

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

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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 Roe; 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; 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 Biting; David Peterson; Charles Biting; Buffalo River Watershed Alliance; Ozark Society; 3rd Planet Peace; elgilpin1@gmail.com; marshman17@aol.com; nuffer@hughes.net; bombbav41@gmail.com; roxvrose439@gmail.com; arhiker.davis871@gmail.com; poweryale@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/pdssql/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.adeg.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)(1), Determination of Domestic Wastewater Effluent Limitations: BWD objects to the change at Reg. 6.401 (A)(1) 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.