch Manager, Inspection Branch
Jim Purvis, Administrative Analyst, Fiscal Division
David Ramsey, ICIS Program Coordinator, Enforcement Branch

Permit Tracking Number: ARG590001
AFIN: 51-00164

NOTICE OF COVERAGE (NOC)
FOR CONCENTRATED ANIMAL FEEDING OPERATIONS GENERAL PERMIT, ARG590000

The discharge of an overflow of manure, litter, or process wastewater caused by precipitation into all receiving waters shall be in accordance with all limitations, monitoring requirements, and other conditions set forth in the Concentrated Animal feeding operations General Permit, ARG590000. Coverage under this General Permit is issued to:

C & H Hog Farms
Hc 72 PO Box 10
Mount Judea, AR 72655

C & H Hog Farms are located as follows: Hc 72 PO Box 10, Mount Judea, in Newton County, Arkansas. The facility's treatment system consists of in house shallow pits with a capacity of 759,542 gallons, a Settling Basin with a capacity of 831,193 gallons, and a Holding Pond with a capacity of 1,904,730 gallons. All wastes are land applied on 630.7 acres.

Response to comments is attached.

Coverage Date:	08/03/2012
Substantial Change Effective Date:	06/05/2014
Expiration Date:	10/31/2016

Mo Shafii
Assistant Chief, Water Division
Arkansas Department of Environmental Quality
501-682-0616
shafii@adeq.state.ar.us

6-4-14
Issue Date

RESPONSE TO COMMENTS
FINAL PERMITTING DECISION

Permit No.: ARG590001

Applicant: Jason Henson
C & H Hog Farms, Inc.

Prepared by: Casey Vickerson

The following are responses to comments received regarding the Nutrient Management Plan (hereinafter "NMP") modification for the above referenced facility and are developed in accordance with regulations promulgated at 40 C.F.R. § 124.17, 40 C.F.R. § 122.62 as incorporated by reference in Arkansas Pollution Control and Ecology Commission's (hereinafter "APC&EC") Regulation No. 6, Regulations for State Administration of the National Pollutant Discharge Elimination System (NPDES), and APC&EC Regulation No. 8, Administrative Procedures.

Introduction

The modification to the referenced facility's NMP was submitted for public comment on 2/19/2014. The public comment period ended on 3/24/2014. The Arkansas Department of Environmental Quality (hereinafter "ADEQ") conducted one (1) public hearing on the proposed modification.

Due to public interest in this facility and the narrowness of the NMP modification, a separate document, not part of the Department's decision on the change to the NMP or this response to comments, has been posted to the ADEQ website to answer frequently asked questions regarding this facility. The frequently asked questions document can be found at the following web address:
http://www.adeq.state.ar.us/home/pdssql/p_permit_details_water_npdes.asp?AFINDash=51-00164&AFIN=5100164&PmtNbr=ARG590001

This document contains a summary of the comments that the ADEQ received during the public comment period. There were several similar issues raised throughout the comments; those are grouped together, with one response from the ADEQ. The C & H Hog Farms, Inc. (herein after "C & H Hog Farms") NMP modification solely changed the land application method from sprinkler irrigation to tanker truck on Fields 7-9.

The following people or organizations sent comments to the ADEQ during the public comment period and public hearing. A total of 28 comments were raised by 55 separate commenters. The National Parks Conservation Association produced a form-letter email that was sent to the Department on behalf of 217 commenters. As these emails were

substantially similar to one another, the Department is considering them as one comment for the record.

	Commenter	# of comments raised
1.	Michael E. Kelly	4
2.	Brian A. Thompson	2
3.	Gordon Watkins	6
4.	Carol Saari	2
5.	Angie Fowler	2
6.	Diane Mitchell	2
7.	Laura Timby	2
8.	David Druding	2
9.	Bob Allen	2
10.	Jane H. Brown	2
11.	Clay McCastlain	2
12.	Lila McCauley	2
13.	Glen Hooks	2
14.	Louise Halsey	2
15.	Stella M. Capek	2
16.	Teresa Luneau	2
17.	Mary J. Meek	2
18.	Nancy L. Baxter	2
19.	Ginny Masullo	5
20.	Steven Miller	1
21.	Gene Dunaway	6
22.	Jack Stewart	5
23.	Pam Fowler	4
24.	Kathleen Thompson	2
25.	Patti Kent	1
26.	Alice B. Andrews	2
27.	Carol Bitting	7
28.	John Murdoch	2
29.	Gerald Garrison	3
30.	Martin Maner	2
31.	Lonnie Ewing	1
32.	Teresa Turk	5
33.	Shawn Porter	1
34.	Pam Stewart	5
35.	Kevin G. Cheri	8
36.	Robert Cross	3
37.	Charles J. Bitting	7
38.	Emily A. Jones	2
39.	Dane Schumacher	10
40.	Barbara Hefley	1

41.	Taylor Hefley	1
42.	John Svendsen	1
43.	Paul Davis	1
44.	Trella Laughlin	1
45.	Johnnie Chamberlin	1
46.	Jacque Alexander	1
47.	Guy Knuth	1
48.	Wendel Norton	1
49.	A.J. Smith	1
50.	Richard S. Grippo	3
51.	John Meyer	1
52.	Joe Golden	1
53.	Sheilah Roenfeldt	2
54.	Jerry Masters	1
55.	National Parks Conservation Association (on behalf of 217 commenters)	3

Comment 1 Fields 7-9 are located directly below the production barns and ponds, next to Big Creek, and are within 300-500 feet of the Mt. Judea school system. Fields 7-9 are not included as testing fields in the Big Creek Research project, and no phosphorus index was shown in the nutrient management plan. Without testing these fields, there is no benchmark for them or proof that land application is safe, or is an acceptable agricultural practice. No spread fields should be approved without permission for testing being a part of the "land use contracts."

Original commenter: Michael E. Kelly

Similar comments were received from: Gordon Watkins, Teresa Turk, Pam Stewart, Kevin G. Cheri, Charles J. Bitting, Dane Schumacher

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which consists only of changing the land application method from sprinkler irrigation to tanker truck on Fields 7-9. Therefore, this comment is outside of the scope of the proposed modification to the NMP.

Comment 2 In regard to modifying the nutrient management plan to allow land application using a tanker truck on fields 7-9. It has come to light that fields 5, 12, and 16 called out in the original NMP are actually not available for application. This indicates that heavier concentrations will need to be applied to fields 7-9 (as with all remaining fields). As a result, it seems inappropriate at this time to make a modification until the issues with the original permit are reviewed and resolved. A more appropriate

sequence would be to reopen and resolve the original permit and then address this modification.

Original commenter: Brian A. Thompson
Similar comments were received from: Michael E. Kelly, Gordon Watkins, Pam Fowler, National Parks Conservation Association

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which consists only of changing the land application method from sprinkler irrigation to tanker truck on Fields 7-9. Therefore, this comment is outside of the scope of the proposed modification to the NMP.

Comment 3 Field 7 is located within 250 feet of the Mt. Judea school grounds and is within 1100 feet of the school buildings themselves, in addition to being within a few hundred feet of at least two residences. The commenter is deeply concerned that the resulting exposure of school children, faculty, and staff to swine waste is particularly dangerous and believes ADEQ should require a comprehensive air quality monitoring station be installed at the Mt. Judea school. This station should monitor for ammonia, hydrogen sulfide, airborne particulates, and other components of swine waste known to be hazardous to human health. Results of air monitoring would be made regularly available to the public. Because of the close proximity of the Mt. Judea school to field 7, the school principal should be notified in advance of any field applications so that appropriate measures can be taken to minimize exposure.

Original commenter: Bob Allen

Similar comments were received from: Gordon Watkins, Carol Saari, Angie Fowler, Diane Mitchell, Laura Timby, David Druding, Jane H. Brown, Clay McCastlain, Lila McCauley, Glen Hooks, Louise Halsey, Stella M. Capek, Teresa Luneau, Mary J. Meek, Nancy L. Baxter, Ginny Masullo, Jack Stewart, Alice B. Andrews, Carol Bitting, John Murdoch, Gerald Garrison, Pam Stewart, Kevin G. Cheri, Robert Cross, A.J. Smith, Sheilah Roenfeldt, Charles J. Bitting

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which consists only of changing the land application method from sprinkler irrigation to tanker truck on Fields 7-9. Therefore, this comment is outside of the scope of the proposed modification to the NMP.

Comment 4 Fields 7-9 should be included as part of the Big Creek Research Study. The research team has identified it as a high use and representative field and initially it was included on their list of preferred study fields. Pursuant to the Memorandum of Agreement, ADEQ has the responsibility to "Assist the University with obtaining access to conduct the study." Therefore ADEQ should facilitate the inclusion of field 7 in the Big Creek study. Studies should include pre-application dye-testing, ground-penetrating-radar study, groundwater monitoring, and surface water testing in adjacent Big Creek. The commenter expresses strong opposition to the project and believes the dangers to the Buffalo River watershed area – both environmentally and in terms of future tourism – are far too high to justify any benefits from a swine farm and requests that ADEQ, if the facility is to be allowed to continue operating, hold the facility to the very highest and strictest environmental standards possible.

Original commenter: Bob Allen

Similar comments were received from: Carol Saari, Angie Fowler, Diane Mitchell, Laura Timby, David Druding, Jane H. Brown, Clay McCastlain, Lila McCauley, Glen Hooks, Louise Halsey, Stella M. Capek, Teresa Luneau, Mary J. Meek, Nancy L. Baxter, Ginny Masullo, Gordon Watkins, Jack Stewart, John Murdoch, Pam Stewart, Dane Schumacher, Sheilah Roenfeldt

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which consists only of changing the land application method from sprinkler irrigation to tanker truck on Fields 7-9. Therefore, this comment is outside of the scope of the proposed modification to the NMP.

Comment 5 If these three fields are found to be unacceptable to ADEQ, what will happen to the existing permit?

Original commenter: Joe Golden

Response: If the Department were to deny the NMP modification, the permittee would continue to land apply under the existing Notice of Coverage (hereinafter "NOC").

Comment 6 Field 7 is already high in phosphorus and the tanker truck will apply waste from the pond which will be higher in phosphorus. This combined with field 7 being in the floodplain of Big Creek is unacceptable.

Original commenter: Ginny Masullo
Similar comments were received from: Pam Fowler, Kathleen Thompson, Carol Bitting, Martin Maner, Teresa Turk, Pam Stewart, Kevin G. Cheri, Dane Schumacher

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which consists only of changing the land application method from sprinkler irrigation to tanker truck on Fields 7-9. Therefore, this comment is outside of the scope of the proposed modification to the NMP.

Comment 7 The C & H request for permit modification included the submission of a revised NOI which included a nutrient management plan with the exception of a couple of pages, the revised NOI is identical to the original NOI. Both the original and revised NOI contain information known to be inaccurate including misidentification of the spray fields and misinformation in the spray field leases. Prior to the submission of the revised NOI, C & H owners were made aware of these inaccuracies yet they knowingly submitted a substantially unchanged, and still inaccurate, revised NOI. The commenter respectfully requests that ADEQ deny the requested permit modification until a correct and complete revised NOI is done and made available for public comment.

Original commenter: Ginny Masullo

Similar comments were received from: Gordon Watkins, Michael E. Kelly, Jack Stewart, Pam Fowler, Alice B. Andrews, Carol Bitting, Gerald Garrison, Teresa Turk, Kevin G. Cheri, Charles J. Bitting, Dane Schumacher

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which consists only of changing the land application method from sprinkler irrigation to tanker truck on Fields 7-9. Therefore, this comment is outside of the scope of the proposed modification to the NMP.

Comment 8 The commenter opposes the modification without reopening the permit in its entirety and feels the permit was granted without any public comment because of serious flaws in ADEQ's public notice process. As a result,

ADEQ permitted a CAFO that is allowed to spread over 2 million gallons of odoriferous wastewater a year on lands directly abutting a major tributary of the Buffalo River and within hailing distance of a public school. It did so without any consideration of this area's well-known karst geology which has a serious potential for allowing rapid underground flow of the polluted water into the Buffalo River. ADEQ now has in its possession the underground studies performed by the University of Arkansas. Those studies demonstrate the existence of underground features that would allow rapid underground flow in the floodplain of Big Creek where C & H wants to spread its waste. Allowing C & H operations to move forward without a thorough and complete review of the permit in its entirety is counter to the spirit and intent of Arkansas statutes and the federal Clean Water Act. The operations of this CAFO pose threats to the Buffalo River Watershed and to the health and livelihood of the people who live in the surrounding area.

Original commenter: Gordon Watkins

Similar comments were received from: Ginny Masullo, Michael E. Kelly, Carol Bitting, Gerald Garrison, Dane Schumacher, Trella Laughlin, Jacque Alexander, Guy Knuth, Wendel Norton, Richard S. Grippo, National Parks Conservation Association

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which consists only of changing the land application method from sprinkler irrigation to tanker truck on Fields 7-9. Therefore, this comment is outside of the scope of the proposed modification to the NMP.

Comment 9 Using a truck tanker will result in significantly compacting the soil and result in decreased permeability of the hog manure into the soil. This will result in easier runoff into the water ways.

Original commenter: Gene Dunaway

Similar comments were received from: Jack Stewart, Steven Miller, Pam Stewart, Brian A. Thompson

Response: The Department acknowledges this comment. Tanker trucks are equipped with large float tires that minimize the potential for compaction. The waste must be evenly distributed across the entire land application area, which will also lessen the likelihood of compaction.

Comment 10 What are the distinctions between sprinkler system application and Vac tanker? Which application method leaves water vapor in the air causing odor and particle drift? It would appear that application by trucks would compress the soil and potentially cause uneven application of liquid wastes.

Original commenter: Gene Dunaway

Response: Sprinkler systems are portable and pump wastewater through a flexible hose that is attached to the sprinkler on risers. When using a vac tanker, waste is pumped into the tank, transported to the application field, and then applied using a pump, spinner, flail, or deflector plate from the back of the truck. The Department considers both to be acceptable land application techniques. See Response to Comment 9 in regards to soil compaction.

Comment 11 Why is the company unable to install the sprinkler system? If it's financial, is this an indication that the company is undercapitalized? What impact will this have on the future when it is certain that significant stream damage will take place?

Original commenter: Gene Dunaway

Similar comments were received from: Jack Stewart

Response: The Department considers both land application by sprinkler irrigation and tanker truck to be acceptable land application techniques. The method chosen is based upon the discretion of the landowner and/or the permittee.

Comment 12 A Vac Tanker should not be used on field 7 of C & H Hog Farm. Spreading manure on field 7 would be irresponsible! On March 16, 2014 a pool of water from field 7 was draining into Big Creek!

Original commenter: Kathleen Thompson

Similar comments were received from: Pam Fowler, Patti Kent, Carol Bitting

Response: The Department acknowledges this comment. ADEQ staff has confirmed via inspection of the field and facility records that land application has yet to occur on Field 7. Land application cannot occur if there is pooling or ponding or when soils "are saturated, frozen, covered with snow, during rain, or when precipitation is imminent (>50% chance of rain)" in accordance with NPDES General Permit No. ARG590000 Part

4.2.1.6. Further, the Phosphorus Index (hereinafter "PI") must be calculated based on the soil conditions prior to each application. Land application on Field 7 by tanker truck is prohibited until issuance of the modified NOC.

Comment 13 From reviewing the original permit application, it appears the person who was granted permission to dump waste on people's land is the human, Jason Henson. The landowners gave permission to Jason Henson to apply waste to their land, but I find no evidence that C & H Hogfarms, Inc. was given permission by any landowners to apply waste to their fields. The distinction between the corporation and a person is not some minor technical detail. To state the obvious, one person is not liable for the debts of another and each landowner would need to know the person they are actually dealing with in order to make informed consent as to the reliability, capabilities and the financial condition of the person should there be damages to their property. The landowners are entitled to know who is actually going to be responsible for applying the waste. The fact that a corporation and not an individual is responsible is also pertinent information as corporations limit the liability of their stockholders and protect their assets from judgments for negligence. From the agencies perspective, you cannot issue a permit to C & H Hogfarms, Inc. to apply waste to land when C & H Hogfarms, Inc. has no permission from the landowners to do so any more than you could give me permission to apply waste to their land when they gave Jason Henson permission to do so. The original permit is therefore void as a matter of fact and law and a void permit cannot be modified. Whoever it is that wants a permit to operate a hog farm in this location needs to file a new application and get permission to spread waste from the landowners. It is also my understanding that even filing an NOI requires notice to surrounding landowners. Has this occurred? What was the response of land owners?

Original commenter: Gene Dunaway

Similar comments were received from: Carol Bitting

Response: Information on file with the Arkansas Secretary of State indicates that C & H Hog Farms, Inc. is an Arkansas corporation registered to do business and currently in good standing, and that Jason Henson is the Incorporator/Organizer, President, and Registered Agent for the corporation.

In order to apply for coverage in accordance with NPDES General Permit No. ARG59000 Part 1.5.1, one must submit an NOI and NMP in accordance with 40 CFR 122 and 412 and ANRC Service Practice Standard Code 590, including the PI, a disclosure statement in accordance

with the APC&EC Regulation No. 8, a permit fee, and an ADEQ Form 1 for plans and specifications that are stamped by a Professional Engineer in Arkansas for construction of ponds. Neighboring land owner notification is not among these requirements.

Comment 14 Applying waste by truck should not be allowed. Applying waste by truck is a different process than leach lines which are under the ground. Surface water can run off faster than leach lines and does not break down waste product like deep soil, which is alive with microorganisms. All water or waste should be processed through a package plant or some other process that produces good quality water. Before allowing this modification you should examine the specific application sites to determine if there are any sink holes or other areas where surface water could enter ground water. I understand the Boone formation is almost all limestone and is one of the worst areas in the state to locate such a treatment plant. Also, you should check the chemistry of the material the permittee plans to apply and compare it with known issues from antibiotics, growth hormones and other feed additives that are fed to hogs.

Original commenter: Gene Dunaway

Similar comments were received from: Kevin G. Cheri

Response: Land application (by tanker truck or sprinkler systems) and subsurface dispersal are both Department approved waste handling methods. However, the permittee has never proposed to utilize subsurface dispersal methods. This NMP modification consists only of changing the land application method from sprinkler irrigation to tanker truck on Fields 7-9.

Comment 15 Applying waste by truck is not practical because there are many times when trucks cannot effectively be used on pasture land, especially during periods of intense rain when trucks will get stuck and cause pasture land to become deeply rutted, causing erosion and runoff. What will happen if the ground is covered with ice for a week or so as we have seen this winter? What will happen if it rains at historically unprecedented times and amounts? I understand some of the truck routes will take over an hour round trip to the most distant fields. Is that correct? Is it practical or does this just look good in theory? Have you built climate change into your modeling? The National Wildlife Association flew me to Washington a few years back to discuss this issue with federal agencies and national water conservation groups. Agencies all acknowledged their "plans" based on historical climate data were worthless. It became obvious that planning and permit conditions could not be based on models from a weather world that no longer exists. The scenarios that predict future climate conditions

are much better than we had only a few years ago. Are these permits based on the best information for what has happened in the past, what is happening now, or what is most likely to happen in the future? Have you applied the "precautionary principle" which is an acceptable scientific risk assessment principle in evaluation uncertain outcomes under novel conditions. I assume that we can agree that the climate on the planet is changing and will continue to change for many years and this is going to cause variances at the extremes. Have you built these assumptions into your permitting model? How? What conclusions have you reached?

Original commenter: Gene Dunaway

Response: Land application (by tanker truck or sprinkler systems) and subsurface dispersal are both Department approved waste handling methods. Land application is prohibited during precipitation events or when soils "are saturated, frozen, covered with snow, during rain, or when precipitation is imminent (>50% chance of rain)" in accordance with NPDES General Permit No. ARG590000 Part 4.2.1.6.

Comment 16 The University of Arkansas Cooperative Extension Service Soil Analysis Report in the May 2012 Nutrient Management Plan (NMP) lists the soil phosphorus for Field 7 as above optimum at 356 lb/acre, which is much, much more than a suitable agronomic rate for phosphorus (typically 40 to 90 lb/acre); the soil phosphorus for Field 8 as optimum at 92 lb/acre, and a recommended application value for P2O5 of 0; the soil phosphorus for Field 9 as above optimum at 104 lb/acre. Furthermore, the USDA NRCS RUSLE2 Calculation Record in the NMP states that Fields 7 and 9 are occasionally flooded. Therefore, swine waste, which contains phosphorus, should not be applied to fields 7, 8, and 9 until the soil phosphorus level comes down to acceptable levels. The Buffalo River, which Big Creek drains to, is phosphorus limited. Any additional phosphorus could contribute to a lowering of the water quality and aesthetics of the Buffalo, which is an Extraordinary Resource Waters (ERW) water body, and subject to the Antidegradation Policy of Reg. 2.

Original commenter: Martin Maner

Similar comments were received from: Teresa Turk, Kevin G. Cheri, Charles J. Bitting, Dane Schumacher

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which consists only of changing the land application method from sprinkler irrigation to tanker truck on Fields 7-9. Therefore,

this comment is outside of the scope of the proposed modification to the NMP.

Comment 17 Explain the seepage calculation in subjects major construction application. For starters how do you guys define seepage? What is the total amount of seepage for one year on the 2 ponds? What happens to the seepage? Does it evaporate? Is it absorbed by the soil?

Original commenter: Lonnie Ewing

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which consists only of changing the land application method from sprinkler irrigation to tanker truck on Fields 7-9. Therefore, this comment is outside of the scope of the proposed modification to the NMP.

Comment 18 I would like for you to address: how many acres are needed to spread the waste without increasing the P level on the spreading fields? Are the phosphorus index ranges listed in the nutrient management plan – the ranges after the amount of waste listed is applied? For example, field 7 indicates a very high phosphorus index and 27921 # of P applied.

Original commenter: Lonnie Ewing

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which consists only of changing the land application method from sprinkler irrigation to tanker truck on Fields 7-9. Therefore, this comment is outside of the scope of the proposed modification to the NMP.

Comment 19 The citizens of Arkansas, who you serve, deserve and you and your agency are legally required to, provide accurate and transparent information that complies with the law. The lack of action by ADEQ in opening the entire permit for review violates federal regulations under the 40 CFR 122 and 412.

Original commenter: Teresa Turk

Response: The Department thanks the commenter for their comment. The NPDES General Permit No. ARG590000 is not being modified and is therefore not eligible to be reopened. In addition, the issuance of permit

coverage for C & H Hog Farms to allow for the revision to the NMP is in accordance with all state and federal regulations, including 40 CFR 122 and 412.

Comment 20 The NMP shows a yield goal of 6.5 tons per acre of Bermudagrass. These yield goals seem unrealistic for common Bermudagrass which has an estimated potential yield of 5.8 tons per acre according to "General Traits of Forage Grasses Grown in Arkansas" published by the University of Arkansas Cooperative Extension Service, publication number FSA2139. The PI is based, in part, on the uptake on nutrients based upon yield goals; therefore, unrealistic yield goals result in unrealistic PI values. In addition to the unrealistic yield goals, the NMP places unrealistic nutrient recommendations into the "Nutrient Applied (lb./ac)" columns. For instance, the N-P-K agronomic rates recommended for Field 7 are 60-0-0, for Field 8 they are 60-0-160, and for Field 9 they are 60-0-160. The "Nutrients Applied" column in the NMP calls for an N-P-K of 489-376-379 for all three fields. This is after the assumptions for nutrient loss through storage, mineralization, and application loss is taken into account. Where do these excess nutrients go? The plants cannot take them all up. Much of the N (nitrogen) will likely leach into the groundwater as it is quite mobile. The excess P (phosphorus) will most probably be transported off the fields in heavy rains, or in its dissolved mobile forms it will leach into groundwater. This will result in an increased primary production in Big Creek of algae and periphyton, and a depletion of already low dissolved oxygen at night, potentially impairing aquatic fauna in Big Creek and the Buffalo River.

Original commenter: Kevin G. Cheri

Similar comments were received from: Charles J. Bitting

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which consists only of changing the land application method from sprinkler irrigation to tanker truck on Fields 7-9. Therefore, this comment is outside of the scope of the proposed modification to the NMP.

Comment 21 The proposed change will increase the application rate of N-P-K on fields 7, 8, and 9. The current NMP allows for the use of a pump, pipeline, and sprinkler system to these fields, with waste drawn for Waste Storage Pond #2 (WSP#2). This system is not in place yet. The proposed NMP would allow for waste from Waste Storage Pond #1 (WSP#1) to be applied to these fields by means of a tanker truck. The NMP shows no adjustments in

the application rate to compensate for the increased concentration of nutrients.

- WSP#1 has 7.52 pounds N Per 1,000 gallons. WSP#2 has 6.04 pounds N per 1,000 gallons. WSP#1 has 1.48 pounds more N per 1,000 gallons than WSP#2, an increase of 25%.
- WSP#1 has 5.78 pounds P_2O_5 per 1,000 gallons. WSP#2 has 4.64 pounds P_2O_5 per 1,000 gallons. WSP#1 has 1.14 pounds more P_2O_5 per 1,000 gallons than WSP#2, an increase of 25%.
- WSP#1 has 5.82 pounds of K_2O per 1,000 gallons. WSP#2 has 4.68 pounds K_2O per 1,000 gallons. WSP#1 has 1.14 pounds more K_2O per 1,000 gallons than WSP#2, an increase of 24%.
- WSP#1 has 1.90 pounds of Water Extractable Phosphorus (WEP) per 1,000 gallons. WSP#2 has 0.07 pounds per WEP per 1,000 gallons. WSP#1 has 1.83 pounds more WEP per 1,000 gallons than WSP#2, an incredible increase of 2,614%!

From this provisional comparison of the differences, it seems obvious that the proposed NMP is much more likely to cause pollution of Big Creek and the Buffalo River than the original NMP. On those grounds, the modification should be rejected.

Original commenter: Kevin G. Cheri

Similar comments were received from: Charles J. Bitting, Dane Schumacher

Response: The NMP modification will not change the nutrient source as the modified Arkansas Nutrient Management Planner with 2009 PI still indicates the source for Fields 7-9 to be WSP#2. The only NMP modification under consideration is changing the land application method from sprinkler irrigation to tanker truck on Fields 7-9. There will be no increase in the concentration of nutrients as the land application rates are based on the Arkansas Phosphorus Index, which considers the concentration of phosphorus in the soil and in the waste and must be recalculated prior to each land application event. Only fields that rank Medium or Low on the PI scale are suitable for land application. Therefore, this comment is outside of the scope of the proposed modification to the NMP.

Comment 22 Because of the danger to human health due to many of the waste components, because of the nearness of the Mount Judea School, and because of the requirement in ARG590000 that there must be an odor and emissions control plan, we request ADEQ require that the Vac Tanker(s) used for spreading waste on Fields 7, 8, and 9 be rigged to apply the waste by injection.

Original commenter: Robert Cross

Response: The Department disagrees as surface land application by tanker truck is a Department approved land application technique. Should strong evidence be provided that warrant additional requirements to be protective of the environment and human health, the Department will take appropriate action at that time.

Comment 23 We suggest additional safeguards of never applying waste to Field 7 when school is in session. Also, Field 7 has been designated as the "emergency field," i.e., the field to be used for receiving large quantities of waste if the ponds are nearing capacity. We request that another field (and not another field near the school) be designated as the emergency field. Also, the setback requirements for Field 7, 8, and 9 should be re-examined to make certain there is no residence within 500 feet of the part of a field where waste will be spread. If ADEQ determines that our request is not appropriate for public comment then we request that you invoke Section 6.3.c of the General Permit, ARG59000, i.e. "Permit may be modified if a determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification."

Original commenter: Robert Cross

Similar comments were received from: Dane Schumacher

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which consists only of changing the land application method from sprinkler irrigation to tanker truck on Fields 7-9. Therefore, this comment is outside of the scope of the proposed modification to the NMP.

Comment 24 First, let me say that I do not believe the current NMP meets the minimum requirements of Arkansas Natural Resources Commission (ANRC) Title XXII, or Natural Resource Conservation Service Practice Standard 590. The primary goal of title XXII is to "maintain the benefits derived from the wise use of poultry litter, commercial fertilizers, and other soil nutrients while avoiding unwanted effects from excess nutrient applications on waters within the State." The rules in Title XXII "provide requirements applicable to nutrient surplus areas, nutrient management plans, and poultry litter management plans. These rules are designed to protect the waters within the State from adverse effects of excess nutrients

while allowing for maximum soil fertility and proper plant growth." (Title XXII, Section 2.201.1) Title XXII describes in some detail the requirements of a NMP. Specifically, according to 2.203B(2)(d) the plan must have "individual field maps with marked conservation features, setbacks, buffers, waterways poultry houses or facilities, surface water features, and environmentally sensitive area such as sinkholes, wells gullies, tile inlets, etc." The NMP provided by C & H in their original NOI lacks these maps. The NMP provided by C & H in December 2013 for "Cold Season Waste Application" does not have ANY maps. The NMP provided by C & H on February 10, 2014 is almost identical to the original NMP, and has no updated maps either. These maps serve several purposes. They allow the regulators to see that appropriate setbacks have been applied that will attenuate, at least somewhat, the contaminants before they reach the receiving stream, the maps allow neighbors and concerned citizens to see exactly where the producer is planning to spread waste, and provide assurances that sensitive resources are being protected, finally, the maps provide the producer, and employees of the producer a certain knowledge where and when waste can be applied, but more importantly where and when no waste should be applied. The insufficient mapping of these fields is a serious oversight, and the new NMP should be rejected on this basis alone.

Original commenter: Charles J. Bitting

Similar comments were received from: Richard S. Grippo

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which consists only of changing the land application method from sprinkler irrigation to tanker truck on Fields 7-9. Therefore, this comment is outside of the scope of the proposed modification to the NMP.

Comment 25 Included in C&H's NMP are "Land Use Contracts" in which the owners of neighboring properties purportedly agreed to allow C&H to apply swine waste to their land. These contracts are signed by Jason Henson. Three in particular are notable for the falsity.

- The Land Use Contract for Field 5 represents to ADEQ that C&H has the permission of the owner Shan (sic) Ricketts to apply hog waste to Field 5 which is described as 23.8 acres of land located in Section 26, Township 15 North, Range 20 West. The land that is depicted as Field 5 on the C&H Field Map actually is owned by Tommie Wheeler and Aliecia Wheeler, husband and wife, by Warranty Deed dated March 19, 1989, as recorded March 20, 1989

at 3:35 p.m. in Deed Book 74-A page 454 of the Newton County, Arkansas records.

- The Land Use Contract for Field 12 represents to ADEQ that C&H has the permission of the owner Barbara Hufley (sic) to apply hog waste to Field 12, which is describe as 33.7 acres in Section 35, Township 15 North, Range 20 West which is depicted as Field 12 on the C&H Field Map is owned by Ronnie D. Campbell and Judy A. Campbell, husband and wife, by Warranty Deed dated January 13, 1987, as recorded January 21, 1987 in Deed Book 71-A Page 159 of the Newton County, Arkansas records.
- The Land Use Contract for Field 16 represents to ADEQ that C&H has the permission of the owner Barbara Hufley (sic) to apply hog waste to Field 16, which is describe as 79.6 acres in Sections 2 and 3, Township 14 North, Range 20 West. Approximately 25 acres of the land located in Section 2, Township 14 North, Range 20 West which is depicted as Field 16 on the Field Map is owned by Samuel R. Dye and Kimberly D. Dye, husband and wife, by Warranty Deed dated March 29, 2005, as recorded April 5, 2005 at 10:42 a.m. in Deed Book 103-A Page 749 of the Newton County, Arkansas records.

Inclusion of these fields among the 630.7 acres of C&H sprayfields was not merely a "mapping discrepancy." As described in the letter dated February 8, 2014, the owners of Field 5 and the owners of portions of Field 12 and 16 were approached by a representative of C&H before the construction of the C&H facility. The C&H representative sought permission to use these landowners' properties as sprayfields. Each of these owners, who are farmers themselves, declined permission. But as of its January 25, 2014 Annual Report, C&H is continuing to represent to ADEQ that it has these fields available for land application when in fact it does not.

Original commenter: Emily A. Jones

Similar comments were received from: Carol Bitting, Johnnie Chamberlin, Richard S. Grippo

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which consists only of changing the land application method from sprinkler irrigation to tanker truck on Fields 7-9. Therefore, this comment is outside of the scope of the proposed modification to the NMP.

Comment 26 C&H, and by extension the Big Creek Research Team, does not have access to the lands identified as Fields 5 and 12. In addition to concerns

about potential trespass and the use of taxpayer dollars to study land that C&H misrepresented as its sprayfields, the Big Creek Research Team appears to be using taxpayer dollars to perform work on another property that is confusingly also identified as "Field 5," but that actually is not the Field 5 identified in C&H's NMP. The "New" Field 5 lies to the north of Tommie and Aliecia Wheeler's property, is not identified in C&H's NMP, and is not a land application field under C&H's permit. This "New" Field 5 is not suitable for use as a land application field as the Ground Penetrating Radar Survey evidenced not only dissolution features (sinkholes and cavities) common in karst terrain but also gravel lens located approximately 20 inches beneath the soil surface.

Original commenter: Emily A. Jones

Similar comments were received from: National Parks Conservation Association

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which consists only of changing the land application method from sprinkler irrigation to tanker truck on Fields 7-9. Therefore, this comment is outside of the scope of the proposed modification to the NMP.

Comment 27 Is it true that there are 7 more hog farm permits in Newton Country alone being done in secret. If that is true, why the secrecy.

Original commenter: Paul Davis

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which consists only of changing the land application method from sprinkler irrigation to tanker truck on Fields 7-9. Therefore, this comment is outside of the scope of the proposed modification to the NMP.

Comment 28 Citizens in favor of the permit and NMP modification.

The following people commented on this issue:

Barbara Hefley, Taylor Hefley, John Svendsen, John Meyer, Jerry Masters

Response: The Department acknowledges this comment.