

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

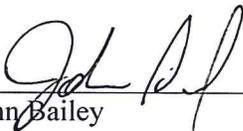
The discharge of an overflow of manure, litter, or process wastewater caused by precipitation into all receiving waters shall be in accordance with all limitations, monitoring requirements, and other conditions set forth in the Concentrated Animal feeding operations General Permit, ARG590000. Coverage 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: August 3, 2012
1st Substantial Change Effective Date: June 6, 2014
2nd Substantial Change Effective Date: May 5, 2015
Expiration Date: October 31, 2016



John Bailey
Senior Operations Manager, Office of Water Quality
Arkansas Department of Environmental Quality

3/21/16
3rd Substantial Change Date

**RESPONSE TO COMMENTS
FINAL PERMITTING DECISION**

Permit Tracking No.: ARG590001
Applicant: C & H Hog Farms, Inc.
Prepared by: Katherine McWilliams

The following are responses to comments received regarding the modification of the construction plans for Waste Storage Ponds 1 and 2 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 construction plans was submitted for public comment on July 8, 2015. The public comment period ended August 7, 2015. The Arkansas Department of Environmental Quality (hereinafter "ADEQ") conducted one (1) public hearing on the proposed modification on September 29, 2015.

Due to public interest in this facility and the narrowness of the modification, a separate document, not part of the Department's decision, is available 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 modification requested by C & H Hog Farms, Inc. (hereinafter "C & H Hog Farms") is to install synthetic liners to Waste Storage Ponds 1 and 2 as well as install a methane flare system and cover on Waste Storage Pond 1.

The following people or organizations sent comments to the ADEQ during the public comment period and public hearing. A total of 31 comments were raised by 116 separate commenters. Three (3) commenters submitted comments after the public notice period ended or not during the public hearing and are not included in the response to comments.

Commenter	# of comments raised
1. Gene Pharr	1
2. Anna Weeks	0
3. Gordon Watkins	8
4. Steven D. Hignight	1
5. Ross Lockhart	1
6. Ginny Masullo	5
7. Lin Wellford	3
8. Joe T. Stroub	1

9. James McPherson	2
10. Lolly Tindol	4
11. Susan Anglin	1
12. Linda Lewis	1
13. Judi Nail	1
14. Keith Collins	1
15. Nancy Deisch	1
16. Richard Armstrong	1
17. Kirk Lanier	5
18. Vicki Bergman Lanier	5
19. Art Hobson	5
20. Randy Bayliss	5
21. Francis Millett	5
22. Randy Clemens	5
23. Julie Clemens	5
24. Stef Bright	5
25. Melody DeVere	5
26. Joseph Chidiac	5
27. Nancy Kahanak	5
28. Carol Small	5
29. Nicholas Lawson	5
30. Katy L. Kane	5
31. Madison Hinojosa	5
32. Konrad Siemek	5
33. Marquette Bruce	5
34. Rachel McDonald	5
35. Diane L. Knight	5
36. Shawn Bennett	5
37. Barbara Jaquish	5
38. James Onellette	5
39. Matthew Lyon	5
40. Amy B. Peeples	5
41. Phyllis Head	5
42. Frank Head	5
43. Rebecca Vockroth	5
44. Theresa Wolf	5
45. Roberto Sangalli	5
46. Nan Yarnelle	5
47. Eunice Millett	5
48. Jerusha White	5
49. Patricia E. Wyatt	5
50. Jeannine Wagar	5
51. Jessica Williams	5
52. Kent Bard	5
53. Deborah Coley	5
54. Nan House	5
55. Judi Walker	5
56. Wendy Florick	5
57. Paul D. Cromwell	5
58. Patti Kent	5

59. Jeff Ingram	5
60. David Martinson	7
61. Glenda Allison	3
62. Brian A. Thompson	5
63. National Park Service	2
64. Alice B. Andrews	7
65. Stephen Farar	2
66. Diana Rose Angelo	1
67. Beth Barham	2
68. Juliana Mannon	1
69. Robert Charles Kramer	1
70. Gene Dunaway	2
71. Lucien Gilham	4
72. Patricia Studer	1
73. Luis Contreras	2
74. Don House	3
75. Pam Stewart	3
76. Terry Dabbs	1
77. Nan Johnson	4
78. Dave Spencer	4
79. Carol Bitting	5
80. Stan Taylor	1
81. Allen Moore	1
82. Paul Hinson	5
83. Fay Knox	5
84. Jan Schaper	3
85. Dan Wright	1
86. Evan A. Teague	1
87. Richard McFadden	4
88. Jane E. Darr	1
89. Susan Watkins	4
90. Marti Olesen	10
91. Frank Reuter	6
92. Mary Reuter	6
93. Laura Timby	5
94. Mike Freeze	1
95. Marjorie Palmer Hudson	5
96. Mary Michelle Trost	1
97. John Murdoch	6
98. Charles J. Bitting	14
99. Bill Pettit	3
100. Sam Cooke	4
101. R. Ellen Corley	5
102. Teresa A. Turk	3
103. Randy Veach	1
104. Marilyn Shoffit	1
105. Melinda Harmon	1
106. Bob Hotchkiss	2
107. Margaret Lonadier	2
108. Dennis Larson	2

109. Jack Stewart	6
110. Jim Westbrook	6
111. Jerry Masters	1
112. Kathy Downs	3
113. Kent Bonar	3
114. Bill Lord	1
115. Bill Cronin	4
116. Bill Dark	0

Comment 1 Liquid and solid waste must be removed from the ponds before liners can be installed. Sludge removal will inevitably disturb the existing clay liner. That clay is now permeated with solids and disturbing it may cause waste to seep through the clay and into the ground and groundwater. When the Big Creek Research and Extension team (BCRET) built their monitoring trenches they initially detected very high E. coli levels, which they attributed to soil disturbance during construction. The same may occur, but on a much larger scale, when the clay liner is disturbed. Is there precedence for retrofitting synthetic liners in existing waste storage ponds perched atop karst substrata? Have those performing the installation had experience under these conditions? Has ADEQ? Until proper measures are taken to eliminate and monitor for any groundwater contamination that may result due to construction and installation of the liners, this request should be denied.

Original Commenter: Gordon Watkins

Similar comments were received from: Ginny Masullo, Lin Wellford, Kirk Lanier, Vicki Bergman Lanier, Art Hobson, Randy Bayliss, Francis Millett, Randy Clemens, Julie Clemens, Stef Bright, Melody DeVere, Joseph Chidiac, Nancy Kahanak, Carol Small, Nicholas Lawson, Katy L. Kane, Madison Hinojosa, Konrad Siemek, Marquette Bruce, Rachel McDonald, Diane L. Knight, Shawn Bennett, Barbara Jaquish, James Onellette, Matthew Lyon, Amy B. Peeples, Phyllis Head, Frank Head, Rebecca Vockroth, Theresa Wolf, Roberto Sangalli, Nan Yarnelle, Eunice Millett, Jerusha White, Patricia E. Wyatt, Jeannine Wagar, Jessica Williams, Kent Bard, Deborah Coley, Nan House, Judi Walker, Wendy Florick, Paul D. Cromwell, Patti Kent, Jeff Ingram, Lucien Gilham, James McPherson, Pam Stewart, Nan Johnson, Dave Spencer, Carol Bitting, Fay Knox, Jan Schaper, Richard McFadden, Marjorie Palmer Hudson, Sam Cooke, Susan Watkins, Laura Timby, Teresa A. Turk, Bill Pettit, Frank Reuter, Mary Reuter, Charles J. Bitting; Don House, Jane E. Darr; Lolly Tindol, Stephen Farar, David Martinson, R. Ellen Corley, Jack Stewart, Jim Westbrook, Marti Olesen, Alice B. Andrews

Response: Limited disturbance of the existing clay liners is expected when removing solids from the waste storage ponds to prepare for installing the liners. The addition of the 60-mil HDPE liner will reduce existing seepage rates. In addition the seams of the liner will be tested in accordance with the manufacturer's specifications and APC&EC Reg. 22, and upon completion of the installation, the liner must be certified to have been installed in accordance with the approved construction plans. The liners will be installed by individuals with experience installing liners. The Big Creek Research and Extension Team (BCRET) will continue monitoring the house well and interceptor trench for parameters to determine leakage from the storage ponds as part of their study.

Comment 2 Swine waste has permeated the clay liner and residual waste could remain after surface sludge is removed. When the liners are installed over the clay which contains residual organic waste, decomposition may produce methane and other gasses. This gas

accumulation can cause the protective barrier and membrane liner to become displaced and float to the surface of the pond. Until proper measures are taken to prevent this from occurring this modification should be denied.

Original Commenter: Gordon Watkins

Similar comments were received from: Ginny Masullo, Lin Wellford, Kirk Lanier, Vicki Bergman Lanier, Art Hobson, Randy Bayliss, Francis Millett, Randy Clemens, Julie Clemens, Stef Bright, Melody DeVere, Joseph Chidiac, Nancy Kahanak, Carol Small, Nicholas Lawson, Katy L. Kane, Madison Hinojosa, Konrad Siemek, Marquette Bruce, Rachel McDonald, Diane L. Knight, Shawn Bennett, Barbara Jaquish, James Onellette, Matthew Lyon, Amy B. Peeples, Phyllis Head, Frank Head, Rebecca Vockroth, Theresa Wolf, Roberto Sangalli, Nan Yarnelle, Eunice Millett, Jerusha White, Patricia E. Wyatt, Jeannine Wagar, Jessica Williams, Kent Bard, Deborah Coley, Nan House, Judi Walker, Wendy Florick, Paul D. Cromwell, Jeff Ingram, Alice B. Andrews, Lucien Gilham, Nan Johnson, Dave Spencer, Fay Knox, Richard McFadden, Marjorie Palmer Hudson, Sam Cooke, Susan Watkins, Teresa A. Turk, Frank Reuter, Mary Reuter; Don House, Jack Stewart, Jim Westbrook, John Murdoch

Response: As much of the residual waste as possible will be removed without damaging the integrity of the existing clay liners. The HDPE liner will then be installed above the current clay liners. To prevent gas buildup between the synthetic liner and clay liner, two vents designed using either Transnet geocomposite with geonet or an equivalent product will be installed. As shown in the submitted design documents, the vents will be 2.5 feet wide and 40.5 feet apart to create a channel for gases to escape from between two liners to the atmosphere. The design plans were signed and stamped by an engineer registered in the State of Arkansas. An engineer registered in the State of Arkansas will sign and stamp the as-built plans.

Comment 3 Seam failure, punctures, mechanical damage can cause membrane liners to fail and leak. Leak detection technology is available to determine when such accidents occur. Until such technology is incorporated, this modification request should be denied.

Original Commenter: Gordon Watkins

Similar comments were received from: Ginny Masullo, Kirk Lanier, Vicki Bergman Lanier, Art Hobson, Randy Bayliss, Francis Millett, Randy Clemens, Julie Clemens, Stef Bright, Melody DeVere, Joseph Chidiac, Nancy Kahanak, Carol Small, Nicholas Lawson, Katy L. Kane, Madison Hinojosa, Konrad Siemek, Marquette Bruce, Rachel McDonald, Diane L. Knight, Shawn Bennett, Barbara Jaquish, James Onellette, Matthew Lyon, Amy B. Peeples, Phyllis Head, Frank Head, Rebecca Vockroth, Theresa Wolf, Roberto Sangalli, Nan Yarnelle, Eunice Millett, Jerusha White, Patricia E. Wyatt, Jeannine Wagar, Jessica Williams, Kent Bard, Deborah Coley, Nan House, Judi Walker, Wendy Florick, Paul D. Cromwell, Patti Kent, Jeff Ingram, Lucien Gilham, Pam Stewart, Nan Johnson, Dave Spencer, Fay Knox, Jan Schaper, Richard McFadden, Marjorie Palmer Hudson, Sam Cooke, Susan Watkins, Frank Reuter, Mary Reuter, Charles J. Bitting, David Martinson, Jack Stewart, Jim Westbrook, Kathy Downs, Alice B. Andrews, Marti Olesen, Paul Hinson, R. Ellen Corley, National Park Service, John Murdoch, Kent Bonar

Response: A geotextile base material (16 oz or greater) will be installed over the current subgrade for padding before installing the synthetic liners. This padding is to prevent

damage from stones or any other material that may result in damage to the liner. The existing clay liner will remain in place beneath the 60-mil HDPE liner. Solids removal in Waste Storage Pond 1 will be via sludge drawoff pipes to prevent damage to both the liner and cover. Solids removal in Waste Storage Pond 2 will be using agitators at locations where the 60-mil HDPE liner is reinforced.

The facility will test the liners in accordance with APC&EC Reg. 22 before operation recommences in the waste storage ponds. The liners will be installed and tested by individuals with experience installing liners. Any necessary repairs to the liner required during installation will be performed.

The design plans were signed and stamped by an engineer registered in the State of Arkansas. An engineer registered in the State of Arkansas will sign and stamp the as-built plans. A leak detection system is not required by NRCS practice standards in the State of Arkansas and will not be required as part of this modification.

Comment 4 The gas flare may impact air quality at the nearby Mt. Judea school, town and nearby residences. Until an air permit is issued to monitor and regulate discharge this modification should be denied.

Original Commenter: Gordon Watkins

Similar comments were received from: Kirk Lanier, Vicki Bergman Lanier, Art Hobson, Randy Bayliss, Francis Millett, Randy Clemens, Julie Clemens, Stef Bright, Melody DeVere, Joseph Chidiac, Nancy Kahanak, Carol Small, Nicholas Lawson, Katy L. Kane, Madison Hinojosa, Konrad Siemek, Marquette Bruce, Rachel McDonald, Diane L. Knight, Shawn Bennett, Barbara Jaquish, James Onellette, Matthew Lyon, Amy B. Peeples, Phyllis Head, Frank Head, Rebecca Vockroth, Theresa Wolf, Roberto Sangalli, Nan Yarnelle, Eunice Millett, Jerusha White, Patricia E. Wyatt, Jeannine Wagar, Jessica Williams, Kent Bard, Deborah Coley, Nan House, Judi Walker, Wendy Florick, Paul D. Cromwell, Patti Kent, Jeff Ingram, Alice B. Andrews, Diana Rose Angelo, Lucien Gilham, James McPherson, David Martinson, Glenda Allison, Pam Stewart, Nan Johnson, Dave Spencer, Carol Bitting, Fay Knox, Jan Schaper, Richard McFadden, Marjorie Palmer Hudson, Sam Cooke, R. Ellen Corley, Bill Pettit, Frank Reuter, Mary Reuter, Charles J. Bitting, Paul Hinson, Laura Timby, Lolly Tindol, John Murdoch, Kent Bonar, Marti Olesen, Don House

Response: The Department thanks the commenters for their comments. This permit does not regulate gas emissions from the flare and is outside the scope of this modification.

Comment 5 The fact remains that this facility should never have been permitted in the highly sensitive karst terrain of the Buffalo National River watershed and that numerous questions regarding C&H facility and its nutrient management plan remain unanswered by ADEQ.

Original Commenter: Gordon Watkins

Similar comments were received from: Ginny Masullo, Kirk Lanier, Vicki Bergman Lanier, Art Hobson, Randy Bayliss, Francis Millett, Randy Clemens, Julie Clemens, Stef Bright, Melody DeVere, Joseph Chidiac, Nancy Kahanak, Carol Small, Nicholas Lawson, Katy L. Kane, Madison Hinojosa, Konrad Siemek, Marquette Bruce, Rachel

McDonald, Diane L. Knight, Shawn Bennett, Barbara Jaquish, James Onellette, Matthew Lyon, Amy B. Peeples, Phyllis Head, Frank Head, Rebecca Vockroth, Theresa Wolf, Roberto Sangalli, Nan Yarnelle, Eunice Millett, Jerusha White, Patricia E. Wyatt, Jeannine Wagar, Jessica Williams, Kent Bard, Deborah Coley, Nan House, Judi Walker, Wendy Florick, Paul D. Cromwell, Patti Kent, Jeff Ingram, Fay Knox, Marjorie Palmer Hudson, Susan Watkins, Frank Reuter, Mary Reuter, Brian A. Thompson, Carol Bitting, Mary Michelle Trost, Patricia Studer, Charles J. Bitting, Lolly Tindol, Stephen Farar, Laura Timby, Linda Lewis, Nancy Deisch, Keith Collins, Juliana Mannon, Marti Olesen, Bill Cronin, Gene Dunaway

Response: The Department thanks the commenters for their comments. However, this comment does not address the modification under consideration, which is to install synthetic liners to Waste Storage Ponds 1 and 2 as well as install a methane flare system and cover on Waste Storage Pond 1.

Comment 6 CARGILL/ C&H have said repeatedly that, “the clay liners are state of the art and overbuilt.” Now that Cargill wants to install membrane liners, is there reason to suspect that the clay liners are not adequate or not performing as expected?

Original Commenter: Ginny Masullo

Similar comments were received from: Lin Wellford, Patti Kent, Gordon Watkins, David Martinson, Carol Bitting, Teresa A. Turk, R. Ellen Corley, Luis Contreras, Frank Reuter, Mary Reuter, Glenda Allison, Margaret Lonadier, Bob Hotchkiss, Charles J. Bitting, Marti Olesen, Bill Cronin, Laura Timby, Jack Stewart, Jim Westbrook, Lolly Tindol

Response: The decision to install the HDPE liners over the current clay liners in Waste Storage Ponds 1 and 2 is a voluntary measure by the facility. The modification was not required by ADEQ. The existing clay liners met NRCS’s *Agricultural Management Field Handbook* Part 651 as shown by testing performed after the construction of the clay liners was completed and before the facility began operation.

Comment 7 This is to reply to the issue of whether a permit should be given to C and H Hog Farm so they can empty to Hog Waste Lagoons to put liners in. I am very concerned with what will happen to the Hog Waste in the lagoons, I suppose it will be sprayed on more fields? I think it is a terrible idea to spray hog waste on fields to begin with and especially in the Mt. Judea area where it will end up endangering the waterways of that area, including the Buffalo River. This year has been especially wet and it seems like a disaster waiting to happen. I think the hog waste should be shipped to Cargill's headquarters so they can find a hog waste solution. This is a terrible problem and the citizens and state of Arkansas should not be the ones dealing with hog waste. It is time to empty the lagoons but not on or in our state.

Original Commenter: Judi Nail

Similar comments were received from: David Martinson, Glenda Allison, Alice B. Andrews, R. Ellen Corley, Beth Barham, Melinda Harmon, Charles J. Bitting, Bill Cronin, Marti Olesen, Bob Hotchkiss, Luis Contreras, Paul Hinson

Response: The system for waste storage includes shallow pits underneath the barns that are emptied via pull-plugs. These shallow pits allow for three (3) weeks of storage before being emptied to Waste Storage Pond 1; therefore, waste will be stored in pits while

liners are installed in Waste Storage Pond 1. Waste will be stored in Waste Storage Pond 1 as installation is occurring in Waste Storage Pond 2.

In order to empty the ponds to allow for installation of the synthetic liners, waste from the waste storage ponds will be land applied on permitted fields in accordance with the conditions and requirements of the general permit and approved Nutrient Management Plan. In order to maintain the integrity of the existing clay liners minimal soil is expected to be disturbed or removed prior to the installation of the synthetic liners. The installation of 60-mil HDPE liners will significantly reduce seepage rates. Any necessary repairs to the existing liners may be completed prior to the installation of the 60-mil HDPE liners. The facility will analyze waste removed in accordance with NPDES General Permit ARG590000 Part 4.2.1.3. In accordance with NPDES General Permit ARG590000 Part 4.2.1.6, waste shall not be land applied to soils that are saturated, frozen, covered with snow, during rain, or when precipitation is imminent (>50% chance of rain).

The BCRET will continue monitoring the impact of land application of swine waste from this facility as part of their study. Regular inspections by the Department will continue to be performed to ensure that the facility is in compliance with the conditions and requirements of the general permit and approved NMP.

Comment 8 What is the life expectancy of the liner materials including seams and anchors?

Original Commenter: David Martinson

Response: The life expectancy of the liner materials including seams and anchors is dependent on conditions that they are exposed to during storage, installation, and use.

Comment 9 What is the ongoing maintenance and surveillance program to insure proper function of the modified lagoons?

Original Commenter: David Martinson

Response: The facility must visually inspect the waste storage ponds weekly in accordance with NPDES General Permit ARG590000 Part 4.4.1.1.c. Any deficiencies found as a result of the inspections must be corrected as soon as possible in accordance with NPDES General Permit ARG590000 Part 4.4.1.3.

Comment 10 The permit was approved without sufficient communication to the public. The news of the approved permit resulted in public alarm, backlash, and distrust of all parties involved in the approval process, including ADEQ. Not only was the public surprised by this permit approval, the following agencies also expressed surprise or concern regarding its surreptitious implementation: The National Park Service, Arkansas Department of Health, U.S. Fish and Wildlife Service, and the Department of Arkansas Heritage. 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 its continued funding under the new administration is in doubt. Former Governor Beebe has expressed deep regret that this permit was ever allowed to go through.

Original Commenter: Brian A. Thompson

Similar comments were received from: Marilyn Shoffit, Bill Pettit, Beth Barham, Kathy Downs, Laura Timby, Robert Charles Kramer, Marti Olesen

Response: The Department thanks the commenters for their comments. However, this comment does not address the modification under consideration, which is to install synthetic liners to Waste Storage Ponds 1 and 2 as well as install a methane flare system and cover on Waste Storage Pond 1.

Comment 11 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. Procedures around how to manage river closures as may be needed for public safety are now being considered.

Original Commenter: Brian A. Thompson

Response: The Department thanks the commenter for their comment. However, this comment does not address the modification under consideration, which is to install synthetic liners to Waste Storage Ponds 1 and 2 as well as install a methane flare system and cover on Waste Storage Pond 1.

Comment 12 In response to a lawsuit filed by an alliance of Arkansas environmental interests, U.S. District Court Judge D.P. Marshall characterized the environmental assessments as “flawed” and “cursory” and ordered them to be redone within a year, while ordering injunctive relief on the federal loan guarantees that enabled the original capitalization of C&H.

Original Commenter: Brian A. Thompson

Response: The Department thanks the commenter for their comment. However, this comment does not address the modification under consideration, which is to install synthetic liners to Waste Storage Ponds 1 and 2 as well as install a methane flare system and cover on Waste Storage Pond 1.

Comment 13 With the installation of a synthetic liner over a clay liner, a common problem that has resulted in other installations is the buildup of water between the two impermeable barriers. This has been a particular problem in installations in Arkansas where the annual rainfall typically exceeds 50 inches per year. The proposed construction plan provides several pathways for water to encroach between liners (ie pipe penetrations and concrete structures). Encroachment could also occur if the clay liner is breached at higher levels of the ponds. The encroaching water will become trapped and reduce the effective storage volume and could stress the liner to a point of failure. All such pathways should be provided with water stops constructed with a high quality clay material.

Original Commenter: Alice B. Andrews

Response: The designs include a pipe boot around pipe penetrations to prevent leaks at these locations. The liner above and below the boot will remain in contact with the layer

of material beneath. The boot itself will consist of 60-mil HDPE liner to be consistent with the liner below and above the boot. A flexible silicone gasket material will be applied as a sealant before placing the pipe boot. Stainless steel straps or bands will be used to clamp the boot to the pipe. Extrusion welds will be used where the boot contacts the liner as well as the end of the boot on the pipe.

At concrete structures, the 60-mil HDPE liner will be laid over the concrete slabs associated with pipe penetration. In Waste Storage Pond 2, the existing concrete spillway will have 60-mil HDPE liner over the surface. Crossover pipes will be installed at the spillway from Waste Storage Pond 1 to allow effluent from Waste Storage Pond 1 to flow to Waste Storage Pond 2 without affecting the integrity of the liner in Waste Storage Pond 1.

Comment 14 The NOI states that the Nutrient Plan was modified in May 2015. The changes to the Nutrient Plan should be included for public comment.

Original Commenter: Alice B. Andrews

Response: The Department thanks the commenter for their comment. A public comment period for the changes to the Nutrient Management Plan was open from March 18, 2015 to April 17, 2015 with a public hearing held April 20, 2015. However, this comment does not address the modification under consideration, which is to install synthetic liners to Waste Storage Ponds 1 and 2 as well as install a methane flare system and cover on Waste Storage Pond 1.

Comment 15 Because they should be considered a hazardous waste, where will the contaminated soils be taken and by whom? Please show who is doing that work and their qualifications. If the soils are not considered hazardous waste, please provide documentation on how that determination was made and the qualifications on who and how that determination was made.

Original Commenter: Paul Hinson

Response: The Department thanks the commenter for their comment. Animal waste is not considered a hazardous waste in accordance with APC&EC Regulation 23 §261.4(b)(2). Waste will be removed from the waste storage ponds and land applied on permitted fields in accordance with NPDES General Permit ARG590000 and the approved NMP.

Comment 16 Verification thru taking water samples before, during and after work in suitable locations to make sure the processes have not negatively impacted the water quality. If temporary wells are to be installed, please pinpoint their locations, depth and other details and methodology of selected locations. Please identify the qualifications of those taking samples. Please provide the sampling frequency and locations of where the samples are to be taken. Please provide the sample testing results for review.

Original Commenter: Paul Hinson

Similar comments were received from: John Murdoch

Response: Groundwater monitoring is not required for CAFO operations in the State of Arkansas; therefore, no temporary or permanent wells will be installed as part of the

requested modification. The BCRET is sampling an interceptor trench and the house well as part of their independent study.

Comment 17 We are concerned about this facility and others, in addition to non-point source pollution of the tributaries to the Buffalo River. We have not seen an Antidegradation Review, as may be required under 40 CFR 131.12(a)(2) for this facility. We respectfully request that this information regarding the Antidegradation Review for this facility so we may understand if it meets the requirements set forth in the federal regulation implementing the Clean Water Act.

Original Commenter: National Park Service
Similar comments were received from: Charles J. Bitting

Response: The Department thanks the commenters for their comments. However, this comment does not address the modification under consideration, which is to install synthetic liners to Waste Storage Ponds 1 and 2 as well as install a methane flare system and cover on Waste Storage Pond 1.

Comment 18 There does not appear to be any discussion of using a bond to ensure that if pollution of the Waters of the State occurs as part of this operation that cleanup will be paid for. This needs to be considered an important part of the overall operation.

Original Commenter: Charles J. Bitting

Response: The Department thanks the commenter for their comment. There are currently no statutory requirements, and it is not ADEQ's policy to require financial assurance for CAFOs. However, this comment does not address the modification under consideration, which is to install synthetic liners to Waste Storage Ponds 1 and 2 as well as install a methane flare system and cover on Waste Storage Pond 1.

Comment 19 Will engineers with ADEQ be on site daily to inspect the work being done? This seems like a reasonable measure to ensure ADEQ is doing its upmost to protect the water quality of the Buffalo River for Arkansans, and all Americans, since a huge portion of your budget comes from the US Government, and the Buffalo River is a national resource.

Original Commenter: Charles J. Bitting
Similar comments were received from: Dennis Larson

Response: ADEQ policy does not require personnel associated with the Department to be onsite during construction. Personnel may be present at the site to observe during the process of installing the liners. A professional engineer, registered in the State of Arkansas, is required to sign and stamp the as-built plans.

Comment 20 Notice of CH transferring waste slurry by a tanker truck to a certified application place that is not specified on C&H permitted places should be put on your website should it occur.

Original Commenter: Dennis Larson

Similar comments were received from: Bill Cronin

Response: NPDES General Permit ARG590000 Part 3.2.3 allows for transfer of manure to other persons. The facility must provide to the recipient of the manure the most current nutrient analysis that is consistent with the requirements of 40 CFR 412. The facility must retain records for five years with the date of transfer, name and address of recipient, and approximate amount of manure transferred. The recipient(s) must be permitted to receive swine waste from other sources, which includes a public notification process outlined in APC&EC's Regulation 5 and Regulation 8.

Comment 21 This liner will still not address the fact that soil phosphorus levels will eventually be too high on land applied fields. What happens then?

Original Commenter: Margaret Lonadier

Response: The Department thanks the commenter for their comment. However, this comment does not address the modification under consideration, which is to install synthetic liners to Waste Storage Ponds 1 and 2 as well as install a methane flare system and cover on Waste Storage Pond 1.

Comment 22 USDA experts at the recent water conference at the U of A brought up the problems with the phosphorus index and especially the fact that it can't be accurately measured without adding a topographical component. Even now the SWAT Topo instrument is being developed by Agri researchers to try to correct for this acute problem in measuring phosphorus pollution. If our measuring tools for particulates are unreliable, perhaps ADEQ needs to look at multiple factors such as algal blooms and macroinvertebrate indices when determining water quality.

Original Commenter: Marti Olesen

Response: The Department thanks the commenter for their comment. However, this comment does not address the modification under consideration, which is to install synthetic liners to Waste Storage Ponds 1 and 2 as well as install a methane flare system and cover on Waste Storage Pond 1.

Comment 23 This appears to be another request to modify this "state-of-the-art" facility. This system might provide a reduction in some gas emissions, but it does not address the emission of exhaust gasses and particulate matter from the large exhaust fans of the two industrial swine buildings, nor does it address the issues of the fate of those bi-products concerning the health of the residents and nearby school through the risk pathway of inhalation. I feel there are already serious airborne health issues that are not being monitored. The design appears to lack any air quality monitoring. Potential health risk to the people of all ages that are impacted by this hog factory is ongoing. So adding additional "unknown" emission(s) is only another weak link in this "state-of-the-art-make-it-up-as-you-go facility".

Original Commenter: John Murdoch

Similar comments were received from: Carol Bitting, Charles J. Bitting

Response: The Department thanks the commenters for their comments. However, this comment does not address the modification under consideration, which is to install synthetic liners to Waste Storage Ponds 1 and 2 as well as install a methane flare system and cover on Waste Storage Pond 1.

Comment 24 The commenters submitted oral and written comments of behalf of Tom Aley regarding the proposed modifications. Mr. Aley recommended that liner installation commence after all waste is removed from the pond and the pond is dry. Secondly, he recommended that the emptied ponds be inspected by a qualified person, preferably an experience geologist licensed in Arkansas for evidence of subsidence or small collapses on the floors and sides. Thirdly, he recommended that sediments on floors and sides be properly compacted prior to installation of the liner and underlying cushion materials. Fourthly, all tears or other damage to the liners be repaired before liners are placed in service. Lastly, after liner installation, the ponds should be filled with water or manure to prevent any portion of liner from floating on any water that builds up between the top of the compacted sediments and liners to prevent damage from unequal stresses on the liners. Mr. Aley discussed his qualifications and professional work in karst areas.

Original Commenters: Marti Olesen and Gordon Watkins
Similar comments were received from: Charles J. Bitting

Response: The Department acknowledges the recommendations. The Department acknowledges the recommendation that a professional geologist with experience in and knowledge of karst be present to inspect the ponds after waste is removed and the ponds have dried for evidence of subsidence or small collapses. Installation of the 60-mil HDPE liner will not begin until the waste storage pond is dry. If compaction of sides and floors is necessary, it will be performed before liner installation begins. Any repairs required by the synthetic liner will occur before the operations in the waste storage pond commence. The installation will be performed by individuals with experience installing liners. A Professional Engineer registered in the State of Arkansas must sign and stamp that the liners were installed in accordance with the approved plans and specifications.

Comment 25 The commenters on behalf of Mr. Tom Aley included comments submitted for the draft Environmental Assessment to be included in the public record for the proposed modifications.

Original Commenters: Marti Olesen and Gordon Watkins

Response: The Department acknowledges the comment; however, the draft Environmental Assessment is not prepared by the Department. The addition of the liners is a voluntary measure by the facility and is not a requirement by the Department for liquid animal waste storage ponds.

Comment 26 The commenters submitted oral and written comment on behalf of the Buffalo River Watershed Alliance. The submitted comment included a list of concerns regarding the location and operation of the facility and its negative impact. The facility is located on an area of karst, which is characterized by rapid groundwater flow and interactions between surface and ground water. Adding polyethylene liners will not stop seepage. The current permit allows for up to 5,000 gal/acre per day leakage of waste from the ponds, which

could be funneled directly to the river. The original borings prior to pond construction to ascertain geotechnical soil properties for construction is thoroughly inadequate to delineate karst features. The subsurface investigations and on-site materials used for liners originally may be adequate for a minor facility in an area where values of off-site resources are minimal, but they are not adequate in view of the potential to adversely impact the waters of the Buffalo National River. Electrical Resistivity Tomography tests revealed epikarst features on spray fields. No geophysical studies or related investigations were conducted to delineate any karst features, subsidence, and/or sinkholes under the waste lagoons. Both ponds are situated on the side of a steep slope. The second pond has no stabilized emergency outlet. If the ponds were to overtop, there would be a danger of catastrophic failure of the embankment, which could release as much as 2 million gallons of waste into the Buffalo River. In high risk areas, it is standard practice to include a stabilized outlet to allow discharge without failure of the embankment. In light of expected climate instability, the 25-year, 24-hour storm that the ponds are designed to withstand is projected to occur more frequently with a similar increase in higher storm events.

Original Commenters: Jack Stewart and Jim Westbrook

Similar comments were received from: Kathy Downs, Brian A. Thompson, John Murdoch, Charles J. Bitting

Response: The Department thanks the commenters for their comments. The addition of liners will reduce seepage rates. However, this comment does not further address the modification under consideration, which is to install synthetic liners to Waste Storage Ponds 1 and 2 as well as install a methane flare system and cover on Waste Storage Pond 1.

Comment 27 The proposed modification does not address odor from land application of waste, which is the major source of air emissions associated with CAFOs. The odors and air pollutants emitted by CAFOs have negative effects on the health and wellbeing of surrounding communities.

Original Commenters: Jack Stewart and Jim Westbrook

Similar comments were received from: Charles J. Bitting

Response: The Department thanks the commenter for their comments. ADEQ Water Division does not regulate air quality concerns. This comment is outside the scope of the permit.

Comment 28 The commenter summarized the numerous species and the threat that a flare could have on the biota. Bats, birds and insects can be burned if flying near or over the flare when it is in operation. Songbirds may suffer from temporary blindness due to the sudden light of the flare in low levels of ambient light, such as foggy conditions, and fly into structures. The location of the flare and farm is positioned such that it is in the flyway of numerous species. If one species is negatively affected, it can affect the stability of the biota.

Original Commenter: Kent Bonar

Response: The Department acknowledges the position of the commenter; however, the Water Division of ADEQ does not have the authority to regulate the operation of the methane flare. Any recommendations provided by the U.S. Fish and Wildlife Service will be taken under consideration.

Comment 29 The waste storage ponds are not properly designed for synthetic liner installation. Flat bottom ponds cause bubbles to form when the liner starts to leak, and the liners will leak at some point.

Original Commenter: Charles J. Bitting

Response: The liners were designed and stamped by a professional engineer, registered in the State of Arkansas. Repairs to the liners will be performed as necessary to ensure that the liners are properly functioning, including repairing liners if bubbles occur due to water or wastewater underneath the liner. Vents are included in the design to prevent the gas buildup between the synthetic liner and the existing clay liner, which can also cause bubbles.

Comment 30 Everybody generates waste of some sort. The responsibility that we have is to see that the waste does not affect the environment in the long run. Cities collect their waste and treat it. Facilities in the solid waste industry have to collect their water and treat it to drinking water standards. There are laws and standards to release that water that meets drinking water standards. Why does this industry, a point source pollutant, not have to treat water to drinking water standards? The technology is there. All industries of that type should have to meet those drinking water standards.

Original Commenter: Bill Lord

Similar comments were received from: Gene Dunaway

Response: The Department thanks the commenter for their comment. However, this comment does not address the modification under consideration, which is to install synthetic liners to Waste Storage Ponds 1 and 2 as well as install a methane flare system and cover on Waste Storage Pond 1.

Comment 31 Citizens in favor of the permit and modification.

The following people commented on the issue: Gene Pharr, Steven D. Hignight, Ross Lockhart, Joe T. Stroub, Susan Anglin, Richard Armstrong, Terry Dabbs, Stan Taylor, Allen Moore, Dan Wright, Evan A. Teague, Mike Freeze, Randy Veach, Jerry Masters

Response: The Department acknowledges this comment.

In accordance with the provisions of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 *et seq.*), and the Clean Water Act (33 U.S.C. § 1251 *et seq.*),

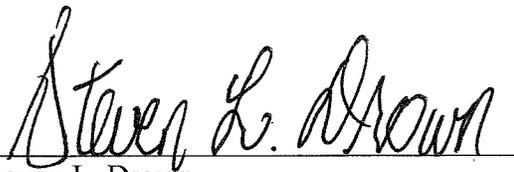
Eligible Operators of Concentrated Animal Feeding Operations (CAFOs) located within the State of Arkansas

are authorized to discharge whenever precipitation causes an overflow of manure, litter, or process wastewater into all receiving waters, except those facilities which are excluded in Part 1.4 of this general permit, in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts 1 through 10.

After properly filing a Notice of Intent (NOI) and other required documentation under Part 1.5 and proceeding through required public notification processes, facilities that are eligible for coverage under this general permit, will receive a Notice of Coverage (NOC) letter, with a tracking number starting with ARG59, and a copy of the permit for the facility. A copy of the facility's Nutrient Management Plan (NMP) will be included with the coverage letter and incorporated into this general permit as an enforceable permit condition. If site specific permit terms have been required by the Director, these terms will be included with the NOC letter as an enforceable permit condition. Not following terms of the NMP or site specific permit terms is a violation of this permit. The NOC letter includes the Department's determination that a facility is covered under this general permit.

Effective Date: November 1, 2011

Expiration Date: October 31, 2016



Steven L. Drown
Chief, Water Division
Arkansas Department of Environmental Quality



Issue Date

TABLE OF CONTENTS

Part	Title	Page
1	Permit Area and Coverage	1
2	Effluent Limitations and Standards	5
3	Nutrient Management Plans (NMP) and Annual Reporting Requirements	8
4	Special Conditions for Subparts C & D	14
5	NOI and NMP Review & Public Notification Process	18
6	General Conditions	19
7	Operation and Maintenance of Pollution Controls	22
8	Monitoring and Records	24
9	Reporting Requirements	26
10	Definitions	30

PART 1 PERMIT AREA AND COVERAGE

1.1 Permit Area

This permit applies to operations defined as Concentrated Animal Feeding Operations (CAFOs) that discharge and are located in the State of Arkansas.

1.2 Permit Coverage

This permit covers any operation that meets the definition of a CAFO and discharges pollutants to waters of the state. Once an operation is defined as a CAFO, the NPDES requirements for CAFOs apply with respect to all animals in confinement at the operation and all manure, litter and process wastewater generated by those animals or the production of those animals, regardless of the type of animal.

1.3 Eligibility for Coverage

Unless excluded from coverage in accordance with Part 1.4 below, operators of existing, currently operating animal feeding operations or proposed animal feeding operations that are defined as CAFOs or designated as CAFOs by the Director as defined in Part 10 and that are subject to 40 CFR Part 412, Subparts A (Horses and Sheep), C (Dairy Cows and Cattle Other than Veal Calves) and D (Swine, Poultry and Veal Calves) are eligible for coverage under this permit. As defined in Part 10.9 of this general permit, a CAFO is any one of the following:

1. A large concentrated animal feeding operation,
2. A medium concentrated animal feeding operation, or
3. An animal feeding operation that is designated as a CAFO.

In addition, two or more animal feeding operations under common ownership are considered a single animal feeding operation if they adjoin each other or if they use a common area or system for the disposal of wastes.

1.4 Limitations on Coverage (Exclusion)

The following CAFOs are not eligible for coverage under this NPDES general permit, but must apply for an individual permit or other general permit as applicable:

- 1.4.1 CAFOs that have been notified by ADEQ to apply for an individual NPDES permit in accordance with Part 1.6 of this permit.
- 1.4.2 CAFOs housing ducks as defined in 40 CFR 412 under Subpart B – Ducks.
- 1.4.3 CAFOs requesting voluntary performance standards under 40 CFR 412.31(a)(2).
- 1.4.4 CAFOs that have been notified by ADEQ that they are ineligible for coverage because of a past history of repeated non-compliance of permit requirements.
- 1.4.5 Dischargers to water quality impaired water (The latest Arkansas 303(d) list) unless the operator:
 - 1.4.5.1 prevents any discharge that contains pollutant(s) for which the waterbody is impaired, and includes documentation of procedures taken to prevent such discharge in the Nutrient Management Plan (NMP); or

- 1.4.5.2 documents that the pollutant(s) for which the waterbody is impaired is not present at the facility, and retains documentation of this finding with the NMP; or
- 1.4.5.3 in advance of submitting the NOI, provides to ADEQ data to support a showing that the discharge is not expected to cause or contribute to an exceedance of a water quality standard, and retains such data onsite with the NMP. To do this, the operator must provide data and other technical information to ADEQ sufficient to demonstrate:
 - a For discharges to waters without an ADEQ approved or established TMDL, that the discharge of the pollutant for which the water is impaired will meet in-stream water quality criteria at the point of discharge to the waterbody; or
 - b For discharges to waters with an ADEQ approved or established TMDL, that there are sufficient remaining wasteload allocations in an ADEQ approved or established TMDL to allow the facility's discharge and that existing dischargers to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with water quality standards.Operators are eligible under this section if they receive an affirmative determination from ADEQ that the discharge will not contribute to the existing impairment, in which case the operator must maintain such determination onsite with the NMP.
- 1.4.6 CAFOs which the Department reasonably believes cannot meet applicable federal effluent limitation guidelines or other conditions of this general permit.

1.5 Application for Coverage

1.5.1 Operators of CAFOs seeking to be covered by this permit must:

- 1.5.1.1 Submit an NOI. This form is available on the ADEQ website http://www.adeg.state.ar.us/water/branch_permits/general_permits/default.htm
- 1.5.1.2 Submit a nutrient management plan (NMP) with the NOI that meets the requirements of 40 CFR 122 and 412 and have been developed in accordance with Arkansas Natural Resource Conservation Service Practice Standard Code 590 (Nutrient Management), including the Arkansas Phosphorous Index, 2010 Revision.
- 1.5.1.3 Submit an ADEQ Disclosure Statement in accordance with the Arkansas Pollution Control & Ecology Commission's (APCEC) Regulation No. 8.
- 1.5.1.4 Submit permit fees (\$200) upon invoicing, after the initial permit and annually thereafter.
- 1.5.1.5 Submit an ADEQ Form 1 and plans and specifications that stamped by Professional Engineer in Arkansas for construction of pond(s).

1.5.2 Where to Submit

CAFOs must submit signed copies of the NOI, NMP and Disclosure Statement (and ADEQ Form 1, if applicable) by mail to:

Arkansas Department of Environmental Quality
General Permits Branch – Water Division
5301 Northshore Drive
North Little Rock, AR 72118

Or by electronic mail (Complete documents must be submitted in PDF format) to:

Water-permit-application@adeq.state.ar.us

1.6 Requiring an Individual Permit

- 1.6.1 ADEQ may at any time require any facility authorized by this permit to apply for, and obtain, an individual NPDES permit. ADEQ will notify the operator, in writing, that an application for an individual permit is required and will set a time for submission of the application. Coverage of the facility under this general NPDES permit is automatically terminated when: (1) the operator fails to submit the required individual NPDES permit application within the defined time frame; or (2) the individual NPDES permit is issued by ADEQ.
- 1.6.2 Any operator covered under this general permit may request to be excluded from the coverage of this permit by applying for an individual permit. The operator shall submit an application for an individual permit (ADEQ Form 1, Disclosure Form, and Form 2B) with the reasons supporting the application to ADEQ. If a final, individual NPDES permit is issued to an operator otherwise subject to this general permit, the applicability of this NPDES CAFO general permit to the facility is automatically terminated on the effective date of the individual NPDES permit. Otherwise, the applicability of this general permit to the facility remains in full force and effect (for example, if an individual NPDES permit is denied to an operator otherwise subject to this general permit).

1.7 Continuation of this Permit

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with 40 CFR 122.6 and remain in force and effect. If you were authorized to discharge under this permit prior to the expiration date, any discharges authorized under this permit will automatically remain covered by this permit until the earliest of:

- 1.7.1 Your authorization for coverage under a reissued permit or a replacement of this permit following your timely and appropriate submittal of a complete NOI requesting authorization to discharge under the new permit and compliance with the requirements of the new permit; or
- 1.7.2 A formal decision by ADEQ to grant the permittee's request for termination of permit coverage; or
- 1.7.3 Issuance or denial of an individual permit for the facility's discharges; or
- 1.7.4 A formal permit decision by ADEQ not to reissue this general permit, at which time ADEQ will identify a reasonable time period for covered dischargers to seek coverage under an alternative general permit or an individual permit. Coverage under this permit will cease at the end of this time period.
- 1.7.5 The permit will be voided upon failure to pay annual permit fee.

1.8 Change in Ownership

If a change in the ownership of a facility whose discharge is authorized under this permit occurs, a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittees must be submitted to ADEQ at the address specified in Part 1.5.6. The new owner must submit an ADEQ Disclosure Statement with the transfer request on an ADEQ Transfer Form. ADEQ will notify the new permittee if the transfer of permit coverage is granted.

Until the disclosure statement and transfer request are submitted and accepted by ADEQ, the current permittee shall remain liable for all permit fees and meeting permit requirements, even if the current permittee no longer owns the facility.

1.9 **Closure Plan Required**

Should a permitted concentrated animal feeding operation cease operation, the permittee shall submit to the Department a closure plan for the liquid waste system storage/treatment structure(s) within sixty (60) days of the final day of operation for Department review and approval. Within ten (10) days of completion of closure activities, the permittee must submit certification that the facility was closed in accordance with the approved plan. The closure plan and closure certification shall be prepared by the USDA Natural Resource Conservation Service addressing the closure of facilities in accordance with Arkansas NRCS Conservation Practice Standard Code 360 (Closure of Waste Impoundments), an Arkansas Natural Resources Commission water quality technician, the University of Arkansas Cooperative Extension Service or a professional engineer registered in the State of Arkansas.

PART 2
EFFLUENT LIMITATIONS AND STANDARDS

2.1 Effluent Limitations and Standards for Subpart A – Horses and Sheep

2.1.1 Effluent Limitations

2.1.1.1. Except when the provisions of Part 2.1.1.2 apply, there shall be no discharge of process wastewater pollutants into Waters of the State.

2.1.1.2. Whenever rainfall events cause an overflow of process wastewater from a facility designed, constructed, operated, and maintained to contain all process-generated wastewaters plus the runoff from a 25-year, 24-hour rainfall event at the location of the point source, any process wastewater pollutants in the overflow may be discharged into Waters of the State. Samples must be collected as specified in Part 2.3 of this general permit.

2.2 Effluent Limitations and Standards for Subpart C (Dairy Cows and Cattle Other Than Veal Calves) and Subpart D (Swine, Poultry And Veal Calves)

2.2.1 Production areas:

2.2.1.1. There must be no discharge of manure, litter, or process wastewater pollutants into Waters of the State from the production area except;

2.2.1.2. All CAFOs subject to 40 CFR 412 Subpart C and existing sources subject to 40 CFR 412 Subpart D: whenever precipitation causes an overflow of manure, litter, or process wastewater, pollutants in the overflow may be discharged into Waters of the State provided:

- a The production area is designed, constructed, operated and maintained to contain all manure, litter, and process wastewater including the runoff and the direct precipitation from a 25-year, 24hour rainfall event;
- b Samples are collected as specified in Part 2.3 of this general permit;
- c The production area is operated in accordance with the additional measures and records as specified in Part 4.4 of this permit.

2.2.2 Land application areas: Discharges from land application areas are subject to the following requirements:

2.2.2.1. Develop and implement the Best Management Practices (BMP) specified in Parts 4.1 and 4.2 of this permit;

2.2.2.2 Maintain-all records needed to document compliance with Part 4.5 of this permit ;

2.2.2.3. There shall be no discharge of manure, litter, or process wastewater to a water of the State from a CAFO as a result of the application of manure, litter or process wastewater to land areas under the control of the CAFO, except where it is an agricultural storm water discharge.”

2.3 Sampling and Monitoring Requirements for All Discharges from Retention Structures

In the event of any overflow or other discharge of pollutants from a manure or wastewater storage or retention structure, whether or not authorized by this permit, the following actions shall be taken.

2.3.1 All discharges to waters of the state shall be sampled and analyzed for the following parameters

Parameters	Limits	Sample Frequency	Sample Type
Flow Volume (GPD)	Report	Once per discharge event	Estimate
Flow Date	Report	N/A	N/A
Flow Time	Report	N/A	N/A
Biochemical oxygen demand (BOD5)	Report	Once per discharge event	Grab
Total suspended solids (TSS)	Report	Once per discharge event	Grab
Fecal Coliform bacteria (FCB)	Report	Once per discharge event	Grab
Total phosphorus (TP)	Report	Once per discharge event	Grab
Ammonia nitrogen (NH3-N)	Report	Once per discharge event	Grab
Total nitrogen (TN)	Report	Once per discharge event	Grab
Nitrate nitrogen (NO3)	Report	Once per discharge event	Grab
pH	Report	Once per discharge event	Grab

2.3.2 The sample shall be collected and analyzed in accordance with EPA approved methods for water analysis listed in 40 CFR 136. Samples collected shall be representative of the monitored discharge.

2.3.3 If conditions are not safe for sampling, the permittee must provide documentation of why samples could not be collected and analyzed. For example, the permittee may be unable to collect samples during dangerous weather conditions (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.). However, once dangerous conditions have passed, the permittee shall collect a sample from the retention structure (pond or lagoon) from which the discharge occurred.

2.3.4 Monitoring results must be submitted to ADEQ Water Enforcement Division, within thirty (30) days of the discharge event at the address listed in Part 8.4 of this permit.

2.4 New source performance standards (NSPS) for Subpart D (Swine, Poultry and Veal Calves)

Any new source subject to this subpart must achieve the following effluent limitations representing the application of NSPS. Land application requirements for new source CAFOs subject to Subpart D are identical to those of Part 2.2.2.

2.4.1 Any CAFO subject to this subpart may request that the Director establish NPDES permit best management practice effluent limitations designed to ensure no discharge of manure, litter, or process wastewater based upon a site-specific evaluation of the CAFO's open surface manure storage structure. The NPDES permit best management practice (BMP) effluent limitations must address the CAFO's entire production area. In the case of any CAFO using an open surface manure storage structure for which the Director establishes such effluent limitations, "no discharge of

manure, litter, or process wastewater pollutants,” as used in this section, means that the storage structure is designed, operated, and maintained in accordance with best management practices established by the Director on a site-specific basis after a technical evaluation of the storage structure. The technical evaluation must address the following elements:

- 2.4.1.1. Information to be used in the design of the open manure storage structure including, but not limited to, the following: minimum storage periods for rainy seasons, additional minimum capacity for chronic rainfalls, applicable technical standards that prohibit or otherwise limit land application to frozen, saturated, or snow-covered ground, planned emptying and dewatering schedules consistent with the CAFO’s Nutrient Management Plan, additional storage capacity for manure intended to be transferred to another recipient at a later time, and any other factors that would affect the sizing of the open manure storage structure.
- 2.4.1.2. The design of the open manure storage structure as determined by the most recent version of the National Resource Conservation Service’s Animal Waste Management (AWM) software. CAFOs may use equivalent design software or procedures as approved by the Director.
- 2.4.1.3. All inputs used in the open manure storage structure design including actual climate data for the previous 30 years consisting of historical average monthly precipitation and evaporation values, the number and types of animals, anticipated animal sizes or weights, any added water and bedding, any other process wastewater, and the size and condition of outside areas exposed to rainfall and contributing runoff to the open manure storage structure.
- 2.4.1.4. The planned minimum period of storage in months including, but not limited to, the factors for designing an open manure storage structure listed in part 2.4.1.1. of this section. Alternatively the CAFO may determine the minimum period of storage by specifying times the storage pond will be emptied consistent with the CAFO’s Nutrient Management Plan.
- 2.4.1.5. Site-specific predicted design specifications including dimensions of the storage facility, daily manure and wastewater additions, the size and characteristics of the land application areas, and the total calculated storage period in months.
- 2.4.1.6. An evaluation of the adequacy of the designed manure storage structure using the most recent version of the Soil Plant Air Water (SPAW) Hydrology Tool. The evaluation must include all inputs to SPAW including but not limited to daily precipitation, temperature, and evaporation data for the previous 100 years, user-specified soil profiles representative of the CAFO’s land application areas, planned crop rotations consistent with the CAFO’s Nutrient Management Plan, and the final modeled result of no overflows from the designed open manure storage structure. For those CAFOs where 100 years of local weather data for the CAFO’s location is not available, CAFOs may use a simulation with a confidence interval analysis conducted over a period of 100 years. The Director may approve equivalent evaluation and simulation procedures.
- 2.4.1.7. Waste management and storage facilities designed, constructed, operated, and maintained consistent with the analysis conducted in Parts 2.4.1.1 through 2.4.1.6 of this section and operated in accordance with the additional measures and records required by Part 4.4 of this permit, will fulfill the requirements of this section.
- 2.4.1.8. The Director has the discretion to request additional information to support a request for effluent limitations based on a site-specific open surface manure storage structure.

PART 3
NUTRIENT MANAGEMENT PLANS (NMP) AND ANNUAL REPORTING REQUIREMENTS

3.1 APPLICABILITY

Any CAFO with permit coverage under this general permit shall develop and implement a site-specific nutrient management plan (NMP). The NMP must be in compliance with 40 CFR 122 and 412 and developed in accordance with the Arkansas NRCS Conservation Service Practice Standard Code 590 (Nutrient Management), including the Arkansas Phosphorus Index, 2010 Revision.”

3.2 NUTRIENT MANAGEMENT PLAN CONTENTS

3.2.1 Requirement to implement a nutrient management plan.

All CAFOs covered under this general permit must implement the site-specific nutrient management plan that, at a minimum, contains practices and procedures necessary to implement the applicable effluent limitations and standards. In addition, the NMP must, as applicable:

- 3.2.1.1 Ensure adequate storage of manure, litter, and process wastewater, including procedures to ensure proper operation and maintenance of the storage facilities;
- 3.2.1.2 Ensure proper management of mortalities (i.e., dead animals) to ensure that they are not disposed of in a liquid manure, stormwater, or process wastewater storage or treatment system that is not specifically designed to treat animal mortalities;
- 3.2.1.3 Ensure that clean water is diverted, as appropriate, from the production area;
- 3.2.1.4 Prevent direct contact of confined animals with waters of the State;
- 3.2.1.5 Ensure that chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or stormwater storage or treatment system unless specifically designed to treat such chemicals and other contaminants;
- 3.2.1.6 Identify appropriate site specific conservation practices to be implemented, including as appropriate setback, buffers or equivalent practices, to control runoff of pollutants to waters of the State;
- 3.2.1.7 Identify protocols for appropriate testing of manure, litter, process wastewater, and soil;
- 3.2.1.8 Establish protocols to land apply manure, litter or process wastewater in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater; and
- 3.2.1.9 Identify specific records that will be maintained to document the implementation and management of the minimum elements described in parts 3.2.1.1 to 3.2.1.8 of this section.

3.2.2. Recordkeeping requirements

3.2.2.1 The permittee must create, maintain for five years, and make available to the Director, upon request, the following records:

- a All applicable records identified pursuant part 3.2.1.9 above
- b All CAFOs must comply with record keeping requirements as specified in Parts 4.4.2. , 4.5., and 8.6 of this permit.

- 3.2.2.2 A copy of the CAFO's site-specific nutrient management plan must be maintained on site and made available to the Director upon request.
- 3.2.3 **Requirements relating to transfer of manure or process wastewater to other persons.** Prior to transferring manure, litter or process wastewater to other persons, Large CAFOs must provide the recipient of the manure, litter or process wastewater with the most current nutrient analysis. The analysis provided must be consistent with the requirements of 40 CFR 412. Large CAFOs must retain for five years records of the date, recipient name and address, and approximate amount of manure, litter or process wastewater transferred to another person.
- 3.2.4 **Annual reporting requirements for CAFOs.** The permittee must submit an annual report to the Director. The annual report all reports are due by the 31st day of January each year for the previous January – December reporting period (i.e. January 31, 2012 for Year 2011). The first report may include less than the 12 months of information and must include:
- 3.2.4.1 The number and type of animals, whether in open confinement or housed under roof (beef cattle, broilers, layers, swine weighing 55 pounds or more, swine weighing less than 55 pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, ducks, turkeys, other);
 - 3.2.4.2 Estimated amount of total manure, litter and process wastewater generated by the CAFO in the previous 12 months (tons/gallons);
 - 3.2.4.3 Estimated amount of total manure, litter and process wastewater transferred to other person by the CAFO in the previous 12 months (tons/gallons);
 - 3.2.4.4 Total number of acres available for land application covered by the nutrient management plan developed in accordance with Part 3 of the permit;
 - 3.2.4.5 Total number of acres under control of the CAFO that were used for land application of manure, litter and process wastewater in the previous 12 months;
 - 3.2.4.6 Summary of all manure, litter and process wastewater discharges from the production area that have occurred in the previous 12 months, including date, time, and approximate volume;
 - 3.2.4.7 A statement indicating whether the current version of the CAFO's nutrient management plan was developed or approved by a certified nutrient management planner; and
 - 3.2.4.8 The actual crop(s) planted and actual yield(s) for each field, the actual nitrogen and phosphorus content of the manure, litter, and process wastewater, the results of calculations conducted in accordance with Parts 3.2.5.1.b and 3.2.5.2.d of this section, and the amount of manure, litter, and process wastewater applied to each field during the previous 12 months; and, for any CAFO that implements a nutrient management plan that addresses rates of application in accordance with Part 3.2.5.2 of this section, the results of any soil testing for nitrogen and phosphorus taken during the preceding 12 months, the data used in calculations conducted in accordance with Part 3.2.5.2.d of this section, and the amount of any supplemental fertilizer applied during the previous 12 months.
- 3.2.5 **Terms of the nutrient management plan.** Any permit issued to a CAFO must require compliance with the terms of the CAFO's site-specific nutrient management plan. The terms of the nutrient management plan are the information, protocols, best management practices, and other conditions in the nutrient management plan determined by the Director to be necessary to meet the requirements of Part 3.2.1 of this section. The terms of the nutrient management plan, with respect to protocols for land application of manure, litter, or process wastewater required by Part 3.2.1.8 of this section and, as applicable, 40 CFR 412.4(c), must

include the fields available for land application; field-specific rates of application properly developed, as specified in Parts 3.2.5.1 through 3.2.5.2 of this section, to ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater; and any timing limitations identified in the nutrient management plan concerning land application on the fields available for land application. The terms must address rates of application using one of the following two approaches, unless the Director specifies that only one of these approaches may be used:

3.2.5.1 **Linear approach.** An approach that expresses rates of application as pounds of nitrogen and phosphorus, according to the following specifications:

- a The terms include maximum application rates from manure, litter, and process wastewater for each year of permit coverage, for each crop identified in the nutrient management plan, in chemical forms determined to be acceptable to the Director, in pounds per acre, per year, for each field to be used for land application, and certain factors necessary to determine such rates. At a minimum, the factors that are terms must include: the outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport from each field; the crops to be planted in each field or any other uses of a field such as pasture or fallow fields; the realistic yield goal for each crop or use identified for each field; the nitrogen and phosphorus recommendations from sources specified by the Director for each crop or use identified for each field; credits for all nitrogen in the field that will be plant available; consideration of multi-year phosphorus application; and accounting for all other additions of plant available nitrogen and phosphorus to the field. In addition, the terms include the form and source of manure, litter, and process wastewater to be land-applied; the timing and method of land application; and the methodology by which the nutrient management plan accounts for the amount of nitrogen and phosphorus in the manure, litter, and process wastewater to be applied.
- b Large CAFOs that use this approach must calculate the maximum amount of manure, litter, and process wastewater to be land applied at least once each year using the results of the most recent representative manure, litter, and process wastewater tests for nitrogen and phosphorus taken within 12 months of the date of land application; or

3.2.5.2 **Narrative rate approach.** An approach that expresses rates of application as a narrative rate of application that results in the amount, in tons or gallons, of manure, litter, and process wastewater to be land applied, according to the following specifications:

- a The terms include maximum amounts of nitrogen and phosphorus derived from all sources of nutrients, for each crop identified in the nutrient management plan, in chemical forms determined to be acceptable to the Director, in pounds per acre, for each field, and certain factors necessary to determine such amounts. At a minimum, the factors that are terms must include: the outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport from each field; the crops to be planted in each field or any other uses such as pasture or fallow fields (including alternative crops identified in accordance with Part 3.2.5.2.b of this section); the realistic yield goal for each crop or use identified for each field; and the nitrogen and phosphorus recommendations from sources specified by the Director for each crop or use identified for each field. In addition, the terms include the methodology by which the nutrient management plan accounts for the following factors when calculating the

amounts of manure, litter, and process wastewater to be land applied; results of soil tests conducted in accordance with protocols identified in the nutrient management plan, as required by Part 3.2.1.7 of this section; credits for all nitrogen in the field that will be plant available; the amount of nitrogen and phosphorus in the manure, litter, and process wastewater to be applied; consideration of multi-year phosphorus application; accounting for all other additions of plant available nitrogen and phosphorus to the field; the form and source of manure, litter, and process wastewater; the timing and method of land application; and volatilization of nitrogen and mineralization of organic nitrogen.

- b The terms of the nutrient management plan include alternative crops identified in the CAFO's nutrient management plan that are not in the planned crop rotation. Where a CAFO includes alternative crops in its nutrient management plan, the crops must be listed by field, in addition to the crops identified in the planned crop rotation for that field, and the nutrient management plan must include realistic crop yield goals and the nitrogen and phosphorus recommendations from sources specified by the Director for each crop. Maximum amounts of nitrogen and phosphorus from all sources of nutrients and the amounts of manure, litter, and process wastewater to be applied must be determined in accordance with the methodology described in Part 3.2.5.2.a of this section.
- c For CAFOs using this approach, the following projections must be included in the nutrient management plan submitted to the Director, but are not terms of the nutrient management plan: the CAFO's planned crop rotations for each field for the period of permit coverage; the projected amount of manure, litter, or process wastewater to be applied; projected credits for all nitrogen in the field that will be plant available; consideration of multi-year phosphorus application; accounting for all other additions of plant available nitrogen and phosphorus to the field; and the predicted form, source, and method of application of manure, litter, and process wastewater for each crop. Timing of application for each field, insofar as it concerns the calculation of rates of application, is not a term of the nutrient management plan.
- d CAFOs that use this approach must calculate maximum amounts of manure, litter, and process wastewater to be land applied at least once each year using the methodology required in Part 3.2.5.2.a of this section before land applying manure, litter, and process wastewater and must rely on the following data:
 - i a field-specific determination of soil levels of nitrogen and phosphorus, including, for nitrogen, a concurrent determination of nitrogen that will be plant available consistent with the methodology required by Part 3.2.5.2.a of this section, and for phosphorus, the results of the most recent soil test conducted in accordance with soil testing requirements approved by the Director; and
 - ii the results of most recent representative manure, litter, and process wastewater tests for nitrogen and phosphorus taken within 12 months of the date of land application, in order to determine the amount of nitrogen and phosphorus in the manure, litter, and process wastewater to be applied.

3.2.6 Changes to a nutrient management plan. Any permit issued to a CAFO must require the following procedures to apply when a CAFO operator makes changes to the CAFO's nutrient management plan previously submitted to the Director:

3.2.6.1 The CAFO operator must provide the Director with the most current version of the CAFO's nutrient management plan and identify changes from the previous version,

except that the results of calculations made in accordance with the requirements of Parts 3.2.5.1.b and 3.2.5.2.d of this section are not subject to the requirements of Part 3.2.6 of this section.

3.2.6.2 The Director must review the revised nutrient management plan to ensure that it meets the requirements of this section and applicable effluent limitations and standards, including those specified in 40 CFR part 412, and must determine whether the changes to the nutrient management plan necessitate revision to the terms of the nutrient management plan incorporated into the permit issued to the CAFO. If revision to the terms of the nutrient management plan is not necessary, the Director must notify the CAFO operator and upon such notification the CAFO may implement the revised nutrient management plan. If revision to the terms of the nutrient management plan is necessary, the Director must determine whether such changes are substantial changes as described in Part 3.2.6.3 of this section.

- a If the Director determines that the changes to the terms of the nutrient management plan are not substantial, the Director must make the revised nutrient management plan publicly available and include it in the permit record, revise the terms of the nutrient management plan incorporated into the permit, and notify the operator and inform the public of any changes to the terms of the nutrient management plan that are incorporated into the permit.
- b If the Director determines that the changes to the terms of the nutrient management plan are substantial as specified in 3.2.6.3 below, the Director must notify the public and make the proposed changes and the information submitted by the CAFO operator available for public review and comment as specified in Part 5.

3.2.6.3 Substantial changes to the terms of a nutrient management plan incorporated as terms and conditions of a permit include, but are not limited to:

- a Addition of new land application areas not previously included in the CAFO's nutrient management plan. Except that if the land application area that is being added to the nutrient management plan is covered by terms of a nutrient management plan incorporated into an existing NPDES permit in accordance with the requirements of Part 3.2.5 of this section, and the CAFO operator applies manure, litter, or process wastewater on the newly added land application area in accordance with the existing field-specific permit terms applicable to the newly added land application area, such addition of new land would be a change to the new CAFO operator's nutrient management plan but not a substantial change for purposes of this section;
- b Any changes to the field-specific maximum annual rates for land application, as set forth in Parts 3.2.5.1 of this section, and to the maximum amounts of nitrogen and phosphorus derived from all sources for each crop, as set forth in Part 3.2.5.2 of this section;
- c Addition of any crop or other uses not included in the terms of the CAFO's nutrient management plan and corresponding field-specific rates of application expressed in accordance with Part 3.2.5 of this section; and
- d Changes to site-specific components of the CAFO's nutrient management plan, where such changes are likely to increase the risk of nitrogen and phosphorus transport to waters of the State.

3.2.6.4 Non-Substantial changes:

Upon receipt of written consent by the CAFO, the Director may modify a permit to make the changes listed in this section following the procedures established in Part 3.2.6.2.a of this permit without a public notice where such changes are not likely to increase the risk of nitrogen and phosphorus transport to waters of the State, but changes will be made publicly available:

- a. Correct typographical errors;
- b. Allow for a change in ownership or operational control of a facility (transfer of the permit) where the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittees has been submitted to the Director.
- c. Transfer permitted land application sites to another permit for the same waste source.
- d. Remove land application sites from a permit.

**PART 4
SPECIAL CONDITIONS FOR SUBPARTS C & D**

**REQUIREMENT TO DEVELOP AND IMPLEMENT BEST MANAGEMENT PRACTICES
(BMP)**

4.1 SPECIALIZED DEFINITIONS

Setback means a specified distance from surface waters or potential conduits to surface waters where manure, litter, and process wastewater may not be land applied. Examples of conduits to surface waters include but are not limited to: Open tile line intake structures, sinkholes, and agricultural well heads. Setback distances for streams, ponds and lakes shall be measured from the ordinary high water mark.

Vegetated buffer means a narrow, permanent strip of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters.

Multi-year phosphorus application means phosphorus applied to a field in excess of the crop needs for that year. In multi-year phosphorus applications, no additional manure, litter, or process wastewater is applied to the same land in subsequent years until the applied phosphorus has been removed from the field via harvest and crop removal.

Each CAFO subject to this section that land applies manure, litter, or process wastewater, must do so in accordance with the following practices:

4.2 Nutrient Management Plan. The CAFO must develop and implement a nutrient management plan that incorporates the requirements of this section based on a field-specific assessment of the potential for nitrogen and phosphorus transport from the field and that addresses the form, source, amount, timing, and method of application of nutrients on each field to achieve realistic production goals, while minimizing nitrogen and phosphorus movement to surface waters.

4.2.1 Determination of application rates. Application rates for manure, litter, and other process wastewater applied to land under the ownership or operational control of the CAFO must minimize phosphorus and nitrogen transport from the field to surface waters in compliance with the Arkansas NRCS Conservation Service Practice Standard Code 590 (Nutrient Management), including the Arkansas Phosphorous Index, 2010 Revision. Such technical standards for nutrient management shall:

4.2.1.1 Include a field-specific assessment of the potential for nitrogen and phosphorus transport from the field to surface waters, and address the form, source, amount, timing, and method of application of nutrients on each field to achieve realistic production goals, while minimizing nitrogen and phosphorus movement to surface waters; and

4.2.1.2 Include appropriate flexibilities for any CAFO to implement nutrient management practices to comply with the technical standards, including consideration of multi-year phosphorus application on fields that do not have a high potential for phosphorus runoff to surface water, phased implementation of phosphorus-based nutrient management, and other components, as determined appropriate by the Director.

- 4.2.1.3 **Manure and soil sampling.** Manure must be analyzed a minimum of once annually for nitrogen and phosphorus content, and soil analyzed a minimum of once every three years for phosphorus content. The results of these analyses are to be used in determining application rates for manure, litter, and other process wastewater.
- 4.2.1.4 **Inspect land application equipment for leaks.** The operator must periodically inspect equipment used for land application of manure, litter, or process wastewater.
- 4.2.1.5 **Setback requirements.** Unless the CAFO exercises one of the compliance alternatives provided for in Part a or d of this section, manure, litter, and process wastewater may not be applied closer than 100 feet to any down-gradient surface waters, open tile line intake structures, sinkholes, agricultural well heads, or other conduits to surface waters, 300 feet of Extraordinary Resource Waters (ERW) as defined by the Department's Regulation No. 2; 50 feet of property lines; or 500 feet of neighboring occupied buildings.
- a Vegetated buffer compliance alternative. As a compliance alternative, the CAFO may substitute the 100-foot setback with a 35-foot wide vegetated buffer where applications of manure, litter, or process wastewater are prohibited.
 - b The restrictions regarding property lines or neighboring occupied buildings shall not apply if the adjoining property is also approved as a land application site under a permit issued by the Department or if the adjoining property owner consents in writing.
 - c Application of waste shall not be made in areas where the land application of waste is prohibited by Arkansas Department of Health regulations for the protection of public water supplies.
 - d Alternative practices compliance alternative. As a compliance alternative, the CAFO may demonstrate that a setback or buffer is not necessary because implementation of alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent or better than the reductions that would be achieved by above setbacks.
- 4.2.1.6 **Precipitation Event.** Wastes shall not be land applied to soils that are saturated, frozen, covered with snow, during rain, or when precipitation is imminent (>50% chance of rain).
- 4.2.1.7 **Slope Requirements:** Wastes shall not be land applied to slopes with a gradient greater than 15%. The CAFO may demonstrate that a higher slope is appropriate because implementation of alternative conservation practices or field-specific conditions will provide pollutant reduction equivalent or better than the reductions that would be achieved by a set slope of 15%

4.3 Reserved

4.4 **ADDITIONAL REQUIREMENTS AREA**

4.4.1 Each CAFO subject to this subpart must implement the following requirements:

- 4.4.1.1 **Visual inspections.** There must be documented routine visual inspections of the CAFO production area. At a minimum, the following must be visually inspected:

- a **Weekly** inspections of all stormwater diversion devices, runoff diversion structures, and devices channelling contaminated stormwater to the wastewater and manure storage and containment structure;
 - b **Daily** inspection of water lines, including drinking water or cooling water lines when the facility is in normal operation;
 - c **Weekly** inspections of the manure, litter, and process wastewater impoundments; the inspection will note the level in liquid impoundments as indicated by the depth marker in 4.4.1.2 of this section.
- 4.4.1.2 **Depth marker.** All open surface liquid impoundments must have a depth marker which clearly indicates the minimum capacity necessary to contain the runoff and direct precipitation of the 25-year, 24-hour rainfall event. In the case of new sources subject to effluent limitations established pursuant to 40 CFR 412.46(a)(1), all open surface manure storage structures associated with such sources must include a depth marker which clearly indicates the minimum capacity necessary to contain the maximum runoff and direct precipitation associated with the design storm used in sizing the impoundment for no discharge.
- 4.4.1.3 **Corrective actions.** Any deficiencies found as a result of these inspections must be corrected as soon as possible.
- 4.4.1.4 **Mortality handling.** Mortalities must not be disposed of in any liquid manure or process wastewater system, and must be handled in such a way as to prevent the discharge of pollutants to surface water, unless alternative technologies pursuant to 40 CFR 412.31(a)(2) and approved by the Director are designed to handle mortalities.
- 4.4.2 **Record keeping requirements.** Each CAFO must maintain on-site the records for a period of five years from the date they are created a complete copy of the information required by 40 CFR 122.21(i)(1) and 40 CFR 122.42(e)(1)(ix) and the records specified in Parts 4.4.2.1 through 4.4.2.6 of this section. The CAFO must make these records available to the Director for review upon request.
- 4.4.2.1 Records documenting the inspections required under Part 4.4.1.1 of this section;
 - 4.4.2.2 Weekly records of the depth of the manure and process wastewater in the liquid impoundment as indicated by the depth marker under Part 4.4.1.2 of this section;
 - 4.4.2.3 Records documenting any actions taken to correct deficiencies required under Part 4.4.1.3 of this section. Deficiencies not corrected within 30 days must be accompanied by an explanation of the factors preventing immediate correction;
 - 4.4.2.4 Records of mortalities management and practices used by the CAFO to meet the requirements of Part 4.4.1.4 of this section;
 - 4.4.2.5 Records documenting the current design of any manure or litter storage structures, including volume for solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity;
 - 4.4.2.6 Records of the date, time, and estimated volume of any overflow.

4.5 RECORDKEEPING REQUIREMENTS FOR THE LAND APPLICATION AREAS

Each CAFO must maintain on-site a copy of its site-specific nutrient management plan. Each CAFO must maintain on-site for a period of five years from the date they are created a complete copy of the information required by 40 CFR 412.4 and 40 CFR 122.42(e)(1)(ix) and the records specified in Parts 4.5.1 through 4.5.10 of this section. The CAFO must make these records available to the Director or his or her designee, for review upon request.

- 4.5.1 Expected crop yields;
- 4.5.2 The date(s) manure, litter, or process waste water is applied to each field;
- 4.5.3 Weather conditions at time of application and for 24 hours prior to and following application;
- 4.5.4 Test methods consistent with University of Arkansas Extension recommendations used to sample and analyze manure, litter, process waste water, and soil .
- 4.5.5 Results from manure, litter, process waste water, and soil sampling;
- 4.5.6 Explanation of the basis for determining manure application rates, as provided in the technical standards established by the Director.
- 4.5.7 Calculations showing the total nitrogen and phosphorus to be applied to each field, including sources other than manure, litter, or process wastewater;
- 4.5.8 Total amount of nitrogen and phosphorus actually applied to each field, including documentation of calculations for the total amount applied;
- 4.5.9 The method used to apply the manure, litter, or process wastewater;
- 4.5.10 Date(s) of manure application equipment inspection.

PART 5
NOI and NMP REVIEW & PUBLIC NOTIFICATION PROCESS

All applications for permit coverage under this general permit will be reviewed by ADEQ prior to undergoing a public notification process.

- 5.1 Upon receipt of Notice of Intent (NOI) and NMP, ADEQ will review the submitted documents to ensure that all permit requirements are fulfilled. ADEQ may request additional information from the CAFO operator if additional information is necessary to complete the NOI, NMP, Disclosure Statement or clarify, modify, or supplement previously submitted material. If ADEQ makes a preliminary determination that the NOI is complete, the NOI, NMP and draft terms of the NMP to be incorporated into the permit will be made available for a 30-day public review and comment period on the ADEQ website (http://www.adeg.state.ar.us/water/branch_permits/general_permits/default.htm). During this period, any interested persons may submit written comments and may request a public hearing in accordance with APCEC Regulation No. 8 to clarify issues involved in the permitting decision. ADEQ will respond to comments received during this period and, if necessary, require the CAFO operator to revise the nutrient management plan. If determined appropriate by ADEQ, CAFOs will be granted coverage under this general permit upon written notification by ADEQ.
- 5.2 Comments will only be considered if they regard a specific facility's NOI or NMP. Comments on the contents of the General CAFO Permit ARG590000 will not be considered during the public comment period for a specific facility's coverage under this permit.
- 5.3 Any CAFO wishing to modify their NMP must notify the Department of planned changes. If the Department determines the changes are a major modification as specified in 40 CFR 122.63 or Substantial changes as specified in Part 3.2.6 of this general permit, the public notification process outlined above will be followed as appropriate.

PART 6 GENERAL CONDITIONS

6.1 Duty To Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Clean Water Act and the Arkansas Water and Air Pollution Control Act and is grounds for enforcement action or for requiring a permittee to apply for an individual NPDES permit.

6.2 Penalties for Violations of Permit Conditions

The Arkansas Water and Air Pollution Control Act provides that any person who violates any provisions of a permit issued under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year, or a fine of not more than twenty-five thousand dollars (\$25,000) or by both such fine and imprisonment for each day of such violation. Any person who violates any provision of a permit issued under the Act may also be subject to civil penalty in such amount as the court shall find appropriate, not to exceed ten thousand dollars (\$10,000) for each day of such violation. The fact that any such violation may constitute a misdemeanor shall not be a bar to the maintenance of such civil action.

6.3 Permit Actions

In accordance with 40 CFR Parts 122.62 (a)(2) and 124.5, this permit may be reopened for modification or revocation and/or reissuance to require additional monitoring and/or effluent limitations when new information is received that actual or potential exceedance of State water quality criteria and/or narrative criteria are determined to be the result of the permittee's discharge(s) to a relevant water body or a Total Maximum Daily Load (TMDL) is established or revised for the water body that was not available at the time of the permit issuance that would have justified the application of different permit conditions at the time of permit issuance.

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to the following:

- a. Violation of any terms or conditions of this permit; or
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- c. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.
- d. Failure of the permittee to comply with the provisions of Reg. 9 (Permit fees) as required by Part II.A.8. herein.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6.4 Toxic Pollutants

If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Reg. 2, as amended, (regulation establishing water quality standards for surface waters of the State of Arkansas) or Section 307(a)

of the Clean Water Act for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitations on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the permittee so notified.

The permittee shall comply with effluent standards or prohibitions established under Reg. 2 (Arkansas Water Quality Standards), as amended, or Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

6.5 Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

6.6 Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

6.7 State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

6.8 Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

6.9 Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

6.10 Permit Fees

The permittee shall comply with all applicable permit fee requirements for wastewater discharge permits as described in Reg. 9 (Regulation for the Fee System for Environmental Permits). Failure to promptly remit all required fees shall be grounds for the Director to initiate action to terminate this permit under the provisions of 40 CFR 122.64 and 124.5 (d), as adopted in Reg. 6 and the provisions of Reg. 8.

6.11 Reserved

6.12 Continuance of the Expired General Permit.

An expired general permit continues in force and effect until a new (renewal) general permit is issued. If this permit is not re-issued or replaced prior to the expiration date, it will be administratively continued in accordance with 40 CFR 122.6 and remain in force and effect. If applicants were granted permit coverage prior to the expiration date, they will automatically remain covered by the continued permit until the earliest of:

- 6.12.1 Re-issuance or replacement of this permit, at which time permittee must comply with the conditions of the new permit to maintain authorization to discharge; or
- 6.12.2 Permittee submit a Notice of Termination; or
- 6.12.3 Issuance of an individual permit for the project's discharges; or
- 6.12.4 A formal permit decision by the ADEQ to not re-issue this general permit, at which time you must seek coverage under an individual permit or other general permits, if available.

PART 7
OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

7.1 Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. The permittee shall provide an adequate operating staff which is duly qualified to carryout operation, maintenance and testing functions required to insure compliance with the conditions of this permit.

7.2 Need to Halt or Reduce not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power for the treatment facility is reduced, is lost, or alternate power supply fails.

7.3 Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment or the water receiving the discharge.

7.4 Bypass of Treatment Facilities

Bypass not exceeding limitation. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation.

7.4.1 Notice

7.4.1.1 Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

7.4.1.2 Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part 9.4 (24-hour notice).

7.4.2 Prohibition of bypass.

7.4.2.1 Bypass is prohibited and the Director may take enforcement action against a permittee for bypass, unless:

- a Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- b There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
- c The permittee submitted notices as required by Part 7.4.1.

7.4.2.2 The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in 7.4.2.1.1.

7.5 Upset Conditions

7.5.1 Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Part 7.5.2 of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

7.5.2 Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An upset occurred and that the permittee can identify the specific cause(s) of the upset;
- b. The permitted facility was at the time being properly operated;
- c. The permittee submitted notice of the upset as required by Part 7.4.1; and
- d. The permittee complied with any remedial measures required by Part 7.3.

7.5.3 Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

7.6 Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of waste waters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering the waters of the State. Written approval for such disposal must be obtained from the ADEQ Director, unless management of the material is contemplated by the Nutrient Management Plan.

7.7 Power Failure

The permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failure either by means of alternate power sources, standby generators, or retention of inadequately treated effluent.

PART 8

Monitoring and Records

8.1 Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken before the effluent joins or is diluted by any other waste stream, body of water, or substance. All discharges from production areas shall be monitored.

8.2 Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. The permittee shall calibrate and perform maintenance procedures on all monitoring analytical instrumentation at intervals frequent enough to insure accuracy of measurements and shall insure that both calibration and maintenance activities will be conducted. An adequate analytical quality control program, including the analysis of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory.

8.3 Penalties for Tampering

The Arkansas Water and Air Pollution Control Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year, or a fine of not more than ten thousand dollars (\$10,000) or by both such fine and imprisonment.

8.4 Reporting of Monitoring Results

Monitoring shall be submitted to the Director at the following address:

Enforcement Branch
Water Division
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118

If permittee uses outside laboratory facilities for sampling and/or analysis, the name and address of the contract laboratory shall be included on the (Discharge Monitoring Report (DMR)).

8.5 Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the summary report. Such increased frequency shall also be indicated in the summary report.

8.6 Record Contents

Records and monitoring information shall include:

- 8.6.1 The date, exact place, time and methods of sampling or measurements;
- 8.6.2 The individuals(s) who performed the sampling or measurements;
- 8.6.3 The date(s) analyses were performed;
- 8.6.4 The individual(s) who performed the analyses;
- 8.6.5 The analytical techniques or methods used; and
- 8.6.6 The measurements and results of such analyses.

8.7 Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- 8.7.1 Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- 8.7.2 Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- 8.7.3 Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- 8.7.4 Sample, inspect or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and/or Arkansas Water and Air Pollution Control Act, any substances or parameters at any location.
- 8.7.5 ADEQ will follow the bio-security policy of the permittee or owner of the animals when inspecting and entering the facility.

PART 9 REPORTING REQUIREMENTS

9.1 Planned Changes

The permittee shall give notice and provide plans and specification to the Director for review and approval prior to any planned physical alterations or additions to the permitted facility.

Any change in the facility discharge (including the introduction of any new source or significant discharge or significant changes in the quantity or quality of existing discharges of pollutants) must be reported to the ADEQ. In no case are any new connections, increased flows, or significant changes in influent quality permitted that cause violation of the effluent limitations specified herein.

9.2 Transfers

Facilities that are authorized under this permit, which undergo a change in ownership, facility name, or signatory authorization (i.e., a new cognizant official, responsible person, etc.), must submit a Permit Transfer form to the Director. A Permit Transfer form can be obtained from the General Permits Section of the Water Division at the following website: http://www.adeg.state.ar.us/water/branch_permits/general_permits/

For an ownership change, the permit transfer form must be submitted a minimum of 30 days prior to the date the transfer to the new operator will take place. The new owner must comply with the existing permit for the facility during the interim period. A Disclosure Form will be required. Transfer of the permit does not relieve the previous permittee from any unpaid permit fees.

9.3 Twenty-four Hour Reporting

The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrences of the noncompliance. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

The following shall be included as information which must be reported within 24 hours:

- 9.3.1 Any unanticipated bypass which exceeds any effluent limitation in the permit; and
- 9.3.2 Any upset which exceeds any effluent limitation in the permit.

9.4 Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Part and 9.3 at the time monitoring reports are submitted. The reports shall contain the information listed at Part 9.3.

9.5 Changes in Discharge of Toxic Substances for Industrial Discharges

The permittee shall notify the Director as soon as he/she knows or has reason to believe:

- 9.5.1 That any activity has occurred or will occur which would result in the discharge, in a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" described in 40 CFR 122.42(a)(1).
- 9.5.2 That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" described in 40 CFR Part 122.42(a)(2).

9.6 Duty to Reapply

This permit will expire 5 years from the effective date. If this permit is not re-issued or replaced prior to the expiration date, it will be administratively continued in accordance with APCEC Regulation No. 6 and remain in force and effect. If permit coverage was granted prior to the expiration date, permit coverage is automatically continued until the earliest of:

- 9.6.1 Reissuance or replacement of this permit, at which time the operator must comply with the conditions of the new permit to maintain authorization to discharge and, the operator is required to notify the Department of his/her intent to be covered under this permit within 120 days after the effective date of the renewal permit ; or
- 9.6.2 Submittal of a Notice of Termination; or
- 9.6.3 Issuance of an individual permit for the facility's discharges; or

A formal permit decision by the ADEQ to not re-issue this general permit, at which time the facility must seek coverage under an individual permit or other alternate permits.

9.7 Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

9.8 Signatory Requirements

All applications, reports, or information submitted to the Director shall be signed and certified as follows:

- 9.8.1 All permit applications shall be signed as follows:

- 9.8.1.1 For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

- a A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
 - b The manager of one or more manufacturing, production, or operation facilities, provided: the manager is authorized to make management decisions which govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- 9.8.1.2 For a partnership or sole proprietorship: by a general partner or proprietor, respectively; or
- 9.8.1.3 For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
- a The chief executive officer of the agency, or
 - b A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- 9.8.2. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- 9.8.2.1. The authorization is made in writing by a person described above;
 - 9.8.2.2. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
 - 9.8.2.3. The written authorization is submitted to the Director.
- 9.8.3. Certification. Any person signing a document under this section shall make the following certification:
- “I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

9.9 Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2 and APCEC Regulation No. 6, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department of Environmental Quality. As required by the Regulations, the name and address of any permit applicant or permittee, permit applications, permits and effluent data shall not be considered confidential.

9.10 Penalties for Falsification of Reports

The Arkansas Water and Air Pollution Control Act provides that any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under this permit shall be subject to civil and/or criminal penalties specified in Part 3.2. under the authority of the Arkansas Water and Air Pollution Control Act.

PART 10 DEFINITIONS

All definitions contained in Section 502 of the Clean Water Act shall apply to this permit and are incorporated herein by reference. Additional definitions of words or phrases used in this permit are as follows:

- 10.1 "**Act**": the Clean Water Act, Public Law 95-217 (33.U.S.C.1251et seq.) as amended.
- 10.2 "**ADEQ**" the Arkansas Department of Environmental Quality.
- 10.3 "**Administrator**": the Administrator of the U.S. Environmental Protection Agency.
- 10.4 "**Agricultural stormwater discharge**" as a discharge composed entirely of stormwater, as defined in § 122.26(a)(13), from a land area upon which manure or wastewater has been applied in accordance with proper agricultural practices, including land application of manure or wastewater in accordance with either a nitrogen-based or, as required, a phosphorus-based manure application rate. In addition, as noted, the proposed effluent guidelines included technology-based requirements for a CAFO's land application areas that were based on the CAFO's use of proper agricultural practices. (See 66 FR at 3029–32). Any dry weather discharge of manure or process wastewater resulting from its application to land area under the control of a CAFO would not be considered an agricultural storm water discharge and would thus be subject to Clean Water Act requirements.
- 10.5 "**Animal feeding operation**" ("**AFO**") means a lot or facility (other than an aquatic animal production facility) where the following conditions are met:
1. Animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and
 2. Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.
- 10.6 "**APCEC**": the Arkansas Pollution Control and Ecology Commission.
- 10.7 "**Applicable effluent standards and limitations**": all State and Federal effluent standards and limitations to which a discharge is subject under the Act, including, but not limited to, effluent limitations, standards of performance, toxic effluent standards and prohibitions, and pretreatment standards.
- 10.8 "**Applicable water quality standards**": all water quality standards to which a discharge is subject under the federal Clean Water Act and which have been (a) approved or permitted to remain in effect by the Administrator following submission to the Administrator pursuant to Section 303(a) of the Act, or (b) promulgated by the Director pursuant to Section 303(b) or 303(c) of the Act, and standards promulgated under Reg. 2, as amended, (regulation establishing water quality standards for surface waters of the State of Arkansas).
- 10.9 "**Bypass**": the intentional diversion of waste streams from any portion of a treatment facility.
- 10.10 "**Concentrated animal feeding operation**" ("**CAFO**") means an AFO that is defined as a Large CAFO or as a Medium CAFO by the terms of this Part, or that is designated as a CAFO in accordance with 40 CFR 122.23(c). Two or more AFOs under common ownership are considered to be a single AFO for the purposes of determining the number of animals at an operation, if they adjoin each other or if they use a common area or system for the disposal of wastes.

Table of Regulatory Definitions of Large CAFOs, Medium CAFO, and Small CAFOs

A **Large CAFO** confines at least the number of animals described in the table below.

A **Medium CAFO** falls within the size range in the table below and either:

- has a manmade ditch or pipe that carries manure or wastewater to surface water; **or**

- the animals come into contact with surface water that passes through the area where they're confined.

If an operation is found to be a significant contributor of pollutants, the permitting authority may designate a medium-sized facility as a CAFO.

A **Small CAFO** confines fewer than the number of animals listed in the table **and** has been designated as a CAFO by the permitting authority as a significant contributor of pollutants.

Animal Sector	Size Thresholds (number of animals)		
	Large CAFOs	Medium CAFOs	Small CAFOs
Subpart A			
sheep or lambs	10,000 or more	3,000 - 9,999	less than 3,000
horses	500 or more	150 - 499	less than 150
Subpart B			
ducks (other than a liquid manure handling systems)	30,000 or more	10,000 - 29,999	less than 10,000
ducks (liquid manure handling systems)	5,000 or more	1,500 - 4,999	less than 1,500
Subpart C			
cattle or cow/calf pairs	1,000 or more	300 - 999	less than 300
mature dairy cattle	700 or more	200 - 699	less than 200
Subpart D			
veal calves	1,000 or more	300 - 999	less than 300
swine (weighing over 55 pounds)	2,500 or more	750 - 2,499	less than 750
swine (weighing less than 55 pounds)	10,000 or more	3,000 - 9,999	less than 3,000
turkeys	55,000 or more	16,500 - 54,999	less than 16,500
laying hens or broilers (liquid manure handling systems)	30,000 or more	9,000 - 29,999	less than 9,000
chickens other than laying hens (other than a liquid manure handling systems)	125,000 or more	37,500 - 124,999	less than 37,500
laying hens (other than a liquid manure handling systems)	82,000 or more	25,000 - 81,999	less than 25,000

- 10.11 **"Daily Maximum"**: discharge limitation means the highest allowable "daily discharge" during the calendar month.
- 10.12 **"Department"**: the Arkansas Department of Environmental Quality (ADEQ).
- 10.13 **"Director"**: the Administrator of the U.S. Environmental Protection Agency and/or the Director of the Arkansas Department of Environmental Quality.
- 10.14 **"Discharge"** means a discharge of any wastes in any manner which directly or indirectly permits such wastes to reach any of the waters of the state.
- 10.15 **"Fecal Coliform"** means the bacterial count at 40 CFR 136.3 in Table 1A, which also cites the approved methods of analysis.

- 10.16 "**Grab sample**": an individual sample collected in less than 15 minutes in conjunction with an instantaneous flow measurement.
- 10.17 "**Land application area**" means land under the control of an AFO operator, whether it is owned, rented, or leased, to which manure, litter or process wastewater from the production area is or may be applied.
- 10.18 "**Manure**" is defined to include manure, bedding, compost and raw materials or other materials commingled with manure or set aside for disposal.
- 10.19 "**mg/l**": milligrams per liter; it is essentially equivalent to parts per million in dilute aqueous solutions.
- 10.20 "**Monitoring and Reporting**": When a permit becomes effective, monitoring requirements are of the immediate period of the permit effective date. Where the monitoring requirement for an effluent characteristic is Monthly or more frequently, the Discharge Monitoring Report shall be submitted within 30 days following the sampling.
- 10.21 "**National Pollutant Discharge Elimination System (NPDES)**": the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under section 307, 402, 318 and 405 of the Clean Water Act.
- 10.22 "**New source**" means any building, structure, facility, or installation from which there is or may be a "discharge of pollutants," the construction of which commenced:
1. After promulgation of standards of performance under section 306 of CWA which are applicable to such source, or
 2. After proposal of standards of performance in accordance with section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal.
- 10.23 "**Operator**" for the purpose of this permit, means any person (an individual, association, partnership, corporation, municipality, state or federal agency) who has the primary management and ultimate decision-making responsibility over the operation of a facility or activity. The operator is responsible for ensuring compliance with all applicable environmental regulations and conditions.
- 10.24 "**Overflow**" means the discharge of manure or process wastewater resulting from the filling of wastewater or manure storage structures beyond the point at which no more manure, process wastewater, or stormwater can be contained by the structure.
- 10.25 "**Point source**" means any discernible, confined and discrete conveyance from which pollutants are or may be discharged. Point source discharges of storm water result from structures which increase the imperviousness of the ground or which acts to collect runoff, with runoff being conveyed along the resulting drainage or grading pattern.
- 10.26 "**Pollutant**" means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.
- 10.27 "**Pollution**" means such contamination or other alteration of the physical, chemical, or biological properties of any waters of the state, or such discharge of any liquid, gaseous, or solid substance in any waters of the state as will, or is likely to, render the waters harmful, detrimental, or injurious to public health, safety, or welfare; to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses; or to livestock, wild animals, birds, fish, or other aquatic life.
- 10.28 "**Process wastewater**" means water directly or indirectly used in the operation of the AFO for any or all of the following: spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other AFO facilities; direct contact

- swimming, washing, or spray cooling of animals; or dust control. Process wastewater also includes any water which comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs or bedding.
- 10.29 **“Production area”** means that part of an AFO that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. The animal confinement area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables. The manure storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage area includes but is not limited to feed silos, silage bunkers, and bedding materials. The waste containment area includes but is not limited to settling basins, and areas within berms and diversions which separate uncontaminated stormwater. Also included in the definition of production area is any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities.
- 10.30 **“Severe property damage”**: substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in productions.
- 10.31 **“Ten (10)-year, 24-hour rainfall event, 25-year, 24-hour rainfall event, and 100-year, 24-hour rainfall event”** mean precipitation events with a probable recurrence interval of once in ten years, or twenty five years, or one hundred years, respectively, as defined by the National Weather Service in Technical Paper No. 40, “Rainfall Frequency Atlas of the State,” May, 1961, or equivalent regional or State rainfall probability information developed from this source.
- 10.32 **“Total Suspended Solids (TSS)”**: the amount of solid material suspended in water, commonly expressed as a concentration, in terms of mg/l.
- 10.33 **“Treatment works”** means any devices and systems used in storage, treatment, recycling, and reclamation of municipal sewage and industrial wastes, of a liquid nature to implement section 201 of the Act, or necessary to recycle reuse water at the most economic cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and alterations thereof; elements essential to provide a reliable recycled supply such as standby treatment units and clear well facilities, and any works, including site acquisition of the land that will be an integral part of the treatment process or is used for ultimate disposal of residues resulting from such treatment.
- 10.34 **“Upset”**: an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventive maintenance, or careless or improper operations.
- 10.35 **“Waters of the State”** means all streams, lakes, marshes, ponds, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion of the state.