ADEQ

ARKANSAS
Department of Environmental Quality

CERTIFIED MAIL RETURN RECEIPT REQUESTED: (91 7199 9991 7034 8059 1128)

Gordon Watkins
Buffalo River Watershed Alliance
HCR 72 Box 34
Parthenon, AR 72666

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

Dear Mr. Watkins:

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 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, Stefanie Richardson, hereby certify that a copy of this permit has been mailed by first class mail to Gordon Watkins, Buffalo River Watershed Alliance, HCR 72 Box 34, Parthenon, AR, 72666.

Stefanie Richardson

Stefanie Richardson
Administrative Specialist, Water Division

May 12, 2015

Date Mailed

ADEQ

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

MAY 1 2 2015

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 02/26/2015. The substantial change will be effective. A copy of the General Permit ARG590000 is available from the Department or at the website below on May 12, 2015.

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 modification coverage as submitted.

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.

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

Sincerely,

Mo Shafii
Assistant Chief, Water Division

Enclosures

MS:km

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

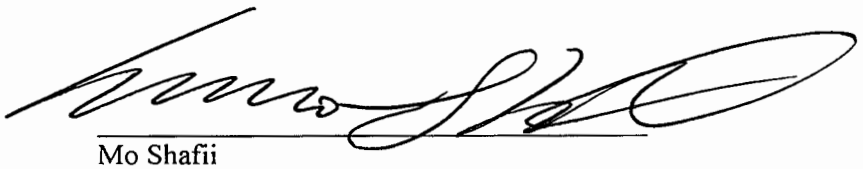
The discharge of an overflow of manure, litter, or process wastewater caused by precipitation into all receiving waters shall be in accordance with all limitations, monitoring requirements, and other conditions set forth in the Concentrated Animal feeding operations General Permit, ARG590000. Coverage 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
1st Substantial Change Effective Date:	06/05/2014
2nd Substantial Change Effective Date:	05/12/2015
Expiration Date:	10/31/2016



5-12-15
Issue Date

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

RESPONSE TO COMMENTS
FINAL PERMITTING DECISION

Permit No.: ARG590001

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

Prepared by: Katherine McWilliams

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 6, Regulations for State Administration of the National Pollution 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 3/18/2015. The public comment period ended 4/17/2015. The Arkansas Department of Environmental Quality (hereinafter "ADEQ") conducted one (1) public hearing on the proposed modification on 4/20/2015.

Due to public interest in this facility and the narrowness of the NMP modification, a separate document, not part of the Department's decision, has been updated with frequently asked questions received during the comment period for this modification that were not included in the frequently asked questions prepared after the previous modification and posted to the ADEQ website. The revised frequently asked questions document can be found at the following web address:

http://www2.adeq.state.ar.us/water/branch_permits/general_permits/pdfs/arg590001_frequently_asked_questions_20140605.pdf

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. (hereinafter "C & H Hog Farms") NMP only added the use of tanker wagons for land applying wastewater from Waste Storage Pond 2 (a sprinkler system is the currently approved method for land applying wastewater from this pond).

The following people or organizations sent comments to the ADEQ during the public comment period and public hearing. A total of 35 comments were raised by 144 separate commenters.

Commenter	# of comments raised
1. Brian A. Thompson	4
2. Tracy Fortuny	2
3. Trella Laughlin	1
4. Thomas Wilkerson	1
5. David Peterson, Ph.D.	6
6. Nancy Garner	2

7. Robert Cauley	1
8. Reba Potee	1
9. Michael J. Adelman	2
10. Gene Dunaway	1
11. Nancy Varvil	2
12. Lin Wellford	1
13. Mitchell McCutchen	1
14. Arthur F. Evans, DDS	1
15. Marie Wood	1
16. Carol Spears	1
17. Pamela Phillips, Ph.D.	4
18. Marilyn Shoffit	2
19. Edd French	1
20. Judi Nail	1
21. Clayton Davis	3
22. Mark A. Smith	1
23. Earlene Venable	2
24. Karen Seller	4
25. Elizabeth Scott	2
26. Judy Thompson	1
27. John Ferguson	1
28. Ruth Weinstein	1
29. Nan Johnson	4
30. Dave Spencer	4
31. Emma Lee Lamm	1
32. Patricia McKeown	3
33. Chuck Mulhearn	1
34. Mitchal Majors	1
35. Francie Bolter	1
36. Pam Floyd	3
37. Patti Kent	2
38. Charles Phillips	6
39. Jeanmarie Mako	1
40. Chuck Maize	6
41. Shawn Porter	5
42. Diane Mitchell	1
43. Alice B. Andrews	8
44. Deborah Byron, Ph.D.	6
45. Annette Hurley	1
46. Joe Golden	1
47. Carolyn Shearman	1
48. Peggy Vyncke	1
49. Allison Majors	1
50. Brad Barnes	1
51. Margaret Bartelt	1
52. Rel B. Corbin	1
53. Uta Meyer	1
54. Dorothy Bailey	1
55. Paul N. Means	2

56. Susanne M. Long	2
57. Cindy Majoros	1
58. Ada J. Cantrell	1
59. Vivian Hill	1
60. Kimberly Pate	1
61. Arkansas Department of Health	1
62. David E. Mervis	1
63. Steven Hignight	1
64. Ellen Mitchell	4
65. Arlene Howard	1
66. Rebecca Liles	1
67. Carol Bitting	1
68. Demara Titzer	1
69. Edie Stahl	1
70. John Rice	1
71. Larry Altman	1
72. Susan Eckhart	1
73. Patricia J. Roe	1
74. Joyce Murray	1
75. Gina Booth	2
76. Carol Christoffel	1
77. Linda Eddings	5
78. Hubert L. Ferguson	1
79. Aletha Petty	5
80. Robin Rumph	1
81. Carol Harley	6
82. Frieda Schroder	1
83. Nancy Deisch	1
84. Pamela E. Stewart	3
85. R. Sheri Nodine	6
86. Cara Burrow	1
87. Ryan Anglin	1
88. Susan Anglin	1
89. William Gibson	2
90. Alan C. Nye	2
91. Charles J. Bitting	5
92. Glenda Huffine	1
93. Mary Michelle Trost	6
94. Sybil Craig	3
95. Mike Quearry	1
96. Margaret Lonadier	2
97. Nancy Young	1
98. Lloyd Smith	1
99. Linda Smith	1
100. Karen Bartle	1
101. Jane E. Darr	2
102. Susan Schmidler	1
103. Arkansas Farm Bureau Federation	1
104. John Murdoch	3

105. Charlotte Morris	1
106. Joseph P. McShane	1
107. Anonymous	1
108. Ellen Compton	2
109. Brent Michael Scott	1
110. Cathy Ross	1
111. Susan Bitting	1
112. Robert A. Cross	1
113. Crystal Ursin	1
114. Gerald Weber	2
115. Wendel Norton	6
116. Jeffrey Ingram	6
117. Fay Knox	6
118. Kathleen Stanley	2
119. Thom Roe	1
120. Thelma Pruitt	1
121. Duane W. Woltjen	1
122. Pam Fowler	1
123. Luis Contreras	1
124. Jacque Alexander	6
125. Bob Shofner	1
126. Earthjustice	2
127. Bill Pettit	1
128. Sandra Priest	1
129. Micki Nelson	1
130. Thomas Maly	1
131. Laura Timby	1
132. Susan Watkins	4
133. Donna Musarra	1
134. Ann Mus	1
135. Rachel Henriques	3
136. Roger Reep	1
137. Teresa A. Turk	3
138. Jim Westbrook	2
139. Kathy Downs	1
140. Friends of the North Fork and White Rivers	2
141. Marti Olesen	9
142. Larry Olesen	1
143. Gordon Watkins	3
144. Dane Schumacher	1

Comment 1 All of these documents continue to contain incorrect maps specifically regarding ownership of field 5 and parts of fields 12 and 16. According to former Director Marks in a letter to Earthjustice dated February 20, 2014, C&H Hog Farms was to submit new, correct maps to ADEQ by March 30, 2014. We are not aware of any new maps and they are not included in the Revised NMP.

However, we do note that the Big Creek Research and Extension Team is using some unexplained field numbers, including a field 5a. This field is not part of the NMP and is reportedly not receiving any waste applications from C&H. This only further confuses the ongoing errors and misrepresentations regarding application field ownership and identification.

Original Commenter: Earthjustice
Similar comments were received from: Brian A. Thompson, Karen Seller, Sybil Craig, Aletha Petty, Carol Harley, R. Sheri Nodine, Deborah Byron, Ph.D., Charles Phillips, Chuck Maize, Mary Michelle Trost, Wendel Norton, Jacque Alexander, Rachel Henriques, Jeffrey Ingram, Nan Johnson, Dave Spencer, Linda Eddings, Shawn Porter, Luis Contreras, Jeanmarie Mako, Fay Knox, Teresa A. Turk, Crystal Ursin, Patricia McKeown, Ellen Compton, Earlene Venable, Alice B. Andrews, John Murdoch, Susan Watkins, Marti Olesen, Gordon Watkins, Charles J. Bitting, Nancy Garner, Michael J. Adelman

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 2 The original Nutrient Management Plan did not contain P values for fields 5-7 and 9. Over the past 2 years, the P values have changed for most fields without any explanation or documentation. Suddenly the P values have dropped when they should be increasing due to manure application. This makes absolutely no sense but ADEQ has not rectified, nor provided any explanation for the situation.

The inputs (types of vegetation, time of year) used to estimate the P values were incorrect. The type of vegetation used in calculating the P index was from North Dakota. No one at ADEQ bothered to note this problem.

Original Commenter: Teresa A. Turk
Similar comments were received from: Alice B. Andrews

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 3 Using Regulation 6 for such an operation as C & H violates the intent of this permit type. A regulation 6 permit assumes uniformity in the environment, operation, and size. None of these features were true with regard to C & H. Unlike the geology of much of the state, C & H is built upon highly porous karst. The environment surround C & H is special, Big Creek drains into the first national river. Finally C & H operation is the

largest pork CAFO in the state. C & H should never had been permitted under Regulation 6 in the first place.

Under 40CFR 122.28(h)(3), the director of ADEQ can require an entity to be permitted under Regulation 5 and require additional monitoring. To date, neither the past nor current director has exercised their authority under this provision.

Original Commenter: Teresa A. Turk

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 4 My understanding is that this permit was granted with the assurance that the facility had 600 acres within which they could spread the hog manure. Since then I have learned that the actual acreage they have access to is significantly less than what they claimed in the application. How can the nutrient management plan numbers work when there is a large reduction in the number of acres available? And why are they allowed to spread liquid waste on fields in the dead of winter when there will be no uptake of nutrients.

Original Commenter: Lin Wellford
Similar comments were received: Chuck Mulhearn

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 5 Who owns these fields/parts of fields and who may lease these fields? Where is the Vac-wagon going? Which fields will receive the Pond 2 waste? It seems there are more questions than answers available.

Original Commenter: Alice B. Andrews

Response: The Department thanks the commenter for their comment. The comment in regard to the owner of fields is outside of the scope of the proposed modification of the NMP. All fields currently approved for land application can receive waste from Waste Storage Pond 2 via tanker wagon.

Comment 6 It should be critically important to C & H to eliminate errors, misrepresentations and unexplained changes in data when requesting a modification of their permit to remove waste from Pond 2 by Vac-Tanker. How much waste? How is the waste spread? Is it distributed evenly over a field?

Original Commenter: Alice B. Andrews

Response: The Department thanks the commenter for their comment. The facility is required to keep records of the amount of waste applied to land application sites and submit these records as part of the annual report to the Department. Upon approval of the modification, the facility will be allowed to land apply waste from Waste Storage Pond 2

via tanker wagon or sprinkler system. Waste is required to be evenly spread over the land application site regardless of the land application method used.

Comment 7 Please deny this modification. This permit has many already noted discrepancies. C & H did not have the equipment the permit listed to begin the operation of this CAFO. The permit should be withdrawn and the owners held responsible for signing a permit that is misleading.

Section B 6, 7 & 8 should be noted and changed due to close proximity to the school and the town of Mt. Judea. Check applications of the fields surrounding the school and to the SW where prevailing winds carry the feces to the students at play. Pond 1 and its health effects on the local public should be taken into consideration, not to mention if Pond 2 is also allowed to be applied by Vac tanker.

There have been a few changes made already that either required public notice or was done without notice such as listed below;

C & H original May 24th, 2012 permit Section J included the use of an In-vessel Composter called BIOvater. It states that if the BIOvator isn't functioning then the mortalities will be picked up within 24 hours and rendered. An inspection to C & H dated 7/23/2013 states

2.) No means of managing farm mortality was observed onsite. The facility NMP calls for composting and rendering; however, no equipment or structures for managing this waste stream was observed onsite. Since the farm will soon be in full production and will be generating a steady waste stream of dead pigs and afterbirth, the composting and/or rendering equipment mentioned in the NMP must be onsite and capable of managing such waste.

June 23, 2014, Jason Bolenbaugh photographed the incinerators and by April 13, 2014 Section J was changed without public notification to include the use of incinerators. It is apparent that C & H did not have the equipment originally permitted.

On 2/19/2014 the public was again notified that C & H had a modification request for; *Allowing land application via Vac Tanker method on Fields 7-9.* Again it is noted that C & H did not have the sprinkler system the original permit specified.

Today we are back again with another modification. The public again is being asked again to comment.

The permit is full of discrepancies such as Field 5, 12 and 16 have owners that did not sign up to have their fields sprayed with hog waste, in fact the owners declined permission to Jason Henson but their fields were included in the permit anyway. I checked the NOI submitted and it still shows the same field discrepancies and the incorrect owners.

The Big Creek Research Team refers to removing the top water from pond 2 and rinsing the barns, this water then returns to Pond 1, isn't this applying pond 2 to the fields event though it hasn't gone thru modification yet?

Do we really want to continue modifying a permit that has so many discrepancies and these are only a few? The National Park Service, EarthJustice and many other people have shown that this permit and the NMP are filled with discrepancies.

I still believe that on page 12 of the NOI this statement says:

The nutrient management plan was developed based on compliance criteria described in the following documents: t81 Arkansas Pollution Control and Ecology Commission Regulation 5 dated March 28, 2008, t81 USDA, Natural Resources Conservation Service (NRCS) conservation practice standard Nutrient Management ("590") dated December 2004 and because this is a document included in the NOI that not only REG 6 must be followed but it must comply with the criteria described in REG 5 and NM 590.

Below are two pages from the NOI 2012 & 2014 signed by Jason Henson in which he states all attachments are true, accurate and complete. It is obvious that the reason for continually modifying the permit is that the documents were not true, accurate or complete.

Original Commenter: Carol Bitting
Similar comments were received from: Aletha Petty, Carol Harley, R. Sheri Nodine, Deborah Byron, Ph.D., Charles Phillips, Chuck Maize, Mary Michelle Trost, Wendel Norton, Jacque Alexander, Rachel Henriques, Jeffrey Ingram, Pam Fowler, Carol Christoffel, Fay Knox, Patricia McKeown, Alan C. Nye, Pamela E. Stewart, Pamela Phillips, Ph.D., Clayton Davis, Ellen Mitchell, Gerald Weber, Marti Olesen

Response: The Department thanks the commenter for their comment. Land application of wastewater via tanker wagon is an acceptable technique for land applying wastewater. However, the remaining comments do not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, most comments are outside of the scope of the proposed modification of the NMP.

Comment 8 C&H should not be introducing raw sewage in this area of karst topography as dye tracing studies have proven the sewage spread. There is a large likely hood of a public health problem where untreated sewage is sprayed. This area is a tourism focus, an area where some residents rely on wells for drinking water, and where a school is in close proximity to spray fields.

Original Commenter: Fay Knox
Similar comments were received from: Bryan A. Thompson, , Sybil Craig, Aletha Petty, Carol Harley, R. Sheri Nodine, Deborah Byron, Ph.D., Charles Phillips, Chuck Maize, Mary Michelle Trost, Wendel Norton, Jacque Alexander, Jeffrey Ingram, Kathleen Stanley, Elizabeth Scott, Nan Johnson, Dave Spencer, Linda Eddings, Shawn Porter, Pam Floyd, Thomas Wilkerson, Susan Eckhart, Rel B. Corbin, Edie Stahl, Ann Mus, Anonymous, Ruth Weinstein, Karen Bartle, Bill Pettit, Tracy Fortuny, Emma Lee Lamm, Joseph P. McShane, Marilyn Shoffit, William Gibson, Gina Booth, Ada J. Cantrell, Judy Thompson, Patricia McKeown, Margaret Lonadier, Roger Reep, Kimberly Pate, Judi Nail, Carol Spears, Pamela Phillips, Ph.D., Clayton Davis, Ellen Mitchell, John Murdoch, Susanne M. Long, Susan Watkins, Jim Westbrook, Kathy Downs, Marti Olesen, Charles J. Bitting

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 9 In order to address public outcry, Governor Beebe approved the release of $340,000.00 from the rainy day fund to monitor water quality in the Big Creek watershed. The fact that taxpayer money is being applied to ensure this single permit does no harm is a serious problem in and of itself. Not to mention that it's continued funding under the new administration is in doubt. In the late summer of 2014, dissolved oxygen levels in Big Creek as measured by the National Park Service Engineers, fell below 5 mg/l for 19 of 21 days. Measurements from the Buffalo above the entrance of the Big Creek tributary were higher in oxygen and lower in E. Coli. Big Creek was shown to be decreasing oxygen levels and increasing in E. Coli where it joins the Buffalo. Procedure around how to manage river closures as may be needed for public safety are now being considered.

Original Commenter: Brian A. Thompson
Similar comments were received from: Karen Seller, Aletha Petty, Carol Harley, R. Sheri Nodine, Deborah Byron, Ph.D., Charles Phillips, Chuck Maize, Mary Michelle Trost, Wendel Norton, Jacque Alexander, Jeffrey Ingram, Elizabeth Scott, Nan Johnson, Dave Spencer, Linda Eddings, Shawn Porter, Rebecca Liles, Donna Musarra, Fay Knox, Margaret Lonadier, Gerald Weber, Lloyd Smith, Linda Smith, Pamela Phillips, Ph.D., Ellen Mitchell, Marti Olesen, Friends of the North Fork and White Rivers

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 10 Based on the recent federal court ruling that requires a redo of the "cursory and flawed" Environmental Assessment of C&H, it is hard to understand how ADEQ can approve this or any other permit modification. By approving this modification request, ADEQ would be saying that C&H can continue in the face of the court ruling, scientific research, and public concerns.

Original Commenter: Shawn Porter
Similar comments were received from: Brian A. Thompson, Karen Seller, Sybil Craig, Carol Harley, R. Sheri Nodine, Deborah Byron, Ph.D., Charles Phillips, Chuck Maize, Mary Michelle Trost, Wendel Norton, Jacque Alexander, Rachel Henriques, Jeffrey Ingram, Nan Johnson, Dave Spencer, Linda Eddings, Tracy Fortuny, Joe Golden, Mark A. Smith, Nancy Young, Mike Quearry, Patricia J. Roe, Glenda Huffine, Fay Knox, Patti Kent, Patricia E. Stewart, Pamela Phillips, Ph.D., Clayton Davis, Alice B. Andrews, Ellen Mitchell, Susan Watkins, Jim Westbrook, Marti Olesen, Charles J. Bitting, Pam Floyd

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 11 Since the entire permitting process was flawed and did not allow for public input, it is disturbing that we are being asked to comment on only the current narrow modification and are being forced to ignore the totality of the impact this facility is having on the community and the threat it poses to the economics of the region. The permit was approved without sufficient communication to the public.

Original Commenter: Shawn Porter
Similar comments were received from: Brian Thompson, Karen Seller, Aletha Petty, Carol Harley, R. Sheri Nodine, Deborah Byron, Ph.D., Charles Phillips, Chuck Maize, Mary Michelle Trost, Wendel Norton, Jacque Alexander, Jeffrey Ingram, Kathleen Stanley, Linda Eddings, William Gibson, Uta Meyer, Sandra Priest, Fay Knox, Pamela E. Stewart, Earlene Venable, Alice B. Andrews

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 12 It is not appropriate and it should not be permitted for C&H to use a vac-tanker truck to apply hog wastewater to any of the fields from pond 2 without reliable, accurate information about the content of that waste-the amount of Phosphorous, Nitrogen, and other nutrients, and without reliable data on the level of nutrients, Phosphorus, and Nitrogen already applied to some of the fields. The spray fields are located within a karst region of the watershed and have very little depth of soil. That and the close proximity to Big Creek would cause increased compaction of the soil and aggravate already compromised runoff conditions.

Original Commenter: Laura Timby
Similar comments were received from: Susan Schmidler, Margaret Bartelt, John Ferguson, Cindy Majoros, Michael J. Adelman, Francie Bolter, Carolyn Shearman, Allison Majors, Mitchal Majors, Peggy Vyncke, Robin Rumph, John Rice, Demara Titzer, Nancy Varvil, Hubert L. Ferguson, Patti Kent, Ellen Compton, Alice B. Andrews

Response: The Department thanks the commenter for their comment. The facility is required to recalculate loading rates yearly based on the most recent analytical results of waste that is to be land applied and soil analysis of the land application sites regardless of the land application method used.

Comment 13 We are spending our time and tax payers money on what appears to be a non substantial modification request which consists of a one page alteration of a 145 page document submitted by a 6500 Confined Animal Feeding operation whose operation has been and continues to be problematic.

As evidenced by the following efforts:

- Governor Beebe's rainy day funds proposal and subsequent involvement of the BCRET –(pond trench and manure treatments);
- Cargill's addition of pond liners;
- 2014 Peer Review Expert Panel's concerns – 1) leakage from the two onsite waste storage ponds, 2) contamination of surface and subsurface water due to land

applications of the wastes, and 3) potential long-term buildup of soil nutrients (primarily soil phosphorus) due to application in excess of crop needs and removal;
- Judge Marshall's order for new EA

I respectfully ask that ADEQ deny this particular narrow scope of a modification request and consider more substantial factors and terms of the permit to ensure appropriate utilization of nutrients at C & H Hog Farm.

Original Commenter: Dane Schumacher

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 14 Information reported by C&H in their 2014 annual report, there were over 500,000 gallons of "untreated" hog waste spread on two fields adjacent to the school (fields 3 and field 7-the best I can tell from the online maps), all legal, I assume. I can personally tell you that the air quality can give one a headache instantly; if there has been recent hog waste spreading nearby. I recently filed a complaint to ADEQ (03/25/2015). It is still early, but so far the only responses have been, that it will be passed on to the Water Division, the Director and later I was told it would be passed on to his supervisor and branch manager. Basically, two trucks were spreading waste south of the school on one of the fields south of the bridge with gusting southern winds and rain in the forecast. I passed by the school on the way out. There were kids and staff on the playground trying to enjoy one of the first pretty days of spring. The smell was very bad. I believe Arkansas has no odor regulation but one might be worried about air borne health concerns. This is more than an "odor issue". Air, water and health quality should be addressed and review what is going on there. I know the permits allow the spreading, but something is very wrong and I believe a real threat to human health.

Original Commenter: John Murdoch
Similar comments were received from: Thom Roe, Susanne M. Long, Gina Booth, Charles J. Bitting, Edd French, Pam Floyd

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 15 I request that the C & H Hog Farm proposed modification of their Nutrient Management Plan to allow land application of hog wastewater from Waste storage Pond 2 by tanker-wagon be denied.

They should be required to install an appropriately sized package plant or other approved wastewater cleaning facility to clean their own water.

Original Commenter: Gene Dunaway

Response: The Department thanks the commenter for their comment. Tanker wagon is an acceptable method of land application for wastewater.

Comment 16 From the start of the C&H debacle, there has been an economic depression to the Mount Judea area. I have personally had to move my family out of the area, because when they started spraying the filed across the road with that toxic hog waste, my grandson who has asthma, immediately started having breathing problems. Since I have had a friend, years ago, die from an asthma attack, my family and I moved as soon as we could. Also, I was worried about my wife who has a compromised immune system.

I put my house for sale and left the area. It's been over a year now, and after lowering the price several times, switching realtors, I have not had even one offer. Nobody in their right mind wants to live in that polluted area.

Please 'do the right thing' any DENY C&H any modification to the Permit, and the use of a Vac Tanker. Do not make any concessions to C&H for their economic prosperity, especially since they have decimated our beautiful area. They should never have been allowed to do what they have done—the best thing that could happen now it that they be permanently shut down.

Original Commenter: Robert Cauley
Similar comments were received from: Marilyn Shoffitt

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 17 Best Management Practices and stream buffer zones should be strictly adhered to during land application of swine wastes.

Original Commenter: ADH
Similar Comments were received from: Marti Olesen, Charles J. Bitting

Response: The Department thanks the commenter for their comment.

Comment 18 2014 Annual Report and 2014 Annual Report Aggregate Phosphorus Index (PI) Spreadsheets contain multiple deviations from the Revised Nutrient Management Plan. For example, the RUSLE values and acreage have substantially changed with no explanation. There are no maps indicating soil sampling locations so variation in STP cannot be explained. Waste was land applied when crops were dormant. No data is included to show how much N and P was applied to each field. The RUSLE values do not match the revised NMP. There are best management practices in use that were not included in the revised NMP; therefore, the P Index values are all listed as "low" in the2014 Annual Report. Only the gallons applied are given with no data on the N and P content per gallon. The total gallons differ substantially between the two annual report documents submitted and the revised NOI

Original Commenter: Earthjustice

Similar comments were received from: Paul N. Means, Alice B. Andrews, Jane E. Darr, Susan Watkins, Friends of the North Fork and White Rivers, Gordon Watkins

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 19 C & H reported different amounts of effluent for 2014 that were spread on hay fields. The amount of phosphorus has probably saturated the soil for these fields. Instead of land applying waste, they should take the waste to a sewage treatment plant. Plants do not take up all of the applied phosphorus. Some phosphorus is retained in the soil and will enter the streams due to runoff. Some phosphorus will enter groundwater. The removal of sewage sources on the Illinois River shows that most phosphorus contamination comes from soil bound phosphorus. Phosphorus Indexes are flawed because they do not account for phosphorus that is bound in deeper soil layers or in the water table.

Original Commenter: Duane W. Woltjen

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 20 The original permit designated fields 5-9 as where waste would be applied under normal conditions. Fields 1-4 and fields 6-17 were designated for emergency conditions when there was potential for overflow from the storage ponds. As such, a sprinkler system was to be installed to service storage pond number 2 and apply waste to fields 5-9. This would allow for regular and uniform application of waste. Use of a Vac-Tanker will result in irregular and non-uniform application of waste, thereby increasing the risk of runoff reaching the Buffalo National River. For this reason the request should be denied.

Original Commenter: Paul N. Means
Similar comments were received from: Alan C. Nye

Response: The Department considers both land application by sprinkler irrigation and tanker truck to be acceptable land application techniques. The waste must be evenly distributed across the entire land application area when using either land application technique. There should not be any ponding or runoff during the land application as required by the permit. In addition, the permittee has to comply with the calculated loading rate based on the wastewater and soil analyses.

Comment 21 If there is no ADEQ approved means of spreading waste from Waste Pond 2 at this point in time, then how is it possible that C & H spreads waste on fields 7-9? Before any modification is granted by ADEQ this must be reexamained and resolved. NMP Section C, spreadsheet page 4 of 5 shows that Pond 2 waste is designated only for fields 5-9. The previous approved modification allowed use of a tanker on fields 7-9. This was further muddled by not combing these 2 modifications into the first. (Please see p. 37, BCRET Quarterly Report, January 1 – March 31, 2015, Andrew Sharpley.)

Original Commenter: Marti Olesen

Response: The Department thanks the commenter for their comment. The original NMP only allowed for waste to be land applied via a sprinkler system for fields 5-9. The previous modification allowed waste to be land applied via tanker truck on fields 7-9. This modification request is to allow wastewater from Waste Storage Pond 2 to be land applied via tanker wagon. The original NMP allowed wastewater from Waste Storage Pond 2 to be land applied only by a sprinkler system. The NMP Section C is a projection of land application rates. The facility follows the narrative rate approach in accordance with General NPDES Permit ARG59000 Part 3.2.5.2, which allows for some flexibility in regard to land application; however, the facility cannot apply over the maximum amounts of nitrogen and phosphorus that can be land applied. The facility is required to recalculate loading rates at least once yearly based on the most recent analytical results of waste that is to be land applied and soil analysis of the land application sites.

Comment 22 Your office requested clarification from C & H Hog Farm with regard to several issues in an email on March 25, 2015. ADEQ has not received a response from C & H Hog Farm. If there is a clarification of this issue, then it is not being made available through the Freedom of Information Act. An open and transparent process will eliminate innuendo and suppositions for all concerned. Concerned parties on all sides must have access to accurate facts and information before they can make informed comments.

Original Commenter: Marti Olesen

Response: The Department thanks the commenter for their comment. Any information that is received is published on ADEQ's website and available through the Freedom of Information Act. The email on March 25, 2015 was not associated with the requested modification and no information has been received in response to date. This comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 23 The Narrative Statement contained in Section A of the Nutrient Management Plan includes the statement, *"Effluent from Waste Storage Pond 1 will be applied through a Vac Tanker, whereas the effluent from Waste Storage Pond 2 will be applied through a traveling gun and a permanent pipeline."* Section A is not included in this Modification Request and directly contradicts the proposed modification. This modification should be denied because it will add yet another source of confusion, contradiction and misinformation contained in the Nutrient Management Plan, further compounding the errors in this already seriously flawed document.

Original Commenter: Gordon Watkins
Similar: Brian A. Thompson

Response: The Department thanks the commenter for their comment. The facility is modifying the Nutrient Management Plan to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Section A is a narrative discussion of the activities that are planned at the facility. Section M supersedes Section A; therefore the modification request is complete since Section M was revised to match the modification

request. The land application method for effluent from Waste Storage Pond 1 is not being modified.

Comment 24 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 removing waste from Pond 2 be rigged to apply waste by injection or second best, band spreading.

Original Commenter: Robert A. Cross

Response: The Department disagrees as surface land application via tanker truck is an acceptable method of land application by the Department. Should 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. The facility is responsible for properly maintaining and operating the land application equipment in order to minimize any potential environmental impact.

Comment 25 The fact that C&H's sprinkler system is not operational should not be the basis for a MNP that allows the use of a tanker truck to apply hog waste pumped on acreage that is far less than previously stated. Where is the unbiased scientific data that the increased pig poop will not overwhelm the micro organisms? An inoperable sprayer system seems to imply that C&H has not or can not maintain the equipment. Will the tanker be the preferred method of spreading waste now and what wavier will be asked for when this or another piece of equipment fails?

Original Commenter: Frieda Schroder

Response: The Department thanks the commenter for their comment. The sprinkler system was proposed; however, the facility has decided to add tanker wagon as a method of land application for wastewater from Waste Storage Pond 2. The Department considers both sprinkler irrigation and tanker wagon to be acceptable land application techniques.

Comment 26 The proposed modification of coverage for the C&H Hog Farm includes a proposal to install a permanent pipeline/sprinkler system from waste storage pond 2 to fields 5-9 and the use of additional equipment that has the potential to further phosphate load fields already high in phosphate. There are no details given about the proposed pipelines (size of pipe, capacity, above ground vs. below ground, length, waste storage in the pipeline, etc.), safety measures (automatic shutoff valves, etc.), operating protocols, or source methodology (i.e. top, bottom or agitated withdrawal). On that basis, **the proposal should be considered incomplete.**

Original Commenter: David Peterson, Ph.D.

Response: The Department thanks the commenter for their comment. The facility is not proposing to install a sprinkler system with this modification. The facility is modifying the Nutrient Management Plan to allow for land application of waste from Waste Storage Pond 2 via tanker wagon in addition to the approved sprinkler system. The Department considers both sprinkler irrigation and tanker wagon to be acceptable land application techniques.

Comment 27 A more **substantial reason for rejecting** the proposal is that these fields already have a level of phosphate greatly exceeding agronomic needs (10 lbs P_2O_5/ac/yr for each ton of hay, 5-10 lbs P_2O_5/ac/yr for each grazing unit). There is no need to increase the capacity of effluent spraying on fields when there is already a 40 year agronomic supply, unless phosphate is viewed as a waste product to be dispersed into the environment. A commonly suggested P threshold level is 3-5 years of agronomic needs. The API (Arkansas Phosphate Index), like phosphate Indices in 48 other states, was intended to reduce CAFO runoff by statistically identifying pollution. "Revision of the 590 Nutrient Management Standard: Sera-17 Recommendations," [Andrew Sharpley, et.al., 2011] has useful comments that apply to the Buffalo River Watershed, and they should be considered/resolved **before granting additional modifications** to the nutrient management plan.

- There is a point above which the risk of P loss from a field is too great to warrant application in any form
- Although there is no scientific evidence to support the use of STP (soil test P, lbs/ac) or P saturation alone to determine the risk of P loss; because P is a finite resource, states should consider establishing an upper limit of STP above which manure cannot be applied, regardless of P Index assessment
- Many P Indices force a P balance approach on individual fields at some point; however the point varies greatly and P Index values ... are not tied directly to water quality
- Define P loss limits for a field based on quantitative water quality criteria for the target water body
- A P-balance approach will involve alternative technologies for manure utilization and export of manure from many farms in some watersheds.

Original Commenter: David Petersen, Ph.D.

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 28 The federal designated use limit for streams is .1 mg/L total P. Accepted guidelines are:

0.01-0.03 mg/L – the level of uncontaminated lakes and streams
0.025-0.1 mg/L – level at which plant growth is stimulated
> 0.1 mg/L – accelerated growth and consequential eutrophic problems
Field tests indicate that API values at the "high" threshold (API = 67) and "very high" threshold (API = 100) correspond to concentrations of total P in runoff at approximately 1.0 and 1.6 mg P/L, far higher than the federal limit for streams (Sharpley et al, 2001). **This suggests limiting P applications when these limits are approached as may be the case in fields 5-9.** But of course runoff from C&H is only a small part of the flow of Big Creek and the unanswered questions at this time are:

i) is dilution the pollution solution in Buffalo River tributary streams, and
ii) to what extent is C&H contributing to any problem?

For the period October 1 to December 31, 2014, 14 of 18 total P samples on Big Creek below C&H were in the "uncontaminated stream" category, with only one sample during high flows exceeding the federal standard. But 8 of 13 samples from a springs and culverts draining C&H were above the 0.03 level. None-the-less, samples drawn on Big Creek above and below C&H are not statistically different in the limited sampling so far. These results indicate that increased phosphate loading on fields 5-9 implies increase P runoff, probably to levels that exceed federal stream guidelines. But there is not enough data to conclude that P levels on this one farm currently impair Big Creek or the Buffalo River.

Original Commenter: David Peterson, Ph.D.

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 29 The determination of allowable P loss from farm fields [i.e. thresholds] is a policy decision. However, this critical decision has instead been made by P-Index model designers...buried within the P-Index structure [Joseph Rudek, 2011, A Review of the Pennsylvania Phosphorus Index: Version 2].

It is no surprise that "recent litter applications" (e.g. 6 months) are a major contributor to phosphorus runoff concentrations – by as much as a factor of 10 for the same soil P values! But in the absence of recent applications, both total P and dissolved P are good predictors of phosphorus concentrations in runoff (R^2 = .80 in one study) [Rudek]. In essence, PI indices try to incorporate these dissimilar contributions into one model. Analysis gets complicated, and the setting of thresholds becomes unsatisfying.

The threshold for a rating of very high (e.g. API >100) is not directly linked to any specific water quality standard or STP, but rather to a high percentile of actual **worst case PI values** - 20% is a common suggestion. We might cringe at the thought that our Big Creek/National River standards are derived from some worst case percentile. If this needs to be done, wouldn't the median or best 20th percentile be better targets?

Original Commenter: David Peterson, Ph.D.

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 30 According to the 2014 Aggregate Split Application Table, the C&H application rate was 7,030 gallons/ac, with P_2O_5 content of 18.1 lbs/1000 gal, thus 127 lbs P_2O_5/acre - 12 times the agronomic need! The 2014 Aggregation table implies an API increase for the year as PI 25. If this report is accepted as approximately accurate and these high rates of application continue, the "very high" threshold could be exceeded in several years. It must be recognized that continual, long-term application of P above crop P removal rates will eventually elevate STP levels to an extent that **alternatives to application may be needed** [Using the 2010 Arkansas Phosphorus Index, Andrew Sharply, et.al.].

Original Commenter: David Peterson, Ph.D.

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 31 The usefulness of the API depends on accurate estimates of several variables, but unfortunately there are many mistakes and/or possible misrepresentations in the initial application and periodic and annual reports.

Original Commenter: David Peterson, Ph.D.

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 32 The commenter discussed the variety of target production values for hay and suggested that the facility's production value should be based on actual data from the farm. The commenter also discussed the change in product targets from hay to rotation or continuous grazing. This change affects how much phosphorus is removed. The commenter suggests that the facility submit herd size and total grazing days to use to calculate the yearly phosphorus removal. Furthermore, the commenter discusses errors in examples used by ADEQ in describing the Arkansas Phosphorus Index, conversion factor changes, acreage changes and total waste applied.
Original Commenter: David Peterson, Ph.D.

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 33 C & H Hog Farm's 2014 Annual Report Aggregate Phosphorus Index Spreadsheets show that fields 12 and 16 did receive waste applications for the period March – June 2014 (48,000 gallons on Field 12 and 56,000 gallons on Field 16.) Director Keogh stated that they had not would not receive and waste unit mapping irregularities were corrected. The facts contradict her.

Original Commenter: Marti Olesen

Response: The Department thanks the commenter for their comment. However, this comment does not address the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. Therefore, this comment is outside of the scope of the proposed modification of the NMP.

Comment 34 I hereby go on record as one who opposed the use of tanker truck(s) to distribute waste from pond #2 onto fields located anywhere in Newton County. Evidence shows that certain fields have been – and continue to be – overused for spreading of waste. I am a 5th generation Newton County resident, and I value the untold treasure we have in our water supply. Our government and state agencies who are charged with the protection of

our water supply has not proven worthy of the task when they allowed C & H to go forward with this operation. This has gone on long enough. It is time these state and government agencies stop catering to one business entity (C & H Hog Farm) and make this right for the people of Newton County and for all those who enjoy our local waterways. I heartily oppose this proposal to use tanker truck(s) to distribute waste from pond #2 onto fields located anywhere in Newton County.

Original Commenter: Thelma Pruitt
Similar comments were received from: Nancy Varvil, Thomas Maly, Micki Nelson, Diane Mitchell, Brad Barnes, Trella Laughlin, Reba Potee, Marie Wood, Arlene Howard, Cara Burrow, Cathy Ross, Joyce Murray, Annette Hurley, Dorothy Bailey, Larry Altman, Arthur F. Evans, DDS, David E. ervis, Susan Bitting, Nancy Deisch, Charlotte Morris, Nancy Garner, Vivian Hill, Jane E. Darr, Larry Olesen, Brett Michael Scott

Response: The Department thanks the commenter for their comment. However, this comment does not provide technical justification for denial of the NMP modification under consideration, which is to allow land application of wastewater from Waste Storage Pond 2 via tanker wagon. .

Comment 35 Citizens in favor of the permit and NMP modification.

The following people commented on the issue:
Bob Shofner, Mitchell McCutchen, Steven Hignight, Arkansas Farm Bureau Federation, Ryan Anglin, Susan Anglin

Response: The Department acknowledges this comment.