

ARKANSAS DEPARTMENT OF ENERGY AND ENVIRONMENT, DIVISION OF ENVIRONMENTAL QUALITY

SUBJECT: APC&EC Rule No. 6: Rules for State Administration of the National Pollutant Discharge Elimination System (NPDES)

DESCRIPTION: Revisions are being proposed to the Arkansas Pollution Control and Ecology Commission's Rule No. 6: Rules for State Administration of the National Pollutant Discharge Elimination System (NPDES) to adopt federal revisions to the NPDES program, incorporate statutory revisions made by the Arkansas General Assembly, clarify several provisions, implement the Governor's directive to make the current moratorium on confined animal operations in the Buffalo National River Watershed permanent, and make stylistic and formatting corrections throughout the rule. Rule No. 6 establishes the parameters for the State water pollution control permitting program in lieu of the federal NPDES program and pursuant to the federal Clean Water Act, 33 U.S.C. § 1251 et seq. The state legislative acts prompting the regulatory amendments are Acts 94 and 575 of 2015 and Acts 315 and 910 of 2019. The federal regulatory changes prompting the amendments are 40 C.F.R. §§ 122.21(e)(3), 122.44(i)(1)(iv), 136.1(c), 125(I) and (J), 423, 122, 123, 127, and 401.17. The Arkansas Pollution Control and Ecology Commission's authority for amending Rule No. 6 is found in Ark. Code Ann. §§ 8-6-207(b)(1), 8-4-202(a), and 8-1-203(b)(1)(A).

Proposed changes to Rule No. 6 include:

- *Incorporation of Updates to Federal Regulations.* Amendments to Rule 6.104 to incorporate changes made to federal regulations;
- *Incorporation of Updates to Arkansas Law.* Acts 94 and 575 of 2015 were enacted by the Arkansas General Assembly and require revisions to Rule 6.205 concerning Trust Fund permitting requirements; Acts 315 and 910 of 2019 were enacted by the Arkansas General Assembly and require revisions to Rule No. 6 concerning the name of ADEQ and the use of "rule" in lieu of "regulation";
- *Amendments to Provide Clarification and Minor Corrections.* Clarification of sections of the rule that were otherwise unclear, and minor corrections to make the rule more illustrative of the legislative and regulatory intent;
- *Amendments to Chapter 4.* To add 6.403 and 6.404 to insert permitting language from Reg. 2;
- *Amendments to Rule 6.602.* To amend the current Rule 6.602 to make permanent the moratorium on confined animal operations of a certain size in the Buffalo National River Watershed;
- *Regulatory Amendments for Consistency with Statutory Changes.* To amend other chapters of the rule for consistency with the statutory changes made by the General Assembly and federal regulations, primarily concerning terminology and program name changes; and
- *Stylistic and Formatting Corrections.* To make minor, non-substantive stylistic and formatting corrections throughout the rule.

PUBLIC COMMENT: A public hearing was held on August 23, 2019. The public comment period expired on September 3, 2019. The APC&EC voted to reopen the public comment period, and that comment period expired on January 23, 2020. The Division provided a summary of the public comments received and its responses thereto, which due to its length, is attached separately.

Rebecca Miller-Rice, an attorney with the Bureau of Legislative Research, asked the following questions:

(1) Section 6.205 – The materials submitted with the proposed changes indicate that Act 94 of 2015 required revisions to the rule; however, it appears from Act 575 of 2015 that the provisions added by Act 94 were limited by the language “[u]ntil January 1, 2016.” Indeed, it appears that the changes made to statute by Act 94 were never incorporated into the rule, and the language that was to be changed by Act 94 is being stricken. Can you please specify then what revisions to the rule are being made as a result of Act 94? **RESPONSE:** The limiting language is from Act 575, but the language that is limited is from Act 94. Both Acts became effective on July 22, 2015. Since both acts became effective at the same time, DEQ treated them as a single change to the law.

(2) Section 6.205 – Is the language being stricken in subsections “P” and “Q” due to the limiting language of Act 575 that allowed the reduction or waiver “[u]ntil January 1, 2016”? **RESPONSE:** Yes.

(3) Section 6.205 – It appears that the language being stricken in subsection “R” is still present in Ark. Code Ann. § 8-4-203(8). Can you reconcile for me why it is being removed from the rule? **RESPONSE:** Ark. Code Ann. § 8-4-203(8) states, “The division shall not directly operate or be responsible for the operation of a nonmunicipal domestic sewage treatment works.” DEQ believes that Ark. Code Ann. § 8-4-203(8) does not require clarification through regulations.

Section 6.205 concerns “Trust Fund Permitting Requirements” for non-municipal domestic sewage treatment works. The proposed language for this section is, “The Division shall not issue, modify, renew, or transfer a NPDES permit for a non-municipal domestic sewage treatment works without the permit applicant first complying with Ark. Code Ann. § 8-4-203(b).”

Based on the proposed changes for Section 6.205, retaining subsection “R” would be redundant because it is in the statute and including “R” in Rule 6 was unnecessary in the first instance.

(4) Section 6.701 – What is the rationale for the addition of a repealer? I only ask because it would seem any repeal of a rule would still be required to go through the legislative review and approval process of Ark. Code Ann. § 10-3-309 before it could become effective. **RESPONSE:** The “repealer” language was intended to make it clear that when a new rule was enacted, that it would supersede existing rules that were in conflict. DEQ’s intention is to run any repeal of a rule concurrently with the superseding rule and

to make it clear in the petition that the new rule would replace the old rule. However, since each rule would move through the process separately, DEQ was concerned that a hiccup in the process could result in conflicting rules being “effective” at the same time.

The proposed effective date is pending legislative review and approval.

FINANCIAL IMPACT: The agency states that the amended rule has no financial impact.

With respect to the total estimated cost by fiscal year to any private individual, entity and business subject to the amended rule, the agency provided the following response:

Implementing the revised federal rules and clarification/correction of various sections of this regulation is not expected to cause an increase in costs to private entities because permittees were expected to comply with these requirements prior to incorporation. Implementing the revised state rule should result in reduced costs to nonmunicipal domestic sewage treatment works permittees. Changes to the general permit process are expected to reduce costs to facilities.

The agency further states that there is no additional cost to state, county, and municipal government to implement the changes to this rule.

LEGAL AUTHORIZATION: The Arkansas Pollution Control and Ecology Commission (“Commission”) is given and charged with the power and duty to promulgate rules, including water quality standards and the classification of the waters of the state and moratoriums or suspensions of the processing of types or categories of permits, implementing the substantive statutes charged to the Division of Environmental Quality (“Division”) for administration. *See* Ark. Code Ann. § 8-4-201(b)(1)(A). *See also* Ark. Code Ann. § 8-1-203(b)(1)(A) (setting forth generally the powers and responsibilities of the Commission, including the promulgation of rules implementing the substantive statutes charged to the Division for administration) and Ark. Code Ann. § 8-6-207(b)(1)(A) (bestowing said power and duty under the Arkansas Solid Waste Management Act, codified at Ark. Code Ann. §§ 8-6-201 through 8-6-223). The Commission is likewise given and charged with the power and duty to adopt, modify, or repeal, after notice and public hearings, rules implementing or effectuating the powers and duties of the Division and the Commission under the Arkansas Water and Air Pollution Control Act (“Act”), codified at Ark. Code Ann. §§ 8-4-101 through 8-4-318. *See* Ark. Code Ann. § 8-4-202(a). Under this Act, the Division is given and charged with the power and duty to issue, continue in effect, revoke, modify, or deny permits under such conditions as it may prescribe “[t]o prevent, control, or abate pollution” and “[f]or the discharge of sewage, industrial waste, or other wastes into the waters of the state, including the disposal of pollutants into wells.” Ark. Code Ann. § 8-4-203(a)(1), (2).

Per the agency, the amended rules are required to comply with federal law, specifically, 40 C.F.R. §§ 122.21(e)(3), 122.44(i)(1)(iv), 125 Subparts I and J, 127, and 136.1(c), and Regulation 6.602.

BEFORE THE ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION

**IN THE MATTER OF AMENDMENTS TO)
REGULATION NO. 6: REGULATIONS FOR)
STATE ADMINISTRATION OF THE)
NATIONAL POLLUTANT DISCHARGE)
ELIMINATION SYSTEM (NPDES))**

DOCKET NO. 19-003-R

RECEIVED

FEB 13 2020

**BUREAU OF
LEGISLATIVE RESEARCH**

RESPONSIVE SUMMARY

Comes now the Arkansas Department of Energy and Environment, Division of Environmental Quality, by and through, Robert Blanz, Associate Director of the Office of Water Quality, and provides this Responsive Summary as required under Arkansas Pollution Control and Ecology Commission Regulation No. 8.812.

I. INTRODUCTION

The public comment record for Docket No. 19-003-R contains over 1719 comments pertaining to changes to Arkansas Pollution Control and Ecology Commission (APC&EC) Regulation No. 6, Regulations for State Administration of the National Pollutant Discharge Elimination System (NPDES).

The notice of proposed Regulation No. 6 changes and public hearing was published on August 3 and 4, 2019, in the Arkansas Democrat-Gazette. APC&EC held a public hearing on August 23, 2019, to receive comments on the proposed rule change to APC&EC Regulation No. 6. The public comment period closed on September 22, 2019. APC&EC reopened the public comment period on October 24, 2019, with an end date of January 22, 2020.

II. RESPONSES TO WRITTEN AND VERBAL COMMENTS

The following people or organizations sent comments during the public comment period and public hearing.

RULE 6 Response to Comments

The following submitted comments in favor of the rulemaking for Rule 6 to make permanent the moratorium on medium and large CAFOs in the Buffalo River Watershed:

Steven & Joan Miller; Cindy Rimkus; Millie Nelms; Sue Mabry; Cindy Thornton; Sarah Jane Polk; Josh Cross; Linda Vanblaricom; Rene Diaz; Court Mathey; Kathryn Searcy; Michael Boyd; Ruth Weinstein McShane; Joe McShane; Kathy Downs; Kathy Sutterfield; Mark Smith; Butch Anselm; Janet Brown; Harriett & Dennis Sisson; Faith McLaughlin; Jan VanSchuyver; Shirely and Robert Bowen; Sheena Pettit; Aletha Tetterton; Jane Spellman; Edie Stahl; Lynn Parker; Jason Wakefield; Geniece Yates; Holly Hanson; Debbie Alexy; Katie Schneider; Elva Kelly; Cay Miller; Bonnie Smith; Caleb Reed; Barbara Moorman; Becky McCain; Ruth Colquitt; Gregory Merlino; James Ollerenshaw; Ted Barnette; Hilda Booth; Kathleen and Larry Stanley; Laura Timby; Joe Golden; Pat Costner; James Binns; Rachel Henriques; Bryce Huff; Dave Smith; John Shelton; Lolly Tindol; Mary Floyd; Corey Brady; Trudi and Jeff Rust; Nancy Deisch; Mary Ann Guinn; Frank Reuter; Ryan Cloud; Robert van Rossum; Rebecca Holden; Leigh Barham; Hank van Rossum; Ann Lasater; Karen Bartle; Cathy Bayne; Carolyn Quick; Annie Langston; Vern Berry; Annee Littell; David Saugey; Shane Jetton; Carroll Fletcher; Susan Hardin; Chuck Maize; John Kelsey; Mary Ryan; Nancy Harris; Dan Stockman; Carolyn Cloud; Scott Davis; David Montague; Joan Murphy; Ginger Milan; Jeff Carfagno; James Gately; Linda Lewis; Mike Tipton; Sally Wood; Sally Jones; Nancy Pierson; Barbara Metzger; Nancy & Harrison Miner; Gail Leftwich; Lloyd & Linda Stith; Karen Baris; Kevin Ehemann; Dean Wilson; Mary Weeks; Carol Storthz; Gerald & Karen Gordy; Robert Cagle; Walter Fenton; Patricia Roc; Bill Thorne; Monty Keel; Joe Wavery Newman, III; Diane Mitchell; Susan Heaney; Nancy Hartney; Wendy Johnson; Mary Fitzgerald; Rose Wallace; Cathy Ross; Keith Faulkner; Bishop Bower; Shelley Buonaiuto; Greg Watkins; Tammy Narramore; Pam Chrisco; Barbara Turney; Allen Powell; Brad Lindsey; Rose Alisandre; S. J. Tucker; Helen Pounds; Janette Groves; Janet Bachmann; Brad Green; Pati Mitchell; David Edsall; Jennifer McMahon; Gwyn Pope; Tim Hicks; Dan Turney; Ann Mesrobian; Kimberly Brasher; Terry Sutterfield; Jay Stanley; James Mott; Robert Bowker; James, Grace, Jimmy, Amy, Rean, Rachel, Brandon, Eva, Madison, Jake, and Josh McPherson; Dee Plunkett; Patricia Peterson; John Buchan; Ellie Stalker; Kay Abney; Dara Yeager; Carole Schuster; Peggy Moody; Heather Hudgens; Krista Garrett; Helen McElree; Steve Owen; Ginger Alexander; Robert and Nancy Lewis; Robert Magness; Russ Wright; Matthew Pekar; Stephen Ballard; Joyce Hale; William Wimberly; J. LaBrie; Carol Kennedy; Jerry Weber; Duane and Judith Woltjen; Cory Betts; Scott Stanley; Darla Newman; Kennet and Tracie Pape; Tracy Fortuny; Marsha Gibson; Danny Barker; Ed Brocksmith; Beth Rooney; Laura Newth; Steve Parsons; Fay Knox; Dotty Phillips; George and Vee Ann Miller; Ron Schneider; Mike Risk; Dan Scheiman; Steve and Kim Hesse; Patrick and Kristine Hall; Ray Quick; Michelle Davis; Beth Buckley; Deborah Byron; Patty Doyal; Todd Parnell; Susan Leahy; Bill Farrell; Beth Barham; Susan Bolding; Sarah Rausch; Lynde Janos; Ralph Doty; Pam Phillips; John Outer; Mike Fagan; Camille Carpenter; Michele Hughes; Reba Potee; Ammen Jordan; Stephanik Jordan; Michael Crane; Dave Kuhne; John Ray; Georgia Lengyel; Jerrell Dillaha; Stuart Reaves; Patricia McDonald; Patti Kent; Phyllis Head; Barabara

RULE 6 Response to Comments

Jaquish; Jan Wilson; Holly Felix; Deb Campbell; Maire Caverly; James and Ashley Fletcher; Richard Isaacs; Jeff Montgomery; John Baker; Miranda Jacky; Lesha Shaver; Jerome and Harriet Jansma; Carol Wineland; Marilyn Wheeler; Pam Bryan; Stevan Vowell; Pat Hagge; Susan Fields and Jeff Scott; Liston Barber; Donald Alexander; Lynn Holmes; Dana Phillips; Sheila Richards; Robert Brewer; Thomas Maly; Martha Ragar; Susan Hubbard; Francie Bolter; Jim Warnock; Kay Ewart; Susan Parker; John Barton; John Slater; Jim Wimberly; Jo Johnson; Jim Compton; Tom Perry; Ann & Rick Owen; Christopher Fischer; Shawn Porter; Judi Nail; Fran Alexander; David Hughey; Bettie Lu Lancaster; Dorothy Mangold; Dina Nash; Maryann Getz; Paul Getz; Lynn Risser; Bryan Signorelli; Charles Mullins; Charles Williams; Mike Adelman; John Ferguson; Betsy Murdoch; Linda Arnold; Jeff Burgess; Virginia Booth; Wanda Stephens; Keaton Smith; Rick Jones; Ruth Vacin; Jeff Nash; Jenny Wiedower; Fred Henry; Susan Flourwoy; Lynn Berry; Ken Leonard; Marti and Larry Olesen; Chuck Rutherford; Tom Burroughs; John Courtway; Tom Griffith; Jan Baker; Susan Hautz; Mark & Ann Segura; Michael Wheeler; Rex and Nan Enoch; Glenda Allison; Denise Dore; Lesley Kline; Nan Johnson and Dave Spencer; Janie Lindquist; Christeen Kline; Z.D. Zbinden; Marquette Bruce and Nancy Talburt; Rachel O'Carroll; Quinn Montana; Sunnie Ruple; Kirk Rhoads; Molly Saxon; Susan Murray; Ellen Compton; Spencer Goertz-Giffen; Margaret Britain; Cindy Jetton; Gene Sparling; Annee Littell; Corey Duncan; Lucas Parsch; Donna Mulhollan; Gladys Tiffany; Annette Pettit; Pam Stewart; Ginny Masullo; Janet Nye; Katie Deakins; Nancy Paddock; Elizabeth Cantwell; Ethel Simpson; Erin Hostetler; Sherrie McIntyre; Teresa Turk; David Martinson; Tyler Chafin; Elizabeth Hale; Dana Bassi; Edward Vollman; Dana Ward; Fred Goldthorpe; Michael Douglas; Radine Nehring; Sondra Gordy; Martha Goldthorpe; Pattie Heitzman; Jeffrey Ingram; S. Beth Lowrey; Denise Nemece; Patricia McKeown; Jean Nayga; Brian and Sarah Thompson; Deb Bartholomew; Calvin Doody; Charles Leflar; Dina and Jeff Nash; Mary Schlatterer; Jeanie Calhoun; Janet Parsch; Karen Seller; Lisa Orton; Grant Scarsdale; Sharon Gattis; Michael Rapp; Bill Pettit; Kim Traw; Laura Villegas; Ellen Corley; Karen Geiger; James Seawel; Beth Ardapple; Louise Mann; Sarah Myers; Marian Johnson; Thomas Calhoun; Ellen Mitchell; Nancy Pierson; Will Larkin; Lowell Collins; Friends of the North Fork and White Rivers; National Parks Conservation Association; John Murdoch; Alice Andrews; Steve Blumreich; John Van Brahana; Bill Lord and Linda Bryant; National Park Service; Carol Bitting; David Peterson; Charles Bitting; Buffalo River Watershed Alliance; Ozark Society; 3rd Planet Peace; clgilpin1@gmail.com; marshman17@aol.com; nuffer@hughes.net; bombba41@gmail.com; roxrose439@aol.com; arhiker.davis871@aol.com; powervale@gmail.com; gary@garycawood.com; serenity.papa@gmail.com

Response: The Division acknowledges the comments submitted in favor of the rulemaking for Rule 6 to make permanent the moratorium on medium and large CAFOs in the Buffalo River Watershed.

RULE 6 Response to Comments

Commenter: Arkansas Pork Producers Association

Comment: Arkansas Pork Producers Association opposes any changes to Rule 5 as proposed in the Third Party Rulemaking.

Response: The rulemaking for Rule 5, initiated on July 26, 2019, is not a Third Party Rulemaking.

Comment: Arkansas Pork Producers Association requests that no decision on this Third Party Rulemaking be made until the Big Creek Research and Extension Team has been given the opportunity to publish its final report.

Response: The rulemaking for Rule 5, initiated on July 26, 2019, by DEQ, is not a Third Party Rulemaking. The Big Creek Research and Extension Team published its Final Report on or about October 22, 2019, and published a revision on December 31, 2019. The Commission reopened the public comment period for Rule 5 and Rule 6 for an additional ninety (90) days, with January 22, 2019, as the end of the public comment period.

Commenter: Don McCaskill

Comment: Future regulations must be in the form of permanent prohibitions instead of moratoriums that are inherently subject to renewal and potential weakening; the prohibition must not be limited just to swine CAFOs, but must also include concentrated "factory" farming of cattle and other domesticated livestock that, for purposes of efficient operations, generate liquid waste with associated handling facilities; no exceptions should be made that would allow permitting small CAFO's (based on number or size of animals) in the watershed since multiple small operations would likely be equally damaging and even more difficult to monitor and control; Technologically-sound restrictions on the importation of animal manure from outside the watershed and its application as fertilizer should be considered.

Response: Commenter may propose such changes through the Third Party Rulemaking process outlined in APC&EC Rule 8.

Comment: While concentrated poultry production does not typically produce liquid manure, scientifically-based restrictions on generation and/or distribution of poultry litter in the watershed should also be administered.

Response: The proposed change to the rule makes permanent the current moratorium on confined animal feeding operations of a certain size in the Buffalo River watershed. Rule 6 is specific to operations with a point source discharge to waters of the state. Comments regarding dry poultry litter are more appropriately directed to the Arkansas Department of Agriculture, Division of Natural Resources.

RULE 6 Response to Comments

Commenter: American Fisheries Society Arkansas Chapter

Comment: Rule 6.206(A)(3) – Lampreys are fish; this is redundant.

Response: “Lampreys” has been removed from Rule 6.206(A)(3).

Comment: Rule 6.301(B) - Does the existence of a tributary entering the stream between the discharge location and the point 2 miles downstream affect the calculation? For example: the streamflow at the proposed discharge location is 2 cfs, the tributary contributes 3 cfs, the streamflow 2 miles downstream is 1.9 cfs. Is this a losing stream segment?

What about the situation where a 2 cfs stream goes completely dry a half mile downstream and then resurges within the 2 mile stretch with a flow of 1.8 cfs?

Although the “bedrock” can be cavernous, a better word might be “soluble”.

A requirement should be included that the geology is reviewed by an ADEQ geologist.

As written this states that all streams in karst terrain/geology should be assumed to be losing streams unless proven otherwise. We believe this is a prudent and support this added language.

Response: Flow from a tributary entering the stream between the discharge location and the point two (2) miles downstream must be considered in the losing stream evaluation. In your example, the stream would be considered to have lost 3.1 cfs from its total flow of 5 cfs after the tributary (62% loss), so it would be considered a losing stream.

A losing stream segment defined as “beginning at the point of discharge and *extending* two (2) miles downstream,” that loses 30% of the flow over part of that range would probably be considered a losing stream regardless of whether it resurged later.

The use of cavernous was intended to refer to situations where the bedrock has channels that water can flow through, regardless of whether the bedrock is soluble or not.

The Division will take your comment regarding a review by an DEQ geologist under consideration for DEQ’s internal processing procedures.

Comment: Rule 6.301(C)(2) – “Seasonal flow” language contradicts 6.301(B) that indicates losing stream studies must be conducted at either a flow of 7Q10 or one (1) cfs.

Response: The intent of Rule 6.301(C)(2) “representative of seasonal flow” was to ensure that stream studies are performed during typical flow conditions of the critical season. The requirement of representative of seasonal flow is in addition to the minimum flow of one (1) cfs. For example, it may not be appropriate to do a losing stream study after a week of heavy rains that might have raised the water table and result in a losing stream becoming a gaining stream.

RULE 6 Response to Comments

- Comment:** Rule 6.301(C)(3)(a) – A professional hydrologist should conduct these studies, rather than owner or operator.
- Response:** In practice, the owner or operator would submit to DEQ, for review and approval, a proposed study plan prepared by a professional engineer or professional hydrogeologist.
- Comment:** Rule 6.301(D)(4) – The geometric mean is always lower than the arithmetic mean, or “average.” This revision allows for higher excursions in discharge concentrations that are considered allowable.
- “However, at no time shall the fecal coliform content exceed a geometric mean of 200 colonies per 100 milliliters in any water defined as an Extraordinary Resource Water or Natural and Scenic Waterway” – how many samples and over what time frame does this apply? This inclusion weakened the requirements. Before this revision, no individual sample could exceed 200 colonies per 100 milliliters.
- Response:** Average for fecal coliform bacteria is defined in APC&EC Rule 2.507 and NPDES Permits as a geometric mean.
- Rule 6.301(D)(4) has been corrected to state, “However, the fecal coliform content of discharges to any water defined as an Extraordinary Resource Water or Natural and Scenic Waterway shall not exceed a monthly or weekly geometric mean of 200 colonies per 100 milliliters.
- Comment:** Rule 6.301(D)(5) – What is the justification of 10 mg/L? This concentration may be applicable for protection of infants from blue baby disease, but this does not seem applicable here. Nitrogen, or -N, should also be included.
- Response:** The National Primary Drinking Water Standards limit is included to protect human health in case the losing stream is linked to aquifers that are used for drinking water. There are no water quality standards for nitrates, and the EPA Gold Book states “Recognizing that concentrations of nitrate or nitrite that would exhibit toxic effects on warm- or coldwater fish could rarely occur in nature, restrictive criteria are not recommended.” Permits may also contain Ammonia-N limits as necessary to prevent in-stream toxicity and oxygen depletion in the receiving stream. Ammonia-N and Nitrate+Nitrite-N limit the nitrogen species of greatest concern to human health and the environment.
- Comment:** Rule 6.301(D)(6) – Maintain instream dissolved oxygen concentrations at what value or values? This should be specified.
- Response:** Instream dissolved oxygen requirements are determined by the ecoregion, watershed size, and season as specified in Rule 2.505.
- Comment:** Rule 6.401(A)(2) – It is unclear whether dissolved oxygen should be maintained at existing concentrations or criteria outlined in Regulation –

RULE 6 Response to Comments

- Response:** Instream dissolved oxygen requirements are determined by the ecoregion, watershed size, and season as specified in Rule 2.505.
- Comment:** Rule 6.401(D) – Consider replacing “basin” with “watershed” for consistency throughout document.
- Response:** “Basin” has been replaced with “watershed” throughout the Rule.
- Comment:** Rule 6.403(A) – In other places throughout the document “7Q10” is used. Replace for consistency.
- Response:** Replaced “Q7-10” with “7Q10” throughout Rule 6.403(A).
- Comment:** Rule 6.404(H) – Define “season when early life stages are present.” Does this apply to all species? Life history studies have not been conducted for all species present throughout Arkansas. Much of the spawning information referenced in Fishes of Arkansas (Robinson and Buchanan 1988) is outdated and sourced from life history studies conducted outside of Arkansas. However, there is a wide range of known spawning seasons for native fishes, commonly spring through fall. Therefore, early life stages of fishes are found throughout the entire year.
- Response:** In practice, early life stages season is typically defined for permitting purposes as April through October in Arkansas and applies to all species. Applying the ecoregion temperature standard during this time period ensures a protective ammonia criterion throughout all seasons of the year.
- Comment:** Chapter 6 - Is there a difference between "basin" and "watershed"? They seem to be used interchangeably in this document. Why are both used in this heading?
- Remove “National” from references to Buffalo River watershed. “Buffalo National River” denotes the National Park Service geographic entity. “Buffalo River watershed” is more appropriate.
- Response:** Removed “basin” and replaced with “watershed,” where appropriate. Removed “National from references to the Buffalo River watershed.
- Comment:** Rule 6.602(A) – “United States Geological Survey” is the appropriate name.
- Response:** Corrected the spelling by adding “al” to “Geologic.”
- Comment:** Rule 6.602(B) – Why is this limited to swine? From a nutrient standpoint, wouldn’t other types of medium and large CAFOs (e.g., turkey, chicken, cattle) also contribute significant pollutants of concern?
- Response:** The content of Rule 6.602(B) has not changed and is therefore out of the scope of this rulemaking. The proposed change to the rule makes permanent the current moratorium on liquid animal waste management systems for confined animal feeding operations of a certain size in the Buffalo River watershed.

RULE 6 Response to Comments

Commenter: Jessie Green

- Comment:** Why is the proposed permanent moratorium in the Buffalo River watershed limited to swine? (Rule 6.602)
- Response:** The content of Rule 6.602(B) has not changed and is therefore out of the scope of this rulemaking. The proposed change to the rule makes permanent the current moratorium on confined animal operations of a certain size in the Buffalo River watershed.
- Comment:** A facility meeting the size threshold of a medium swine CAFO could still be permitted under Rule 5.901(B) and Rule 6.602(B).
- Response:** The proposed Rule 5.901(B) and Rule 6.602(B) prohibit issuance of a permit to any facility with (1) 750 or more swine weighing 55 pounds or more; or (2) 3000 or more swine weighing less than 55 pounds.
- Comment:** There are major discrepancies between the moratorium as outlined in Rule 5 and Rule 6. Will an AFO meeting the size threshold, but not regulatory definition of a medium CAFO be able to obtain coverage under Rule 6 in the Buffalo River watershed?
- Response:** No.
- Comment:** Including language stating "all operations meeting the size threshold will be assumed to be significant contributors of pollutants, and therefore designated as a CAFO" to Rule 5.901(B) and Rule 6.602(B) would address concerns outlined in section A. II. in comments above. However, size thresholds outlined in Rule 5.901(B) and Rule 6.602(B) do not provide sufficient clarity to which operations are subject to the moratorium.
- Response:** The size thresholds are clearly stated. The Rule prohibits any Confined Animal Feeding Operations of a certain size.
- Comment:** For each combination of swine listed above from 2013-2018 C&H annual reports, please respond in comments as to whether the department would have classified a new facility with the proposed corresponding numbers as: a) Large-CAFO; b) Medium-CAFO; c) Medium-sized facility (not CAFO). Please provide detailed response as to the factors underlying all determinations for hypothetically proposed operations to help clarify the scope of the moratorium.
- Response:** Hypothetical applications are outside the scope of this rulemaking.
- Comment:** Technical requirements, facility construction certification, and permitting provisions for CAFOs seeking NPDES permit coverage under Rule 6 should be (at minimum) as stringent as required by Rule 5.
- Response:** This comment is outside the scope of this rulemaking.

RULE 6 Response to Comments

Comment: Land application requirements should be outlined for all outstanding natural resource waters as defined by the Arkansas Pollution Control and Ecology Commission Rule No. 2. (Rule 5.406(D))

Response: This comment is outside the scope of this rulemaking.

Comment: Annual reporting requirements for animal operations subject to Rule 5 and Rule 5 should be revised to adequately evaluate runoff potential.

Response: This comment is outside the scope of this rulemaking.

Comment: Please provide adequate information regarding the site-specific characteristics of the Buffalo River watershed (e.g., karst terrain) that result in waters of the state being more vulnerable to land use applications (e.g., CAFO operations) and thereby warranting a permanent moratorium on select swine CAFOs.

Response: Congress designated the Buffalo River as the first National River in 1972 “for the purposes of conserving and interpreting an area containing unique scenic and scientific features, and preserving [it] as a free-flowing stream.” 16 U.S.C. § 460m-8. APC&EC Rule 2 affords the Buffalo National River its highest category of designated use, “Extraordinary Resource Water.”

Comment: Proposed changes to effluent limitations for discharges weaken protections for losing stream segments. Rule 6.301(D)(4) The geometric mean for two or more positive numbers is always lower than the arithmetic mean, or “average.” This revision allows for higher excursions in discharge concentrations that are considered allowable. These revised effluent limitations do not assure that changes are consistent with the Clean Water Act (CWA) section 303(d)(4). These relaxed limitations do not meet an anti-backsliding exemption outlined in CWA section 402(o)(2).

It is understood that the changes proposed were an attempt to be consistent with the geometric mean standard outlined in Rule 2.507. However, the Department has not demonstrated that the best professional judgement used to define the effluent limitation based on the arithmetic mean was not the original intent of the existing limitation. Please respond as to whether monitoring and reporting requirements are consistent with applicable geometric mean standards outlined in Rule 2.507.

The individual sample concentration allowable in discharges to Extraordinary Resource Waters (ERW) and Natural and Scenic Waterways (NSW; current rule) is more stringent than allowing calculations based on the geometric mean (proposed revision). Limitations were clearly meant to be more stringent in ERWs and NSWs, otherwise there would be no need to reiterate the same effluent limitation. The Department has not defined the timeframe and sample requirements for calculating the geometric mean.

In response to comments, please provide a record of existing permits discharging to losing stream segments that are subject to provisions outlined in Rule 6.301.

RULE 6 Response to Comments

Response: Average for fecal coliform bacteria is defined in APC&EC Rule 2.507 and NPDES Permits as a geometric mean.

Rule 6.301(D)(4) has been corrected to state, "However, the fecal coliform content of discharges to any water defined as an Extraordinary Resource Water or Natural and Scenic Waterway shall not exceed a monthly or weekly geometric mean of 200 colonies per 100 milliliters. The monitoring and reporting requirements are consistent with applicable geometric mean standards outlined in Rule 2.507.

Permits are available on the DEQ website at <https://www.adeq.state.ar.us/home/pdssul/pds.aspx>.

Comment: Clarify instream dissolved oxygen requirements. (Rule 6.301(D)(6) and Rule 6.401(A)(2)) Should the existing instream dissolved oxygen requirements be maintained? If so, how is instream dissolved oxygen determined? Are there specific study design requirements (e.g., continuous vs. discrete sampling, number of samples, season, measures of central tendency, etc.)?

Response: Instream dissolved oxygen requirements are determined by the ecoregion, watershed size, and season as specified in Rule 2.505.

Comment: How is 7Q10 flow determined?

What happens if capturing 7Q10 or one (1) cfs flow is not feasible?

Does the existence of a tributary entering the stream between the discharge location and the point two (2) miles downstream affect the calculation? For example, consider: the streamflow at the proposed discharge location is two (2) cfs, the tributary contributes three (3) cfs, the streamflow 2 miles downstream is 1.9 cfs. Is this a losing stream segment?

What about the situation where a two (2) cfs stream goes completely dry a half mile downstream and then resurges within the two (2) mile stretch with a flow of 1.8 cfs?

6.301(C)(2) - "representative of seasonal flow" seems to be in conflict with 7Q10 requirements. Is there another interpretation?

6.301(B) indicates that monitoring locations should be selected based on outfalls and distance downstream regardless of hydrogeomorphic characteristics (i.e., riffle, run, pool, glide). Is this correct?

Response: 7Q10 is determined by models or monitoring data from USGS. It is expected that all streams, other than very small tributaries, will have a flow of 1 cfs or greater during heavy precipitation events. Proposed discharges to a very small tributary where the flow never reached 1 cfs would be considered on a case-by-case basis. Flow from any tributaries would need to be considered in the losing stream evaluation. In your example, the stream would be considered to have lost 3.1 cfs

RULE 6 Response to Comments

from its total flow of 5 cfs after the tributary (62% loss), so it would be considered a losing stream. A losing stream segment defined as “beginning at the point of discharge and *extending* two (2) miles downstream,” that loses 30% of the flow over part of that range would probably be considered a losing stream regardless of whether it resurged later. The intent of Rule 6.301(C)(2) “representative of seasonal flow” was to ensure that stream studies are performed during typical flow conditions of the critical season. For example, it may not be appropriate to do a losing stream study after a week of heavy rains that might have raised the water table and result in a typically losing stream becoming a gaining stream. As specified in Rule 6.301(B), the segment to be considered is from the outfall extending two (2) miles downstream. The number and location of monitoring points will be established in the study plan approved by DEQ.

Comment: The presumption that, unless proven otherwise, all streams in karst terrain/geology are losing streams is a precautionary approach that is protective of sensitive waters of the state. We fully support the addition of the following sentence to Rule 6.301(B)

Response: The Division acknowledges the comment.

Comment: Hydrologic Unit Codes should be defined in Rule 6.401 (D).

Response: Hydrologic Unit Codes are available from the Department of the Interior, United States Geological Survey.

Comment: Effluent limitations for Ecologically Sensitive Waterbodies should never exceed 10/15 mg/L CBOD5. (Rule 6.401(B)(2)) Please provide rationale as to why lower limitations would be warranted in the event more species-specific information is not available.

Response: CBOD5 limitations are determined on a case-by-case basis in accordance with APC&EC Rule 2.

Comment: Monthly monitoring and reporting requirements should be required for point source discharges into watersheds of waters officially listed in Arkansas’s impaired waterbody list (303(d)). Rule 6.404.

Response: Monitoring and reporting requirements are included in all NPDES permits regardless of the receiving stream.

Commenter: Arkansas Farm Bureau Federation

Comment: The Arkansas Farm Bureau Federation would like to offer the following comments opposing the permanent moratorium on the Buffalo River watershed as initiated by Arkansas Pollution Control & Ecology Commission (APC&EC) Regulation’s 5 and 6. The ADEQ and APC&EC initiated rulemaking to prohibit landowners within the Buffalo River watershed their right to farm without a single

RULE 6 Response to Comments

shred of scientific evidence that animal agriculture, and in this case C&H Hog Farms, had caused an environmental impact. C&H Hog Farms was, and still to this day, the most heavily scrutinized and monitored farm in the state. The Big Creek Research and Extension Team was originally created by then Governor Mike Beebe to evaluate the potential impact and sustainable management of the C&H Farms operation on the water quality of Big Creek. Several years later, the ADEQ funded a drilling study to evaluate the lithology/geology below the waste storage ponds at C&H Hog Farms and to assess potential subsurface impact from the waste storage ponds. Upon completion of the drilling study, Governor Asa Hutchinson created the Beautiful Buffalo River Action Committee and authorized the development of a Watershed Management Plan for the Buffalo River Watershed that would evaluate its tributaries to determine which would need the most attention. The United States Geologic Survey (USGS) studied algal growth on the Buffalo River, as well as, nutrient concentrations upstream and downstream of Big Creek on the Buffalo River. All of these studies identified above determined either Big Creek continues to maintain pristine water quality and C&H was having no environmental impact.

Response: The Division does not concur with Commenter's conclusion regarding studies undertaken in the Buffalo River Watershed. In the Buffalo River Watershed, four Assessment Units (two sections of Big Creek and two sections of the Buffalo National River) have been identified as impaired: three for bacteria and one for dissolved oxygen.

Comment: Environmental groups state the moratorium is based on sound science and the justification used is to merely regurgitate the definition of karst. The mere presence of karst does not constitute scientific justification for a permanent moratorium. All of Northwest Arkansas and Northcentral from the Black River to the Oklahoma Border and North of the Arkansas River to Missouri as well as portion of Southwest Arkansas are underlain by karst. Using this logic, these areas should also be included in the moratorium.

Response: The purpose of this rulemaking is to make permanent the current moratorium on swine operations of a certain size in the Buffalo River watershed.

Congress designated the Buffalo River as the first National River in 1972 "for the purposes of conserving and interpreting an area containing unique scenic and scientific features, and preserving [it] as a free-flowing stream." 16 U.S.C. § 460m-8. APC&EC Rule 2 affords the Buffalo National River its highest category of designated use, "Extraordinary Resource Water."

Comment: The temporary moratorium was put in place until such time as the Big Creek and Research & Extension Team (BCRET) could study the impacts of the C&H Hog Farms operation. However, ADEQ has decided to initiate rulemaking despite the fact the BCRET final report has not been issued. In addition, at the July 26th commission meeting APC&EC commissioner Dr. Delia Haak requested the ADEQ postpone the comment period until the BCRET final report could be

RULE 6 Response to Comments

released and the public given an opportunity to review it so as to provide more meaningful feedback. the APC&EC commission implemented a temporary moratorium that required the following for Regulation 5: "Five years from the effective date of this regulation the Director shall initiate rulemaking to either delete this paragraph, Reg. 5.901(E), or delete the entirety of Reg. 5.901." And the following for Regulation 6: "Five years from the effective date of this regulation the Director shall initiate rulemaking to either delete this paragraph, Reg. 6.602(E), or delete the entirety of Reg. 6.602." Both Regulations have an effective date of August 28, 2015. Despite the fact that ADEQ is initiating rulemaking one year prior to regulatory requirements, which would allow sufficient time for the BCRET's final report to be issued, the ADEQ is proposing to delete additional sections under Regulations 5.901 and 6.602 which will have an impact to currently permitted facilities within the watershed.

Response: Changes to Rule 5 and Rule 6 will not impact any currently permitted facilities. The Big Creek Research and Extension Team published its Final Report on or about October 22, 2019, and published a revision on December 31, 2019. The Commission reopened the public comment period for Rule 5 and Rule 6 for an additional ninety (90) days, with January 22, 2019, as the end of the public comment period.

Commenter: Ross Noland

Comment: My primary concern with the revisions, as proposed, is how ADEQ will respond to a facility seeking to house swine in numbers at the limit for both weight classes. Specifically, the draft rule could be interpreted to allow a facility housing 749 swine weighing 55 pound or more and 2,999 swine weighing 55 pounds or less. This would comprise a major facility with more swine waste present than that which C & H produced.

I suggest a rule adopting a simple conversion of counting every four animals which are less than 55 pounds as one which is over 55 pounds ($3000/750=4$). Thus, if a facility proposes a mixed weight-class operation, it will be clear what the maximum permitted number in each weight class is. For example, a facility proposing to keep 100 swine over 55 pounds could also house 2,600 swine under 55 pounds, but no more.

Response: DEQ acknowledges that the numbers determining the size of the facility are derived from the federal rules. The federal rules are based on animal units. DEQ takes this into consideration when reviewing permit applications.

Commenter: Colene Gaston on behalf of Beaver Water District

Comment: The documents filed by the Division of Environmental Quality (DEQ) do not provide sufficient information for the public to understand, analyze, or evaluate

RULE 6 Response to Comments

all of the proposed changes to Reg. 6. ADEQ's Amended Petition to Initiate Rulemaking (hereinafter, the "Amended Petition") may appear to provide the "detailed explanation" required by APCEC Regulation No. 8, Administrative Procedures, at Reg. 8.808(A)(1). Closer examination of the Petition reveals, however, that proposed changes that are listed as "clarifications" or "minor corrections" sometimes are significant, substantive changes for which no real explanation of the scientific, technical, or legal bases for the changes are given. For example, see Comments 3, 4, 7, 8, 9, 10, 11, and 12 below. This necessitates amendment by ADEQ of its rulemaking documents to comply with Reg. 8.808(A)(1), to be followed by another public comment period.

Response: The Division provided a proper explanation for the proposed changes.

Comment: In the future, BWD requests that DEQ convene a meeting or meetings of interested stakeholders prior to petitioning the APCEC to initiate rulemaking to amend Reg. 6 or any final Rule 6. BWD and others have made similar requests in the past, including in our written public comments submitted on October 19, 2016, regarding another rulemaking to amend Reg. 6. Informal meetings with stakeholders in advance of the initiation of rulemaking provide opportunities for discussion and dialogue, unlike the one-way communication that takes place at public hearings and during the formal public comment period on proposed rulemakings. Among other things, such meetings: (1) educate and inform the public and the regulated community about the regulation; (2) provide a forum that allows for evolving conversations between DEQ and stakeholders with differing perspectives; (3) convey to DEQ timely and invaluable insight regarding the practical application of the regulation in a way that is not possible under the formal notice and comment process; (4) produce more comprehensive and balanced proposed changes to the regulation; and (5) result in a smoother rulemaking process. These benefits are contingent, of course, on the process being transparent and including representatives from the full spectrum of stakeholders interested in wastewater permitting and the quality of the surface waters of the state.

Response: The Division acknowledges the comment.

Comment: The last sentence in Rule 6.104(A) provides, "All as adopted as final rules (including "interim final rules" and "technical amendments") by the United States Environmental Protection Agency on or before January 1, 2016." What is the reason that the date was changed to January 1, 2016? The Amended Petition does not discuss the reason for the date selected. Shouldn't the date be the date that any amendments to Rule 6 are adopted by APCEC or at least the date that DEQ filed its rulemaking petition (which appears from the documents posted on ADEQ's website to be July 26, 2019)?

Response: After reviewing all the final rules (including "interim final rules" and "technical amendments") promulgated by the United States Environmental Protection Agency, DEQ is updating the adoption date of final rules (including "interim

RULE 6 Response to Comments

final rules" and "technical amendments") promulgated by the United States Environmental Protection Agency to January 1, 2020.

Comment: Proposed Rule 6.202(C), Application Requirements for Construction and Operation of Wastewater Facilities: This provision would delete the requirement that an approval letter from the Arkansas Department of Health (ADH) be submitted before obtaining a permit for construction of domestic wastewater treatment facilities. The Amended Petition does not explain this change, as there is nothing in it specific to Reg. 6.202(C). There is only the list of "clarifications" and "minor corrections ... " "specifically to ... [s]implify Reg. 6.202 generally and remove repetitive language." See Amended Petition at numbered paragraph 4.d.(2). Doing away with the requirement for the submission of an approval letter from ADH, however, is not a clarification, a minor correction, or a simplification (except in terms of easing the requirements). DEQ may contend that the proposed change removes repetitive language because of the provision currently at Reg. 6.202(D), which is proposed to be Rule 6.202(K). DEQ, however, also proposes to substantively change that provision (see Comment 10, below). BWD, therefore, objects to the deletion of the requirement in Reg. 6.202(C) that an approval letter from ADH must be submitted before obtaining a permit for construction of domestic wastewater treatment facilities.

Response: Applicants seeking a permit for the construction and operation of wastewater facilities are still required to receive ADH approval before constructing a wastewater facility: the applicant must obtain ADH approval before initiating construction. This allows DEQ to process state construction permits more efficiently since most applicants submit applications to ADH and DEQ at the same time meaning DEQ has to hold the application until ADH has issued an approval letter. With this minor change, DEQ can issue the construction permit, but the applicant cannot begin construction until the applicant has submitted the ADH approval letter to DEQ.

Comment: Proposed Rule 6.202(D), Application Requirements for Construction and Operation of Wastewater Facilities: The deletion of the phrase "the National Pollutant Discharge Elimination System permit" in the second sentence of this provision (at lines 5 and 6) may have been meant to simplify or remove repetitive language. Instead it incorrectly changes the meaning. Now, instead of the application being approved and the NPDES permit being issued, the subject of the verb "issued" is the "application." This is incorrect. Applications are approved or denied, not issued. Additionally, the words "or require" in line 7 of this provision do not make sense. Presumably, the second sentence in Rule 6.202(D) should be changed to read something along the lines of "Issuance of a state permit for construction or modification of a treatment system in no way guarantees or assumes that an application for an NPDES permit to operate the system will be approved nor does issuance of a NPDES permit assume compliance with any state wastewater-facility-construction-or-modification permit requirement or a satisfactory review of the design or construction of the treatment facility."

RULE 6 Response to Comments

- Response: NPDES was inadvertently omitted from Rule 6.202(D). The correction has been made.
- Comment: Proposed Rule 6.202(E), Application Requirements for Construction and Operation of Wastewater Facilities: The Amended Petition, at numbered paragraph 4.d.(3), states that this proposed change is to "[c]larify and make minor corrections to Reg. 6.202(E) by using appropriate language to describe the engineer responsible for approval of [sic] state construction permit." The change from "Registered Professional Engineer" to "licensed professional engineer" is in regard to who must stamp and sign the plans and specifications and design calculations that are to be submitted when applying for a state construction permit and not in regard to who approves the permit.
- Response: Registered Professional Engineer was changed to "licensed professional engineer" to clarify an engineer's status in Arkansas. Professional engineers are licensed through the Arkansas State Board of Licensure for Professional Engineers and Professional Surveyors.
- Comment: Proposed Rule 6.202(F), Application Requirements for Construction and Operation of Wastewater Facilities: This entirely new provision states that, "A state construction permit is not required for a facility that has a general NPDES permit if the construction of that facility or the modification of that facility has been authorized under the applicable general permit." The Amended Petition, at numbered paragraph 4.d.(4), states only that this proposed change is to "[c]larify Reg. 6.202 by adding subsection (F) to provide that a state construction permit is not required if the construction is authorized under a general NPDES permit." First, this is a significant change to and not simply a clarification of the current Reg. 6.202(A) that requires a state construction permit for "any person who desires to construct ... or modify any disposal system " [Emphasis added]. Second, no justification for such a significant change is given. Third, the proposed change contradicts the statutory prohibitions at A.C.A. §§ 8-4-217(b)(1)(A), (C), and (D) against constructing wastewater treatment plants/facilities/systems, etcetera, without first obtaining a construction permit. Given that DEQ has provided no statutory or technical basis for proposed Rule 6.202(F) and that it conflicts with the statutory provisions cited above, BWD objects to the inclusion of proposed Rule 6.202(F) and requests that it be deleted.
- Response: Certain General NPDES permits authorize construction in accordance with Ark. Code Ann. §§ 8-4-217(b)(1)(A), (C), and (D). Those General NPDES permits include ARG790000, ARG550000, ARG500000, ARG160000. The construction requirements set forth in the aforementioned general NPDES permits are consistent with the requirements for a state construction permit:
- A state construction permit requires the following:
- DEQ Form 1
 - DEQ Construction Permit Application Form—parts 1–12—not applicable to the general NPDES permits that authorize construction

RULE 6 Response to Comments

Design Calculations

Plans and Specifications signed and stamped by a professional engineer registered in AR

Disclosure Statement

NPDES General Permit Number ARG790000 for Groundwater and Surface Water Petroleum Remediation Facilities Located within the State of Arkansas covers construction of a treatment system and discharge of treated petroleum contaminated groundwater and surface water provided the following conditions have been met:

1.2.1.1. The treatment system (e.g. air stripper, etc.) is designed to provide adequate treatment of wastewater to meet the effluent limitations of this general permit; and

1.2.1.2. If an existing treatment system will be used, the treatment system was properly permitted under a State Construction Permit in accordance with APC&EC Regulation 6; and

1.2.1.3. If a new treatment system is proposed, the requirements in Part 1.4.4 below are met.

1.4.4. Construction Requirements

1.4.4.1. Any facility requesting approval to construct a treatment system must submit an ADEQ Form 1, plans and specifications, and design calculations stamped by a Professional Engineer registered in the State of Arkansas in accordance with APC&EC Regulation 6.202.

1.4.4.2. An additional \$500 fee will be required based on Regulation 9.402(A).

1.4.3.5. A Disclosure Statement as required by APC&EC Reg. 8.204.

NPDES General Permit Number ARG550000 for Operators of Individual Treatment Facilities Generating Only Domestic Waste located within the State of Arkansas.

1.2.1.1 This general permit covers the construction and installation of individual treatment facilities provided that the system design has been approved by ADEQ and that the system has been approved by the Arkansas Department of Health (ADH). Each individual treatment facility shall be designed or equipped so that effluent discharged by the system will be in compliance with effluent limitations set forth in Part 2. ADEQ will maintain a list of evaluated and approved treatment system designs on the General Non-Stormwater Permits webpage: https://www.adeq.state.ar.us/water/permits/npdes/nonstormwater/p_list-ofacceptable-systems.aspx

1.2.1.2 This general permit also covers discharges from individual treatment facilities that are constructed or installed as described above.

1.3.1.5 if the system is owned by a corporation, a Proof of Good Standing with the Arkansas Secretary of State and the Secretary of State of the permittee's state of origin (if not Arkansas); and

1.3.1.6 a Disclosure Statement (if applicable). A blank copy of the Disclosure Statement may be obtained at the following link (per APC&EC Reg.

RULE 6 Response to Comments

8.204(C)(7)(a)(vi), homeowners are exempt):
https://www.adeq.state.ar.us/ADEQ_Disclosure_Statement.pdf.

NPDES General Permit Number ARG500000 for Aggregate Facilities located within the State of Arkansas.

1.2.1.3. This general permit also covers the construction of process water ponds at Aggregate facilities.

1.2.4.1 Pond Construction Requirements; and

1.2.4.1.1 Any facility, previously permitted or seeking a permit, that will require the construction of a process water pond will require the submission of ADEQ Form 1 and design, plans, and specifications stamped by a Professional Engineer registered in the State of Arkansas in accordance with APC&EC Reg. 6.202;

1.2.4.1.2 The process water pond shall be protected from physical damage by the one hundred (100) year flood and should remain fully operational and accessible during the twenty-five (25) year flood in accordance with Section 51.2 of the Ten State Standards;

1.2.4.1.3 The pond must be designed and constructed in accordance with Ten State Standards and the ADEQ Pond Requirements Policy;

1.2.4.1.4 The outfall structure must be designed in accordance with Section 55 of the Ten State Standards; and

1.2.4.1.5 An additional \$500.00 fee will be required based on APC&EC Reg. 9.402(A).

1.2.4.1.6 Upon completion of the pond the permittee shall submit a certification signed and stamped by a registered Professional Engineer in the state of Arkansas that the pond is in good operating condition and is in compliance with the Ten State Standards. Operation of the pond shall not commence until the Water Division has issued the Notice of Coverage.

1.2.11 No permit coverage may be granted without review of an ADEQ Disclosure Statement as required by APC&EC Regulation No. 8.

NPDES General Permit Number ARG160000 for Sanitary Landfills located within the State of Arkansas.

1.2.1. This general permit covers construction and discharge of uncontaminated stormwater from Sanitary Landfills required to have sedimentation ponds to control uncontaminated stormwater runoff from inactive areas that commingle with closed portions of the landfill as defined in Part 7 and which meet the following criteria:

1.2.1.1. Sedimentation ponds have been designed and constructed with a storage capacity to handle runoff from a 25-year, 24-hour storm event; and

1.2.1.2. In order for the ponds to maintain the required storage capacity stated in Part 1.2.1.1, operational procedures at the landfill shall include a requirement that sedimentation ponds be dewatered as soon as possible after a storm event and after sufficient settling to ensure that no effluent limitations will be exceeded.

1.3.2 Construction Requirements

RULE 6 Response to Comments

1.3.2.1 Any facility that will require the construction of a sedimentation pond will require the submission of Arkansas Form 1 and design, plans, and specifications stamped by a Professional Engineer registered in the State of Arkansas in accordance with Regulation 6.202; and

1.3.2.2 The sedimentation pond shall be protected from physical damage by the one hundred (100) year flood and should remain fully operational and accessible during the twenty-five (25) year flood in accordance with Section 51.2 of the Ten State Standards; and

1.3.2.3 There should be a minimum separation of 4 feet between the bottom of the pond and the maximum ground water elevation in accordance with Section 93.22 of the Ten State Standards; and

1.3.2.4 There should be a minimum separation of 2 feet between the top liner and the top of the bedrock (as adapted from Regulation 22.431), except in the areas of the St. Joe and Boone formations, where a minimum separation of 10 feet will be required between the bottom liner and the highest point of the bedrock or pinnacles (as adapted from Regulation 22.425); and

1.3.2.5 Dikes and pond bottom shall be compacted to at least 95 percent Standard Proctor Density to form a stable structure in accordance with Section 93.411 and Section 93.421 of the Ten State Standards; and

1.3.2.6 Inner and outer dike slopes shall not be steeper than 1 vertical to 3 horizontal (1:3) in accordance with Section 93.413 of the Ten State Standards; and

1.3.2.7 Inner slopes should not be flatter than 1 vertical to 4 horizontal (1:4) in accordance with Section 93.414 of the Ten State Standards; and

1.3.2.8 Minimum freeboard shall be 2 feet in accordance with Section 93.415 of the Ten State Standards; and

1.3.2.9 Dikes shall have a covered layer of at least 4 inches of fertile topsoil to promote establishment of an adequate vegetative cover wherever riprap is not utilized. Erosion control on the interior dike slopes may be necessary for ponds which are subject to severe wave action in accordance with Section 93.417 of the Ten State Standards; and

1.3.2.10 The sedimentation pond must have a pond bottom liner with a permeability of less than 1×10^{-7} cm/sec and a thickness of at least 1 foot or equivalent before the start of operation in accordance with Section 93.422 of the Ten State Standards; and

1.3.2.11 A pond level gauge shall be provided in accordance with Section 93.56 of the Ten State Standards; and

1.3.2.12 The outfall structure must be designed in accordance with Section 55 of the Ten State Standards; and

1.3.2.13 An additional \$500 fee will be required based on Regulation 9.402(A).

1.3.3 A certification indicating that the ponds have been constructed in accordance with the plans, designs, and specifications based on the Ten State Standards (and listed in Part 1.3.2) must be submitted to the Department prior to commencing operation of the pond.

1.3.1.9 A Disclosure Statement as required by Reg. 6.204 of the APC&EC

RULE 6 Response to Comments

- Comment:** Proposed Rule 6.202(H), Application Requirements for Construction and Operation of Wastewater Facilities: Proposed Reg. 6.202(H) was moved from current Reg. 6.202(B) and changed significantly, including deletion of the disinfection requirements. Once again, the Amended Petition, at numbered paragraph 4.d.(5), characterizes this change as a "clarification" and provides no explanation or justification for it. BWD would not necessarily object to the proposed changes if an appropriate legal, scientific, or technical basis had been provided by DEQ. In the absence of any explanation or justification for the proposed changes, however, BWD objects to the proposed changes and, in particular, to the deletion of the provision that, "Disinfection shall be required when necessary to meet the State's water quality standards for the receiving stream or to protect public water supplies and recreational use areas. " This or a comparable provision should be reinserted.
- Response:** Rule 6.202(G) requires that design criteria for wastewater treatment plants be based on the applicable provision in the latest edition of Ten States Standards. Rule 6.202(H) prescribes those standards that apply to all wastewater treatment plants. Chapter 100 of Ten States Standards states, "Disinfection of the effluent shall be provided as necessary to meet applicable standards." Disinfection is not applicable to all wastewater treatment plants, for example, many industrial wastewater treatment plants do not have a waste stream that requires disinfection. Thus, disinfection is not required for all wastewater treatment plants.
- Comment:** Proposed Rule 6.202(1), Application Requirements for Construction and Operation of Wastewater Facilities: This new provision specifies that, "The design criteria for nondomestic wastewater treatment plants shall be reviewed and approved by the Office of Water Quality of ADEQ as part of the application process." The Amended Petition, at numbered paragraph 4.d.(7) states only that Reg. [sic] 6.202(1) is added "concerning design criteria for nondomestic wastewater treatment plants." First, "ADEQ" should be "DEQ." Second, and more importantly, DEQ once again provides no explanation for this new provision. See Amended Petition, numbered paragraph 4.d.(7). Consequently, the purpose of this new provision is unclear to BWD. Doesn't DEQ review and approve the design criteria for all wastewater treatment plants? Why is this provision limited to "nondomestic" wastewater treatment plants? In the absence of any explanation or justification for proposed Rule 6.202(1), BWD objects to this new provision and requests that DEQ review whether it is appropriate as written.
- Response:** Removed "A" from "ADEQ." DEQ reviews and approves the design criteria for all wastewater treatment plants, excluding individual residential septic systems. Nondomestic wastewater treatment plants are separated from the domestic wastewater treatment plants because Ten States Standards typically do not apply to nondomestic wastewater treatment plants. Domestic and municipal wastewater treatment plant construction standards are based on Ten States Standards unless a deviation from those standards is fully justified.
- Comment:** Proposed Rule 6.202(K), Application Requirements for Construction and Operation of Wastewater Facilities: This proposed revision to current Reg.

RULE 6 Response to Comments

6.202(D) alters the timing of when an approval letter from ADH is required. Instead of requiring that the approval letter from the ADH be submitted with the application for a permit for construction of domestic wastewater treatment facilities as is currently the case, proposed Rule 6.202(D) apparently would only require that an ADH approval letter be obtained before beginning construction. There is no explanation for the proposed revision in the Amended Petition. See also Comment 4, above. BWD objects to this proposed revision.

Response: This allows DEQ to process state construction permits more efficiently since most applicants submit applications to ADH and DEQ at the same time meaning that DEQ has to hold the application until ADH has issued an approval letter. With this minor change, DEQ can issue the construction permit, but the applicant cannot begin construction until the applicant has submitted the ADH approval letter to DEQ.

Comment: Proposed Rule 6.203, Permitting Requirements for Stormwater Discharges Associated with a Small Construction Site: This proposed revision eliminates most of the prescriptive requirements of Reg. 6.203. The Amended Petition, at numbered paragraph 4.d.(8), states only that Reg. 6.202(1) is to "[s]implify and clarify Reg. 6.203 concerning the permitting requirements for stormwater discharges associated with a small construction site, including automatic permit coverage." In the absence of any explanation or justification for the major revisions in proposed Reg. 6.203 and to the extent that the changes relax the requirements for small construction sites, BWD objects to the proposed changes.

Response: Proposed Rule 6.203 does not change the requirements for small construction sites. Rule 6.203(B) still requires that the Stormwater Pollution Prevention Plan be prepared using good engineering practices. Rule 6.203(C) requires the owner or operator of a small construction site to "comply with all requirements of the NPDES General Permit for Stormwater Construction Discharge Permit." Part II Section A Conditions 4 and 5 of the NPDES General Permit for Stormwater Construction Discharge Permit detail the requirements of a Stormwater Pollution Prevention Plan. Therefore, requiring the owner or operator of a small construction site to comply with all requirements of the NPDES General Permit for Stormwater Construction Discharge Permit is a simplification of Rule 6.203.

Comment: Proposed Rule 6.401(A)(I), Determination of Domestic Wastewater Effluent Limitations: BWD objects to the change at Reg. 6.401 (A)(I) that would delete the requirement for "nutrient removal where appropriate." Again, the Amended Petition provides no explanation or justification for this proposed revision. See Amended Petition, numbered paragraph 4.d.(13). The lack of nutrient removal could negatively impact receiving streams, including tributaries to drinking water supply sources.

Response: The phrase "nutrient removal where appropriate" was inadvertently omitted. The phrase has been restored to Rule 6.401(A)(I).

RULE 6 Response to Comments

Comment: Proposed Rule 6.401(C), Determination of Domestic Wastewater Effluent Limitations: BWD requests that this provision regarding discharges of domestic wastewater to reservoirs and domestic water supplies be expanded to include tributaries of reservoirs and domestic water supplies. BWD additionally requests that the same minimum 1.0 mg/L monthly average Total Phosphorus limitation that applies to discharges to the streams and their tributaries listed in proposed Rule 6.401 (D) also apply to reservoirs and domestic water supplies and their tributaries. The negative impacts that nutrients can have on reservoirs and drinking water supplies are well documented and justify these requested revisions.

Response: Commenter may seek to make those changes to Rule 6 through the Third Party Rulemaking procedures outlined in Rule 8.

Commenters: Buffalo River Watershed Alliance; Brian Thompson

Comment: Section 6.202(F) The Alliance believes the construction permitting process serves an important purpose in allowing the ADEQ to review and approve an engineer's construction plans, provide notice to the public, and ensure that disposal systems are constructed in accordance with the plans submitted and approved. This change weakens the permitting process, is against the public interest, and is one that the Alliance strongly opposes. A separate construction permit, and public notice of application for such a permit, should be required.

Response: Certain General NPDES permits authorize construction in accordance with Ark. Code Ann. §§ 8-4-217(b)(1)(A), (C), and (D). Those General NPDES permits include ARG790000, ARG550000, ARG500000, ARG160000. The construction requirements set forth in the aforementioned general NPDES permits are consistent with the requirements for a state construction permit. See Response to Beaver Water District for a comparison of the general NPDES permit construction requirements.

Comment: Section 6.301(D)(4) Regulation 2.507 states, "For assessment of ambient waters as impaired by bacteria, [see] the below listed applicable values for E. coli ..." (emphasis added) E. coli is considered by EPA to be a better indicator of bacterial impairment with regard to human health than fecal coliform. "Assessment of Escherichia coli Concentrations in the Surface Waters of Buffalo National River 2009 to 2012 Buffalo National River Report NPS/ B-0100/2013 " which states on page 2, "In recent years, guidance from the EPA has suggested that the utilization of E. coli was more effective in monitoring surface waters from a human health perspective than was fecal coliform. So, in 2009 the park began to make the transition from fecal coliform to that of E. coli for monitoring purpose. and as of now, the park collects both fecal coliform and E. coli." In order to be consistent with existing state regulations and conform with federal guidelines, E. coli should be the primary analyte for monitoring bacterial contamination, not fecal coliform, and section 6.310(D)(4) should be changed accordingly. The final sentence of this section regarding ERW/NSWs does not specify a period during which the

RULE 6 Response to Comments

geometric mean is to be calculated. The phrase, “at no time” implies that no single sample should exceed 200 colonies per 100 ml, therefore the language regarding geometric mean is incorrect because a mean cannot be calculated based on a single sample. This sentence should either specify a minimum number of samples to be taken in order to calculate a geometric mean, or the reference to geometric mean should be removed. Whether by averages or geometric means, the application of any mathematical formula should not be allowed to obscure dangerous peak readings when public health is of concern. Parents allow their children to swim in ERWs on the assumption that this designation means the water is safe for human contact

Response: Discharge limitations for E. coli have been included in Rule 6.301(D)(4).

Rule 6.301(D)(4) has been corrected to state, “However, the fecal coliform content of discharges to any water defined as an Extraordinary Resource Water or Natural and Scenic Waterway shall not exceed a monthly or weekly geometric mean of 200 colonies per 100 milliliters.

Comment: We fully support the proposed changes to Chapter 6 and particularly Rule 6.602 regarding issuance of permits for medium and large swine CAFOs in the Buffalo National River watershed.

Response: The Division acknowledges the comment.

Commenter: Central Arkansas Water

Comment: Rule 6.207—Notification to appropriate drinking water utilities should be required. It is suggested to add an additional notification as follows:

(5) The operator of record for any drinking water utility withdrawing water from a source impacted by the CAFO.

Response: Arkansas Department of Health does not disclose the location of the source intakes so it would be difficult for an applicator to locate correctly. DEQ notifies ADH by way of a weekly application received email.

Comment: Rule 6.404(B)—Use of the phrase, “no distinctly visible increase” does not properly categorize the potential impact to a receiving water. For example, if a stream or water body normally has a turbidity of 5 Nephelometric Turbidity Units (NTUs), and it increases to 20 NTUs, the result may barely be noticeable to the general public. However, that amount of increase in turbidity in a drinking water supply will create a situation whereby water treatment methodology will need to be modified in order to maintain the resultant finished water quality. This increases both the cost of treatment and jeopardizes human health.

RULE 6 Response to Comments

I would recommend the following modification: There shall be no distinctly visible increase in turbidity of receiving waters or impact to the designated uses attributable to discharges or instream activities.

Addition of “or impact to the designated uses” brings this statement into alignment with language in (F) Nutrients.

Response: The language of Rule 6.404(B) is consistent with Rule 2.503. The Division will take this comment under advisement.

Comment: Rule 6.404(F)—Use of the term “Materials” is rather vague. Sentence also seems to be missing a “be”.

Suggest: Substances stimulating algal growth shall not be present in any discharges in concentrations sufficient to cause objectionable algal densities or other nuisance aquatic vegetation or otherwise impair any designated use of the receiving waters.

Response: The use of “materials” in Rule 6.404(F) is consistent with Rule 2.509.

RULE 6 Response to Comments Received During the Comment Period Extension

The following submitted comments in favor of the rulemaking for Rule 6 to make permanent the moratorium on medium and large CAFOs in the Buffalo River Watershed:

James Seawel; Dennis Dinkel; Judy White; Cassandra Fox; Cindy Baker; Tonia Spurlock; Ted Porter; Kimberly Rabon; Allyce Capps; Genia Bennett; Karen Seller; Adam Schaffer; Kathy Madding; Kerry Kraus; Sharon Holladay; Jack Land; Robert Merritt; LaJuana Oswald; Lisa Orton; David Pope; Ashley Money; Thomas Baldrige; Elizabeth Mazzone; Mary Ellen Hill; David Jones; Pat Ford; Julie Lanshe; Andrew Blann; Jerry Hale; Brenda Barnhill; Debbie Galbraith; Cameron Peck; Anice Tedford; Denise Lanuti; Karen Hicks; Tim Crouch; Eric Torgerson; Helen Pounds; Nancy Harris; Susan Smith; Chris Dillon; Dixie Rhyne; Sonja Williams; Lynn Risser; Patricia McKeown; Karen Huber; Sherrie McIntyre; Shawn Porter; David Kuhne; Susan Hantz; Nancy Johnson; Katie Deakins; Mike Fick; Steven Barger; Frank Kelly; Charles Eubanks; Cynthia Jetton; David Orr; Beth Ardapple; Kent Landrum; Ellen Mitchell; Burnetta Hinterthuer; Margot Lavoie; Annie Holmes; William Jeter; Mary Susan Seawel; Deanne Mayer; Sharon Gattis; Carole Cimarron; Carolyn Shearman; Ginger Milan; Cathey Morris; Jana Brady; Beth Goodwin; Virginia Booth; Sue Mabry; Victoria McClendon; Lowell Collins; David Martinson; Barbara Fell; Jerry Dorman; Karen Crocker; Joel Emerson; Don McCaskill; Annee Littell; Mary Gocio; David Hughey; Erin Rowe; Cathy Ross; Janice Muetzel; Candice Kozark; William Thomas; Schuyler Schwarting; Karen Beneke; George Wise; Jann Bell; Yolanda Dreher; Linda Vanblaricom; Kenneth Leonard; John Slater; Marvin Schwartz; Randall Hollenbeck; Bryan Signorelli; Susan Moore; Ann Owen; Cay Miller; Diana Angelo; Steve Kopp; John Fritz; John Courtway; John Ray; Ginny Masullo; Susie Parker; Laura Villegas; Karen Bartle; Susan Fields; Nancy Harris; Robert Pikel; Frederick Paillet; Michele Jackson; Randy Jackson; Albefrita Wells; Melissa White; Susan Benton; Heather Hudgens; Steve Singleton; Dorothy Bailey; Katherine Weaver; Ryan Duncan; Dave and Nan Johnson-Spencer; Dee Elkins; Grant Scarsdale; Debbie Galbraith; Eileen Neukranz; Gail King; Robert van Rossum; Karen Crocker; Paul Vickers; Louise Mann; Beth Goodwin; Judi Nail; Scott Stanley; Roger Burke; Dean Castle; Vanessa Tomczak; Marshall Dickey; Gene Sparling; Michael Stoecker; Margaret Sands; Kim Smith; Cary Roth; Kenneth Carle; Roger Jones; Edd French; Jan VanSchuyver; Glenn Benson; Cheryl Rutledge; Tsunemi Yamashita; Jeff Hood; Fay Knox; Judith Duguid and Elmer Gall; Michael Rapp; Karen Harris; Richard Gray; Elaine Appel; Richard Barnes; Brad Green; Camille Carpenter; Autumn Gillmore; Joe Golden; Genia Bennett; Dara Yeager; Sylvia Scott; Maria Smith; Ronald Stark; Martha Ragar; Marty Mignard; Michael Adelman; Debbie Alexy; Terry Karnes; Raymond Herschend; Blake Stone; Will Larkin; Harvey Pierce; Ray Hall; Jackie Lamar; Donnie Hutchens; Richard Olson; Kathryn Searcy; Roxanne Thompson; Ted Porter; Robert Merritt; Don Hamilton; Linda Schuck; Karen Bartle; Robert Smith; Paula Breid; Mike McMullin; Lorraine Heartfield; Julian Clark; Mary Adams; Tom Parsons; Kathleer Trotter; Glenda Allison; John Shelton; Steven Singleton; JJ Willis; Mike Kelly; Katy Hinegardner; Mageli Candetaria; Shelley Buonaiuto; Robert Dum; Carol Storthz; Cassie Gill; Nonah Olesen; William Wellner; John Layson; James Hicks; Suzie Bell; Shirley Bailey; William Etges; Marian Johnson; Christine Perry; Gregory Flower; Peggy Volland; Mike

RULE 6 Response to Comments Received During the Comment Period Extension

Swanner; Joseph Hewgley; Jack Stewart; Terry Dailey; Carolyn Watts; Michael Sprunger; Jo Johnson; Jean Smith; Carol Patterson; Gail King; Kara Beach; Ed Laster; Judith Griffith; Karen Garrett; Sandy Pianalto; Beverly Glass; Brent Boughn; Deborah Meldahl; Teresa Crawford; Charles Lowrey; Sidney Graham; Susan Jenkins; Cynthia Patton; Elisabeth Olsson; Laura Hutzel; Natalie Mannering; D. Dunagin; Shirley Pharis; Larry Hedrick; Don Castleberry; Joe Murphy; Danny Jenkins; Lisa Schoult; Bill Beall; Karen Keith; James Haguewood; Julia Tucker; Lynell Withers; Scott Luchesi; Jerome Jansma; Gregory Floyd; Wendy Luna; Tammy Alexander; Pat Yates; Brenda Tirey; David Harju; Susan Leslie; Chris Daniels; Barry Bennett; John Andrews; Pamela Westerman; Lynn Christie; Caitlin Cassidy; Bruce Petray; Diane Mikrut; Larry Olesen; Ray Stahl; Marc McCord; Geniece Yates; Joseph Long; Samantha Blanchard; Bennie Scott; Christine Carlson; Paula Pope; Dennis W Wright; Dave Stahle; Nancy Pierson; Frank Meeks; Claudia Carberry; Elizabeth Bradford; Rebecca Evans; James E Wimberly; Joseph D. LaFace; Steve Heye; Glenn Pearson; Dorothy Bailey; Abel Tomlinson; Cody Wyatt; Francie Bolter; Lucy Rhodes; Winifred Hirsch; Ken Duncan; Jim Pfeifer; Charles Mullins; Eugene Milus; Joe Neal; Scott Yaich; Klaus Kupfersberger; James Krieger; Kelsey Mayans; Adam Schaffer; Michelle Trost; Jack Land; Phillip Taylor; Crystal Rust; Sara Wittenberg; Dwan Garrison; Paul McCune; Jess VanderStek; Joan Meeks; Heather Smith; Frits Druff; Lora Dail; Kirk Rhoads; Robert Duncan; Dana Steward; Bill Steward; Francis Millett; Cornelia Beck; Kathleen Beattie; William Beattie; Diane Newcomb; Steve Davis; Amy Strickland; Chris Hankins; Doug Holmes; Bert Kell; Corey Pettett; Karen Walls; Sharon Boatright; Duane Woltjen; Lee Cowan; Zane Colvin; Darla Wroblski; Bonnie Jaeckle; Carol Percifull; Michael Berry; Emma Hickey; Johnny Furness; Carolyn Wilkins; Mark Smith; Zach Turner; Laurie Fisher; Cindy Jetton; Cathy Shingledecker; Faith Shah; Michael Frank Shah; Donna Peterson; Mary Heller; Jon Bonney; Thomas Emerick; Lisa Kessler; Sarah Cumnock; John Shultz; Ashley Miner; Joe Rath; Mike OConnell; Thomas Keel; Brian Thompson; Cliff Barnes; Carol Ann Lasater; Bill Farrell; Karen Bartle; Charles Phillips; Teri Patrick; Jerry Cagle; Steve Hesse; Claiborne Morton; Barry Haas; Roger Reep; Gene Dunaway; Laura Timby; Trudi Rust; Nancy Miner; William Eaton; Joe Massey; Ruth Weinstein-McShane; Joseph McShane; Peg McCoy; Janette Groves; John Ray; Steven Foster; Richard Stauffacher; Jerome and Harriet Jansma; Carmen Quinn; Willem DeBruijn; Barry Martindale; Lolly Tindol; Jon Hackler; Sherri Ramseyer; Keaton Smith; Al Agnew; Karen Spence; Mary Agnew; Betty L Scott; Yolanda Dreher; James McPherson; Alisa Dixon; Richard P. Osborne; Debora Carpenter; Jamie White; Jill Acree; Charles Johnson; Pamela Ellwood; Tammy Tennyson; Robert Shingledecker; Kevin Ehemann; Rebecca Holden; Cathy Ross; Daniela Tamayo; Michael Armstrong; Andrew Proctor; Mary E. Fitzgerald; William Threet; Gladys Tiffany; Lauri Patterson; Nancy Hartney; Stephen Bailey; Fred Goldthorpe; Kathrine Jones; Kay Ewart; Janet Nye; Pamela Phillips; Janet Parsch; Debbie Howorka; Tim Eubanks; Laura Fleetwood; Joy Henning; William Dailey; Dara Yeager; Tim Yeager; Brenda Miller; Jill Valenti; Jim Bush; James Frederick; Bryan Manire; Mark Richards; Gerald Toler; David Peterson; Sarah Thompson; Grimsley Graham; Timothy Dean; Harrie Farrow; Lynn Phillips; Mark Alderman; Ralph Rexroad; Eva Coffee; James Cohea; Derek

RULE 6 Response to Comments Received During the Comment Period Extension

Linn; Kay Abney; Margaret Fortuny; John Sutherland; Glenn Jones; Ann Mesrobian; Gary Bivens; Sam McClea; Mary Schlatterer; Jolynn Loftus; Emily Linn; Eunice Millett; Philip Waters; Danny Coleman; Ellen Tutt; Andrea Ross; Marin Miller; Sue Lupien; Valerie Dunn; Stuart Reaves; Miles Riley; Rebecca Corley; Dale Heath; Clay Parton; Stephen Ballard; Howard Aleshire; Kevin Christian; Angela Head; LA Tann; Christopher Walters; James Jones; James Strack; Dennis W Wright; Hamilton Bell; Evelyn Sammons; Lynn R; Lyn Caveness; James Brandenburg; Roxana Wallace; Patricia Mitchell; Gail Leftwich; Edith Stahl; Beth Keck; David Malm; Annastasia Hunter; Ann Segura; Roger Pyzocha; Gail Eastlack; Kim Hamilton; Gail Lee; Bendex Stevenson; Jessie Cave; Kelsey Dixson; Sami Saati; William Pickel; Syama Barden; Patrick Thom; Emily Spillers; Christopher Zapf; Laura Allcon; Mayleena Benham; Jarret Bain; Kevvin Brown; Cassidy Rolle; Shawna Woodside; Alec Severe; Laura Newth; Jordon Henley; Ginger Milan; Kevin Nawa; Josh Robinson; Imani Doyle; Cynthia Peterson; Lizabeth Lottmann; Arkansas Canoe Club; Ray Jones; Friends of the North Fork and White Rivers; Saline River Watershed Alliance; Audubon Arkansas; Daniel Cohee; Gerald Weber; Janice LaBrie; Katie Deakins; Alan Nye; Jacob Bradow; Leslie Coston; Karen Ramsey; Megan Johnson; Donna Bouzi; Dustin Brown; Dale Steffens; Kirk Rhoads; James Ollerenshaw; Terry Sutterfield; Mike Risk; William Smith; Jimmy McCain; Jan Scheel; Rodney Lewis; Willow Stratton; Kim Hesse; Notm Windt; Mary Green; Randal Camp; Deborah Graham; Nick McDaniel; Frank Sospenzi; Nancy Bumgardner; Marcia Zamora; Lucas Parsch; Emily Roberts; David Gruenewald; Tim Mason; Byron East; Rachel Henriques; Brittney Russell; Gordon King; Scott Barstow; Laurie Schuler; Mary Morris; Geniece Yates; Terri Huber; Susan Howe; Bonnie Nickol; Peter Pulay; Matt Foster; William Spaine; Tom Perry; Christopher Pryor; Harmon Chadbourn; Marsha Havens; Debbie Doss; David Parker; Gary Speed; C F Christian; Jesse Phillips; Robert Walker; Michael Butler; Beth Forbes; Norma Senyard; Ozark Society Peterson; Jan Wilson; Bonnie Smith; Kathy Sutterfield; Johnny Sain; William Stephenson; Kenneth Pape; Tom Simmons; Lynn Berry; Vicki Jett; Cathy Joyce; James Britt; Michael Tipton; Susanna Brinnon; William Kumpuris; Betty Pitts; Elizabeth VanderStek; Bill Pettit; Amber Manney; Tom Krohn; Bettie Lu Lancaster; Rhonda Reid; Jeff Ingram; Julianne Bitely; Robert D Architect; Bob Tyler; Christopher Fischer; Mary Simonson; Marianne Lombardi-Nelle; Phyllis Ridgway; Cheryl Marcum; Carole Degginger; Teresa Turk; Bob Billig; Linda Nichols; Mark Degginger; Fran Alexander; Ed McEowen; Garland Goodwin; Susan Holt; Marti Olesen; Annette Pettit; Billie Walker; George Campbell; Beverly Wright; Bill Pitts; Bruce Darr; Jennifer Conner; Susan Jenkins; Christy Lavelly; Susan Watkins; Eric Fraser; John Murdoch; William Spitzer; Betsy Murdoch; Thomas Johnson; David Schisler; Alice Andrews; Carol Bitting; Robin Rumph; Mary Kunkle; Terry Fredrick; Charles Finch; Hamsa Karth; Judith Mchhoff; Mona Vica; Lynn Cunningham; Mary Brizzi; Darci Kent; Dan Kelley; Sandra Tedder; John Ray; Jennifer Hartzill; Patricia Mikkelson; Carolyn Swaney; Lisa Milligan; Jody Miskell; F Jane Scroggs; Juliette Minkel; Lary Lindly; Rye Wheeler; Rick Henterthuen; Gordon Bradford; Jane Bachmann; Jan Townsley; Jane Titus; John LaBrie; Deborah Bartholomew; Emilie Lasiter; Doug Shields; Mary Littrell; Holly Childs; Susan McBay; Sharon Schmidt; Julie Ironside; Stephen Ironside; Sharon

RULE 6 Response to Comments Received During the Comment Period Extension

Morgan; Stephen Smith; Jim Lukens; Nan Yarnelle; Vicki Bergman; Ben Pollock Jr.; Robert Morgan; Jim Dudley; Barabara Jaquish; Trenton Morrow; Christy Pollock; Aaron Hinterthuer; Noelia Cerna; Walter Schmidt; Dawn Fisher; Kimberly Smith; Susan Shore; Mary Brenel; Drearna Phoenix; Rachel O'Carroll; Patricia McDonald; James Alexander; Michael Cockram; Elizabeth Gambert; Denise Nemea; Patricia Doyal; Frank Sharp; Helen Kwiatkowski; Sara Parnell; Sara Sharp; Joyce Hale; Charles Watson; Phyllis Rengier; Barbara Willett; Margaret Konert; Tristen Wylde; Hoyor Clave Benefield; Charley Reese; Amy Wilson; Steve Holst; Kristina Palmer; Hannah Lee; Scott Mashburn; Miller Nance; Nan Smith-Blair; Jacob Risliy; Shannon Ball; Marian Kunetka; Gary Weidner; Baileigh Payne; Susan Puckett; Karen Chotkowski; Michele James; Patti Kent; Patricia Wyatt; Susan Raymond; Deborah Robinson; Aurora Zisner; Mimi Burke; Milton Burke; Rena Jean Schmieg; Austin Bailly; G. Grimsley Graham; Jonna Hussey; Becky McCain; Aaron Smith; Rick Spicer; Joan Miller; Judi Hart; Vic Trolio; Amy Groth; Anna Koch; Paula Matthews; Millie Nelms; Joshua Bassarear; Jessica DeChant; Amy Bassarear; Barbara DeChant; Theresa Miller; Jennifer Clayborn Baldassari; Carole Lane; Jenna Lebleavsley; Torrey Travy; Paige Drummond; Carl Vevi; Ella May Powell; Jill Marshall; Douglas Forrester; Sophie Nolan; Julia Montgomery; Sharon Berman; Hooria Tariq; Corinne Spicer; Michael deBays; Sarah Spangler; Darla Newman; Ashley Erickson; Elizabeth Rademacher; Michelle Hendren; Dave Kuhre; Carole Lane; Jeff Kearnen; Carla Weeks; Mary Olson; Andrea Goehl; Jacqueline Gray; Janna Peters; Denise Dore; Eleana Hale; Eleanor Edana Hale; David Hale; Terry Donohue; Cindy Dollard; Timothy Permenter; Ellen Mitchell; V.B. McClendon; John Hagberg; Bobby Allen Jr.; Jessica McClendon; Lisa Skiles; Brian Jorgensen; Brent Jorgensen; Barbara Haas; Mark Bieliacki; Skipp Cluff; Aletha Tetterton; Robert Hudson; Cathey Cluff; Jake Weeden; Kristin Olesen-Jorgensen; Nancy Harris; Sean McGinnis; Jessica Van; CG Apt; Lyna Van; Brett Sparkman; Ashley Darig; Sidney Grutz; Leighanna Rickman; Rania Trulley; Julia Chowdhury; Michael de Buys; Kathleen Conway; Victoria Linn; Shawna Miller; Richard Waggoner; Pattie Heitzman; Dianne Williams; Ben Strawn; Geoffrey Oelsner; Joey Head; Heather Chowdhury; Catherine Wallack; Michael Heffernan; Chau Nesson Bayett; Barbara Dillon; Nancy Ann Heffernan; Andrew Head; N. Alan Hull; Paras Chowdhury; Rich King; Sherman Storchio; Frank Travis Head; Carly Overbey; Marthanne Squires; Gina Berquist; Rachel Hill; Stephen Cooper; Del Heck; Nichole Head; Dawn Newman; Chris James; Linda James; Sequoyah Chowdhury; Pranati Chowdhury; Prizam Chowdhury; Perry Chowdhury; Ana Garces-Wood; Joith Squires; Leslie Oelsner; Nancy Harris; Patricai Studer; Sara Long; Nichole Rowan; Celine Simpson; Danielle Lower; J. Manning; Ashan Kennedy; Jane Mercedes Bolsterli; RA Rowan; Dylan Wieties; Frank Livingston; Alisha Johnson; Richard Sloan; Mary Paal; Sylvia Turner; Candy Turner; Carolyn DuCharme; Dennis Schlegelmilch; Briana Brockmann; Danny Jenkins; Stephen Atwood; Jamie Thoryn; John Edwards; Sydney Krevan; Erica Nadeau; Madison Martin; E. Cunningham; Renee Teague; Andrew; Doug Pardu; Cele Greece; Zaehe! Talraee; illegible name; Shannon Mitchell; Julie Long; Ronald Weets; Maggie Weeden; Cristie Donohue; Mary Sivensa; Roxanne Thompson; Kara Kearney; Kathy Downs; Alexandra Sparkman; Kelly Weinberg; Chava Nesson Bayett;

RULE 6 Response to Comments Received During the Comment Period Extension

August Baumgartner; Caroline Martin; Stacey Wieties; Heather Cook; Lindsay Scott; Sarah Spangler; Iris Scarborough; Deac Lancaster; Emily Lane; John Calhoun; Damen Long; Faybran Whittle; Adam Moore; Paul Moore; Diane Vanhook; Kelly White; Wendy Hannah; Susan Murray; DeMarius Davis; Richard Bench; Landra Bench; Andrew Sparks; L. Leilani Lau; Maria Grace; Hayden Weaver; Anna Wolff; Foel Wagner; Chase Bilon; April Lane; Patricia Poulter; Annabella Singley; Christian Singley; Kathleen Marleneanu; Megan Kyles; Dakota Ashley; Addison Black; Allyson Walsh; Chase McDonnough; Junier Morales; Kolin Amerson; Hunter Little; Jueli Nail; John King; Nancy Garner; Marites Sales; Mort Gitelman; Jeff Montgomery; Karen Kakemoto; Don Bridges; Brenda Brown; Michele Gibson; Michael McKinnon; Jeannie Philpott; Helen Davis; Isabel Rodriguez; Sonie Toori; Susan Fredrick; Barbara Fell; Patrick Freyer; Erin Ford; Gracie Garrett; Ryan Hicks; Lamon Wade; Logan Wolfe; Marle Cavender; Cain Farnam; Joshua Chamberlain; Zavier Grant; Jason Tiller; Nathaniel Hernandez-Juarez; Hope Smith; Alan Beudel; Dustin Davis; Suzanne Webre; Kathren Green; Cody Brown; Ryan Clark; Cy Sheffield; Drew Hawthorn; Jackson Rouse; Debbie Chalfant; Nancy Martino; Charles Lowe III; Peter Pulay; M Corley; David Weeks; Hank van Rossum; Jahaira Sanchez Garay; Jerry Brown; Joe Nix; Joel Nunneley; Kathy Martone; Leslie Kline; Darlene Carvin; Linda Padgett; Gray Norton; Keith Runion; Deborah Doerr; James Haguewood; Barbara Waymire; Janet Bartos; Johanna Oswald; Lynn Spiva; John Sarna; Gordon Messling; Caro Anderson; Allen Myers; Kirk Rhoads; Inez Lewis; Paula Bongo; Terry Dailey; Martha Stobaugh; Thomas Anthony; Karen Sage; Don Hamilton; Katie Becker; Ann Burnett; Sally Benson; Patti Criner; T Mullarkey; Easha Sawyer; Robert Brewer; Maryanne Morrow; Maria Gomez; David Parker; Karen Tablish; Timothy Dean; Catherine Reynolds; Eileen Joyce; Beth Seward; Jane Krone; Grace Christie; Daniel Bertram; Theanna Benefiel; Lisa Schoultz; Darlene Carvin; Bob Bowker; Ruth Billingsley

Response: The Division acknowledges the comments submitted in favor of the rulemaking for Rule 6 to make permanent the moratorium on medium and large CAFOs in the Buffalo River Watershed.

RULE 6 Response to Comments Received During the Comment Period Extension

The following submitted comments through the Arkansas Farm Bureau Federation opposing the rulemaking for Rule 6 to make permanent the moratorium on medium and large CAFOs in the Buffalo River Watershed:

Jordan Winkler; Tim Burcham; Ronald G; Divella, Derik, and Miranda Gray; Richie Gray; Shawn Ragland; Greg Ragland; Shane McElroy; Derik Gray; Jerry Whitten; Stewart Warner; Joy West; Roberta Golmon; Elliott Golmon; Tommy Sorrells; Jay Sorrells; Alex Dykes; Melvin Daniel; Melba Wren; W.A. Wren; Sherry Felts; Benton Felts; Kay Moseley; Terry Moseley; William Groce; Shaun Pazn; Melissa Goodson; Leslie Turner; M.H. Bitely III; Robery Goodson; James Baber; Halle Cummings; Sheena Slate; Richard Pierce; Savanna Behning; Shea Gregory; Brenda Patton; James and Brenda Patton; Sue Billiet; Ken Billiet; Bruce Jackson; Jeb Weleld; Julia McLelland; Bennup Trevlen; Randy Arnold Bill Dodgen; Virginia Dodgen; Joel Pace; Bob Schaefers; Rudry Vers; Diane Thompson; Jim Cunningham; Danna Cofer; Daniel Cofer; Rusty Smith; Janice and Bob Shofner; Nicholas Simon; Jon Carroll; Johnny Gravett; Steve Eddington; Hellen Wayown; Carey Robertson; Danny Wood; Tommy Thompson; Becky Wood; Flora Harrington; Linda Parish; Morgan Harrington; Erin and Kallem Hill; Jason Cofer; Bobby Cofer; David Hodges; Angie Hodges; Charles Denver; Chris Schaefers; Glynn Guenther; Joe Stroub; JennaMrtin; Tony Bradley; Valerie Turner; Jack Parish; Dwight Kirkpatrick; C and Bill Nicholson; Jeanice Hess; Tom Hess; Darren Eubanks; Brittany Leek; Kerry Hartmesh; Beverly Quillin; Terry Rushing; Vanna Eddignton; Lorie Henley; Stephen Boyd; Brad Henley; Sarah Burns; Molly Taylor; Deana Taylor; Angela Morrison; Dennis Taylor; Kendall Morrison; Mel Crawford; Regina Chaney; Sandra Jackson; Raymond Staggs; Angie Pierer; Robert Benedict; Betty Garner; Clifton Gifford Jr; Staneley Rhodes; Jason Smedley; Carol Fields; Ronney Fields; Bobby Ballinger; Steven Harrington; Harlie Treat; Janet Clark; Kenny Clark; Meagan Ballinger; Libbie Dogan; Allan Beuerman; Randall Quillin; Brad and Tara Peacock; Deborah Brennan; Robert Stobaugh; Cheryl Phipps; Tammy Thompson; Roger Thompson; Regina Oliver; Brian Jones; Jerry Shannon; Dustin Cowell; Cindy and Gene Pharr; Jackie Hatcher; Norma Robinson; Maurice Robinson; Gary Procton; Jewell Proctor; Barbara Horn; Lonnie Horn; Jeff Pitchford; Belinda Wright; Everett Mason; Katie Mason; Todd Johnston; Tedd Phipps; Bill Sodon; Keith Shepherd; Amy Shepherd; Curtis Shepherd; Helen Williams; Casey Wooten; Jana Carroll; John Horton; Donna Horton; Elaina Martin; Keith Martin; Terry Duboise; Victoria West; Shyane Ferguson; Barbara Sutton; Nedra Turney; Larry Williams; Kerry Stiles; Randal Colemon; Keith Woolverton; Robert Strobel; Jonathan Roberts; Zach Tidwell; Stanley Taylor; Kevin Cochran; Amanda Mathio; Janet Mathio; Allen Stewart; David Walt; Joe Haller; Kimie Head; David Head; Larry Smith; Dan Stewart; Magen Allen; Mark Keaton; Jason Murray; Cindy Wilson; Leon Wilson; James Rhein; Danny Naegle; Dana Stewart; Rocky Harrell; Diana Alston; Luke Alston; Jeremy Wicdeman; John Mitchell; Keith Futrell; Shelly Futrell; Terry Norwood; Shelia Brown; Stacy Wilson; Jimmy Brown; Pauline Pronia; Gail Sewell; Judy Branscum; Ivan Wilson; Morgan Taylor; Rachel Bearden; John Bend; Steve Barne; Judy Brown; ; Robert Brown; Kevin Flippin; Larry Blodell Jr; Cheryl Blasdel; Brian Weesenfels; Judith Warmstrong; Pat Bocksnick; Jim Bocksmith; Tom and Jan Leslie; Jennifer Martin; Mark and Mindy Lockhart;

RULE 6 Response to Comments Received During the Comment Period Extension

Clay Antley; Doreen Anty; Beth and Don Ullrich; Steve Toney; Nicole Moore; Curtis Moore; Ralph Moore; Allen Moore; Jack Kildow; Cindy Moore; Reba Moore; Richard Armstrong; Barb Hillman; Hal Hillman;

Response: The Division acknowledges the comments submitted in opposition of the rulemaking for Rule 6 to make permanent the moratorium on medium and large CAFOs in the Buffalo River Watershed.

RULE 6 Response to Comments Received During the Comment Period Extension

Commenter: Anice Tedford

Comment: I also strongly support Reg. 6 to include adoption of federal revisions to the NPDES program, including sufficiently sensitive test methods, cooling water intake structure requirements, steam electric power generating, and reporting requirements; incorporations of statutory changes passed by the Arkansas General Assembly, amending the Trust Fund permitting requirements, changing Arkansas Department of Environmental Quality to Division of Environmental Quality, changing the title of regulations to rules; revising to make permanent the moratorium of confined animal operations of a certain size in the Buffalo National River Watershed; several minor corrections to make the regulation more illustrative of the legislative and regulatory intent; and a variety of non-substantive and minor stylistic changes in the interest of clarity and consistency. All effort should be made to protect the Buffalo National River Watershed. Thank you!

Response: The Division acknowledges the comment.

Commenter: Shawn Porter

Comment: Furthermore support a complete ban on CAFOS statewide. I am a small farmer.

Response: Commenter may propose such changes through the Third Party Rulemaking process outlined in APC&EC Rule 8.

Commenter: David Jones

Comment: I have commented previously about the importance of the moratorium being made permanent. Now I'm wondering about the delay. There has been more than ample time for public comments.

Response: The Commission reopened the public comment period for Rule 5 and Rule 6 for an additional ninety (90) days, with January 22, 2019, as the end of the public comment period.

Commenter: M K Elkins

Comment: This doesn't not include the air pollution. We have gone to Sam's Throne and it smell almost be unbearable

Response: This comment is outside the scope of this rulemaking.

RULE 6 Response to Comments Received During the Comment Period Extension

Commenter: Johon Fritz

Comment: Keep the title as "regulations", meaning, do not change "regulations" to "rules". Maintain the moratorium on CAFOs in the Buffalo River watershed, in keeping with The American Public Health Association's (APHA) new policy statement advising federal, state, and local governments and public health agencies to impose a moratorium on all new and expanding concentrated feeding animal operations (CAFOs).

Response: Act 315 of the 2019 requires all state agencies to use "rule" in place of "regulation."

Commenter: Gerald Weber

Comment: Regulation 6 should be discarded.

Response: Rule 6 is necessary to qualify the State of Arkansas to receive authorization to implement the State water pollution control permitting program, in lieu of the federal National Pollutant Discharge Elimination System program, pursuant to the federal Clean Water Act, 33 U.S.C. § 1251 et seq. In order to receive such authorization, it is necessary for the Arkansas Department of Environmental Quality to have regulations as stringent as the federal program administered by the United States Environmental Protection Agency.

Commenter: Richard Spiker

Comment: This just proves that the citizens of the states that allow CAFO's, like Missouri, end up with the bill and the meat packers and ag. corporations get off "scott free". The citizens of Missouri must wake up to the CAFO's being allowed and supported by our governor and "bought off" legislature.

Response: This comment is outside the scope of this rulemaking.

Commenter: Marti Olesen

Comment: As I read the BCRET final report, one part especially made me think twice about the conclusions it drew. The report included a comparison of the local Big Creek watershed with the Upper Illinois and Upper White River watershed in order to submit its opinion that Big Creek was in good shape. Anyone who is familiar with the northwest Arkansas water situation is aware of the long-term battle between Oklahoma and Arkansas about impaired water quality due to excess nitrates that Arkansas has released into the waters of Oklahoma. A Nutrient Surplus Area was

RULE 6 Response to Comments Received During the Comment Period Extension

designated to relieve the input of nutrients to remediate that situation. If the BCRET had proposed a similar Nutrient Surplus Area restriction on the Buffalo River Watershed in their report, then this comparison might have had a purpose. Instead they used it to say that the Big Creek area is just fine because it is not worse than the other. Since the other has a large and growing urban base and innumerable poultry operations, it can only truly be useful as a warning of what can develop in a watershed through uncontrolled growth. ADEQ has prudently proposed a moratorium to limit such proliferation of waste in the Buffalo River watershed, but perhaps a Nutrient Surplus Area designation would be beneficial here as well, since waste from such designated areas can be hauled and dumped here.

Response: The Division did not review or approve the study design and has no authority over the data analysis performed by BCRET. While the Division may consider the research conducted by the University of Arkansas, questions regarding the study and the final report should be more appropriately directed to the University of Arkansas.

Commenter: Diane Goodwin

Comment: I am strongly against this.

Response: The Division acknowledges the comment.

Commenter: Elliott Golmon

Comment: We need to continue to support our Farmers who are on the front lines in the battle to preserve our nations ecosystems through sound farming practices based on research which utilizes science. We are against the moratorium on farms of any type that threaten private property rights, especially those that are following the rules set forth by our governmental agencies.

Response: The Division acknowledges the comment.

Commenter: Buffalo River Watershed Alliance

Comment: Summary: The Big Creek Research Extension Team's (BCRET)'s final report (https://bigcreekresearch.org/project_reports/) in spite of numerous errors and apparent obfuscation, nevertheless clearly documents, after only 5 years of

RULE 6 Response to Comments Received During the Comment Period Extension

operation, water quality impacts from a single hog concentrated animal feeding operation (CAFO) in the Buffalo National River Watershed. Such facilities are 2 designed for a much longer operational life. In this case, C&H Hog Farm had an initial 12-year contract and likely would have remained operational for a much longer period if not for the closure of the facility. The documented impacts as detailed below would have grown exponentially if, 1) C&H had been allowed to operate until the end of its design life, and/or, 2) additional medium or large swine CAFOs were permitted in the watershed. Statements and data from the BCRET report, and the conclusions of the expert panel review of the BCRET report, along with the two expert reports attached to these comments, all reveal impacts and advise caution regarding management of swine waste from C&H and warn of the potential impact of other such facilities in the watershed, thus supporting the need for a permanent moratorium on swine CAFOs in the Buffalo National River watershed in order to protect this extraordinary resource water and state and national icon. It must be noted that this 90-day comment period was opened ostensibly to allow for comments on the BCRET final report, released after the previous 30-day comment period had closed. While our comments here reference the BCRET report, we contend that the BCRET final report is so rife with errors that the accuracy and reliability of its entire contents and conclusions are called into serious question. Even the expert review team did not identify numerous errors which only came to light due to careful review by concerned citizens who brought errors to the notice of the BCRET team. Some of these errors are noted below. Some have been corrected in the revised report but others persist. Below in Part 1 are examples of impact to soil and surface and groundwater from operation of the C&H Hog Farm, quoting from the BCRET final report. There follows in Part 2, excerpts from two reports prepared by Mike Smolen, Ph.D, an acknowledged expert in water quality and agricultural waste management. Both reports are attached to these comments in their entirety as part of our comments.

Response: This rulemaking makes permanent the moratorium on medium and large CAFOs in the Buffalo River watershed, and includes a moratorium on land application permits for CAFOs in the Buffalo River watershed. C&H Hog Farms, Inc. is outside the scope of this rulemaking. The Division did not review or approve the study design and has no authority over the data analysis performed by BCRET. While the Division may consider the research conducted by the University of Arkansas, questions regarding the study and the final report should be more appropriately directed to the University of Arkansas.

Commenter: Arkansas Farm Bureau Federation

RULE 6 Response to Comments Received During the Comment Period Extension

- Comment:** The Arkansas Farm Bureau Federation would like to offer the following comments opposing the permanent moratorium on the Buffalo River watershed as initiated in Arkansas Pollution Control & Ecology Commission (APC&EC) Regulation's 5 and 6. The ADEQ and APC&EC initiated rulemaking to prohibit landowners within the Buffalo River watershed their right to farm without a single shred of scientific evidence that animal agriculture, and in this case C&H Hog Farms, had caused an environmental impact. C&H Hog Farms was, and still to this day, the most heavily scrutinized and monitored farm in the state. The Big Creek Research and Extension Team was originally created by then Governor Mike Beebe to evaluate the potential impact and sustainable management of the C&H Farms operation on the water quality of Big Creek. Several years later, the ADEQ funded a drilling study to evaluate the lithology/geology below the waste storage ponds at C&H Hog Farms and to assess potential subsurface impact from the waste storage ponds. Upon completion of the drilling study, Governor Asa Hutchinson created the Beautiful Buffalo River Action Committee and authorized the development of a Watershed Management Plan for the Buffalo River Watershed that would evaluate its tributaries to determine which would need the most attention. The United States Geologic Survey (USGS) studied algal growth on the Buffalo River, as well as, nutrient concentrations upstream and downstream of Big Creek on the Buffalo River. All of these studies identified above determined either Big Creek continues to maintain pristine water quality and C&H was having no environmental impact.
- Response:** The Division does not concur with Commenter's conclusion regarding studies undertaken in the Buffalo River Watershed. In the Buffalo River Watershed, four Assessment Units (two sections of Big Creek and two sections of the Buffalo National River) have been identified as impaired: three for bacteria and one for dissolved oxygen.
- Comment:** Environmental groups state the moratorium is based on sound science and the justification used is to merely regurgitate the definition of karst. The mere presence of karst does not constitute scientific justification for a permanent moratorium. All of Northwest Arkansas and Northcentral from the Black River to the Oklahoma Border and North of the Arkansas River to Missouri as well as portion of Southwest Arkansas are underlain by karst. Using this logic, these areas should also be included in the moratorium.
- Response:** The purpose of this rulemaking is to make permanent the current moratorium on swine operations of a certain size in the Buffalo River watershed.
- Congress designated the Buffalo River as the first National River in 1972 "for the purposes of conserving and interpreting an area containing unique scenic and scientific features, and preserving [it] as a free-flowing stream." 16 U.S.C. § 460m-8. APC&EC Rule 2 affords the Buffalo National River its highest category of designated use, "Extraordinary Resource Water."

RULE 6 Response to Comments Received During the Comment Period Extension

Commenter: Joel Nunneley

Comment: There is a new mining operation near the Kings River that is right above Keel's Creek, a major tributary to the Kings River. ADEQ needs to be vigilant in protecting the beautiful Kong's River.

Response: This comment is outside the scope of this rulemaking.

Commenter: Brian Pruitt

Comment: Tyson is allowed to have egg farms in the buffalo river water shed alliance shed and I. Feel like it's unfair because they can spread dry litter and be in the area and the. The fact is that liquid slurry litter is absorbed by the plant and grass it's applied to and rarely reaches the soil this is a 70 year old practice that has been tested and dry litter causes more pollution than wet litter does in California chicken houses run wet litter operations and Europe wet litter is a widely accepted method for animal waste disposal and the ozark mountain region is not true karst topography as the propaganda mill describes it as I'm against this practice because agriculture was in the buffalo river valley long before tourism was and it wasn't pollution until the national park service took over this is a picture of the vault toilet at mt Hersey flooded in 2017 can you regulate them and get them out of the flood plane the mill creek pump failure is the only reason they permitted C&h farms in the first place and your agency needs a scapegoat for your mistakes and ignorance

Response: Rule 5 is specific to liquid animal waste management systems. Comments regarding dry poultry litter are more appropriately directed to the Arkansas Department of Agriculture, Division of Natural Resources. C&H Hog Farm, Inc. is outside the scope of this rulemaking.

Comment: I will definitely not stand for this action because the national park service is putting raw untreated human waste in the water every flood with the vault toilets in the flood plan

Response: The Division acknowledges the comment.

Commenter: Andy McCurcheon

Comment: I oppose a moratorium on farms in the Buffalo River watershed. There is NO evidence that C&H or any other agricultural operation in the watershed is causing or has caused any degradation of water quality in the Buffalo River. This is

RULE 6 Response to Comments Received During the Comment Period Extension

blatant government overreach and an attempt to deprive private land owners in the watershed of their right to farm.

Response: The Division acknowledges the comment. C&H Hog Farm, Inc. is outside the scope of this rulemaking.

Commenter: Shaylee Wallace

Comment: Agriculture has been a long standing and important factor to environmental sustainability. Science has shown time and time again that agriculture is not causing harm to our natural forests and rivers. Fear mongering from the opposition should not be tolerated, they are driven by their own agenda. This dissolves any rights that farmers have and gives dangerous power to anti-agriculturalists to fuel their desire to end all animal agriculture (which plays a vital role in maintaining a sound, balanced environment). We aim to raise safe sustainable food, yet fear mongers who have no knowledge or authority on the subject are pushing us around. We cannot stand for it any longer!

Response: The Division acknowledges the comment.

Commenter: Tatum Tarvin

Comment: Please be careful as you consider this regulation, Arkansas farmers deserve the respect of our state. They work tirelessly to feed the people of the great states of America. Federal law already requires so much of our farmers, and they respect the reasons for rules and regulations, however I do not believe there is enough unbiased proof to make this ruling on regulations 5 & 6! Thank you for your time.

Response: The Division acknowledges the comment.

Commenter: Michael Brotherton

Comment: NO to your ridiculous "Ban". I have no reason to believe ADEQ, The Buffalo River Watershed Alliance (BRWA), or the State of Arkansas have the best intentions for the Buffalo National River or especially Newton/Searcy counties with this action. Certain people want to keep the area "poor" and promote "tourism" in ways that serve only their own business interests. C&H Farms demonstrated the best intentions and operated in a manner exceeding the requirements set by law, and were harassed and punished for it. Meanwhile the REAL cause of damage to the river (overcrowding by humans) is buried under falsified misleading propaganda & biased pseudo-science to the extent that it ought to be considered criminal. There is not a shred of decency or moral

RULE 6 Response to Comments Received During the Comment Period Extension

character at ADEQ & BRWA and THEY should be held accountable for promoting the degradation of the Buffalo National River in the interest of Greed.

Response: The Division acknowledges the comment. C&H Hog Farm, Inc. is outside the scope of this rulemaking.

Commenter: Nathan Pennington

Comment: This regulation would set a DANGEROUS standard. If farms cannot be in a watershed then there will not be any farms. We must work together to educate people about the truth and not knee jerk regulate farms away. Farms can operate in a responsible manner. C & H never caused any issue yet they were ran off. This is a very bad idea.

Response: The proposed rule does not ban all farms from the watershed, only swine facilities larger than a certain size. C&H Hog Farm, Inc. is outside the scope of this rulemaking.

Commenter: Joann Saraydarian

Comment: I'm an Arkansas Master Naturalist and am very aware of the dangers animal waste has on our environment. The proposed moratorium under Regulation No. 6 will make it impossible to keep the Buffalo River, our National Treasure, clean! Listen to the scientific facts. What will it take to make it clear that many species depend on the purity of this river. It is a crime against the entire planet. Naturalists and tourists around the globe are attracted to our state to experience the beauty of this river. Our state is cutting off its own arm. Once it is polluted, the damage can not be reversed!

Response: The Division acknowledges the comment.

Commenter: Fay Knox

Comment: It is my understanding that the comment that was previously closed was reopened to include the results of the Big Creek Research Extension Team's (BCRET) final report. The report states in the following quotes the fact of increased phosphorous present downstream from C&H and that the complex karst hydrologic system is vulnerable to contamination. The following quotes from the limited BCRET report illustrate need for moratorium.

◀ In Chapter 7 of the BCRET report increased phosphorous is seen downstream from the one existing CAFO in the watershed. BCRET states that "Future additions of any nutrients (i.e. as mineral fertilizer, swine slurry, or poultry litter)

RULE 6 Response to Comments Received During the Comment Period Extension

should be carefully managed so as not to lead to further increases in soil test P. (BCRET Final Report, October 24, 2019, Chapter 7, pp 30-31).

• "The Big Creek Watershed below the C&H Farm and application field locations, lie within a karst hydrologic system of great complexity exhibiting intimate connection of surface-water and groundwater regimes. These characteristics endow the hydrologic system as an important recreational resource locally and regionally, but also render the system vulnerable to contamination." (BCRET Final Report, Oct. 24, 2019 Chapter 2, p.2).

Response: The Division did not review or approve the study design and has no authority over the data analysis performed by BCRET. While the Division may consider the research conducted by the University of Arkansas, questions regarding the study and the final report should be more appropriately directed to the University of Arkansas.

Commenter: Michael Rapp

Comment: I submitted a critique of the draft Environmental Impact statement in August, 2015, and that critique is attached.

Response: This comment is outside the scope of this Rulemaking.

Commenter: Duane Woltjen

Comment: Presumably the comment period is extended to January 22, 2020 to accommodate the preparation of BCRET Final Report. The version of that report presently available to the public is so full of incorrect determinations it must not be allowed to stand as representing the "facts" of the C&H fiasco. ADEQ owes the public and future generations of Arkansas an accurate report of facts and accurate interpretation of them, lest the tragedy of C&H be repeated in decades to come because someone accepts that there is no meaningful effect from this operation. I question is why ADEQ takes the word of the incompetent "professionals (?!?!)" of BCRET? ADEQ is responsible for the truth, completeness, and accuracy of any final report in this matter.

"Future additions of any nutrients to fields, which received slurry from C&H Farms, should be carefully managed, so as to not lead to further increases in soil test P. This can be achieved by application of nitrogen (N) fertilizer or slurry and poultry litter a P-based rates, where P applied is equivalent to expected forage uptake of P." so says BCRET from their Final Report. BCRET continues, even in their Final Report, to advocate what C&H was required to do when the doors opened until the doors finally closed in December of 2019. And there is no doubt that C&H faithfully applied slurry in accordance with their permit as verified by

RULE 6 Response to Comments Received During the Comment Period Extension

the inspection reports of their compliance. This BCRET advocated practice is how we ended up with Nitrate levels that more than double in Big Creek as it passes by the C&H Farm; P downstream that is double the upstream level; increasing levels of nitrates in the ground water found in the well by the two barns; ground water downstream of the barns that is 4 x the nitrate level of groundwater upstream of the barns; very high Big Creek E. coli levels such that Big Creek is declared "Impaired" by the State. Isn't the above remarkable? The Final BCRET Report recommendations have been followed for at least 6 years, and the results are a disaster! That tells us the Arkansas P Index (equivalent to the Final edict) does not work. Why not? The basic reason why it does not work is the application field geology is karst. Karst soils are extremely variable in permeability, with virtually impermeable soil lying next to conduits to the water table in unpredictable locations of greatly variable extent. If P soil samples are taken in what turns out to be a conduit or highly permeable location, P readings will be low (because the previously applied P when to the water table below). The P applied was not used by plants, it went to the groundwater. I resent BCRET's Final Report appearing as a recommendation by BCRET. This more of the BS they have foisted on C&H and the public. This is academic fraud, pure and simple. Logically, the only thing that works on karst is Not Applying Animal or Manufactured Fertilizers. (Try crop rotation to restore nutrients—old Chinese saying?). Permanent prohibition of CAFOs is necessary to protect the Buffalo River and must happen. Now

Response: The Division did not review or approve the study design and has no authority over the data analysis performed by BCRET. While the Division may consider the research conducted by the University of Arkansas, questions regarding the study and the final report should be more appropriately directed to the University of Arkansas.

Commenter: Ann Bendy

Comment: I kindly ask that the permanent moratorium for swine operations in the watershed area be voted against. As long as farms are following proper procedures and regulations there should be no reason for this moratorium. Find a better way to do it, don't just ban it all together. The moratorium would also have an economic impact by causing a loss of products, loss of jobs, and loss of economic diversity, which would have a negative impact on the area. Vote no to the moratorium on swine operations in the watershed area.

Response: The Division acknowledges the comment.

Commenters: Maser McCutcheon, Cheryl McCutcheon, Andy McCutcheon

Comment: I OPPOSE any moratorium of any type for the Buffalo River Watershed

RULE 6 Response to Comments Received During the Comment Period Extension

Response: The Division acknowledges the comment.

Commenter: **Melissa Klipp**

Comment: We as land owners and homesteaders should have the right to raise what ever animals that we need to feed our families. We worked hard for our land and we should have the opportunity to freely have our land support our families. Our children also raise pigs for 4h and compete in county fairs. Our rights should not so easily be taken away.

Response: This rulemaking does not apply to small family farms.

Commenter: **Randy McCutcheon**

Comment: As a life long resident of Searcy County Arkansas and resident of the Richland Vally just a few miles from the Woolum crossing of the Buffalo river. I am against these regulations which will not solve the problems with the river. I don't believe the Government should have this much power over a free people. The US constitution does not grant such powers to the government. This just erodes the rights of the people.

Response: The Division acknowledges the comment.

Commenter: **Ryan Crow**

Comment: I don't agree with any of this. Quit over reaching.

Response: The Division acknowledges the comment.

Commenter: **Arkansas Cattlemen's Associaton**

Comment: As currently written, the Arkansas Cattlemen's Association (ACA) opposes the changes to Regulation 6 specifically concerning the "hog moratorium" component under Rule 5.901 subparagraph (B). It is the opinion of the ACA, and its members, that this rule directly violates Arkansas Code Ann. § A.C.A. Tit. 2, Subtit. 1, Ch. 4, known as the "Arkansas Right-to-Farm" law. It is the stated purpose of A.C.A. § 2-4-101. "to reduce the loss to the state of its agriculture resources by limiting the circumstances under which agriculture operations may be deemed to be a nuisance." The Arkansas Cattlemen's Association believes that by placing a moratorium on swine confined animal feeding operations (CAFO) located on the Buffalo National River Watershed, the APC&EC is publicly stating production agriculture is a nuisance. This unwelcome mindset will set a

RULE 6 Response to Comments Received During the Comment Period Extension

dangerous precedent in future legal proceedings as well as place a "not welcome" sign at the state line to all potential livestock feeding operations. The Arkansas Cattlemen's Association finds that a swine CAFO moratorium on the Buffalo National River Watershed (BNRW) by the APC&EC and the State of Arkansas is unconstitutional or, at the very least, an encroachment on the rights of the people of Arkansas, including cattle producers. Under Arkansas's Constitution, Article 2 sub-article 22, "Property rights- Taking without just compensation prohibited" states, "The right of property is before and higher than any constitutional sanction; and private property shall not be taken, appropriated or damaged for public use, without just compensation therefor." Should the state government and the APC&EC continue to move forward with the proposed rule, they will essentially be taking private property, and the ability of private land holders to generate income from their land, away. Moreover, there is justifiable concern among cattle producers in the BNR W, and statewide, that should the proposed rule take effect, it will soon be expanded to other agricultural sectors, such as cattle production, both inside and outside the BNRW. Once again, this proposed rule sets a dangerous precedent for the future of production animal agriculture in Arkansas. With 57 separate, eight-digit watersheds located in Arkansas, the proposed rule could serve as the beginning of multiple regulations aimed at cattle operations and agriculture in watersheds throughout the state. In conclusion, the Arkansas Cattlemen's Association opposes the proposed Changes to Regulation 6. As presented, it is a violation of Arkansas law, unconstitutional when viewed against the Arkansas Constitution, and capable of setting egregiously harmful precedent. The Arkansas Cattlemen's Association believes the proposed rule should be withdrawn and other aspects on how to preserve the Buffalo National River should be examined. Such examination should include the effects of gravel roads, municipalities, feral hogs and how millions of tourist annually disturb the BNRW.

Response: The Division acknowledges the comment. Neither APC&EC nor the Division has stated that production agriculture is a nuisance.

Commenter: Cindy Majoros

Comment: Any future farms of this source really needs to be reviewed and locations considered before making a crucial decision as they didn't on this one.

Response: The permitting process is outside the scope of this rulemaking.

Commenter: Katie Deakins

Comment: Reg. 5.109 Exemption: Any confined animal operation using a liquid waste disposal system shall be exempt from the requirements of this regulation if the owner or operator obtains and maintains active coverage under either an National Pollutant Discharge Elimination System individual or general permit for

RULE 6 Response to Comments Received During the Comment Period Extension

discharges from a concentrated animal feeding operation. I am not comfortable with the proposed Reg. 5.105 Exemption. This is not strict enough to protect watershed areas in our state that are dominated by karst topography. Please do everything possible to ensure a PERMANENT moratorium on such CAFO's in the Buffalo River watershed as well as others in our beautiful Natural State. I appreciate the work Gov. Hutchison has done so far, and it is my hope he can make this a lasting legacy forever.

Response: The content of Rule 5.105 has not changed and therefore is outside the scope of this rulemaking.

Commenter: Alan Nye

Comment: I have attached my technical criticism of the Big Creek Research Extension Team report. To the extent that the Big Creek Research Extension Team report is used as a decision-making tool in whether or not to make the moratorium permanent, I request that my comments be thoughtfully considered. One result of the BCRET report is very clear. During the operation of C&H Farm, the nitrate concentrations downstream of the farm were approximately double those of the upstream sampling station. These results are the "smoking gun" strongly implying C&H Farm is a source of nitrate pollution to Big Creek and the Buffalo National River watershed. I would urge the ADEQ to make the conditions of the moratorium permanent, thereby avoiding future nutrient loading to Buffalo National River watershed and the high costs incurred to undo the mistake of allowing C&H Farm and its like to be sited and operated in the watershed.

Response: C&H Hog Farms, Inc. is outside the scope of this rulemaking. The Division did not review or approve the study design and has no authority over the data analysis performed by BCRET. While the Division may consider the research conducted by the University of Arkansas, questions regarding the study and the final report should be more appropriately directed to the University of Arkansas.

Commenter: Philip Gibson

Comment: Although my address is out of state, I own land boarding the Buffalo National River and come there often. I have been coming for 20years. I may retire on that land and become a full-time resident of Arkansas. All because if that river.

Response: The Division acknowledges the comment.

Commenter: Natalie Dettmann:

RULE 6 Response to Comments Received During the Comment Period Extension

Comment: The Buffalo River is a place that many traveler and campers enjoy; Myself included. It breaks my heart to see what has happened to it over the past years. Please consider donating in any way you can! Give your money and time to help save the river!

Response: The Division acknowledges the comment.

Commenter: Vicente Vasquez

Comment: Everyone should report the amount of waste they are dumping in to the river and everyone should be able to acces this information By everyone i refer to the companies that dump waste into the river

Response: The Division acknowledges the comment.

Commenter: Katie Watson

Comment: In many of my environmental classes for the past two years have addressed the many issues in the Buffalo River. I believe that corporations and other businesses should understand the many values the river offers to many disciplines

Response: The Division acknowledges the comment.

Commenter: Robert Agosti

Comment: Please keep all commercial (especially hog farms) animal enterprises out of the White River water shed basin.

Response: The Division acknowledges the comment.

Commenter: William Smith

Comment: Although I do question the integrity of ADEQ to do so as the agency has already failed in its initial promise to monitor and protect homeowners in the Cartney Arkansas area and the White River, The result being an unrestricted over extension of the original mining on Cartney Mountain which over the years has created a gigantic red pit and surface mining swallowing up homes and threatening local streams, remaining homeowners wells, property values, and the White River.

Response: This comment is outside the scope of this rulemaking.

RULE 6 Response to Comments Received During the Comment Period Extension

Commenter: Ozark Society Peterson

Comment: The Final Big Creek Research Extension Team (BCRET) Report deserves critical comment in order to put its conclusions and many pages of data interpretation into proper perspective. The Final BCRET report is highly technical and our response is also highly technical. A major problem is that the report makes few error estimates on the data input and therefore can't quantify the accuracy of its conclusions. Due to its lack of investigatory breadth, limited and flawed field sampling and data collection of swine waste-associated contaminants in surface water, inadequate characterization of the magnitude and timing of Big Creek surface water and stormwater runoff flows, most of the BCRET report results and conclusions cannot be confidently relied upon as a decision-making tool for assessing the impact of medium and large CAFOs on the Buffalo River watershed. Unfortunately, the authors provide no information or perspective regarding the uncertainty or variability of the study results, perhaps leading the uncritical reader to blithely accept the authors' conclusions. A good example is the chapter on surface runoff. Final Report inferences follow from column 6, table 7, page 15, the ratio of total phosphorus (TP) output and input (column 4 and 5) – neither of which is reliably estimated.

Another example of the inadequacy of the BCRET report is found in the recently re-drafted chapter 7 on nutrient loads. The apparent goal is to obtain estimates for yearly loads at BC6 and BC7 and thereby deduce the load generated in the farm stretch – a worthy goal of the investigation. But the model as presented is inscrutable (e.g. parameter values in the model are not given) and has the weakness of all models: it does not really represent the BCRET data set. As such, the results of the model are of unknown certainty. The OS presents a different method which gives similar but somewhat different estimates but includes an additional analysis of loading effects in the farm stretch of Big Creek. Our modeling of this same nutrient release is more transparent, but there can be no certainty or reliance on model results without a meaningful error analysis.

Response: The Division did not review or approve the study design and has no authority over the data analysis performed by BCRET. While the Division may consider the research conducted by the University of Arkansas, questions regarding the study and the final report should be more appropriately directed to the University of Arkansas.

Commenter: Searcy County Cattlemen's Association

Comment: On behalf of the 82 members of the Searcy County Cattlemen's Association, we OPPOSE any moratorium of any type agricultural operations for the Buffalo River Watershed.

Response: The Division acknowledges the comment.

RULE 6 Response to Comments Received During the Comment Period Extension

Commenter: Kirk Wasson

Comment: All concentrated animal growing farms of any size should not be allowed on watersheds of National Rivers and Wild and Scenic Rivers. More scientific data and research should be mandatory for approving any hog, bovine or poultry operations of any size. Major plans on monitoring and waste management should be place with monetary guarantees and criminal penalties before approving even small farms in other watersheds. Cows should be limited to one animal per acre. Hogs should be limited to the number of acres of land that the waste can be spread on. X? number of hogs per acre. All potential spread fields should be evaluated for potential runoff rates, absorption, karst and vegetation to be grown before approving concentrated animal businesses. I have winter time concentrated cattle feeding operations close to where I live that should be monitored and stopped if violating environmental laws. Some days the smell is strong and who knows what the runoff does to Bridge Creek and on downstream. While I believe in property rights, activities on my land should not affect neighbors and public lands Please ban all concentrated animal factories in drainages for all public water systems and any waterbody my grandchildren may swim in.

Response: The Division acknowledges the comment.

Commenter: Grant Scarsdale

Comment: The proposed Regulations No. 5 and No. 6 rulemaking changes for the Buffalo River watershed moratorium should encompass ALL medium and large animal feeding operations. The language of the proposed moratorium only applies to swine; however, medium and large poultry and dairy animal feeding operations pose an equivalent threat to our first national river.

Response: Rule 5 is specific to liquid animal waste management systems. Comments regarding dry poultry litter are more appropriately directed to the Arkansas Department of Agriculture, Division of Natural Resources.

Commenter: Nancy Deisch

Comment: The loopholes in Regulations 5 and 6 need to be closed to make sure that medium and large-scale animal (swine, poultry and livestock) feeding operations are covered in the moratorium on the Buffalo River watershed. If all the Arkansas watersheds were covered, wouldn't that be something? Arkansas--a cutting-edge

RULE 6 Response to Comments Received During the Comment Period Extension

example of pollutants control? It is beyond belief that this could STILL be a matter of public concern after all this time. We need to get it right before too much damage is done. Please fix the regulations--once and for all, for the good of everyone in the state!

Response: The size thresholds in Rule 6 are clearly stated.

Commenter: Ray Quick

Comment: The citizens of the State of Arkansas have spoken with respect to not allowing the C&H concentrated animal feeding operation (CAFO) to continue operating in the watershed of the Buffalo National River. ADEQ does not want to make another "mistake" by permitting any animal CAFO in the watershed of the Buffalo National River. Therefore, the proposed Regulations No. 5 and No. 6 rulemaking changes for the Buffalo River watershed moratorium should encompass ALL medium and large animal feeding operations. The language of the proposed moratorium only applies to swine; however, medium and large poultry and dairy animal feeding operations pose an equivalent threat to our first national river. In particular, given the fact that the the geology is primarily limestone/karst.

Response: C&H Hog Farms, Inc. is outside the scope of this rulemaking. Commenter may propose such changes through the Third Party Rulemaking process outlined in APC&EC Rule 8.

Commenters: Ammen Jordan; Pat Robinette; Kai Coggin; Lanie Carlson; McKendra Adams; Dixie Keyes; Terrie Martindale;

Comment: The proposed Regulations No. 5 and No. 6 rulemaking changes for the Buffalo River watershed moratorium should encompass ALL medium and large animal feeding operations. The language of the proposed moratorium only applies to swine; however, medium and large poultry and dairy animal feeding operations pose an equivalent threat to our first national river.

Response: Commenters may propose such changes through the Third Party Rulemaking process outlined in APC&EC Rule 8.

Commenters: Bennie Scott; Carol Christoffel

Comment: I am in favor of establishing a permanent moratorium on medium and large swine, chicken, and cattle CAFOs in the Buffalo and other Arkansas watersheds.

Response: Commenters may propose such changes through the Third Party Rulemaking process outlined in APC&EC Rule 8. Comments regarding dry poultry litter are more appropriately directed to the Arkansas Department of Agriculture, Division of Natural Resources.

RULE 6 Response to Comments Received During the Comment Period Extension

Commenter: Jan Wilson

Comment: Please continue the good /Godly movement you started by permanently placing a moratorium on CAFOs for medium/large swine not only in the Buffalo National River watershed, but in ALL of our precious Arkansas. I am grateful for your attention to this matter and hope you will have the wisdom needed to protect God's precious waterways for Arkansas.

Response: Commenters may propose such changes through the Third Party Rulemaking process outlined in APC&EC Rule 8.

Commenter: Dina and Jeff Nash

Comment: Our family is opposed to any future permits for CAFOs in the Buffalo River and Big Creek Watersheds. For that matter, we don't want CAFOs or polluting industries anywhere in the Extraordinary Resource Waters of the state, either; for example, the Mulberry, the Caddo, Illinois Bayou, the Little Red, etc. The data contained in the BCRET final report should be enough for the ADEQ's rule change to create a permanent moratorium on polluting CAFOs or other businesses in these sensitive karst-based soil formations. which eventually pollutes our rivers, streams, and lakes.

Response: Commenters may propose such changes through the Third Party Rulemaking process outlined in APC&EC Rule 8.

Commenter: Virginia Hartnett

Comment: Arkansas is a land of wonder and beauty, and the Buffalo River highlights this Natural State. As our National River, it deserves our respect and protection. We Arkansans are duty bound. Its waters are still being adversely affected as a result of the CAFO hog farm that has been shut down. It will take time and care to recover. It is critical that further damage be avoided. Changes to Regulations 5 & 6 should expand the moratorium to include ALL (not only swine) medium and large scale animal feeding operations in the Buffalo River Watershed.

Response: Commenter may propose such change through the Third Party Rulemaking process outlined in APC&EC Rule 8

RULE 6 Response to Comments Received During the Comment Period Extension

Commenter: White River Waterkeeper

- Comment:** The copious number of changes that were nestled within the redline document were more than any interested stakeholder could thoroughly scrutinize within a 30 or even 90-day window.
- Response:** The initial thirty (30) day public comment period was extended twenty (20) days. Together with the second public comment period, public comments were received for greater than 120 days.
- Comment:** The petition to initiate rulemaking to amend Reg. 6 does not meet the requirements of Reg. 8.808(a)(1). The petition states DEQ intends “to make permanent the moratorium of confined animal operations of a certain size...” However, this explanation falsely characterizes the scope of the proposed changes. The only variable recognized in DEQ’s description is that of size. The description fails to acknowledge that the prohibition only applies to swine AFOs of a certain size that also meet the regulatory definition of a concentrated animal feeding operation (CAFO).
- Response:** The content of Rule 6.602(B) has not changed and therefore is outside the scope of this rulemaking. DEQ acknowledges that the numbers determining the size of the facility are derived from the federal rules. The federal rules are based on animal units. DEQ takes this into consideration when reviewing permit applications.
- Comment:** To reiterate, the moratorium defined in the proposed Reg. 6.602(b) applies to concentrated animal feeding operations (CAFOs), not the more broadly defined confined animal operations (AFOs). Although all CAFOs are AFOs, not all AFOs are CAFOs. AFOs are categorized based solely on the number of animal units. An AFO can be defined as a CAFO if: i. It meets the size threshold of a Large AFO; ii. It meets the size threshold of a Medium AFO and either: a. 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. b. The AFO is found to be a significant contributor of pollutants, and the permitting authority uses its discretion to designate the facility as a CAFO. (Note: “found to be” does not translate to “presumed” to be.) iii. It meets the size threshold of a Small AFO, and the permitting authority chooses to designate it as a CAFO on a case-by-case basis because it is found to be a significant contributor of pollutants. B. The public notice, both original and of the reopening of the public comment period, fails to meet the requirement of Reg. 8.802. See above for a detailed explanation of the mischaracterization of the terms and substance of the proposed regulation changes. As explained in WRW’s September 2019 comments, DEQ’s failure to provide a detailed explanation of proposed changes

RULE 6 Response to Comments Received During the Comment Period Extension

has misled the public to believe that a facility the size of C&H Hog Farm cannot be constructed in the Buffalo River watershed under the proposed rulemaking changes. This is false.

Response: The content of Rule 6.602(B) has not changed and therefore is outside the scope of this rulemaking.

Comment: DEQ provided misleading information on the Economic Impact/ Environmental Benefit Analysis. In response to question #9, DEQ stated, "This proposed rule prohibits the citing of confined animal operations of a certain size in the Buffalo National River Watershed while still allowing small confined animal operation to operate within the watershed. Small confined animal operations pose a lesser threat to the Buffalo National River Watershed." Again, this explanation more broadly characterizes the prohibition and does not adequately reflect the extent of the ban as detailed in the proposed changes. WRW recommends that "CAFO" be deleted from the proposed Rule 6.602(b), and replaced with "confined animal operations" to meet the intent of the prohibition as spelled out in all associated rulemaking documents.

Response: The content of Rule 6.602(B) has not changed and therefore is outside the scope of this rulemaking.

Comment: Although WRW supports the prohibition, WRW is disappointed in DEQ's failure to reference the adequate scientific basis for this prohibition. To be fair, a reliable and relevant water quality monitoring study design was not employed by the Big Creek Research and Extension Team (BCRET). And to be fair to BCRET – they would have needed substantially more resources in order to design a more robust study. WRW agrees with comments submitted on behalf of Arkansas Farm Bureau that C&H Hog Farm was, and is, the most heavily scrutinized and monitored farm in the state. The fact that there are no conclusive results to definitively discern the level of water quality impacts from the farm is all the more reason a permanent medium and large AFO ban should be codified. As stated in the BCRET final report, "the complexity of karst prevents easy understanding of flow regimes, challenging effective protection and management." The dye-trace studies of Kosic (2019)² and Kosic et al. (2015)³ confirmed the complexity of subsurface flow within karst areas of the Buffalo River watershed. Interbasin transfer of groundwater flows highlighted failed assumptions of BCRET's surface water quality study design. BCRET's upstream and downstream monitoring stations on Big Creek were intended to serve as control and impact sites, respectively. However, dye-trace studies confirmed this underlying assumption was violated due to the unexpected direction of subsurface flow. If after nearly six years and close to \$1 million spent on environmental monitoring, there are still this many study design complications impacting data interpretation, is there any chance of ever generating definitive results to evaluate the extent of C&H's impact on water quality? No. Further complicating matters is the tangled and multifarious nature of nutrient cycling in the environment (Figure 1). For years, EPA has been pushing states to develop numeric water quality criteria based on assessment endpoints (e.g., food web alterations, water clarity,

RULE 6 Response to Comments Received During the Comment Period Extension

algal growth) to protect management objectives or designated uses (e.g., aquatic life, drinking water, recreation) from harmful effects of nutrient enrichment. To put that simply, in-stream nitrogen and phosphorus concentrations are not useful assessment endpoints due to chemical and physical interactions - including assimilation through the food web. There is ample empirical evidence confirming the land application of manure from C&H has resulted in a buildup of soil test phosphorus at levels known to increase runoff potential to surface waters. Also, there is ample empirical evidence supporting the notion that C&H's permitted land application of manure will result in legacy phosphorus leaching into surface and groundwater for many years to come. Recent USGS studies provide further support that there are concerning environmental effects related to animal operations impacting the health of Big Creek. This research shows significantly reduced metabolic activity in Big Creek, yet, high bacterial counts. Bacteria rendered metabolically inactive signifies the influence of CAFO pharmaceutical compounds causing antimicrobial effects. This research has focused on compounds that are known to be used in industrial agriculture and have been detected in EPA's emerging contaminant studies conducted in the Buffalo River watershed. Unfortunately, environmental research and investigations in the natural environment are never straightforward or without a plethora of confounding factors. DEQ must rely on a weight of evidence approach, which WRW believes is heavily weighted in favor of a permanent prohibition of medium and large AFOs in the Buffalo River watershed due to the sensitive karst terrain.

Response: Congress designated the Buffalo River as the first National River in 1972 "for the purposes of conserving and interpreting an area containing unique scenic and scientific features, and preserving [it] as a free-flowing stream." 16 U.S.C. § 460m-8. APC&EC Rule 2 affords the Buffalo National River its highest category of designated use, "Extraordinary Resource Water." C&H Hog Farms, Inc. is outside the scope of this rulemaking. The Division did not review or approve the study design and has no authority over the data analysis performed by BCRET. While the Division may consider the research conducted by the University of Arkansas, questions regarding the study and the final report should be more appropriately directed to the University of Arkansas.

BEFORE THE ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION

**IN THE MATTER OF AMENDMENTS TO)
REGULATION NO. 6: REGULATIONS FOR)
STATE ADMINISTRATION OF THE)
NATIONAL POLLUTANT DISCHARGE)
ELIMINATION SYSTEM (NPDES))**

DOCKET NO. 19-003-R

RECEIVED

FEB 13 2020

**BUREAU OF
LEGISLATIVE RESEARCH**

RESPONSIVE SUMMARY

Comes now the Arkansas Department of Energy and Environment, Division of Environmental Quality, by and through, Robert Blanz, Associate Director of the Office of Water Quality, and provides this Responsive Summary as required under Arkansas Pollution Control and Ecology Commission Regulation No. 8.812.

I. INTRODUCTION

The public comment record for Docket No. 19-003-R contains over 1719 comments pertaining to changes to Arkansas Pollution Control and Ecology Commission (APC&EC) Regulation No. 6, Regulations for State Administration of the National Pollutant Discharge Elimination System (NPDES).

The notice of proposed Regulation No. 6 changes and public hearing was published on August 3 and 4, 2019, in the Arkansas Democrat-Gazette. APC&EC held a public hearing on August 23, 2019, to receive comments on the proposed rule change to APC&EC Regulation No. 6. The public comment period closed on September 22, 2019. APC&EC reopened the public comment period on October 24, 2019, with an end date of January 22, 2020.

II. RESPONSES TO WRITTEN AND VERBAL COMMENTS

The following people or organizations sent comments during the public comment period and public hearing.

RULE 6 Response to Comments

The following submitted comments in favor of the rulemaking for Rule 6 to make permanent the moratorium on medium and large CAFOs in the Buffalo River Watershed:

Steven & Joan Miller; Cindy Rimkus; Millie Nelms; Sue Mabry; Cindy Thornton; Sarah Jane Polk; Josh Cross; Linda Vanblaricom; Rene Diaz; Court Mathey; Kathryn Searcy; Michael Boyd; Ruth Weinstein McShane; Joe McShane; Kathy Downs; Kathy Sutterfield; Mark Smith; Butch Anselm; Janet Brown; Harriett & Dennis Sisson; Faith McLaughlin; Jan VanSchuyver; Shirely and Robert Bowen; Sheena Pettit; Aletha Tetterton; Jane Spellman; Edie Stahl; Lynn Parker; Jason Wakefield; Geniece Yates; Holly Hanson; Debbie Alexy; Katie Schneider; Elva Kelly; Cay Miller; Bonnie Smith; Caleb Reed; Barbara Moorman; Becky McCain; Ruth Colquitt; Gregory Merlino; James Ollerenshaw; Ted Barnette; Hilda Booth; Kathleen and Larry Stanley; Laura Timby; Joe Golden; Pat Costner; James Binns; Rachel Henriques; Bryce Huff; Dave Smith; John Shelton; Lolly Tindol; Mary Floyd; Corey Brady; Trudi and Jeff Rust; Nancy Deisch; Mary Ann Guinn; Frank Reuter; Ryan Cloud; Robert van Rossum; Rebecca Holden; Leigh Barham; Hank van Rossum; Ann Lasater; Karen Bartle; Cathy Bayne; Carolyn Quick; Annie Langston; Vern Berry; Annee Littell; David Saugey; Shane Jetton; Carroll Fletcher; Susan Hardin; Chuck Maize; John Kelsey; Mary Ryan; Nancy Harris; Dan Stockman; Carolyn Cloud; Scott Davis; David Montague; Joan Murphy; Ginger Milan; Jeff Carfagno; James Gately; Linda Lewis; Mike Tipton; Sally Wood; Sally Jones; Nancy Pierson; Barbara Metzger; Nancy & Harrison Miner; Gail Leftwich; Lloyd & Linda Stith; Karen Baris; Kevin Ehemann; Dean Wilson; Mary Weeks; Carol Storthz; Gerald & Karen Gordy; Robert Cagle; Walter Fenton; Patricia Roc; Bill Thorne; Monty Keel; Joe Wavery Newman, III; Diane Mitchell; Susan Heaney; Nancy Hartney; Wendy Johnson; Mary Fitzgerald; Rose Wallace; Cathy Ross; Keith Faulkner; Bishop Bower; Shelley Buonaiuto; Greg Watkins; Tammy Narramore; Pam Chrisco; Barbara Turney; Allen Powell; Brad Lindsey; Rose Alisandre; S. J. Tucker; Helen Pounds; Janette Groves; Janet Bachmann; Brad Green; Pati Mitchell; DavidEdsall; Jennifer McMahon; Gwyn Pope; Tim Hicks; Dan Turney; Ann Mesrobian; Kimberly Brasher; Terry Sutterfield; Jay Stanley; James Mott; Robert Bowker; James, Grace, Jimmy, Amy, Rean, Rachel, Brandon, Eva, Madison, Jake, and Josh McPherson; Dee Plunkett; Patricia Peterson; John Buchan; Ellie Stalker; Kay Abney; Dara Yeager; Carole Schuster; Peggy Moody; Heather Hudgens; Krista Garrett; Helen McElree; Steve Owen; Ginger Alexander; Robert and Nancy Lewis; Robert Magness; Russ Wright; Matthew Pekar; Stephen Ballard; Joyce Hale; William Wimberly; J. LaBrie; Carol Kennedy; Jerry Weber; Duane and Judith Woltjen; Cory Betts; Scott Stanley; Darla Newman; Kennet and Tracie Pape; Tracy Fortuny; Marsha Gibson; Danny Barker; Ed Brocksmith; Beth Rooney; Laura Newth; Steve Parsons; Fay Knox; Dotty Phillips; George and Vee Ann Miller; Ron Schneider; Mike Risk; Dan Scheiman; Steve and Kim Hesse; Patrick and Kristine Hall; Ray Quick; Michelle Davis; Beth Buckley; Deborah Byron; Patty Doyal; Todd Parnell; Susan Leahy; Bill Farrell; Beth Barham; Susan Bolding; Sarah Rausch; Lynda Janos; Ralph Doty; Pam Phillips; John Outler; Mike Fagan; Camille Carpenter; Michele Hughes; Reba Potee; Ammen Jordan; Stephanie Jordan; Michael Crane; Dave Kuhne; John Ray; Georgia Lengyel; Jerrell Dillaha; Stuart Reaves; Patricia McDonald; Patti Kent; Phyllis Head; Barbara

RULE 6 Response to Comments

Jaquish; Jan Wilson; Holly Felix; Deb Campbell; Maire Caverly; James and Ashley Fletcher; Richard Isaacs; Jeff Montgomery; John Baker; Miranda Jacky; Lesha Shaver; Jerome and Harriet Jansma; Carol Wineland; Marilyn Wheeler; Pam Bryan; Stevan Vowell; Pat Hagge; Susan Fields and Jeff Scott; Liston Barber; Donald Alexander; Lynn Holmes; Dana Phillips; Sheila Richards; Robert Brewer; Thomas Maly; Martha Ragar; Susan Hubbard; Francie Bolter; Jim Warnock; Kay Ewart; Susan Parker; John Barton; John Slater; Jim Wimberly; Jo Johnson; Jim Compton; Tom Perry; Ann & Rick Owen; Christopher Fischer; Shawn Porter; Judi Nail; Fran Alexander; David Hughey; Bettie Lu Lancaster; Dorothy Mangold; Dina Nash; Maryann Getz; Paul Getz; Lynn Risser; Bryan Signorelli; Charles Mullins; Charles Williams; Mike Adelman; John Ferguson; Betsy Murdoch; Linda Arnold; Jeff Burgess; Virginia Booth; Wanda Stephens; Keaton Smith; Rick Jones; Ruth Vacin; Jeff Nash; Jenny Wiedower; Fred Henry; Susan Flourwoy; Lynn Berry; Ken Leonard; Marti and Larry Olesen; Chuck Rutherford; Tom Burroughs; John Courtway; Tom Griffith; Jan Baker; Susan Hautz; Mark & Ann Segura; Michael Wheeler; Rex and Nan Enoch; Glenda Allison; Denise Dore; Lesley Kline; Nan Johnson and Dave Spencer; Janie Lindquist; Christeen Kline; Z.D. Zbinden; Marquette Bruce and Nancy Talburt; Rachel O'Carroll; Quinn Montana; Sunnie Ruple; Kirk Rhoads; Molly Saxon; Susan Murray; Ellen Compton; Spencer Goertz-Giffen; Margaret Britain; Cindy Jetton; Gene Sparling; Annee Littell; Corey Duncan; Lucas Parsch; Donna Mulhollan; Gladys Tiffany; Annette Pettit; Pam Stewart; Ginny Masullo; Janet Nye; Katie Deakins; Nancy Paddock; Elizabeth Cantwell; Ethel Simpson; Erin Hostetler; Sherrie McIntyre; Teresa Turk; David Martinson; Tyler Chafin; Elizabeth Hale; Dana Bassi; Edward Vollman; Dana Ward; Fred Goldthorpe; Michael Douglas; Radine Nehring; Sondra Gordy; Martha Goldthorpe; Pattie Heitzman; Jeffrey Ingram; S. Beth Lowrey; Denise Nemece; Patricia McKeown; Jean Nayga; Brian and Sarah Thompson; Deb Bartholomew; Calvin Doody; Charles Leflar; Dina and Jeff Nash; Mary Schlatterer; Jeanie Calhoun; Janet Parsch; Karen Seller; Lisa Orton; Grant Scarsdale; Sharon Gattis; Michael Rapp; Bill Pettit; Kim Traw; Laura Villegas; Ellen Corley; Karen Geiger; James Seawel; Beth Ardapple; Louise Mann; Sarah Myers; Marian Johnson; Thomas Calhoun; Ellen Mitchell; Nancy Pierson; Will Larkin; Lowell Collins; Friends of the North Fork and White Rivers; National Parks Conservation Association; John Murdoch; Alice Andrews; Steve Blumreich; John Van Brahana; Bill Lord and Linda Bryant; National Park Service; Carol Bitting; David Peterson; Charles Bitting; Buffalo River Watershed Alliance; Ozark Society; 3rd Planet Peace; clgilpin1@gmail.com; marshman17@aol.com; nuffer@hu_hes.net; bombba41@gmail.com; roxrose439@gmail.com; arhiker.davis871@gmail.com; powerale@gmail.com; gary@garycawood.com; serenity.papa@gmail.com

Response: The Division acknowledges the comments submitted in favor of the rulemaking for Rule 6 to make permanent the moratorium on medium and large CAFOs in the Buffalo River Watershed.

RULE 6 Response to Comments

Commenter: Arkansas Pork Producers Association

Comment: Arkansas Pork Producers Association opposes any changes to Rule 5 as proposed in the Third Party Rulemaking.

Response: The rulemaking for Rule 5, initiated on July 26, 2019, is not a Third Party Rulemaking.

Comment: Arkansas Pork Producers Association requests that no decision on this Third Party Rulemaking be made until the Big Creek Research and Extension Team has been given the opportunity to publish its final report.

Response: The rulemaking for Rule 5, initiated on July 26, 2019, by DEQ, is not a Third Party Rulemaking. The Big Creek Research and Extension Team published its Final Report on or about October 22, 2019, and published a revision on December 31, 2019. The Commission reopened the public comment period for Rule 5 and Rule 6 for an additional ninety (90) days, with January 22, 2019, as the end of the public comment period.

Commenter: Don McCaskill

Comment: Future regulations must be in the form of permanent prohibitions instead of moratoriums that are inherently subject to renewal and potential weakening; the prohibition must not be limited just to swine CAFOs, but must also include concentrated "factory" farming of cattle and other domesticated livestock that, for purposes of efficient operations, generate liquid waste with associated handling facilities; no exceptions should be made that would allow permitting small CAFO's (based on number or size of animals) in the watershed since multiple small operations would likely be equally damaging and even more difficult to monitor and control; Technologically-sound restrictions on the importation of animal manure from outside the watershed and its application as fertilizer should be considered.

Response: Commenter may propose such changes through the Third Party Rulemaking process outlined in APC&EC Rule 8.

Comment: While concentrated poultry production does not typically produce liquid manure, scientifically-based restrictions on generation and/or distribution of poultry litter in the watershed should also be administered.

Response: The proposed change to the rule makes permanent the current moratorium on confined animal feeding operations of a certain size in the Buffalo River watershed. Rule 6 is specific to operations with a point source discharge to waters of the state. Comments regarding dry poultry litter are more appropriately directed to the Arkansas Department of Agriculture, Division of Natural Resources.

RULE 6 Response to Comments

Commenter: American Fisheries Society Arkansas Chapter

Comment: Rule 6.206(A)(3) – Lampreys are fish; this is redundant.

Response: “Lampreys” has been removed from Rule 6.206(A)(3).

Comment: Rule 6.301(B) - Does the existence of a tributary entering the stream between the discharge location and the point 2 miles downstream affect the calculation? For example: the streamflow at the proposed discharge location is 2 cfs, the tributary contributes 3 cfs, the streamflow 2 miles downstream is 1.9 cfs. Is this a losing stream segment?

What about the situation where a 2 cfs stream goes completely dry a half mile downstream and then resurges within the 2 mile stretch with a flow of 1.8 cfs?

Although the “bedrock” can be cavernous, a better word might be “soluble”.

A requirement should be included that the geology is reviewed by an ADEQ geologist.

As written this states that all streams in karst terrain/geology should be assumed to be losing streams unless proven otherwise. We believe this is a prudent and support this added language.

Response: Flow from a tributary entering the stream between the discharge location and the point two (2) miles downstream must be considered in the losing stream evaluation. In your example, the stream would be considered to have lost 3.1 cfs from its total flow of 5 cfs after the tributary (62% loss), so it would be considered a losing stream.

A losing stream segment defined as “beginning at the point of discharge and *extending* two (2) miles downstream,” that loses 30% of the flow over part of that range would probably be considered a losing stream regardless of whether it resurged later.

The use of cavernous was intended to refer to situations where the bedrock has channels that water can flow through, regardless of whether the bedrock is soluble or not.

The Division will take your comment regarding a review by an DEQ geologist under consideration for DEQ’s internal processing procedures.

Comment: Rule 6.301(C)(2) – “Seasonal flow” language contradicts 6.301(B) that indicates losing stream studies must be conducted at either a flow of 7Q10 or one (1) cfs.

Response: The intent of Rule 6.301(C)(2) “representative of seasonal flow” was to ensure that stream studies are performed during typical flow conditions of the critical season. The requirement of representative of seasonal flow is in addition to the minimum flow of one (1) cfs. For example, it may not be appropriate to do a losing stream study after a week of heavy rains that might have raised the water table and result in a losing stream becoming a gaining stream.

RULE 6 Response to Comments

Comment: Rule 6.301(C)(3)(a) – A professional hydrologist should conduct these studies, rather than owner or operator.

Response: In practice, the owner or operator would submit to DEQ, for review and approval, a proposed study plan prepared by a professional engineer or professional hydrogeologist.

Comment: Rule 6.301(D)(4) – The geometric mean is always lower than the arithmetic mean, or “average.” This revision allows for higher excursions in discharge concentrations that are considered allowable.

“However, at no time shall the fecal coliform content exceed a geometric mean of 200 colonies per 100 milliliters in any water defined as an Extraordinary Resource Water or Natural and Scenic Waterway” – how many samples and over what time frame does this apply? This inclusion weakened the requirements. Before this revision, no individual sample could exceed 200 colonies per 100 milliliters.

Response: Average for fecal coliform bacteria is defined in APC&EC Rule 2.507 and NPDES Permits as a geometric mean.

Rule 6.301(D)(4) has been corrected to state, “However, the fecal coliform content of discharges to any water defined as an Extraordinary Resource Water or Natural and Scenic Waterway shall not exceed a monthly or weekly geometric mean of 200 colonies per 100 milliliters.

Comment: Rule 6.301(D)(5) – What is the justification of 10 mg/L? This concentration may be applicable for protection of infants from blue baby disease, but this does not seem applicable here. Nitrogen, or -N, should also be included.

Response: The National Primary Drinking Water Standards limit is included to protect human health in case the losing stream is linked to aquifers that are used for drinking water. There are no water quality standards for nitrates, and the EPA Gold Book states “Recognizing that concentrations of nitrate or nitrite that would exhibit toxic effects on warm- or coldwater fish could rarely occur in nature, restrictive criteria are not recommended.” Permits may also contain Ammonia-N limits as necessary to prevent in-stream toxicity and oxygen depletion in the receiving stream. Ammonia-N and Nitrate+Nitrite-N limit the nitrogen species of greatest concern to human health and the environment.

Comment: Rule 6.301(D)(6) – Maintain instream dissolved oxygen concentrations at what value or values? This should be specified.

Response: Instream dissolved oxygen requirements are determined by the ecoregion, watershed size, and season as specified in Rule 2.505.

Comment: Rule 6.401(A)(2) – It is unclear whether dissolved oxygen should be maintained at existing concentrations or criteria outlined in Regulation 2.

RULE 6 Response to Comments

Response: Instream dissolved oxygen requirements are determined by the ecoregion, watershed size, and season as specified in Rule 2.505.

Comment: Rule 6.401(D) – Consider replacing “basin” with “watershed” for consistency throughout document.

Response: “Basin” has been replaced with “watershed” throughout the Rule.

Comment: Rule 6.403(A) – In other places throughout the document “7Q10” is used. Replace for consistency.

Response: Replaced “Q7-10” with “7Q10” throughout Rule 6.403(A).

Comment: Rule 6.404(H) – Define “season when early life stages are present.” Does this apply to all species? Life history studies have not been conducted for all species present throughout Arkansas. Much of the spawning information referenced in Fishes of Arkansas (Robinson and Buchanan 1988) is outdated and sourced from life history studies conducted outside of Arkansas. However, there is a wide range of known spawning seasons for native fishes, commonly spring through fall. Therefore, early life stages of fishes are found throughout the entire year.

Response: In practice, early life stages season is typically defined for permitting purposes as April through October in Arkansas and applies to all species. Applying the ecoregion temperature standard during this time period ensures a protective ammonia criterion throughout all seasons of the year.

Comment: Chapter 6 - Is there a difference between "basin" and "watershed"? They seem to be used interchangeably in this document. Why are both used in this heading?

Remove “National” from references to Buffalo River watershed. “Buffalo National River” denotes the National Park Service geographic entity. “Buffalo River watershed” is more appropriate.

Response: Removed “basin” and replaced with “watershed,” where appropriate. Removed “National” from references to the Buffalo River watershed.

Comment: Rule 6.602(A) – “United States Geological Survey” is the appropriate name.

Response: Corrected the spelling by adding “al” to “Geologic.”

Comment: Rule 6.602(B) – Why is this limited to swine? From a nutrient standpoint, wouldn’t other types of medium and large CAFOs (e.g., turkey, chicken, cattle) also contribute significant pollutants of concern?

Response: The content of Rule 6.602(B) has not changed and is therefore out of the scope of this rulemaking. The proposed change to the rule makes permanent the current moratorium on liquid animal waste management systems for confined animal feeding operations of a certain size in the Buffalo River watershed.

RULE 6 Response to Comments

Commenter: Jessie Green

Comment: Why is the proposed permanent moratorium in the Buffalo River watershed limited to swine? (Rule 6.602)

Response: The content of Rule 6.602(B) has not changed and is therefore out of the scope of this rulemaking. The proposed change to the rule makes permanent the current moratorium on confined animal operations of a certain size in the Buffalo River watershed.

Comment: A facility meeting the size threshold of a medium swine CAFO could still be permitted under Rule 5.901(B) and Rule 6.602(B).

Response: The proposed Rule 5.901(B) and Rule 6.602(B) prohibit issuance of a permit to any facility with (1) 750 or more swine weighing 55 pounds or more; or (2) 3000 or more swine weighing less than 55 pounds.

Comment: There are major discrepancies between the moratorium as outlined in Rule 5 and Rule 6. Will an AFO meeting the size threshold, but not regulatory definition of a medium CAFO be able to obtain coverage under Rule 6 in the Buffalo River watershed?

Response: No.

Comment: Including language stating "all operations meeting the size threshold will be assumed to be significant contributors of pollutants, and therefore designated as a CAFO" to Rule 5.901(B) and Rule 6.602(B) would address concerns outlined in section A. II. in comments above. However, size thresholds outlined in Rule 5.901(B) and Rule 6.602(B) do not provide sufficient clarity to which operations are subject to the moratorium.

Response: The size thresholds are clearly stated. The Rule prohibits any Confined Animal Feeding Operations of a certain size.

Comment: For each combination of swine listed above from 2013-2018 C&H annual reports, please respond in comments as to whether the department would have classified a new facility with the proposed corresponding numbers as: a) Large-CAFO; b) Medium-CAFO; c) Medium-sized facility (not CAFO). Please provide detailed response as to the factors underlying all determinations for hypothetically proposed operations to help clarify the scope of the moratorium.

Response: Hypothetical applications are outside the scope of this rulemaking.

Comment: Technical requirements, facility construction certification, and permitting provisions for CAFOs seeking NPDES permit coverage under Rule 6 should be (at minimum) as stringent as required by Rule 5.

Response: This comment is outside the scope of this rulemaking.

RULE 6 Response to Comments

Comment: Land application requirements should be outlined for all outstanding natural resource waters as defined by the Arkansas Pollution Control and Ecology Commission Rule No. 2. (Rule 5.406(D))

Response: This comment is outside the scope of this rulemaking.

Comment: Annual reporting requirements for animal operations subject to Rule 5 and Rule 5 should be revised to adequately evaluate runoff potential.

Response: This comment is outside the scope of this rulemaking.

Comment: Please provide adequate information regarding the site-specific characteristics of the Buffalo River watershed (e.g., karst terrain) that result in waters of the state being more vulnerable to land use applications (e.g., CAFO operations) and thereby warranting a permanent moratorium on select swine CAFOs.

Response: Congress designated the Buffalo River as the first National River in 1972 “for the purposes of conserving and interpreting an area containing unique scenic and scientific features, and preserving [it] as a free-flowing stream.” 16 U.S.C. § 460m-8. APC&EC Rule 2 affords the Buffalo National River its highest category of designated use, “Extraordinary Resource Water.”

Comment: Proposed changes to effluent limitations for discharges weaken protections for losing stream segments. Rule 6.301(D)(4) The geometric mean for two or more positive numbers is always lower than the arithmetic mean, or “average.” This revision allows for higher excursions in discharge concentrations that are considered allowable. These revised effluent limitations do not assure that changes are consistent with the Clean Water Act (CWA) section 303(d)(4). These relaxed limitations do not meet an anti-backsliding exemption outlined in CWA section 402(o)(2).

It is understood that the changes proposed were an attempt to be consistent with the geometric mean standard outlined in Rule 2.507. However, the Department has not demonstrated that the best professional judgement used to define the effluent limitation based on the arithmetic mean was not the original intent of the existing limitation. Please respond as to whether monitoring and reporting requirements are consistent with applicable geometric mean standards outlined in Rule 2.507.

The individual sample concentration allowable in discharges to Extraordinary Resource Waters (ERW) and Natural and Scenic Waterways (NSW; current rule) is more stringent than allowing calculations based on the geometric mean (proposed revision). Limitations were clearly meant to be more stringent in ERWs and NSWs, otherwise there would be no need to reiterate the same effluent limitation. The Department has not defined the timeframe and sample requirements for calculating the geometric mean.

In response to comments, please provide a record of existing permits discharging to losing stream segments that are subject to provisions outlined in Rule 6.301.

RULE 6 Response to Comments

Response: Average for fecal coliform bacteria is defined in APC&EC Rule 2.507 and NPDES Permits as a geometric mean.

Rule 6.301(D)(4) has been corrected to state, "However, the fecal coliform content of discharges to any water defined as an Extraordinary Resource Water or Natural and Scenic Waterway shall not exceed a monthly or weekly geometric mean of 200 colonies per 100 milliliters. The monitoring and reporting requirements are consistent with applicable geometric mean standards outlined in Rule 2.507.

Permits are available on the DEQ website at <https://www.adeq.state.ar.us/home/pdssul/pds.aspx>.

Comment: Clarify instream dissolved oxygen requirements. (Rule 6.301(D)(6) and Rule 6.401(A)(2)) Should the existing instream dissolved oxygen requirements be maintained? If so, how is instream dissolved oxygen determined? Are there specific study design requirements (e.g., continuous vs. discrete sampling, number of samples, season, measures of central tendency, etc.)?

Response: Instream dissolved oxygen requirements are determined by the ecoregion, watershed size, and season as specified in Rule 2.505.

Comment: How is 7Q10 flow determined?

What happens if capturing 7Q10 or one (1) cfs flow is not feasible?

Does the existence of a tributary entering the stream between the discharge location and the point two (2) miles downstream affect the calculation? For example, consider: the streamflow at the proposed discharge location is two (2) cfs, the tributary contributes three (3) cfs, the streamflow 2 miles downstream is 1.9 cfs. Is this a losing stream segment?

What about the situation where a two (2) cfs stream goes completely dry a half mile downstream and then resurges within the two (2) mile stretch with a flow of 1.8 cfs?

6.301(C)(2) - "representative of seasonal flow" seems to be in conflict with 7Q10 requirements. Is there another interpretation?

6.301(B) indicates that monitoring locations should be selected based on outfalls and distance downstream regardless of hydrogeomorphic characteristics (i.e., riffle, run, pool, glide). Is this correct?

Response: 7Q10 is determined by models or monitoring data from USGS. It is expected that all streams, other than very small tributaries, will have a flow of 1 cfs or greater during heavy precipitation events. Proposed discharges to a very small tributary where the flow never reached 1 cfs would be considered on a case-by-case basis. Flow from any tributaries would need to be considered in the losing stream evaluation. In your example, the stream would be considered to have lost 3.1 cfs

RULE 6 Response to Comments

from its total flow of 5 cfs after the tributary (62% loss), so it would be considered a losing stream. A losing stream segment defined as “beginning at the point of discharge and *extending* two (2) miles downstream,” that loses 30% of the flow over part of that range would probably be considered a losing stream regardless of whether it resurged later. The intent of Rule 6.301(C)(2) “representative of seasonal flow” was to ensure that stream studies are performed during typical flow conditions of the critical season. For example, it may not be appropriate to do a losing stream study after a week of heavy rains that might have raised the water table and result in a typically losing stream becoming a gaining stream. As specified in Rule 6.301(B), the segment to be considered is from the outfall extending two (2) miles downstream. The number and location of monitoring points will be established in the study plan approved by DEQ.

Comment: The presumption that, unless proven otherwise, all streams in karst terrain/geology are losing streams is a precautionary approach that is protective of sensitive waters of the state. We fully support the addition of the following sentence to Rule 6.301(B)

Response: The Division acknowledges the comment.

Comment: Hydrologic Unit Codes should be defined in Rule 6.401 (D).

Response: Hydrologic Unit Codes are available from the Department of the Interior, United States Geological Survey.

Comment: Effluent limitations for Ecologically Sensitive Waterbodies should never exceed 10/15 mg/L CBOD5. (Rule 6.401(B)(2)) Please provide rationale as to why lower limitations would be warranted in the event more species-specific information is not available.

Response: CBOD5 limitations are determined on a case-by-case basis in accordance with APC&EC Rule 2.

Comment: Monthly monitoring and reporting requirements should be required for point source discharges into watersheds of waters officially listed in Arkansas’s impaired waterbody list (303(d)). Rule 6.404.

Response: Monitoring and reporting requirements are included in all NPDES permits regardless of the receiving stream.

Commenter: Arkansas Farm Bureau Federation

Comment: The Arkansas Farm Bureau Federation would like to offer the following comments opposing the permanent moratorium on the Buffalo River watershed as initiated in Arkansas Pollution Control & Ecology Commission (APC&EC) Regulation’s 5 and 6. The ADEQ and APC&EC initiated rulemaking to prohibit landowners within the Buffalo River watershed their right to farm without a single

RULE 6 Response to Comments

shred of scientific evidence that animal agriculture, and in this case C&H Hog Farms, had caused an environmental impact. C&H Hog Farms was, and still to this day, the most heavily scrutinized and monitored farm in the state. The Big Creek Research and Extension Team was originally created by then Governor Mike Beebe to evaluate the potential impact and sustainable management of the C&H Farms operation on the water quality of Big Creek. Several years later, the ADEQ funded a drilling study to evaluate the lithology/geology below the waste storage ponds at C&H Hog Farms and to assess potential subsurface impact from the waste storage ponds. Upon completion of the drilling study, Governor Asa Hutchinson created the Beautiful Buffalo River Action Committee and authorized the development of a Watershed Management Plan for the Buffalo River Watershed that would evaluate its tributaries to determine which would need the most attention. The United States Geologic Survey (USGS) studied algal growth on the Buffalo River, as well as, nutrient concentrations upstream and downstream of Big Creek on the Buffalo River. All of these studies identified above determined either Big Creek continues to maintain pristine water quality and C&H was having no environmental impact.

Response: The Division does not concur with Commenter's conclusion regarding studies undertaken in the Buffalo River Watershed. In the Buffalo River Watershed, four Assessment Units (two sections of Big Creek and two sections of the Buffalo National River) have been identified as impaired: three for bacteria and one for dissolved oxygen.

Comment: Environmental groups state the moratorium is based on sound science and the justification used is to merely regurgitate the definition of karst. The mere presence of karst does not constitute scientific justification for a permanent moratorium. All of Northwest Arkansas and Northcentral from the Black River to the Oklahoma Border and North of the Arkansas River to Missouri as well as portion of Southwest Arkansas are underlain by karst. Using this logic, these areas should also be included in the moratorium.

Response: The purpose of this rulemaking is to make permanent the current moratorium on swine operations of a certain size in the Buffalo River watershed.

Congress designated the Buffalo River as the first National River in 1972 "for the purposes of conserving and interpreting an area containing unique scenic and scientific features, and preserving [it] as a free-flowing stream." 16 U.S.C. § 460m-8. APC&EC Rule 2 affords the Buffalo National River its highest category of designated use, "Extraordinary Resource Water."

Comment: The temporary moratorium was put in place until such time as the Big Creek and Research & Extension Team (BCRET) could study the impacts of the C&H Hog Farms operation. However, ADEQ has decided to initiate rulemaking despite the fact the BCRET final report has not been issued. In addition, at the July 26th commission meeting APC&EC commissioner Dr. Delia Haak requested the ADEQ postpone the comment period until the BCRET final report could be

RULE 6 Response to Comments

released and the public given an opportunity to review it so as to provide more meaningful feedback. the APC&EC commission implemented a temporary moratorium that required the following for Regulation 5: "Five years from the effective date of this regulation the Director shall initiate rulemaking to either delete this paragraph, Reg. 5.901(E), or delete the entirety of Reg. 5.901." And the following for Regulation 6: "Five years from the effective date of this regulation the Director shall initiate rulemaking to either delete this paragraph, Reg. 6.602(E), or delete the entirety of Reg. 6.602." Both Regulations have an effective date of August 28, 2015. Despite the fact that ADEQ is initiating rulemaking one year prior to regulatory requirements, which would allow sufficient time for the BCRET's final report to be issued, the ADEQ is proposing to delete additional sections under Regulations 5.901 and 6.602 which will have an impact to currently permitted facilities within the watershed.

Response: Changes to Rule 5 and Rule 6 will not impact any currently permitted facilities. The Big Creek Research and Extension Team published its Final Report on or about October 22, 2019, and published a revision on December 31, 2019. The Commission reopened the public comment period for Rule 5 and Rule 6 for an additional ninety (90) days, with January 22, 2019, as the end of the public comment period.

Commenter: **Ross Noland**

Comment: My primary concern with the revisions, as proposed, is how ADEQ will respond to a facility seeking to house swine in numbers at the limit for both weight classes. Specifically, the draft rule could be interpreted to allow a facility housing 749 swine weighing 55 pound or more and 2,999 swine weighing 55 pounds or less. This would comprise a major facility with more swine waste present than that which C & H produced.

I suggest a rule adopting a simple conversion of counting every four animals which are less than 55 pounds as one which is over 55 pounds ($3000/750=4$). Thus, if a facility proposes a mixed weight-class operation, it will be clear what the maximum permitted number in each weight class is. For example, a facility proposing to keep 100 swine over 55 pounds could also house 2,600 swine under 55 pounds, but no more.

Response: DEQ acknowledges that the numbers determining the size of the facility are derived from the federal rules. The federal rules are based on animal units. DEQ takes this into consideration when reviewing permit applications.

Commenter: **Colene Gaston on behalf of Beaver Water District**

Comment: The documents filed by the Division of Environmental Quality (DEQ) do not provide sufficient information for the public to understand, analyze, or evaluate

RULE 6 Response to Comments

all of the proposed changes to Reg. 6. ADEQ's Amended Petition to Initiate Rulemaking (hereinafter, the "Amended Petition") may appear to provide the "detailed explanation" required by APCEC Regulation No. 8, Administrative Procedures, at Reg. 8.808(A)(1). Closer examination of the Petition reveals, however, that proposed changes that are listed as "clarifications" or "minor corrections" sometimes are significant, substantive changes for which no real explanation of the scientific, technical, or legal bases for the changes are given. For example, see Comments 3, 4, 7, 8, 9, 10, 11, and 12 below. This necessitates amendment by ADEQ of its rulemaking documents to comply with Reg. 8.808(A)(1), to be followed by another public comment period.

Response: The Division provided a proper explanation for the proposed changes.

Comment: In the future, BWD requests that DEQ convene a meeting or meetings of interested stakeholders prior to petitioning the APCEC to initiate rulemaking to amend Reg. 6 or any final Rule 6. BWD and others have made similar requests in the past, including in our written public comments submitted on October 19, 2016, regarding another rulemaking to amend Reg. 6. Informal meetings with stakeholders in advance of the initiation of rulemaking provide opportunities for discussion and dialogue, unlike the one-way communication that takes place at public hearings and during the formal public comment period on proposed rulemakings. Among other things, such meetings: (1) educate and inform the public and the regulated community about the regulation; (2) provide a forum that allows for evolving conversations between DEQ and stakeholders with differing perspectives; (3) convey to DEQ timely and invaluable insight regarding the practical application of the regulation in a way that is not possible under the formal notice and comment process; (4) produce more comprehensive and balanced proposed changes to the regulation; and (5) result in a smoother rulemaking process. These benefits are contingent, of course, on the process being transparent and including representatives from the full spectrum of stakeholders interested in wastewater permitting and the quality of the surface waters of the state.

Response: The Division acknowledges the comment.

Comment: The last sentence in Rule 6.104(A) provides, "All as adopted as final rules (including "interim final rules" and "technical amendments") by the United States Environmental Protection Agency on or before January 1, 2016." What is the reason that the date was changed to January 1, 2016? The Amended Petition does not discuss the reason for the date selected. Shouldn't the date be the date that any amendments to Rule 6 are adopted by APCEC or at least the date that DEQ filed its rulemaking petition (which appears from the documents posted on ADEQ's website to be July 26, 2019)?

Response: After reviewing all the final rules (including "interim final rules" and "technical amendments") promulgated by the United States Environmental Protection Agency, DEQ is updating the adoption date of final rules (including "interim

RULE 6 Response to Comments

final rules” and “technical amendments”) promulgated by the United States Environmental Protection Agency to January 1, 2020.

Comment: Proposed Rule 6.202(C), Application Requirements for Construction and Operation of Wastewater Facilities: This provision would delete the requirement that an approval letter from the Arkansas Department of Health (ADH) be submitted before obtaining a permit for construction of domestic wastewater treatment facilities. The Amended Petition does not explain this change, as there is nothing in it specific to Reg. 6.202(C). There is only the list of "clarifications" and "minor corrections ... " "specifically to ... [s]implify Reg. 6.202 generally and remove repetitive language." See Amended Petition at numbered paragraph 4.d.(2). Doing away with the requirement for the submission of an approval letter from ADH, however, is not a clarification, a minor correction, or a simplification (except in terms of easing the requirements). DEQ may contend that the proposed change removes repetitive language because of the provision currently at Reg. 6.202(D), which is proposed to be Rule 6.202(K). DEQ, however, also proposes to substantively change that provision (see Comment 10, below). BWD, therefore, objects to the deletion of the requirement in Reg. 6.202(C) that an approval letter from ADH must be submitted before obtaining a permit for construction of domestic wastewater treatment facilities.

Response: Applicants seeking a permit for the construction and operation of wastewater facilities are still required to receive ADH approval before constructing a wastewater facility; the applicant must obtain ADH approval before initiating construction. This allows DEQ to process state construction permits more efficiently since most applicants submit applications to ADH and DEQ at the same time meaning DEQ has to hold the application until ADH has issued an approval letter. With this minor change, DEQ can issue the construction permit, but the applicant cannot begin construction until the applicant has submitted the ADH approval letter to DEQ.

Comment: Proposed Rule 6.202(D), Application Requirements for Construction and Operation of Wastewater Facilities: The deletion of the phrase "the National Pollutant Discharge Elimination System permit" in the second sentence of this provision (at lines 5 and 6) may have been meant to simplify or remove repetitive language. Instead it incorrectly changes the meaning. Now, instead of the application being approved and the NPDES permit being issued, the subject of the verb "issued" is the "application." This is incorrect. Applications are approved or denied, not issued. Additionally, the words "or require" in line 7 of this provision do not make sense. Presumably, the second sentence in Rule 6.202(D) should be changed to read something along the lines of "Issuance of a state permit for construction or modification of a treatment system in no way guarantees or assumes that an application for an NPDES permit to operate the system will be approved, nor does issuance of a NPDES permit assume compliance with any state wastewater-facility-construction-or-modification permit requirements or a satisfactory review of the design or construction of the treatment facility."

RULE 6 Response to Comments

Response: NPDES was inadvertently omitted from Rule 6.202(D). The correction has been made.

Comment: Proposed Rule 6.202(E), Application Requirements for Construction and Operation of Wastewater Facilities: The Amended Petition, at numbered paragraph 4.d.(3), states that this proposed change is to "[c]larify and make minor corrections to Reg. 6.202(E) by using appropriate language to describe the engineer responsible for approval of [sic] state construction permit." The change from "Registered Professional Engineer" to "licensed professional engineer" is in regard to who must stamp and sign the plans and specifications and design calculations that are to be submitted when applying for a state construction permit and not in regard to who approves the permit.

Response: Registered Professional Engineer was changed to "licensed professional engineer" to clarify an engineer's status in Arkansas. Professional engineers are licensed through the Arkansas State Board of Licensure for Professional Engineers and Professional Surveyors.

Comment: Proposed Rule 6.202(F), Application Requirements for Construction and Operation of Wastewater Facilities: This entirely new provision states that, "A state construction permit is not required for a facility that has a general NPDES permit if the construction of that facility or the modification of that facility has been authorized under the applicable general permit." The Amended Petition, at numbered paragraph 4.d.(4), states only that this proposed change is to "[c]larify Reg. 6.202 by adding subsection (F) to provide that a state construction permit is not required if the construction is authorized under a general NPDES permit." First, this is a significant change to and not simply a clarification of the current Reg. 6.202(A) that requires a state construction permit for "any person who desires to construct ... or modify any disposal system " [Emphasis added]. Second, no justification for such a significant change is given. Third, the proposed change contradicts the statutory prohibitions at A.C.A. §§ 8-4-217(b)(1)(A), (C), and (D) against constructing wastewater treatment plants/facilities/systems, etcetera, without first obtaining a construction permit. Given that DEQ has provided no statutory or technical basis for proposed Rule 6.202(F) and that it conflicts with the statutory provisions cited above, BWD objects to the inclusion of proposed Rule 6.202(F) and requests that it be deleted.

Response: Certain General NPDES permits authorize construction in accordance with Ark. Code Ann. §§ 8-4-217(b)(1)(A), (C), and (D). Those General NPDES permits include ARG790000, ARG550000, ARG500000, ARG160000. The construction requirements set forth in the aforementioned general NPDES permits are consistent with the requirements for a state construction permit:

A state construction permit requires the following:

DEQ Form 1
DEQ Construction Permit Application Form—parts 1–12—not applicable
to the general NPDES permits that authorize construction

RULE 6 Response to Comments

Design Calculations

Plans and Specifications signed and stamped by a professional engineer registered in AR

Disclosure Statement

NPDES General Permit Number ARG790000 for Groundwater and Surface Water Petroleum Remediation Facilities Located within the State of Arkansas covers construction of a treatment system and discharge of treated petroleum contaminated groundwater and surface water provided the following conditions have been met:

1.2.1.1. The treatment system (e.g. air stripper, etc.) is designed to provide adequate treatment of wastewater to meet the effluent limitations of this general permit; and

1.2.1.2. If an existing treatment system will be used, the treatment system was properly permitted under a State Construction Permit in accordance with APC&EC Regulation 6; and

1.2.1.3. If a new treatment system is proposed, the requirements in Part 1.4.4 below are met.

1.4.4. Construction Requirements

1.4.4.1. Any facility requesting approval to construct a treatment system must submit an ADEQ Form 1, plans and specifications, and design calculations stamped by a Professional Engineer registered in the State of Arkansas in accordance with APC&EC Regulation 6.202.

1.4.4.2. An additional \$500 fee will be required based on Regulation 9.402(A).

1.4.3.5. A Disclosure Statement as required by APC&EC Reg. 8.204.

NPDES General Permit Number ARG550000 for Operators of Individual Treatment Facilities Generating Only Domestic Waste located within the State of Arkansas.

1.2.1.1 This general permit covers the construction and installation of individual treatment facilities provided that the system design has been approved by ADEQ and that the system has been approved by the Arkansas Department of Health (ADH). Each individual treatment facility shall be designed or equipped so that effluent discharged by the system will be in compliance with effluent limitations set forth in Part 2. ADEQ will maintain a list of evaluated and approved treatment system designs on the General Non-Stormwater Permits webpage: https://www.adeq.state.ar.us/water/permits/npdes/nonstormwater/p_list-ofacceptable-systems.aspx

1.2.1.2 This general permit also covers discharges from individual treatment facilities that are constructed or installed as described above.

1.3.1.5 if the system is owned by a corporation, a Proof of Good Standing with the Arkansas Secretary of State and the Secretary of State of the permittee's state of origin, if not Arkansas; and

1.3.1.6 a Disclosure Statement (if applicable). A blank copy of the Disclosure Statement may be obtained at the following link (per APC&EC Reg.

RULE 6 Response to Comments

8.204(C)(7)(a)(vi), homeowners are exempt):
https://www.adeq.state.ar.us/ADEQ_Disclosure_Statement.pdf.

NPDES General Permit Number ARG500000 for Aggregate Facilities located within the State of Arkansas.

1.2.1.3. This general permit also covers the construction of process water ponds at Aggregate facilities.

1.2.4.1 Pond Construction Requirements; and

1.2.4.1.1 Any facility, previously permitted or seeking a permit, that will require the construction of a process water pond will require the submission of ADEQ Form 1 and design, plans, and specifications stamped by a Professional Engineer registered in the State of Arkansas in accordance with APC&EC Reg. 6.202;

1.2.4.1.2 The process water pond shall be protected from physical damage by the one hundred (100) year flood and should remain fully operational and accessible during the twenty-five (25) year flood in accordance with Section 51.2 of the Ten State Standards;

1.2.4.1.3 The pond must be designed and constructed in accordance with Ten State Standards and the ADEQ Pond Requirements Policy;

1.2.4.1.4 The outfall structure must be designed in accordance with Section 55 of the Ten State Standards; and

1.2.4.1.5 An additional \$500.00 fee will be required based on APC&EC Reg. 9.402(A).

1.2.4.1.6 Upon completion of the pond the permittee shall submit a certification signed and stamped by a registered Professional Engineer in the state of Arkansas that the pond is in good operating condition and is in compliance with the Ten State Standards. Operation of the pond shall not commence until the Water Division has issued the Notice of Coverage.

1.2.11 No permit coverage may be granted without review of an ADEQ Disclosure Statement as required by APC&EC Regulation No. 8.

NPDES General Permit Number ARG160000 for Sanitary Landfills located within the State of Arkansas.

1.2.1. This general permit covers construction and discharge of uncontaminated stormwater from Sanitary Landfills required to have sedimentation ponds to control uncontaminated stormwater runoff from inactive areas that commingle with closed portions of the landfill as defined in Part 7 and which meet the following criteria:

1.2.1.1. Sedimentation ponds have been designed and constructed with a storage capacity to handle runoff from a 25-year, 24-hour storm event; and

1.2.1.2. In order for the ponds to maintain the required storage capacity stated in Part 1.2.1.1, operational procedures at the landfill shall include a requirement that sedimentation ponds be dewatered as soon as possible after a storm event and after sufficient settling to ensure that no effluent limitations will be exceeded.

1.3.2 Construction Requirements

RULE 6 Response to Comments

1.3.2.1 Any facility that will require the construction of a sedimentation pond will require the submission of Arkansas Form 1 and design, plans, and specifications stamped by a Professional Engineer registered in the State of Arkansas in accordance with Regulation 6.202; and

1.3.2.2 The sedimentation pond shall be protected from physical damage by the one hundred (100) year flood and should remain fully operational and accessible during the twenty-five (25) year flood in accordance with Section 51.2 of the Ten State Standards; and

1.3.2.3 There should be a minimum separation of 4 feet between the bottom of the pond and the maximum ground water elevation in accordance with Section 93.22 of the Ten State Standards; and

1.3.2.4 There should be a minimum separation of 2 feet between the top liner and the top of the bedrock (as adapted from Regulation 22.431), except in the areas of the St. Joe and Boone formations, where a minimum separation of 10 feet will be required between the bottom liner and the highest point of the bedrock or pinnacles (as adapted from Regulation 22.425); and

1.3.2.5 Dikes and pond bottom shall be compacted to at least 95 percent Standard Proctor Density to form a stable structure in accordance with Section 93.411 and Section 93.421 of the Ten State Standards; and

1.3.2.6 Inner and outer dike slopes shall not be steeper than 1 vertical to 3 horizontal (1:3) in accordance with Section 93.413 of the Ten State Standards; and

1.3.2.7 Inner slopes should not be flatter than 1 vertical to 4 horizontal (1:4) in accordance with Section 93.414 of the Ten State Standards; and

1.3.2.8 Minimum freeboard shall be 2 feet in accordance with Section 93.415 of the Ten State Standards; and

1.3.2.9 Dikes shall have a covered layer of at least 4 inches of fertile topsoil to promote establishment of an adequate vegetative cover wherever riprap is not utilized. Erosion control on the interior dike slopes may be necessary for ponds which are subject to severe wave action in accordance with Section 93.417 of the Ten State Standards; and

1.3.2.10 The sedimentation pond must have a pond bottom liner with a permeability of less than 1×10^{-7} cm/sec and a thickness of at least 1 foot or equivalent before the start of operation in accordance with Section 93.422 of the Ten State Standards; and

1.3.2.11 A pond level gauge shall be provided in accordance with Section 93.56 of the Ten State Standards; and

1.3.2.12 The outfall structure must be designed in accordance with Section 55 of the Ten State Standards; and

1.3.2.13 An additional \$500 fee will be required based on Regulation 9.402(A).

1.3.3 A certification indicating that the ponds have been constructed in accordance with the plans, designs, and specifications based on the Ten State Standards (and listed in Part 1.3.2) must be submitted to the Department prior to commencing operation of the pond.

1.3.1.9 A Disclosure Statement as required by Reg. 8.204 of the APC&EC

RULE 6 Response to Comments

Comment: Proposed Rule 6.202(H), Application Requirements for Construction and Operation of Wastewater Facilities: Proposed Reg. 6.202(H) was moved from current Reg. 6.202(B) and changed significantly, including deletion of the disinfection requirements. Once again, the Amended Petition, at numbered paragraph 4.d.(5), characterizes this change as a "clarification" and provides no explanation or justification for it. BWD would not necessarily object to the proposed changes if an appropriate legal, scientific, or technical basis had been provided by DEQ. In the absence of any explanation or justification for the proposed changes, however, BWD objects to the proposed changes and, in particular, to the deletion of the provision that, "Disinfection shall be required when necessary to meet the State's water quality standards for the receiving stream or to protect public water supplies and recreational use areas. " This or a comparable provision should be reinserted.

Response: Rule 6.202(G) requires that design criteria for wastewater treatment plants be based on the applicable provision in the latest edition of Ten States Standards. Rule 6.202(H) prescribes those standards that apply to all wastewater treatment plants. Chapter 100 of Ten States Standards states, "Disinfection of the effluent shall be provided as necessary to meet applicable standards." Disinfection is not applicable to all wastewater treatment plants, for example, many industrial wastewater treatment plants do not have a waste stream that requires disinfection. Thus, disinfection is not required for all wastewater treatment plants.

Comment: Proposed Rule 6.202(1), Application Requirements for Construction and Operation of Wastewater Facilities: This new provision specifies that, "The design criteria for nondomestic wastewater treatment plants shall be reviewed and approved by the Office of Water Quality of ADEQ as part of the application process." The Amended Petition, at numbered paragraph 4.d.(7) states only that Reg. [sic] 6.202(1) is added "concerning design criteria for nondomestic wastewater treatment plants." First, "ADEQ" should be "DEQ." Second, and more importantly, DEQ once again provides no explanation for this new provision. See Amended Petition, numbered paragraph 4.d.(7). Consequently, the purpose of this new provision is unclear to BWD. Doesn't DEQ review and approve the design criteria for all wastewater treatment plants? Why is this provision limited to "nondomestic" wastewater treatment plants? In the absence of any explanation or justification for proposed Rule 6.202(1), BWD objects to this new provision and requests that DEQ review whether it is appropriate as written.

Response: Removed "A" from "ADEQ." DEQ reviews and approves the design criteria for all wastewater treatment plants, excluding individual residential septic systems. Nondomestic wastewater treatment plants are separated from the domestic wastewater treatment plants because Ten States Standards typically do not apply to nondomestic wastewater treatment plants. Domestic and municipal wastewater treatment plant construction standards are based on Ten States Standards unless a deviation from those standards is fully justified.

Comment: Proposed Rule 6.202(K), Application Requirements for Construction and Operation of Wastewater Facilities: This proposed revision to current Reg.

RULE 6 Response to Comments

6.202(D) alters the timing of when an approval letter from ADH is required. Instead of requiring that the approval letter from the ADH be submitted with the application for a permit for construction of domestic wastewater treatment facilities as is currently the case, proposed Rule 6.202(D) apparently would only require that an ADH approval letter be obtained before beginning construction. There is no explanation for the proposed revision in the Amended Petition. See also Comment 4, above. BWD objects to this proposed revision.

Response: This allows DEQ to process state construction permits more efficiently since most applicants submit applications to ADH and DEQ at the same time meaning that DEQ has to hold the application until ADH has issued an approval letter. With this minor change, DEQ can issue the construction permit, but the applicant cannot begin construction until the applicant has submitted the ADH approval letter to DEQ.

Comment: Proposed Rule 6.203, Permitting Requirements for Stormwater Discharges Associated with a Small Construction Site: This proposed revision eliminates most of the prescriptive requirements of Reg. 6.203. The Amended Petition, at numbered paragraph 4.d.(8), states only that Reg. 6.202(1) is to "[s]implify and clarify Reg. 6.203 concerning the permitting requirements for stormwater discharges associated with a small construction site, including automatic permit coverage." In the absence of any explanation or justification for the major revisions in proposed Reg. 6. 203 and to the extent that the changes relax the requirements for small construction sites, BWD objects to the proposed changes.

Response: Proposed Rule 6.203 does not change the requirements for small construction sites. Rule 6.203(B) still requires that the Stormwater Pollution Prevention Plan be prepared using good engineering practices. Rule 6.203(C) requires the owner or operator of a small construction site to "comply with all requirements of the NPDES General Permit for Stormwater Construction Discharge Permit." Part II Section A Conditions 4 and 5 of the NPDES General Permit for Stormwater Construction Discharge Permit detail the requirements of a Stormwater Pollution Prevention Plan. Therefore, requiring the owner or operator of a small construction site to comply with all requirements of the NPDES General Permit for Stormwater Construction Discharge Permit is a simplification of Rule 6.203.

Comment: Proposed Rule 6.401(A)(I), Determination of Domestic Wastewater Effluent Limitations: BWD objects to the change at Reg. 6.401 (A)(I) that would delete the requirement for "nutrient removal where appropriate." Again, the Amended Petition provides no explanation or justification for this proposed revision. See Amended Petition, numbered paragraph 4.d.(13). The lack of nutrient removal could negatively impact receiving streams, including tributaries to drinking water supply sources.

Response: The phrase "nutrient removal where appropriate" was inadvertently omitted. That phrase has been restored to Rule 6.401(A)(1).

RULE 6 Response to Comments

Comment: Proposed Rule 6.401(C), Determination of Domestic Wastewater Effluent Limitations: BWD requests that this provision regarding discharges of domestic wastewater to reservoirs and domestic water supplies be expanded to include tributaries of reservoirs and domestic water supplies. BWD additionally requests that the same minimum 1.0 mg/L monthly average Total Phosphorus limitation that applies to discharges to the streams and their tributaries listed in proposed Rule 6.401 (D) also apply to reservoirs and domestic water supplies and their tributaries. The negative impacts that nutrients can have on reservoirs and drinking water supplies are well documented and justify these requested revisions.

Response: Commenter may seek to make those changes to Rule 6 through the Third Party Rulemaking procedures outlined in Rule 8.

Commenters: Buffalo River Watershed Alliance; Brian Thompson

Comment: Section 6.202(F) The Alliance believes the construction permitting process serves an important purpose in allowing the ADEQ to review and approve an engineer's construction plans, provide notice to the public, and ensure that disposal systems are constructed in accordance with the plans submitted and approved. This change weakens the permitting process, is against the public interest, and is one that the Alliance strongly opposes. A separate construction permit, and public notice of application for such a permit, should be required.

Response: Certain General NPDES permits authorize construction in accordance with Ark. Code Ann. §§ 8-4-217(b)(1)(A), (C), and (D). Those General NPDES permits include ARG790000, ARG550000, ARG500000, ARG160000. The construction requirements set forth in the aforementioned general NPDES permits are consistent with the requirements for a state construction permit. See Response to Beaver Water District for a comparison of the general NPDES permit construction requirements.

Comment: Section 6.301(D)(4) Regulation 2.507 states, "For assessment of ambient waters as impaired by bacteria, [see] the below listed applicable values for E. coli ..." (emphasis added) E. coli is considered by EPA to be a better indicator of bacterial impairment with regard to human health than fecal coliform. "Assessment of Escherichia coli Concentrations in the Surface Waters of Buffalo National River 2009 to 2012 Buffalo National River Report NPS/ B-0100/2013 " which states on page 2, "In recent years, guidance from the EPA has suggested that the utilization of E. coli was more effective in monitoring surface waters from a human health perspective than was fecal coliform. So, in 2009 the park began to make the transition from fecal coliform to that of E. coli for monitoring purpose, and as of now, the park collects both fecal coliform and E. coli." In order to be consistent with existing state regulations and conform with federal guidelines, E. coli should be the primary analyte for monitoring bacterial contamination, not fecal coliform, and section 6.310(D)(4) should be changed accordingly. The final sentence of this section regarding ERW/NSWs does not specify a period during which the

RULE 6 Response to Comments

geometric mean is to be calculated. The phrase, “at no time” implies that no single sample should exceed 200 colonies per 100 ml, therefore the language regarding geometric mean is incorrect because a mean cannot be calculated based on a single sample. This sentence should either specify a minimum number of samples to be taken in order to calculate a geometric mean, or the reference to geometric mean should be removed. Whether by averages or geometric means, the application of any mathematical formula should not be allowed to obscure dangerous peak readings when public health is of concern. Parents allow their children to swim in ERWs on the assumption that this designation means the water is safe for human contact

Response: Discharge limitations for E. coli have been included in Rule 6.301(D)(4).

Rule 6.301(D)(4) has been corrected to state, “However, the fecal coliform content of discharges to any water defined as an Extraordinary Resource Water or Natural and Scenic Waterway shall not exceed a monthly or weekly geometric mean of 200 colonies per 100 milliliters.

Comment: We fully support the proposed changes to Chapter 6 and particularly Rule 6.602 regarding issuance of permits for medium and large swine CAFOs in the Buffalo National River watershed.

Response: The Division acknowledges the comment.

Commenter: Central Arkansas Water

Comment: Rule 6.207—Notification to appropriate drinking water utilities should be required. It is suggested to add an additional notification as follows:

(5) The operator of record for any drinking water utility withdrawing water from a source impacted by the CAFO.

Response: Arkansas Department of Health does not disclose the location of the source intakes so it would be difficult for an applicator to locate correctly. DEQ notifies ADH by way of a weekly application received email.

Comment: Rule 6.404(B)—Use of the phrase, “no distinctly visible increase” does not properly categorize the potential impact to a receiving water. For example, if a stream or water body normally has a turbidity of 5 Nephelometric Turbidity Units (NTUs), and it increases to 20 NTUs, the result may barely be noticeable to the general public. However, that amount of increase in turbidity in a drinking water supply will create a situation whereby water treatment methodology will need to be modified in order to maintain the resultant finished water quality. This increases both the cost of treatment and jeopardizes human health.

RULE 6 Response to Comments

I would recommend the following modification: There shall be no distinctly visible increase in turbidity of receiving waters or impact to the designated uses attributable to discharges or instream activities.

Addition of “or impact to the designated uses” brings this statement into alignment with language in (F) Nutrients.

Response: The language of Rule 6.404(B) is consistent with Rule 2.503. The Division will take this comment under advisement.

Comment: Rule 6.404(F)—Use of the term “Materials” is rather vague. Sentence also seems to be missing a “be”.

Suggest: Substances stimulating algal growth shall not be present in any discharges in concentrations sufficient to cause objectionable algal densities or other nuisance aquatic vegetation or otherwise impair any designated use of the receiving waters.

Response: The use of “materials” in Rule 6.404(F) is consistent with Rule 2.509.

RULE 6 Response to Comments Received During the Comment Period Extension

The following submitted comments in favor of the rulemaking for Rule 6 to make permanent the moratorium on medium and large CAFOs in the Buffalo River Watershed:

James Seawel; Dennis Dinkel; Judy White; Cassandra Fox; Cindy Baker; Tonia Spurlock; Ted Porter; Kimberly Rabon; Allyce Capps; Genia Bennett; Karen Seller; Adam Schaffer; Kathy Madding; Kerry Kraus; Sharon Holladay; Jack Land; Robert Merritt; LaJuana Oswalt; Lisa Orton; David Pope; Ashley Money; Thomas Baldridge; Elizabeth Mazzone; Mary Ellen Hill; David Jones; Pat Ford; Julie Lanshe; Andrew Blann; Jerry Hale; Brenda Barnhill; Debbie Galbraith; Cameron Peck; Anice Tedford; Denise Lanuti; Karen Hicks; Tim Crouch; Eric Torgerson; Helen Pounds; Nancy Harris; Susan Smith; Chris Dillon; Dixie Rhyne; Sonja Williams; Lynn Risser; Patricia McKeown; Karen Huber; Sherrie McIntyre; Shawn Porter; David Kuhne; Susan Hantz; Nancy Johnson; Katie Deakins; Mike Fick; Steven Barger; Frank Kelly; Charles Eubanks; Cynthia Jetton; David Orr; Beth Ardapple; Kent Landrum; Ellen Mitchell; Burnetta Hinterthuer; Margot Lavoie; Annie Holmes; William Jeter; Mary Susan Seawel; Deanne Mayer; Sharon Gattis; Carole Cimarron; Carolyn Shearman; Ginger Milan; Cathey Morris; Jana Brady; Beth Goodwin; Virginia Booth; Sue Mabry; Victoria McClendon; Lowell Collins; David Martinson; Barbara Fell; Jerry Dorman; Karen Crocker; Joel Emerson; Don McCaskill; Annee Littell; Mary Gocio; David Hughey; Erin Rowe; Cathy Ross; Janice Muetzel; Candice Kozark; William Thomas; Schuyler Schwarting; Karen Beneke; George Wise; Jann Bell; Yolanda Dreher; Linda Vanblaricom; Kenneth Leonard; John Slater; Marvin Schwartz; Randall Hollenbeck; Bryan Signorelli; Susan Moore; Ann Owen; Cay Miller; Diana Angelo; Steve Kopp; John Fritz; John Courtway; John Ray; Ginny Masullo; Susie Parker; Laura Villegas; Karen Bartle; Susan Fields; Nancy Harris; Robert Pikel; Frederick Paillet; Michele Jackson; Randy Jackson; Albefrta Wells; Melissa White; Susan Benton; Heather Hudgens; Steve Singleton; Dorothy Bailey; Katherine Weaver; Ryan Duncan; Dave and Nan Johnson-Spencer; Dee Elkins; Grant Scarsdale; Debbie Galbraith; Eileen Neukranz; Gail King; Robert van Rossum; Karen Crocker; Paul Vickers; Louise Mann; Beth Goodwin; Judi Nail; Scott Stanley; Roger Burke; Dean Castle; Vanessa Tomczak; Marshall Dickey; Gene Sparling; Michael Stoecker; Margaret Sands; Kim Smith; Cary Roth; Kenneth Carle; Roger Jones; Edd French; Jan VanSchuyver; Glenn Benson; Cheryl Rutledge; Tsunemi Yamashita; Jeff Hood; Fay Knox; Judith Duguid and Elmer Gall; Michael Rapp; Karen Harris; Richard Gray; Elaine Appel; Richard Barnes; Brad Green; Camille Carpenter; Autumn Gillmore; Joe Golden; Genia Bennett; Dara Yeager; Sylvia Scott; Maria Smith; Ronald Stark; Martha Ragar; Marty Mignard; Michael Adelman; Debbie Alexy; Terry Karnes; Raymond Herschend; Blake Stone; Will Larkin; Harvey Pierce; Ray Hall; Jackie Lamar; Donnie Hutchens; Richard Olson; Kathryn Searcy; Roxanne Thompson; Ted Porter; Robert Merritt; Don Hamilton; Linda Schuck; Karen Bartle; Robert Smith; Paula Breid; Mike McMullin; Lorraine Heartfield; Julian Clark; Mary Adams; Tom Parsons; Kathleen Trotter; Glenda Allison; John Shelton; Steven Singleton; JP Willis; Mike Kelly; Katy Hinegardner; Magell Candelaria; Shelley Buonaiuto; Robert Dunn; Carol Storthz; Cassie Gill; Nonah Olesen; William Wellner; John Layson; James Hicks; Suzie Bell; Shirley Bailey; William Etges; Marian Johnson; Christine Perry; Gregory Flower; Peggy Volland; Mike

RULE 6 Response to Comments Received During the Comment Period Extension

Swanner; Joseph Hewgley; Jack Stewart; Terry Dailey; Carolyn Watts; Michael Sprunger; Jo Johnson; Jean Smith; Carol Patterson; Gail King; Kara Beach; Ed Laster; Judith Griffith; Karen Garrett; Sandy Pianalto; Beverly Glass; Brent Boughn; Deborah Meldahl; Teresa Crawford; Charles Lowrey; Sidney Graham; Susan Jenkins; Cynthia Patton; Elisabeth Olsson; Laura Hutzal; Natalie Mannering; D. Dunagin; Shirley Pharis; Larry Hedrick; Don Castleberry; Joe Murphy; Danny Jenkins; Lisa Schoult; Bill Beall; Karen Keith; James Haguewood; Julia Tucker; Lynell Withers; Scott Luchesi; Jerome Jansma; Gregory Floyd; Wendy Luna; Tammy Alexander; Pat Yates; Brenda Tirey; David Harju; Susan Leslie; Chris Daniels; Barry Bennett; John Andrews; Pamela Westerman; Lynn Christie; Caitlin Cassidy; Bruce Petray; Diane Mikrut; Larry Olesen; Ray Stahl; Marc McCord; Geniece Yates; Joseph Long; Samantha Blanchard; Bennie Scott; Christine Carlson; Paula Pope; Dennis W Wright; Dave Stahle; Nancy Pierson; Frank Meeks; Claudia Carberry; Elizabeth Bradford; Rebecca Evans; James E Wimberly; Joseph D. LaFace; Steve Heye; Glenn Pearson; Dorothy Bailey; Abel Tomlinson; Cody Wyatt; Francie Bolter; Lucy Rhodes; Winifred Hirsch; Ken Duncan; Jim Pfeifer; Charles Mullins; Eugene Milus; Joe Neal; Scott Yaich; Klaus Kupfersberger; James Krieger; Kelsey Mayans; Adam Schaffer; Michelle Trost; Jack Land; Phillip Taylor; Crystal Rust; Sara Wittenberg; Dwan Garrison; Paul McCune; Jess VanderStek; Joan Meeks; Heather Smith; Frits Druff; Lora Dail; Kirk Rhoads; Robert Duncan; Dana Steward; Bill Steward; Francis Millett; Cornelia Beck; Kathleen Beattie; William Beattie; Diane Newcomb; Steve Davis; Amy Strickland; Chris Hankins; Doug Holmes; Bert Kell; Corey Pettett; Karen Walls; Sharon Boatright; Duane Woltjen; Lee Cowan; Zane Colvin; Darla Wroblski; Bonnie Jaeckle; Carol Percifull; Michael Berry; Emma Hickey; Johnny Furness; Carolyn Wilkins; Mark Smith; Zach Turner; Laurie Fisher; Cindy Jetton; Cathy Shingledecker; Faith Shah; Michael Frank Shah; Donna Peterson; Mary Heller; Jon Bonney; Thomas Emerick; Lisa Kessler; Sarah Cumnock; John Shultz; Ashley Miner; Joe Rath; Mike OConnell; Thomas Keel; Brian Thompson; Cliff Barnes; Carol Ann Lasater; Bill Farrell; Karen Bartle; Charles Phillips; Teri Patrick; Jerry Cagle; Steve Hesse; Claiborne Morton; Barry Haas; Roger Reep; Gene Dunaway; Laura Timby; Trudi Rust; Nancy Miner; William Eaton; Joe Massey; Ruth Weinstein-McShane; Joseph McShane; Peg McCoy; Janette Groves; John Ray; Steven Foster; Richard Stauffacher; Jerome and Harriet Jansma; Carmen Quinn; Willem DeBruijn; Barry Martindale; Lolly Tindol; Jon Hackler; Sherri Ramseyer; Keaton Smith; Al Agnew; Karen Spence; Mary Agnew; Betty L Scott; Yolanda Dreher; James McPherson; Alisa Dixon; Richard P. Osborne; Debora Carpenter; Jamie White; Jill Acree; Charles Johnson; Pamela Ellwood; Tammy Tennyson; Robert Shingledecker; Kevin Ehemann; Rebecca Holden; Cathy Ross; Daniela Tamayo; Michael Armstrong; Andrew Proctor; Mary E. Fitzgerald; William Threet; Gladys Tiffany; Lauri Patterson; Nancy Hartney; Stephen Bailey; Fred Goldthorpe; Kathrine Jones; Kay Ewart; Janet Nye; Pamela Phillips; Janet Parsch; Debbie Howorka; Tim Eubanks; Laura Fleetwood; Joy Henning; William Dailey; Dara Yeager; Tim Yeager; Brenda Miller; Jill Valenti; Jim Bush; James Frederick; Bryan Manire; Mark Richards; Gerald Toler; David Peterson; Sarah Thompson; Grimsley Graham; Timothy Dean; Harrie Farrow; Lynn Phillips; Mark Alderman; Ralph Rexroad; Eva Coffee; James Cohea; Derek

RULE 6 Response to Comments Received During the Comment Period Extension

Linn; Kay Abney; Margaret Fortuny; John Sutherland; Glenn Jones; Ann Mesrobian; Gary Bivens; Sam Mcclea; Mary Schlatterer; Jolynn Loftus; Emily Linn; Eunice Millett; Philip Waters; Danny Coleman; Ellen Tutt; Andrea Ross; Marin Miller; Sue Lupien; Valerie Dunn; Stuart Reaves; Miles Riley; Rebecca Corley; Dale Heath; Clay Parton; Stephen Ballard; Howard Aleshire; Kevin Christian; Angela Head; LA Tann; Christopher Walters; James Jones; James Strack; Dennis W Wright; Hamilton Bell; Evelyn Sammons; Lynn R; lyn Caveness; James Brandenburg; Roxana Wallace; Patricia Mitchell; Gail Leftwich; Edith Stahl; Beth Keck; David Malm; Anastasia Hunter; Ann Segura; Roger Pyzocha; Gail Eastlack; Kim Hamilton; Gail Lee; Bendex Stevenson; Jessie Cave; Kelsey Dixson; Sami Saati; William Pickel; Syama Barden; Patrick Thom; Emily Spillers; Christopher Zapf; Laura Allcon; Mayleena Benham; Jarret Bain; Kevvin Brown; Cassidy Rolle; Shawna Woodside; Alec Severe; Laura Newth; Jordon Henley; Ginger Milan; Kevin Nawa; Josh Robinson; Imani Doyle; Cynthia Peterson; Lizabeth Lottmann; Arkansas Canoe Club; Ray Jones; Friends of the North Fork and White Rivers; Saline River Watershed Alliance; Audubon Arkansas; Daniel Cohee; Gerald Weber; Janice LaBrie; Katie Deakins; Alan Nye; Jacob Bradow; Leslie Coston; Karen Ramsey; Megan Johnson; Donna Bouzi; Dustin Brown; Dale Steffens; Kirk Rhoads; James Ollerenshaw; Terry Sutterfield; Mike Risk; William Smith; Jimmy McCain; Jan Scheel; Rodney Lewis; Willow Stratton; Kim Hesse; Notm Windt; Mary Green; Randal Camp; Deborah Graham; Nick McDaniel; Frank Sospenzi; Nancy Bumgardner; Marcia Zamora; Lucas Parsch; Emily Roberts; David Gruenewald; Tim Mason; Byron East; Rachel Henriques; Brittney Russell; Gordon King; Scott Barstow; Laurie Schuler; Mary Morris; Geniece Yates; Terri Huber; Susan Howe; Bonnie Nickol; Peter Pulay; Matt Foster; William Spaine; Tom Perry; Christopher Pryor; Harmon Chadbourn; Marsha Havens; Debbie Doss; David Parker; Gary Speed; C F Christian; Jesse Phillips; Robert Walker; Michael Butler; Beth Forbes; Norma Senyard; Ozark Society Peterson; Jan Wilson; Bonnie Smith; Kathy Sutterfield; Johnny Sain; William Stephenson; Kenneth Pape; Tom Simmons; Lynn Berry; Vicki Jett; Cathy Joyce; James Britt; Michael Tipton; Susanna Brinnon; William Kumpuris; Betty Pitts; Elizabeth VanderStek; Bill Pettit; Amber Manney; Tom Krohn; Bettie Lu Lancaster; Rhonda Reid; Jeff Ingram; Julianne Bitely; Robert D Architect; Bob Tyler; Christopher Fischer; Mary Simonson; Marianne Lombari-Nelle; Phyllis Ridgway; Cheryl Marcum; Carole Degginger; Teresa Turk; Bob Billig; Linda Nichols; Mark Degginger; Fran Alexander; Ed McEowen; Garland Goodwin; Susan Holt; Marti Olesen; Annette Pettit; Billie Walker; George Campbell; Beverly Wright; Bill Pitts; Bruce Darr; Jennifer Conner; Susan Jenkins; Christy Lavelly; Susan Watkins; Eric Fraser; John Murdoch; William Spitler; Betsy Murdoch; Thomas Johnson; David Schisler; Alice Andrews; Carol Bitting; Robin Rumph; Mary Kunkle; Terry Fredrick; Charles Finch; Hamsa Karth; Judith Mchoff; Mona Vica; Lynn Cunningham; Mary Brizzi; Darci Kent; Dan Kelley; Sandra Tedder; John Ray; Jennifer Hartzill; Patricia Mikkelson; Carolyn Swaney; Lisa Milligan; Jody Miskell; E. Jane Scroggs; Juliette Minkel; Larry Lindly; Rya Wheeler; Rick Henterthuer; Gordon Bradford; Janet Bachmann; Jan Townsley; Janet Titus; John LaBrie; Deborah Bartholomew; Emilie Lasiter; Doug Shields; Mary Littrell; Holly Childs; Susan McBay; Sharon Schmidt; Julie Ironside; Stephen Ironside; Sharon

RULE 6 Response to Comments Received During the Comment Period Extension

Morgan; Stephen Smith; Jim Lukens; Nan Yarnelle; Vicki Bergman; Ben Pollock Jr.; Robert Morgan; Jim Dudley; Barabara Jaquish; Trenton Morrow; Christy Pollock; Aaron Hinterthuer; Noelia Cerna; Walter Schmidt; Dawn Fisher; Kimberly Smith; Susan Shore; Mary Brenel; Drearna Phoenix; Rachel O'Carroll; Patricia McDonald; James Alexander; Michael Cockram; Elizabeth Gambert; Denise Nemece; Patricia Doyal; Frank Sharp; Helen Kwiatkowski; Sara Parnell; Sara Sharp; Joyce Hale; Charles Watson; Phyllis Rengier; Barbara Willett; Margaret Konert; Tristen Wylde; Hoyor Clave Benefield; Charley Reese; Amy Wilson; Steve Holst; Kristina Palmer; Hannah Lee; Scott Mashburn; Miller Nance; Nan Smith-Blair; Jacob Risliy; Shannon Ball; Marian Kunetka; Gary Weidner; Baileigh Payne; Susan Puckett; Karen Chotkowski; Michele James; Patti Kent; Patricia Wyatt; Susan Raymond; Deborah Robinson; Aurora Zisner; Mimi Burke; Milton Burke; Rena Jean Schmieg; Austin Bailly; G. Grimsley Graham; Jonna Hussey; Becky McCain; Aaron Smith; Rick Spicer; Joan Miller; Judi Hart; Vic Trolio; Amy Groth; Anna Koch; Paula Matthews; Millie Nelms; Joshua Bassarear; Jessica DeChant; Amy Bassarear; Barbara DeChant; Theresa Miller; Jennifer Clayborn Baldassari; Carole Lane; Jenna Lebleavsley; Torrey Travy; Paige Drummond; Carl Vevi; Ella May Powell; Jill Marshall; Douglas Forrester; Sophie Nolan; Julia Montgomery; Sharon Berman; Hooria Tariq; Corinne Spicer; Michael deBays; Sarah Spangler; Darla Newman; Ashley Erickson; Elizabeth Rademacher; Michelle Hendren; Dave Kuhre; Carole Lane; Jeff Kearmen; Carla Weeks; Mary Olson; Andrea Goehl; Jacqueline Gray; Janna Peters; Denise Dore; Eleana Hale; Eleanor Edana Hale; David Hale; Terry Donohue; Cindy Dollard; Timothy Permenter; Ellen Mitchell; V.B. McClendon; John Hagberg; Bobby Allen Jr.; Jessica McClendon; Lisa Skiles; Brian Jorgensen; Brent Jorgensen; Barbara Haas; Mark Bieliecki; Skipp Cluff; Aletha Tetterton; Robert Hudson; Cathey Cluff; Jake Weeden; Kristin Olesen-Jorgensen; Nancy Harris; Sean McGinnis; Jessica Van; CG Apt; Lyna Van; Brett Sparkman; Ashley Darig; Sidney Grutz; Leighanna Rickman; Rania Trulley; Julia Chowdhury; Michael de Buys; Kathleen Conway; Victoria Linn; Shawna Miller; Richard Waggoner; Pattie Heitzman; Dianne Williams; Ben Strawn; Geoffrey Oelsner; Joey Head; Heather Chowdhury; Catherine Wallack; Michael Heffernan; Chau Nesson Bayett; Barbara Dillon; Nancy Ann Heffernan; Andrew Head; N. Alan Hull; Paras Chowdhury; Rich King; Sherman Storchio; Frank Travis Head; Carly Overbey; Marthanne Squires; Gina Berquist; Rachel Hill; Stephen Cooper; Del Heck; Nichole Head; Dawn Newman; Chris James; Linda James; Sequoyah Chowdhury; Pranati Chowdhury; Prizam Chowdhury; Perry Chowdhury; Ana Garces-Wood; Joith Squires; Leslie Oelsner; Nancy Harris; Patricai Studer; Sara Long; Nichole Rowan; Celine Simpson; Danielle Lower; J. Manning; Ashan Kennedy; Jane Mercedes Bolsterli; RA Rowan; Dylan Wieties; Frank Livingston; Alisha Johnson; Richard Sloan; Mary Paal; Sylvia Turner; Candy Turner; Carolyn DuCharme; Dennis Schlegelmilch; Briana Brockmann; Danny Jenkins; Stephen Atwood; Jamie Thoryn; John Edwards; Sydney Krevanl; Erica Nadeau; Madison Martin; E. Cunningham; Renee Teague; Andrew; Doug Pardu; Cele Greece; Zaehel Talranee; illegible name; Shannon Mitchell; Julie Long; Ronald Weets; Maggie Weeden; Cristie Donohue; Mary Sivensa; Roxanne Thompson; Kara Kearney; Kathy Downs; Alexandra Sparkman; Kelly Weinberg; Chava Nesson Bayett;

RULE 6 Response to Comments Received During the Comment Period Extension

August Baumgartner; Caroline Martin; Stacey Wieties; Heather Cook; Lindsay Scott; Sarah Spangler; Iris Scarborough; Deac Lancaster; Emily Lane; John Calhoun; Damen Long; Faybran Whittle; Adam Moore; Paul Moore; Diane Vanhook; Kelly White; Wendy Hannah; Susan Murray; DeMarius Davis; Richard Bench; Landra Bench; Andrew Sparks; L. Leilani Lau; Maria Grace; Hayden Weaver; Anna Wolff; Foel Wagner; Chase Bilon; April Lane; Patricia Poulter; Annabella Singley; Christian Singley; Kathleen Marleneanu; Megan Kyles; Dakota Ashley; Addison Black; Allyson Walsh; Chase McDonnough; Junier Morales; Kolin Amerson; Hunter Little; Jueli Nail; John King; Nancy Garner; Marites Sales; Mort Gitelman; Jeff Montgomery; Karen Kakemoto; Don Bridges; Brenda Brown; Michele Gibson; Michael McKinnon; Jeannie Philpott; Helen Davis; Isabel Rodriguez; Sonie Toori; Susan Fredrick; Barbara Fell; Patrick Freyer; Erin Ford; Gracie Garrett; Ryan Hicks; Lamon Wade; Logan Wolfe; Marle Cavender; Cain Farnam; Joshua Chamberlain; Zavier Grant; Jason Tiller; Nathaniel Hernandez-Juarez; Hope Smith; Alan Beudel; Dustin Davis; Suzanne Webre; Kathren Green; Cody Brown; Ryan Clark; Cy Sheffield; Drew Hawthorn; Jackson Rouse; Debbie Chalfant; Nancy Martino; Charles Lowe III; Peter Pulay; M Corley; David Weeks; Hank van Rossum; Jahaira Sanchez Garay; Jerry Brown; Joe Nix; Joel Nunneley; Kathy Martone; Leslie Kline; Darlene Carvin; Linda Padgett; Gray Norton; Keith Runion; Deborah Doerr; James Haguewood; Barbara Waymire; Janet Bartos; Johanna Oswald; Lynn Spiva; John Sarna; Gordon Messling; Caro Anderson; Allen Myers; Kirk Rhoads; Inez Lewis; Paula Bongo; Terry Dailey; Martha Stobaugh; Thomas Anthony; Karen Sage; Don Hamilton; Katie Becker; Ann Burnett; Sally Benson; Patti Criner; T Mullarkey; Easha Sawyer; Robert Brewer; Maryanne Morrow; Maria Gomez; David Parker; Karen Tablish; Timothy Dean; Catherine Reynolds; Eileen Joyce; Beth Seward; Jane Krone; Grace Christie; Daniel Bertram; Theanna Benefiel; Lisa Schoultz; Darlene Carvin; Bob Bowker; Ruth Billingsley

Response: The Division acknowledges the comments submitted in favor of the rulemaking for Rule 6 to make permanent the moratorium on medium and large CAFOs in the Buffalo River Watershed.

RULE 6 Response to Comments Received During the Comment Period Extension

The following submitted comments through the Arkansas Farm Bureau Federation opposing the rulemaking for Rule 6 to make permanent the moratorium on medium and large CAFOs in the Buffalo River Watershed:

Jordan Winkler; Tim Burcham; Ronald G; Divella, Derik, and Miranda Gray; Richie Gray; Shawn Ragland; Greg Ragland; Shane McElroy; Derik Gray; Jerry Whitten; Stewart Warner; Joy West; Roberta Golmon; Elliott Golmon; Tommy Sorrells; Jay Sorrells; Alex Dykes; Melvin Daniel; Melba Wren; W.A. Wren; Sherry Felts; Benton Felts; Kay Moseley; Terry Moseley; William Groce; Shaun Pazn; Melissa Goodson; Leslie Turner; M.H. Bitely III; Robery Goodson; James Baber; Halle Cummings; Sheena Slate; Richard Pierce; Savanna Behning; Shea Gregory; Brenda Patton; James and Brenda Patton; Sue Billiet; Ken Billiet; Bruce Jackson; Jeb Welelld; Julia McLelland; Bennup Trevlen; Randy Arnold Bill Dodgen; Virginia Dodgen; Joel Pace; Bob Schaefers; Rudry Vers; Diane Thompson; Jim Cunningham; Danna Cofer; Daniel Cofer; Rusty Smith; Janice and Bob Shofner; Nicholas Simon; Jon Carroll; Johnny Gravett; Steve Eddington; Hellen Wayown; Carey Robertson; Danny Wood; Tommy Thompson; Becky Wood; Flora Harrington; Linda Parish; Morgan Harrington; Erin and Kallem Hill; Jason Cofer; Bobby Cofer; David Hodges; Angie Hodges; Charles Denver; Chris Schaefers; Glynn Guenther; Joe Stroub; JennaMrtin; Tony Bradley; Valerie Turner; Jack Parish; Dwight Kirkpatrick; C and Bill Nicholson; Jeanice Hess; Tom Hess; Darren Eubanks; Brittany Leek; Kerry Hartmesh; Beverly Quillin; Terry Rushing; Vanna Eddington; Lorie Henley; Stephen Boyd; Brad Henley; Sarah Burns; Molly Taylor; Deana Taylor; Angela Morrison; Dennis Taylor; Kendall Morrison; Mel Crawford; Regina Chaney; Sandra Jackson; Raymond Staggs; Angie Pierer; Robert Benedict; Betty Garner; Clifton Gifford Jr; Staneley Rhodes; Jason Smedley; Carol Fields; Ronney Fields; Bobby Ballinger; Steven Harrington; Harlie Treat; Janet Clark; Kenny Clark; Meagan Ballinger; Libbie Dogan; Allan Beuerman; Randall Quillin; Brad and Tara Peacock; Deborah Brennan; Robert Stobaugh; Cheryl Phipps; Tammy Thompson; Roger Thompson; Regina Oliver; Brian Jones; Jerry Shannon; Dustin Cowell; Cindy and Gene Pharr; Jackie Hatcher; Norma Robinson; Maurice Robinson; Gary Procton; Jewell Proctor; Barbara Horn; Lonnie Horn; Jeff Pitchford; Belinda Wright; Everett Mason; Katie Mason; Todd Johnston; Tedd Phipps; Bill Sodon; Keith Shepherd; Amy Shepherd; Curtis Shepherd; Helen Williams; Casey Wooten; Jana Carroll; John Horton; Donna Horton; Elaina Martin; Keith Martin; Terry Duboise; Victoria West; Shyane Ferguson; Barbara Sutton; Nedra Turney; Larry Williams; Kerry Stiles; Randal Colemon; Keith Woolverton; Robert Strobel; Jonathan Roberts; Zach Tidwell; Stanley Taylor; Kevin Cochran; Amanda Mathio; Janet Mathio; Allen Stewart; David Walt; Joe Haller; Kimie Head; David Head; Larry Smith; Dan Stewart; Magen Allen; Mark Keaton; Jason Murray; Cindy Wilson; Leon Wilson; James Rhein; Danny Naegle; Dana Stewart; Rocky Harrell; Diana Alston; Luke Alston; Jeremy Wiedeman; John Mitchell; Keith Futrell; Shelly Futrell; Terry Norwood; Shelia Brown; Stacy Wilson; Jimmy Brown; Pauline Pronia; Gail Sewell; Judy Branscum; Ivan Wilson; Morgan Taylor; Rachel Bearden; John Bend; Steve Barne; Judy Brown; ; Robert Brown; Kevin Flippin; Larry Bloddel Jr; Cheryl Blasdel; Brian Weesenfels; Judith Warmstrong; Pat Bocksnick; Jim Bocksmith; Tom and Jan Leslie; Jennifer Martin; Mark and Mindy Lockhart;

RULE 6 Response to Comments Received During the Comment Period Extension

Clay Antley; Doreen Anty; Beth and Don Ullrich; Steve Toney; Nicole Moore; Curtis Moore; Ralph Moore; Allen Moore; Jack Kildow; Cindy Moore; Reba Moore; Richard Armstrong; Barb Hillman; Hal Hillman;

Response: The Division acknowledges the comments submitted in opposition of the rulemaking for Rule 6 to make permanent the moratorium on medium and large CAFOs in the Buffalo River Watershed.

RULE 6 Response to Comments Received During the Comment Period Extension

Commenter: Anice Tedford

Comment: I also strongly support Reg. 6 to include adoption of federal revisions to the NPDES program, including sufficiently sensitive test methods, cooling water intake structure requirements, steam electric power generating, and reporting requirements; incorporations of statutory changes passed by the Arkansas General Assembly, amending the Trust Fund permitting requirements, changing Arkansas Department of Environmental Quality to Division of Environmental Quality, changing the title of regulations to rules; revising to make permanent the moratorium of confined animal operations of a certain size in the Buffalo National River Watershed; several minor corrections to make the regulation more illustrative of the legislative and regulatory intent; and a variety of non-substantive and minor stylistic changes in the interest of clarity and consistency. All effort should be made to protect the Buffalo National River Watershed. Thank you!

Response: The Division acknowledges the comment.

Commenter: Shawn Porter

Comment: Furthermore support a complete ban on CAFOS statewide. I am a small farmer.

Response: Commenter may propose such changes through the Third Party Rulemaking process outlined in APC&EC Rule 8.

Commenter: David Jones

Comment: I have commented previously about the importance of the moratorium being made permanent. Now I'm wondering about the delay. There has been more than ample time for public comments.

Response: The Commission reopened the public comment period for Rule 5 and Rule 6 for an additional ninety (90) days, with January 22, 2019, as the end of the public comment period.

Commenter: M K Elkins

Comment: This doesn't not include the air pollution. We have gone to Sam's Throne and it smell almost be unbearable

Response: This comment is outside the scope of this rulemaking.

RULE 6 Response to Comments Received During the Comment Period Extension

Commenter: Johon Fritz

Comment: Keep the title as "regulations", meaning, do not change "regulations" to "rules". Maintain the moratorium on CAFOs in the Buffalo River watershed, in keeping with The American Public Health Association's (APHA) new policy statement advising federal, state, and local governments and public health agencies to impose a moratorium on all new and expanding concentrated feeding animal operations (CAFOs).

Response: Act 315 of the 2019 requires all state agencies to use "rule" in place of "regulation."

Commenter: Gerald Weber

Comment: Regulation 6 should be discarded.

Response: Rule 6 is necessary to qualify the State of Arkansas to receive authorization to implement the State water pollution control permitting program, in lieu of the federal National Pollutant Discharge Elimination System program, pursuant to the federal Clean Water Act, 33 U.S.C. § 1251 et seq. In order to receive such authorization, it is necessary for the Arkansas Department of Environmental Quality to have regulations as stringent as the federal program administered by the United States Environmental Protection Agency

Commenter: Richard Spiker

Comment: This just proves that the citizens of the states that allow CAFO's, like Missouri, end up with the bill and the meat packers and ag. corporations get off "scott free". The citizens of Missouri must wake up to the CAFO's being allowed and supported by our governor and "bought off" legislature.

Response: This comment is outside the scope of this rulemaking.

Commenter: Marti Olesen

Comment: As I read the BCRET final report, one part especially made me think twice about the conclusions it drew. The report included a comparison of the local Big Creek watershed with the Upper Illinois and Upper White River watershed in order to submit its opinion that Big Creek was in good shape. Anyone who is familiar with the northwest Arkansas water situation is aware of the long-term battle between Oklahoma and Arkansas about impaired water quality due to excess nitrates that Arkansas has released into the waters of Oklahoma. A Nutrient Surplus Area was

RULE 6 Response to Comments Received During the Comment Period Extension

designated to relieve the input of nutrients to remediate that situation. If the BCRET had proposed a similar Nutrient Surplus Area restriction on the Buffalo River Watershed in their report, then this comparison might have had a purpose. Instead they used it to say that the Big Creek area is just fine because it is not worse than the other. Since the other has a large and growing urban base and innumerable poultry operations, it can only truly be useful as a warning of what can develop in a watershed through uncontrolled growth. ADEQ has prudently proposed a moratorium to limit such proliferation of waste in the Buffalo River watershed, but perhaps a Nutrient Surplus Area designation would be beneficial here as well, since waste from such designated areas can be hauled and dumped here.

Response: The Division did not review or approve the study design and has no authority over the data analysis performed by BCRET. While the Division may consider the research conducted by the University of Arkansas, questions regarding the study and the final report should be more appropriately directed to the University of Arkansas.

Commenter: Diane Goodwin

Comment: I am strongly against this.

Response: The Division acknowledges the comment.

Commenter: Elliott Golmon

Comment: We need to continue to support our Farmers who are on the front lines in the battle to preserve our nations ecosystems through sound farming practices based on research which utilizes science. We are against the moratorium on farms of any type that threaten private property rights, especially those that are following the rules set forth by our governmental agencies.

Response: The Division acknowledges the comment.

Commenter: Buffalo River Watershed Alliance

Comment: Summary: The Big Creek Research Extension Team's (BCRET) final report (https://bigcreekresearch.org/project_reports/) in spite of numerous errors and apparent obfuscation, nevertheless clearly documents, after only 5 years of

RULE 6 Response to Comments Received During the Comment Period Extension

operation, water quality impacts from a single hog concentrated animal feeding operation (CAFO) in the Buffalo National River Watershed. Such facilities are 2 designed for a much longer operational life. In this case, C&H Hog Farm had an initial 12-year contract and likely would have remained operational for a much longer period if not for the closure of the facility. The documented impacts as detailed below would have grown exponentially if, 1) C&H had been allowed to operate until the end of its design life, and/or, 2) additional medium or large swine CAFOs were permitted in the watershed. Statements and data from the BCRET report, and the conclusions of the expert panel review of the BCRET report, along with the two expert reports attached to these comments, all reveal impacts and advise caution regarding management of swine waste from C&H and warn of the potential impact of other such facilities in the watershed, thus supporting the need for a permanent moratorium on swine CAFOs in the Buffalo National River watershed in order to protect this extraordinary resource water and state and national icon. It must be noted that this 90-day comment period was opened ostensibly to allow for comments on the BCRET final report, released after the previous 30-day comment period had closed. While our comments here reference the BCRET report, we contend that the BCRET final report is so rife with errors that the accuracy and reliability of its entire contents and conclusions are called into serious question. Even the expert review team did not identify numerous errors which only came to light due to careful review by concerned citizens who brought errors to the notice of the BCRET team. Some of these errors are noted below. Some have been corrected in the revised report but others persist. Below in Part 1 are examples of impact to soil and surface and groundwater from operation of the C&H Hog Farm, quoting from the BCRET final report. There follows in Part 2, excerpts from two reports prepared by Mike Smolen, Ph.D, an acknowledged expert in water quality and agricultural waste management. Both reports are attached to these comments in their entirety as part of our comments.

Response: This rulemaking makes permanent the moratorium on medium and large CAFOs in the Buffalo River watershed, and includes a moratorium on land application permits for CAFOs in the Buffalo River watershed. C&H Hog Farms, Inc. is outside the scope of this rulemaking. The Division did not review or approve the study design and has no authority over the data analysis performed by BCRET. While the Division may consider the research conducted by the University of Arkansas, questions regarding the study and the final report should be more appropriately directed to the University of Arkansas.

Commenter: Arkansas Farm Bureau Federation

RULE 6 Response to Comments Received During the Comment Period Extension

Comment: The Arkansas Farm Bureau Federation would like to offer the following comments opposing the permanent moratorium on the Buffalo River watershed as initiated in Arkansas Pollution Control & Ecology Commission (APC&EC) Regulation's 5 and 6. The ADEQ and APC&EC initiated rulemaking to prohibit landowners within the Buffalo River watershed their right to farm without a single shred of scientific evidence that animal agriculture, and in this case C&H Hog Farms, had caused an environmental impact. C&H Hog Farms was, and still to this day, the most heavily scrutinized and monitored farm in the state. The Big Creek Research and Extension Team was originally created by then Governor Mike Beebe to evaluate the potential impact and sustainable management of the C&H Farms operation on the water quality of Big Creek. Several years later, the ADEQ funded a drilling study to evaluate the lithology/geology below the waste storage ponds at C&H Hog Farms and to assess potential subsurface impact from the waste storage ponds. Upon completion of the drilling study, Governor Asa Hutchinson created the Beautiful Buffalo River Action Committee and authorized the development of a Watershed Management Plan for the Buffalo River Watershed that would evaluate its tributaries to determine which would need the most attention. The United States Geologic Survey (USGS) studied algal growth on the Buffalo River, as well as, nutrient concentrations upstream and downstream of Big Creek on the Buffalo River. All of these studies identified above determined either Big Creek continues to maintain pristine water quality and C&H was having no environmental impact.

Response: The Division does not concur with Commenter's conclusion regarding studies undertaken in the Buffalo River Watershed. In the Buffalo River Watershed, four Assessment Units (two sections of Big Creek and two sections of the Buffalo National River) have been identified as impaired: three for bacteria and one for dissolved oxygen.

Comment: Environmental groups state the moratorium is based on sound science and the justification used is to merely regurgitate the definition of karst. The mere presence of karst does not constitute scientific justification for a permanent moratorium. All of Northwest Arkansas and Northcentral from the Black River to the Oklahoma Border and North of the Arkansas River to Missouri as well as portion of Southwest Arkansas are underlain by karst. Using this logic, these areas should also be included in the moratorium.

Response: The purpose of this rulemaking is to make permanent the current moratorium on swine operations of a certain size in the Buffalo River watershed.

Congress designated the Buffalo River as the first National River in 1972 "for the purposes of conserving and interpreting an area containing unique scenic and scientific features, and preserving [it] as a free-flowing stream." 16 U.S.C. § 460m-8. APC&EC Rule 2 affords the Buffalo National River its highest category of designated use. "Extraordinary Resource Water."

RULE 6 Response to Comments Received During the Comment Period Extension

Commenter: Joel Nunneley

Comment: There is a new mining operation near the Kings River that is right above Keel's Creek, a major tributary to the Kings River. ADEQ needs to be vigilant in protecting the beautiful Kong's River.

Response: This comment is outside the scope of this rulemaking.

Commenter: Brian Pruitt

Comment: Tyson is allowed to have egg farms in the buffalo river water shed alliance shed and I. Feel like it's unfair because they can spread dry litter and be in the area and the. The fact is that liquid slurry litter is absorbed by the plant and grass it's applied to and rarely reaches the soil this is a 70 year old practice that has been tested and dry litter causes more pollution than wet litter does in California chicken houses run wet litter operations and Europe wet litter is a widely accepted method for animal waste disposal and the ozark mountain region is not true karst topography as the propaganda mill describes it as I'm against this practice because agriculture was in the buffalo river valley long before tourism was and it wasn't pollution until the national park service took over this is a picture of the vault toilet at mt Hersey flooded in 2017 can you regulate them and get them out of the flood plane the mill creek pump failure is the only reason they permitted C&h farms in the first place and your agency needs a scapegoat for your mistakes and ignorance

Response: Rule 5 is specific to liquid animal waste management systems. Comments regarding dry poultry litter are more appropriately directed to the Arkansas Department of Agriculture, Division of Natural Resources. C&H Hog Farm, Inc. is outside the scope of this rulemaking.

Comment: I will definitely not stand for this action because the national park service is putting raw untreated human waste in the water every flood with the vault toilets in the flood plan

Response: The Division acknowledges the comment.

Commenter: Andy McCutcheon

Comment: I oppose a moratorium on farms in the Buffalo River watershed. There is NO evidence that C&H or any other agricultural operation in the watershed is causing or has caused any degradation of water quality in the Buffalo River. This is

RULE 6 Response to Comments Received During the Comment Period Extension

blatant government overreach and an attempt to deprive private land owners in the watershed of their right to farm.

Response: The Division acknowledges the comment. C&H Hog Farm, Inc. is outside the scope of this rulemaking.

Commenter: Shaylee Wallace

Comment: Agriculture has been a long standing and important factor to environmental sustainability. Science has shown time and time again that agriculture is not causing harm to our natural forests and rivers. Fear mongering from the opposition should not be tolerated, they are driven by their own agenda. This dissolves any rights that farmers have and gives dangerous power to anti-agriculturalists to fuel their desire to end all animal agriculture (which plays a vital role in maintaining a sound, balanced environment). We aim to raise safe sustainable food, yet fear mongers who have no knowledge or authority on the subject are pushing us around. We cannot stand for it any longer!

Response: The Division acknowledges the comment.

Commenter: Tatum Tarvin

Comment: Please be careful as you consider this regulation, Arkansas farmers deserve the respect of our state. They work tirelessly to feed the people of the great states of America. Federal law already requires so much of our farmers, and they respect the reasons for rules and regulations, however I do not believe there is enough unbiased proof to make this ruling on regulations 5 & 6! Thank you for your time.

Response: The Division acknowledges the comment.

Commenter: Michael Brotherton

Comment: NO to your ridiculous "Ban". I have no reason to believe ADEQ, The Buffalo River Watershed Alliance (BRWA), or the State of Arkansas have the best intentions for the Buffalo National River or especially Newton/Searcy counties with this action. Certain people want to keep the area "poor" and promote "tourism" in ways that serve only their own business interests. C&H Farms demonstrated the best intentions and operated in a manner exceeding the requirements set by law, and were harassed and punished for it. Meanwhile the REAL cause of damage to the river (overcrowding by humans) is buried under falsified misleading propaganda & biased pseudo-science to the extent that it ought to be considered criminal. There is not a shred of decency or moral

RULE 6 Response to Comments Received During the Comment Period Extension

character at ADEQ & BRWA and THEY should be held accountable for promoting the degradation of the Buffalo National River in the interest of Greed.

Response: The Division acknowledges the comment. C&H Hog Farm, Inc. is outside the scope of this rulemaking.

Commenter: Nathan Pennington

Comment: This regulation would set a DANGEROUS standard. If farms cannot be in a watershed then there will not be any farms. We must work together to educate people about the truth and not knee jerk regulate farms away. Farms can operate in a responsible manner. C & H never caused any issue yet they were ran off. This is a very bad idea.

Response: The proposed rule does not ban all farms from the watershed, only swine facilities larger than a certain size. C&H Hog Farm, Inc. is outside the scope of this rulemaking.

Commenter: Joann Saraydarian

Comment: I'm an Arkansas Master Naturalist and am very aware of the dangers animal waste has on our environment. The proposed moratorium under Regulation No. 6 will make it impossible to keep the Buffalo River, our National Treasure, clean! Listen to the scientific facts. What will it take to make it clear that many species depend on the purity of this river. It is a crime against the entire planet. Naturalists and tourists around the globe are attracted to our state to experience the beauty of this river. Our state is cutting off its own arm. Once it is polluted, the damage can not be reversed!

Response: The Division acknowledges the comment.

Commenter: Fay Knox

Comment: It is my understanding that the comment that was previously closed was reopened to include the results of the Big Creek Research Extension Team's (BCRET) final report. The report states in the following quotes the fact of increased phosphorous present downstream from C&H and that the complex karst hydrologic system is vulnerable to contamination. The following quotes from the limited BCRET report illustrate need for moratorium:

• In Chapter 7 of the BCRET report increased phosphorous is seen downstream from the one existing CAFO in the watershed. BCRET states that : 'Future additions of any nutrients (i.e. as mineral fertilizer, swine slurry, or poultry litter)

RULE 6 Response to Comments Received During the Comment Period Extension

should be carefully managed so as not to lead to further increases in soil test P. (BCRET Final Report, October 24,2019 , Chapter 7, pp 30-31).

• "The Big Creek Watershed below the C&H Farm and application field locations, lie within a karst hydrologic system of great complexity exhibiting intimate connection of surface-water and groundwater regimes. These characteristics endow the hydrologic system as an important recreational resource locally and regionally, but also render the system vulnerable to contamination." (BCRET Final Report, Oct. 24, 2019 Chapter 2, p.2).

Response: The Division did not review or approve the study design and has no authority over the data analysis performed by BCRET. While the Division may consider the research conducted by the University of Arkansas, questions regarding the study and the final report should be more appropriately directed to the University of Arkansas.

Commenter: Michael Rapp

Comment: I submitted a critique of the draft Environmental Impact statement in August, 2015, and that critique is attached.

Response: This comment is outside the scope of this Rulemaking.

Commenter: Duane Woltjen

Comment: Presumably the comment period is extended to January 22, 2020 to accommodate the preparation of BCRET Final Report. The version of that report presently available to the public is so full of incorrect determinations it must not be allowed to stand as representing the "facts" of the C&H fiasco. ADEQ owes the public and future generations of Arkansas an accurate report of facts and accurate interpretation of them, lest the tragedy of C&H be repeated in decades to come because someone accepts that there is no meaningful effect from this operation. I question is why ADEQ takes the word of the incompetent "professionals (??!!)" of BCRET? ADEQ is responsible for the truth, completeness, and accuracy of any final report in this matter.

"Future additions of any nutrients to fields, which received slurry from C&H Farms, should be carefully managed, so as to not lead to further increases in soil test P. This can be achieved by application of nitrogen (N) fertilizer or slurry and poultry litter a P-based rates, where P applied is equivalent to expected forage uptake of P.", so says BCRET from their Final Report. BCRET continues, even in their Final Report, to advocate what C&H was required to do when the doors opened until the doors finally closed in December of 2019. And there is no doubt that C&H faithfully applied slurry in accordance with their permit as verified by

RULE 6 Response to Comments Received During the Comment Period Extension

the inspection reports of their compliance. This BCRET advocated practice is how we ended up with Nitrate levels that more than double in Big Creek as it passes by the C&H Farm; P downstream that is double the upstream level; increasing levels of nitrates in the ground water found in the well by the two barns; ground water downstream of the barns that is 4 x the nitrate level of groundwater upstream of the barns; very high Big Creek E. coli levels such that Big Creek is declared "Impaired" by the State. Isn't the above remarkable? The Final BCRET Report recommendations have been followed for at least 6 years, and the results are a disaster! That tells us the Arkansas P Index (equivalent to the Final edict) does not work. Why not? The basic reason why it does not work is the application field geology is karst. Karst soils are extremely variable in permeability, with virtually impermeable soil lying next to conduits to the water table in unpredictable locations of greatly variable extent. If P soil samples are taken in what turns out to be a conduit or highly permeable location, P readings will be low (because the previously applied P went to the water table below). The P applied was not used by plants, it went to the groundwater. I resent BCRET's Final Report appearing as a recommendation by BCRET. This more of the BS they have foisted on C&H and the public. This is academic fraud, pure and simple. Logically, the only thing that works on karst is Not Applying Animal or Manufactured Fertilizers. (Try crop rotation to restore nutrients—old Chinese saying?). Permanent prohibition of CAFOs is necessary to protect the Buffalo River and must happen. Now

Response: The Division did not review or approve the study design and has no authority over the data analysis performed by BCRET. While the Division may consider the research conducted by the University of Arkansas, questions regarding the study and the final report should be more appropriately directed to the University of Arkansas.

Commenter: Ann Bendy

Comment: I kindly ask that the permanent moratorium for swine operations in the watershed area be voted against. As long as farms are following proper procedures and regulations there should be no reason for this moratorium. Find a better way to do it, don't just ban it all together. The moratorium would also have an economic impact by causing a loss of products, loss of jobs, and loss of economic diversity, which would have a negative impact on the area. Vote no to the moratorium on swine operations in the watershed area.

Response: The Division acknowledges the comment.

Commenters: Masen McCutcheon, Cheryl McCutcheon, Andy McCutcheon

Comment: I OPPOSE any moratorium of any type for the Buffalo River Watershed.

RULE 6 Response to Comments Received During the Comment Period Extension

Response: The Division acknowledges the comment.

Commenter: Melissa Klipp

Comment: We as land owners and homesteaders should have the right to raise what ever animals that we need to feed our families. We worked hard for our land and we should have the opportunity to freely have our land support our families. Our children also raise pigs for 4h and compete in county fairs. Our rights should not so easily be taken away.

Response: This rulemaking does not apply to small family farms.

Commenter: Randy McCutcheon

Comment: As a life long resident of Searcy County Arkansas and resident of the Richland Vally just a few miles from the Woolum crossing of the Buffalo river. I am against these regulations which will not solve the problems with the river. I don't believe the Government should have this much power over a free people. The US constitution does not grant such powers to the government. This just erodes the rights of the people.

Response: The Division acknowledges the comment.

Commenter: Ryan Crow

Comment: I don't agree with any of this. Quit over reaching.

Response: The Division acknowledges the comment.

Commenter: Arkansas Cattlemen's Associaton

Comment: As currently written, the Arkansas Cattlemen's Association (ACA) opposes the changes to Regulation 6 specifically concerning the "hog moratorium" component under Rule 5.901 subparagraph (B). It is the opinion of the ACA, and its members, that this rule directly violates Arkansas Code Ann. § A.C.A. Tit. 2, Subtit. 1, Ch. 4, known as the "Arkansas Right-to-Farm" law. It is the stated purpose of A.C.A. § 2-4-101, "to reduce the loss to the state of its agriculture resources by limiting the circumstances under which agriculture operations may be deemed to be a nuisance." The Arkansas Cattlemen's Association believes that by placing a moratorium on swine confined animal feeding operations (CAFO) located on the Buffalo National River Watershed, the APC&EC is publicly stating production agriculture is a nuisance. This unwelcome mindset will set a

RULE 6 Response to Comments Received During the Comment Period Extension

dangerous precedent in future legal proceedings as well as place a "not welcome" sign at the state line to all potential livestock feeding operations. The Arkansas Cattlemen's Association finds that a swine CAFO moratorium on the Buffalo National River Watershed (BNRW) by the APC&EC and the State of Arkansas is unconstitutional or, at the very least, an encroachment on the rights of the people of Arkansas, including cattle producers. Under Arkansas's Constitution, Article 2 sub-article 22, "Property rights- Taking without just compensation prohibited" states, "The right of property is before and higher than any constitutional sanction; and private property shall not be taken, appropriated or damaged for public use, without just compensation therefor." Should the state government and the APC&EC continue to move forward with the proposed rule, they will essentially be taking private property, and the ability of private land holders to generate income from their land, away. Moreover, there is justifiable concern among cattle producers in the BNR W, and statewide, that should the proposed rule take effect, it will soon be expanded to other agricultural sectors, such as cattle production, both inside and outside the BNRW. Once again, this proposed rule sets a dangerous precedent for the future of production animal agriculture in Arkansas. With 57 separate, eight-digit watersheds located in Arkansas, the proposed rule could serve as the beginning of multiple regulations aimed at cattle operations and agriculture in watersheds throughout the state. In conclusion, the Arkansas Cattlemen's Association opposes the proposed Changes to Regulation 6. As presented, it is a violation of Arkansas law, unconstitutional when viewed against the Arkansas Constitution, and capable of setting egregiously harmful precedent. The Arkansas Cattlemen's Association believes the proposed rule should be withdrawn and other aspects on how to preserve the Buffalo National River should be examined. Such examination should include the effects of gravel roads, municipalities, feral hogs and how millions of tourist annually disturb the BNRW.

Response: The Division acknowledges the comment. Neither APC&EC nor the Division has stated that production agriculture is a nuisance.

Commenter: **Cindy Majoros**

Comment: Any future farms of this source really needs to be reviewed and locations considered before making a crucial decision as they didn't on this one.

Response: The permitting process is outside the scope of this rulemaking.

Commenter: **Katie Deakins**

Comment: Reg. 5.105 Exemption Any confined animal operation using a liquid waste disposal system shall be exempt from the requirements of this regulation if the owner or operator obtains and maintains active coverage under either an National Pollutant Discharge Elimination System individual or general permit for

RULE 6 Response to Comments Received During the Comment Period Extension

discharges from a concentrated animal feeding operation. I am not comfortable with the proposed Reg. 5.105 Exemption. This is not strict enough to protect watershed areas in our state that are dominated by karst topography. Please do everything possible to ensure a PERMANENT moratorium on such CAFO's in the Buffalo River watershed as well as others in our beautiful Natural State. I appreciate the work Gov. Hutchison has done so far, and it is my hope he can make this a lasting legacy forever.

Response: The content of Rule 5.105 has not changed and therefore is outside the scope of this rulemaking.

Commenter: Alan Nye

Comment: I have attached my technical criticism of the Big Creek Research Extension Team report. To the extent that the Big Creek Research Extension Team report is used as a decision-making tool in whether or not to make the moratorium permanent, I request that my comments be thoughtfully considered. One result of the BCRET report is very clear. During the operation of C&H Farm, the nitrate concentrations downstream of the farm were approximately double those of the upstream sampling station. These results are the "smoking gun" strongly implying C&H Farm is a source of nitrate pollution to Big Creek and the Buffalo National River watershed. I would urge the ADEQ to make the conditions of the moratorium permanent, thereby avoiding future nutrient loading to Buffalo National River watershed and the high costs incurred to undo the mistake of allowing C&H Farm and its like to be sited and operated in the watershed.

Response: C&H Hog Farms, Inc. is outside the scope of this rulemaking. The Division did not review or approve the study design and has no authority over the data analysis performed by BCRET. While the Division may consider the research conducted by the University of Arkansas, questions regarding the study and the final report should be more appropriately directed to the University of Arkansas.

Commenter: Philip Gibson

Comment: Although my address is out of state, I own land boarding the Buffalo National River and come there often. I have been coming for 20years. I may retire on that land and become a full-time resident of Arkansas. All because if that river.

Response: The Division acknowledges the comment.

Commenter: Natalie Dettmann

RULE 6 Response to Comments Received During the Comment Period Extension

Comment: The Buffalo River is a place that many traveler and campers enjoy; Myself included. It breaks my heart to see what has happened to it over the past years. Please consider donating in any way you can! Give your money and time to help save the river!

Response: The Division acknowledges the comment.

Commenter: Vicente Vasquez

Comment: Everyone should report the amount of waste they are dumping in to the river and everyone should be able to acces this information By everyone i refer to the companies that dump waste into the river

Response: The Division acknowledges the comment.

Commenter: Katie Watson

Comment: In many of my environmental classes for the past two years have addressed the many issues in the Buffalo River. I believe that corporations and other businesses should understand the many values the river offers to many disciplines

Response: The Division acknowledges the comment.

Commenter: Robert Agosti

Comment: Please keep all commercial (especially hog farms) animal enterprises out of the White River water shed basin.

Response: The Division acknowledges the comment.

Commenter: William Smith

Comment: Although I do question the integrity of ADEQ to do so as the agency has already failed in its initial promise to monitor and protect homeowners in the Cartney Arkansas area and the White River, The result being an unrestricted over extension of the original mining on Cartney Mountain which over the years has created a gigantic red pit and surface mining swallowing up homes and threatening local streams, remaining homeowners wells, property values, and the White River.

Response: This comment is outside the scope of this rulemaking.

RULE 6 Response to Comments Received During the Comment Period Extension

Commenter: Ozark Society Peterson

Comment: The Final Big Creek Research Extension Team (BCRET) Report deserves critical comment in order to put its conclusions and many pages of data interpretation into proper perspective. The Final BCRET report is highly technical and our response is also highly technical. A major problem is that the report makes few error estimates on the data input and therefore can't quantify the accuracy of its conclusions. Due to its lack of investigatory breadth, limited and flawed field sampling and data collection of swine waste-associated contaminants in surface water, inadequate characterization of the magnitude and timing of Big Creek surface water and stormwater runoff flows, most of the BCRET report results and conclusions cannot be confidently relied upon as a decision-making tool for assessing the impact of medium and large CAFOs on the Buffalo River watershed. Unfortunately, the authors provide no information or perspective regarding the uncertainty or variability of the study results, perhaps leading the uncritical reader to blithely accept the authors' conclusions. A good example is the chapter on surface runoff. Final Report inferences follow from column 6, table 7, page 15, the ratio of total phosphorus (TP) output and input (column 4 and 5) – neither of which is reliably estimated.

Another example of the inadequacy of the BCRET report is found in the recently re-drafted chapter 7 on nutrient loads. The apparent goal is to obtain estimates for yearly loads at BC6 and BC7 and thereby deduce the load generated in the farm stretch – a worthy goal of the investigation. But the model as presented is inscrutable (e.g. parameter values in the model are not given) and has the weakness of all models: it does not really represent the BCRET data set. As such, the results of the model are of unknown certainty. The OS presents a different method which gives similar but somewhat different estimates but includes an additional analysis of loading effects in the farm stretch of Big Creek. Our modeling of this same nutrient release is more transparent, but there can be no certainty or reliance on model results without a meaningful error analysis.

Response: The Division did not review or approve the study design and has no authority over the data analysis performed by BCRET. While the Division may consider the research conducted by the University of Arkansas, questions regarding the study and the final report should be more appropriately directed to the University of Arkansas.

Commenter: Searcy County Cattlemen's Association

Comment: On behalf of the 82 members of the Searcy County Cattlemen's Association, we OPPOSE any moratorium of any type agricultural operations for the Buffalo River Watershed.

Response: The Division acknowledges the comment.

RULE 6 Response to Comments Received During the Comment Period Extension

Commenter: Kirk Wasson

Comment: All concentrated animal growing farms of any size should not be allowed on watersheds of National Rivers and Wild and Scenic Rivers. More scientific data and research should be mandatory for approving any hog, bovine or poultry operations of any size. Major plans on monitoring and waste management should be place with monetary guarantees and criminal penalties before approving even small farms in other watersheds. Cows should be limited to one animal per acre. Hogs should be limited to the number of acres of land that the waste can be spread on. X? number of hogs per acre. All potential spread fields should be evaluated for potential runoff rates, absorption, karst and vegetation to be grown before approving concentrated animal businesses. I have winter time concentrated cattle feeding operations close to where I live that should be monitored and stopped if violating environmental laws. Some days the smell is strong and who knows what the runoff does to Bridge Creek and on downstream. While I believe in property rights, activities on my land should not affect neighbors and public lands Please ban all concentrated animal factories in drainages for all public water systems and any waterbody my grandchildren may swim in.

Response: The Division acknowledges the comment.

Commenter: Grant Scarsdale

Comment: The proposed Regulations No. 5 and No. 6 rulemaking changes for the Buffalo River watershed moratorium should encompass ALL medium and large animal feeding operations. The language of the proposed moratorium only applies to swine; however, medium and large poultry and dairy animal feeding operations pose an equivalent threat to our first national river.

Response: Rule 5 is specific to liquid animal waste management systems. Comments regarding dry poultry litter are more appropriately directed to the Arkansas Department of Agriculture, Division of Natural Resources.

Commenter: Nancy Deisch

Comment: The loopholes in Regulations 5 and 6 need to be closed to make sure that medium and large-scale animal (swine, poultry, and livestock) feeding operations are covered in the moratorium on the Buffalo River watershed. If all the Arkansas watersheds were covered, wouldn't that be something? Arkansas--a cutting-edge

RULE 6 Response to Comments Received During the Comment Period Extension

example of pollutants control? It is beyond belief that this could STILL be a matter of public concern after all this time. We need to get it right before too much damage is done. Please fix the regulations--once and for all, for the good of everyone in the state!

Response: The size thresholds in Rule 6 are clearly stated.

Commenter: Ray Quick

Comment: The citizens of the State of Arkansas have spoken with respect to not allowing the C&H concentrated animal feeding operation (CAFO) to continue operating in the watershed of the Buffalo National River. ADEQ does not want to make another "mistake" by permitting any animal CAFO in the watershed of the Buffalo National River. Therefore, the proposed Regulations No. 5 and No. 6 rulemaking changes for the Buffalo River watershed moratorium should encompass ALL medium and large animal feeding operations. The language of the proposed moratorium only applies to swine; however, medium and large poultry and dairy animal feeding operations pose an equivalent threat to our first national river. In particular, given the fact that the geology is primarily limestone/karst.

Response: C&H Hog Farms, Inc. is outside the scope of this rulemaking. Commenter may propose such changes through the Third Party Rulemaking process outlined in APC&EC Rule 8.

Commenters: Ammen Jordan; Pat Robinette; Kai Coggin; Lanie Carlson; McKendra Adams; Dixie Keyes; Terrie Martindale;

Comment: The proposed Regulations No. 5 and No. 6 rulemaking changes for the Buffalo River watershed moratorium should encompass ALL medium and large animal feeding operations. The language of the proposed moratorium only applies to swine; however, medium and large poultry and dairy animal feeding operations pose an equivalent threat to our first national river.

Response: Commenters may propose such changes through the Third Party Rulemaking process outlined in APC&EC Rule 8.

Commenters: Bennie Scott; Carol Christoffel

Comment: I am in favor of establishing a permanent moratorium on medium and large swine, chicken, and cattle CAFOs in the Buffalo and other Arkansas watersheds.

Response: Commenters may propose such changes through the Third Party Rulemaking process outlined in APC&EC Rule 8. Comments regarding dry poultry litter are more appropriately directed to the Arkansas Department of Agriculture, Division of Natural Resources.

RULE 6 Response to Comments Received During the Comment Period Extension

Commenter: Jan Wilson

Comment: Please continue the good /Godly movement you started by permanently placing a moratorium on CAFOs for medium/large swine not only in the Buffalo National River watershed, but in ALL of our precious Arkansas. I am grateful for your attention to this matter and hope you will have the wisdom needed to protect God's precious waterways for Arkansas.

Response: Commenters may propose such changes through the Third Party Rulemaking process outlined in APC&EC Rule 8.

Commenter: Dina and Jeff Nash

Comment: Our family is opposed to any future permits for CAFOs in the Buffalo River and Big Creek Watersheds. For that matter, we don't want CAFOs or polluting industries anywhere in the Extraordinary Resource Waters of the state, either; for example, the Mulberry, the Caddo, Illinois Bayou, the Little Red, etc. The data contained in the BCRET final report should be enough for the ADEQ's rule change to create a permanent moratorium on polluting CAFOs or other businesses in these sensitive karst-based soil formations, which eventually pollutes our rivers, streams, and lakes.

Response: Commenters may propose such changes through the Third Party Rulemaking process outlined in APC&EC Rule 8.

Commenter: Virginia Hartnett

Comment: Arkansas is a land of wonder and beauty, and the Buffalo River highlights this Natural State. As our National River, it deserves our respect and protection. We Arkansans are duty bound. Its waters are still being adversely affected as a result of the CAFO hog farm that has been shut down. It will take time and care to recover. It is critical that further damage be avoided. Changes to Regulations 5 & 6 should expand the moratorium to include ALL (not only swine) medium and large scale animal feeding operations in the Buffalo River Watershed.

Response: Commenter may propose such changes through the Third Party Rulemaking process outlined in APC&EC Rule 8.

RULE 6 Response to Comments Received During the Comment Period Extension

Commenter: White River Waterkeeper

Comment: The copious number of changes that were nestled within the redline document were more than any interested stakeholder could thoroughly scrutinize within a 30 or even 90-day window.

Response: The initial thirty (30) day public comment period was extended twenty (20) days. Together with the second public comment period, public comments were received for greater than 120 days.

Comment: The petition to initiate rulemaking to amend Reg. 6 does not meet the requirements of Reg. 8.808(a)(1). The petition states DEQ intends “to make permanent the moratorium of confined animal operations of a certain size...” However, this explanation falsely characterizes the scope of the proposed changes. The only variable recognized in DEQ’s description is that of size. The description fails to acknowledge that the prohibition only applies to swine AFOs of a certain size that also meet the regulatory definition of a concentrated animal feeding operation (CAFO).

Response: The content of Rule 6.602(B) has not changed and therefore is outside the scope of this rulemaking. DEQ acknowledges that the numbers determining the size of the facility are derived from the federal rules. The federal rules are based on animal units. DEQ takes this into consideration when reviewing permit applications.

Comment: To reiterate, the moratorium defined in the proposed Reg. 6.602(b) applies to concentrated animal feeding operations (CAFOs), not the more broadly defined confined animal operations (AFOs). Although all CAFOs are AFOs, not all AFOs are CAFOs. AFOs are categorized based solely on the number of animal units. An AFO can be defined as a CAFO if: i. It meets the size threshold of a Large AFO; ii. It meets the size threshold of a Medium AFO and either: a. 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. b. The AFO is found to be a significant contributor of pollutants, and the permitting authority uses its discretion to designate the facility as a CAFO. (Note: “found to be” does not translate to “presumed” to be.) iii. It meets the size threshold of a Small AFO, and the permitting authority chooses to designate it as a CAFO on a case-by-case basis because it is found to be a significant contributor of pollutants. B. The public notice, both original and of the reopening of the public comment period, fails to meet the requirement of Reg. 8.803. See above for a detailed explanation of the mischaracterization of the terms and substance of the proposed regulation changes. As explained in WRW’s September 2019 comments, DEQ’s failure to provide a detailed explanation of proposed changes

RULE 6 Response to Comments Received During the Comment Period Extension

has misled the public to believe that a facility the size of C&H Hog Farm cannot be constructed in the Buffalo River watershed under the proposed rulemaking changes. This is false.

Response: The content of Rule 6.602(B) has not changed and therefore is outside the scope of this rulemaking.

Comment: DEQ provided misleading information on the Economic Impact/ Environmental Benefit Analysis. In response to question #9, DEQ stated, "This proposed rule prohibits the citing of confined animal operations of a certain size in the Buffalo National River Watershed while still allowing small confined animal operation to operate within the watershed. Small confined animal operations pose a lesser threat to the Buffalo National River Watershed." Again, this explanation more broadly characterizes the prohibition and does not adequately reflect the extent of the ban as detailed in the proposed changes. WRW recommends that "CAFO" be deleted from the proposed Rule 6.602(b), and replaced with "confined animal operations" to meet the intent of the prohibition as spelled out in all associated rulemaking documents.

Response: The content of Rule 6.602(B) has not changed and therefore is outside the scope of this rulemaking.

Comment: Although WRW supports the prohibition, WRW is disappointed in DEQ's failure to reference the adequate scientific basis for this prohibition. To be fair, a reliable and relevant water quality monitoring study design was not employed by the Big Creek Research and Extension Team (BCRET). And to be fair to BCRET – they would have needed substantially more resources in order to design a more robust study. WRW agrees with comments submitted on behalf of Arkansas Farm Bureau that C&H Hog Farm was, and is, the most heavily scrutinized and monitored farm in the state. The fact that there are no conclusive results to definitively discern the level of water quality impacts from the farm is all the more reason a permanent medium and large AFO ban should be codified. As stated in the BCRET final report, "the complexity of karst prevents easy understanding of flow regimes, challenging effective protection and management." The dye-trace studies of Kopic (2019)² and Kopic et al. (2015)³ confirmed the complexity of subsurface flow within karst areas of the Buffalo River watershed. Interbasin transfer of groundwater flows highlighted failed assumptions of BCRET's surface water quality study design. BCRET's upstream and downstream monitoring stations on Big Creek were intended to serve as control and impact sites, respectively. However, dye-trace studies confirmed this underlying assumption was violated due to the unexpected direction of subsurface flow. If after nearly six years and close to \$1 million spent on environmental monitoring, there are still this many study design complications impacting data interpretation, is there any chance of ever generating definitive results to evaluate the extent of C&H's impact on water quality? No. Further complicating matters is the tangled and multifarious nature of nutrient cycling in the environment (Figure 1). For years, EPA has been pushing states to develop numeric water quality criteria based on assessment endpoints (e.g., food web alterations, water clarity,

RULE 6 Response to Comments Received During the Comment Period Extension

algal growth) to protect management objectives or designated uses (e.g., aquatic life, drinking water, recreation) from harmful effects of nutrient enrichment. To put that simply, in-stream nitrogen and phosphorus concentrations are not useful assessment endpoints due to chemical and physical interactions - including assimilation through the food web. There is ample empirical evidence confirming the land application of manure from C&H has resulted in a buildup of soil test phosphorus at levels known to increase runoff potential to surface waters. Also, there is ample empirical evidence supporting the notion that C&H's permitted land application of manure will result in legacy phosphorus leaching into surface and groundwater for many years to come. Recent USGS studies provide further support that there are concerning environmental effects related to animal operations impacting the health of Big Creek. This research shows significantly reduced metabolic activity in Big Creek, yet, high bacterial counts. Bacteria rendered metabolically inactive signifies the influence of CAFO pharmaceutical compounds causing antimicrobial effects. This research has focused on compounds that are known to be used in industrial agriculture and have been detected in EPA's emerging contaminant studies conducted in the Buffalo River watershed. Unfortunately, environmental research and investigations in the natural environment are never straightforward or without a plethora of confounding factors. DEQ must rely on a weight of evidence approach, which WRW believes is heavily weighted in favor of a permanent prohibition of medium and large AFOs in the Buffalo River watershed due to the sensitive karst terrain.

Response: Congress designated the Buffalo River as the first National River in 1972 "for the purposes of conserving and interpreting an area containing unique scenic and scientific features, and preserving [it] as a free-flowing stream." 16 U.S.C. § 460m-8. APC&EC Rule 2 affords the Buffalo National River its highest category of designated use, "Extraordinary Resource Water." C&H Hog Farms, Inc. is outside the scope of this rulemaking. The Division did not review or approve the study design and has no authority over the data analysis performed by BCRET. While the Division may consider the research conducted by the University of Arkansas, questions regarding the study and the final report should be more appropriately directed to the University of Arkansas.