

QUESTIONNAIRE  
FOR FILING PROPOSED RULES AND REGULATIONS  
WITH THE ARKANSAS LEGISLATIVE COUNCIL  
AND JOINT INTERIM COMMITTEE

DEPARTMENT/AGENCY: Arkansas Department of Environmental Quality  
DIVISION: Water Division  
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TO: Donna K. Davis  
Subcommittee on Administrative Rules and Regulations  
Arkansas Legislative Council  
Bureau of Legislative Research  
Room 315, State Capitol  
Little Rock, AR 72201

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1. What is the short title of this rule?

*Same as in Financial Impact Statement*

2. What is the subject of the proposed rule?

*Modification of the chloride, sulfate, total dissolved solids (TDS) and selenium criteria of the Arkansas Water Quality Standards (WQS) and removal of the designated, but not existing, domestic water supply use for Boggy Creek.*

3. Is this rule required to comply with federal statute or regulations?

Yes \_\_\_\_\_ No X

4. Was this rule filed under the emergency provisions of the Administrative Procedure Act?

Yes \_\_\_\_\_ No X

If yes, what is the effective date of the emergency rule? \_\_\_\_\_

When does the emergency rule expire? \_\_\_\_\_

Will this emergency rule be promulgated under the permanent provisions of the Administrative

Administrative Procedure Act? Yes \_\_\_\_\_ No \_\_\_\_\_

Is this a new Rule? Yes \_\_\_\_\_ No   X  

If yes, please provide a brief summary explaining the regulation

Does this repeal an existing rule: Yes \_\_\_\_\_ No   X   If yes, a copy of the repealed rule is to be included with your completed questionnaire. If it is being replaced with a new rule, please provide a summary of the rule giving an explanation of what the rule does.

5. Is this an amendment to an existing rule? Yes   X   No \_\_\_\_\_ If yes, please attach a mark-up showing the changes in the existing rule and a summary of the substance changes.

*See Attachments A and B.*

6. Cite the state law that grants the authority for this proposed rule. If codified, please give the Arkansas Code citation.

*Act 472 of the Acts of Arkansas 1949, as amended. ARK. CODE ANN. §8-4-101, et seq.*

7. What is the purpose of the rule? Why is it necessary?

*This Petition is submitted pursuant to Section 2.306 of Arkansas Pollution Control and Ecology Commission ("APCEC") Regulation No. 2, Section 3.4 of APCEC Regulation No. 8 and the Continuing Planning Process. Clean Harbors Environmental Services, Inc. ("Clean Harbors") is requesting modifications to the selenium, chloride, sulfate, and total dissolved solids ("TDS") criteria of the Arkansas Water Quality Standards and removal of the designated, but not existing, domestic water supply use for Boggy Creek.*

*Clean Harbors operates a hazardous waste treatment and incinerator facility in El Dorado, Arkansas, which had provided environmental remediation of existing contamination caused by petroleum operations. The facility discharges treated wastewater and offsite stormwater through two outfalls (007 and 009) and stormwater and non-process water through one outfall (001) all as authorized by the Arkansas Department of Environmental Quality (ADEQ) under National Pollution Discharge Elimination System (NPDES) Permit No. AR0037800. Boggy Creek is the ultimate receiving stream for outfalls 007 and 009, and flows southward to its confluence with Bayou de Loutre which flows into the Ouachita River in Louisiana.*

*Clean Harbors operates a water treatment facility that collects previously contaminated groundwater containing elevated levels of total dissolved solids and*

selenium. The source evaluation indicates that selenium occurs in groundwater under the site, in surface runoff from the site and in upstream segments to Boggy Creek. The source of the selenium is believed to be primarily due to previous refining operations. Clean Harbors does not discharge TDS, chloride or selenium in toxic amounts into Boggy Creek. The existing selenium concentrations in Boggy Creek are not harmful to aquatic life and no downstream effects are apparent in Bayou de Loutre. Fish tissue and sediment data indicate selenium residuary in fish in Boggy Creek and Bayou de Loutre are below levels at which adverse affects begin to occur in sensitive fish species.

Clean Harbors requests the Arkansas Pollution Control and Ecology Control Commission to amend Regulation No. 2, to remove the domestic drinking water supply use designation for Boggy Creek. Clean Harbors is further asking APCEC to modify the dissolved minerals criteria as follows:

*For Boggy Creek:*

*TDS from 123 mg/L to 1,360 mg/L*

*Sulfate from 41 mg/L to 63 mg/L*

*Chloride from 19 mg/L to 631mg/L*

*Selenium from 5µg/L to 15.6 µg/L*

*These water quality standard modifications will not adversely affect the aquatic life communities and existing fisheries.*

8. Will a public hearing be held on this proposed rule? Yes   X   No        If yes, please complete the following:

Date: Week of   March 19  , 2007

Time: To be determined by ADEQ

Place: El Dorado, Arkansas at a location to be determined by ADEQ

9. When does the public comment period expire for permanent promulgation? (Must provide a date.)

*The period for receiving all written comments by the public shall conclude ten (10) business days after the date of the public hearing pursuant to Arkansas Pollution Control and Ecology Commission Regulation No. 8, Part 3, Section 2.2.3, unless an extension of time is granted. Thus, the public comment period will expire during the week of   April 2  , 2007.*

10. What is the proposed effective date of this proposed rule? (Must provide a date.)

*The regulation becomes effective twenty days after filing of the final regulation as adopted by the Commission with the Secretary of State.*

11. Do you expect the rule to be controversial? Yes \_\_\_\_\_ No  X  If yes, please explain.
12. Please give the names of persons, groups, or organizations that you expect to comment of these rules? Please provide the position (for or against) if known.

*For or Neutral:*

*Arkansas Department of Environmental Quality*

*Arkansas Department of Health*

*Arkansas Natural Resources Conservation Commission*

*Arkansas Environmental Federation*

*Region VI, US Environmental Protection Agency*

*Against:*

*Unknown*

Use Variations Supported by UAA

Bois d'Arc Creek from Caney Creek to Red River - no domestic or industrial water supply use(GC-1,#13)  
Town Creek below Acme tributary - no domestic water supply(GC-4,#14)  
Unnamed trib. from Acme - no domestic water supply(GC-4,#14)  
Gum Creek - no domestic water supply use(GC-2,#15)  
Bayou de Loutre from Gum Creek to State line - no domestic water supply use(GC-2,#16)  
Walker Branch - no domestic water supply use(GC-2,#17)  
Little Cornie Bayou from Walker Branch to State line - no domestic water supply use(GC-2,#18)  
Alcoa unnamed trib to Hurricane Cr.and Hurricane Cr. - no domestic water supply use(GC-4,#19)  
Holly Creek - no domestic water supply use(GC-4,#20)  
Dry Lost Creek and Tribs. - no domestic water supply use(GC-4.#21)  
Lost Creek - no domestic water supply use(GC-4,#22)  
Albemarle unnamed trib (AUT) to Horsehead Creek - no domestic water supply use(GC-2,#27)  
Horsehead Creek from AUT to mouth - no domestic water supply use(GC-2,#27)  
Dismukes Creek and Big Creek to Bayou Dorcheat - no domestic water supply  
**Boggy Creek-No domestic water supply use (GC-2)**

**SPECIFIC STANDARDS: GULF COASTAL ECOREGION**  
(Plates GC-1, GC-2, GC-3, GC-4)

	<u>Typical Streams</u>	<u>Spring Water Streams</u>	<u>Lakes and Reservoirs</u>
Temperature °C (°F)*			
Ouachita River	30 (86)	30 (86)	32 (89.6)
(state line to Little Missouri River)	32 (89.6)		
Red River	32 (89.6)		
Turbidity (NTU)(primary/storm)	21/32	21/32	25/45
Red River(primary/storm)	50/150		
Minerals	see Reg. 2.511		see Reg. 2.511
Dissolved Oxygen (mg/l)**	<u>Pri.</u>	<u>Crit.</u>	see Reg. 2.505
<10 mi <sup>2</sup> watershed	5	2	
10 mi <sup>2</sup> - 500 mi <sup>2</sup>	5	3	
>500 mi <sup>2</sup> watershed	5	5	
All sizes	6	5	
All other standards	(same as statewide)		

\* Increase over natural temperatures may not be more than 2.8°C (5°F).

\*\* At water temperatures ≤10°C or during March, April and May when stream flows are 15 CFS and greater, the primary season D.O. standard will be 6.5 mg/l. When water temperatures exceed 22°C, the critical season D.O. standard may be depressed by 1 mg/l for no more than 8 hours during a 24-hour period

#### Variations Supported by UAA

Loutre Creek - from headwaters to railroad bridge, critical season D.O. standard - 3 mg/l; primary season - 5 mg/l; from railroad bridge to mouth, critical season D.O. - 2 mg/l (GC-2, #1)

Unnamed tributary to Smackover Creek - headwaters to Smackover Creek, year round D.O. criteria - 2 mg/l (GC-2, #2)

Unnamed tributary to Flat Creek - from headwaters to Flat Creek, year round D.O. criteria - 2 mg/l (GC-2, #4)

Dodson Creek - from headwaters to confluence with Saline River, critical season D.O. standard - 3 mg/l (GC-4, #5)

Jug Creek - from headwaters to confluence with Moro Creek, critical season D.O. standard - 3 mg/l (GC-2, #6)

Lick Creek - from headwaters to Millwood Reservoir, critical season D.O. standard - 2 mg/l (GC-1, #7)

Coffee Creek and Mossy Lake - exempt from Reg. 2.406 and Chapter Five (GC-3, #8)

Red River from Oklahoma to confluence with Little River - total dissolved solids - 850 mg/l (GC-1, #9)

Bluff Creek and unnamed trib. - sulfates 651 mg/l; total dissolved solids 1033 mg/l (GC-1, #10)

Muddy Fork Little Missouri River - sulfates 250 mg/l; total dissolved solids 500 mg/l (GC-1, #24)

Little Missouri River - sulfates 90 mg/l; total dissolved solids 180 mg/l (GC-1, #25)

Mine Creek from Highway 27 to Millwood Lake - chlorides - 90 mg/l; sulfates - 65 mg/l; TDS - 700 mg/l (GC-1, #11)

Caney Creek - chlorides 113 mg/l; sulfates 283 mg/l; total dissolved solids 420 mg/l (GC-1, #12)

Bois d'Arc Creek from Caney Creek to Red River - chlorides 113 mg/l; sulfates 283 mg/l; dissolved solids 420 mg/l (GC-1, #13)

Town Creek below Acme tributary - sulfates 200 mg/l; TDS 700 mg/l (GC-4, #14)

Unnamed trib. from Acme - sulfates 330 mg/l; TDS 830 mg/l (GC-4, #14)

Gum Creek - chlorides 104 mg/L; TDS 311 mg/L (GC-2, #15)

Bayou de Loutre from Gum Creek to State line - Chlorides 250 mg/l; TDS solids 750 mg/l (GC-2, #16)

Walker Branch - chlorides 180 mg/l; total dissolved solids 970 mg/l (GC-2, #17)

Ouachita River - from Ouachita River mile (ORM) 223 to the Arkansas-Louisiana border (ORM 221.1), site specific seasonal D.O. criteria: 3 mg/L June and July; 4.5 mg/L August; 5 mg/L September through May. These seasonal criteria may be unattainable during or following naturally occurring high flows, (i.e., river stage above 65 feet measured at the lower gauge at the Felsenthal Lock and Dam, Station No. 89-0, and also for the two weeks following the recession of flood waters below 65 feet), which occurs from May through August. Naturally occurring conditions which fail to meet criteria should not be interpreted as violations of these criteria (GC-3, #26)

Alcoa unnamed trib. to Hurricane Cr. And Hurricane Cr. - see Reg. 2.511 (CG-4, #19)

Holly Creek - See Reg. 2.511 (CG-4, #20)

Saline River bifurcation - see Reg. 2.511 (GC-4, #23)

Dry Lost Creek and tributaries - see Reg. 2.511 (GC-4, #21)

Lost Creek - see Reg. 2.511 (GC-4, #22)

Albemarle unnamed trib (AUT) to Horsehead Creek - chlorides 137 mg/l; TDS 383 mg/l (GC-2, #27)

Horsehead Creek from AUT to mouth - chlorides 85 mg/l; TDS 260 mg/l (GC-2, #27)

Bayou Dorcheat - sulfates 16 mg/l (GC-2, #27)

Dismukes Creek - chlorides 26 mg/L; TDS 157 mg/L (GC-2, #28)

Big Creek from Dismukes to Bayou Dorcheat - chlorides 20 mg/L; TDS 200 mg/L (GC-2, #28)

Bayou de Loutre from Great Lakes outfall to Loutre Creek - maximum water temperature 96°F (GC-2, #29)

Unnamed tributary of Lake June below Entergy Couch Plant to confluence with Lake June - maximum water temperature 95 degrees F (limitation of 5 degrees above natural temperature does not apply) (GC-1, #30).

Boggy Creek - Chlorides 631 mg/L; Sulfates 63 mg/L; TDS 1,330 mg/L; and Selenium 15.6 ug/L

### Summary of the Proposed Rule Change

Modification of the chloride, sulfate, total dissolved solids (TDS) and selenium criteria of the Arkansas Water Quality Standards (WQS) and removal of the designated, but not existing, domestic water supply use for Boggy Creek as follows:

For Boggy Creek:

TDS from 123 mg/L to 1,360mg/L  
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ATTACHMENT "B"