BEFORE THE ARKANSAS COMMISSION ON POLLUTION CONTROL & ECOLOGY

IN RE: REQUEST BY CLEAN HARBORS)	
EL DORADO, LLC)	
TO INITIATE RULEMAKING TO AMEND)	DOCKET NO
REGULATION NO. 2.)	

PETITION TO INITIATE THIRD-PARTY RULEMAKING TO AMEND REGULATION NO. 2

Petitioner, Clean Harbors El Dorado, LLC, ("Clean Harbors"), for its Petition to Initiate Third-Party Rulemaking to Amend Regulation No. 2 ("Petition") states:

- 1. 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. As set forth more fully below in paragraph 7, Clean Harbors is requesting modifications to the selenium, chloride, sulfate and total dissolved minerals ("TDS") criteria of the Arkansas Water Quality Standards and removal of the designated, but not existing, domestic water supply use for Boggy Creek.
- 2. Clean Harbors owns and operates a hazardous waste treatment and incineration facility in El Dorado, Union County, Arkansas. This facility has operated at this location since 1978. The location was a former petroleum-refining site with documented contamination of surface water run-off and groundwater. Prior to the purchase of the facility by Clean Harbors, Teris LLC conducted environmental remediation of existing contamination caused by petroleum operations. Clean Harbors operates a water treatment facility that collects previously contaminated groundwater containing elevated levels of total dissolved solids and selenium. Water that passes through the treatment system is discharged to Boggy Creek under the authority of an NPDES permit (AR

0037800). Boggy Creek originates east of the city of El Dorado, Arkansas, and flows southward for approximately 7.7 miles to its confluence with Bayou de Loutre, which flows to the Ouachita River in Louisiana. The current NPDES permit became effective October 1, 2004, and the numeric limits for TDS and selenium became enforceable in November 1, 2007. Analytical date for both TDS and selenium indicate the discharge will not meet the permit limitations.

- 3. The Clean Harbors wastewater treatment plant is designed to provide treatment to process wastewater and surface water sources. An on site well provides makeup water to the facility cooling tower. This makeup water contains elevated levels of selenium and TDS due to previous refining operations. The blowdown from the cooling tower is the majority of the process wastewater and is a concentrated blend of the makeup well water. NPDES outfall 009 is located at the mouth of the south ditch that traverses the facility along the south side of the main production area and flows east towards Boggy Creek. The south ditch receives water from the discharge from the wastewater treatment plant, run off areas of the facility and stormwater run off from private property. The source evaluations indicate 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.
 - 4. The applicable Arkansas Water Quality Standards are as follows:

Chloride 19 mg/1
Sulfate 41 mg/L
TDS 138 mg/L

Selenium 5 μg/L (chronic), 20 μg/L (acute)

5. Pursuant to APCEC Regulation No. 2, the watercourses at issue herein are assigned the following designated uses:

Boggy Creek within the Gulf Coastal Ecoregion (Plate D2 APCEC 2005)

Primary contact recreation; Secondary contact; Domestic industrial and agricultural supply; and Perennial Gulf Coast fishery

Bayou de Loutre (in Arkansas) uses within the Gulf Coast Ecoregion (Plate D-2 of APCEC 2005)

Primary contact recreation; Secondary contact; Domestic, industrial and agricultural supply; and Perennial Gulf Coast fishery

These designated uses are assigned by default in Regulation No. 2.

- 6. Through this Petition, Clean Harbors is requesting the following amendments to APCEC Regulation No. 2:
 - a. modify the dissolved minerals criteria for Boggy Creek as follows:

TDS from 138 mg/L to 1,360 mg/L Sulfate from 41 mg/L to 63 mg/L Chloride from 19 mg/L to 631 mg/L Selenium from 5 µg/L to 15.6 µg/L

- b. remove the Domestic Water Supply use designation for Boggy Creek.
- 7. A black-lined version of the specific changes which are requested to Regulation No. 2 is attached hereto as Exhibit "A" and is incorporated herein.
- 8. On January 12, 2006, Clean Harbors submitted to ADEQ a document entitled Use Attainability Analysis Report for Boggy Creek in support of this Petition (hereinafter the "UAA"). The UAA is filed contemporaneously herewith as Exhibit "G." This document fully satisfies the information requirements of Section 2.306 of Regulation No. 2 for Site Specific Criteria for amending Regulation No. 2.

- 9. The UAA supports this Petition as follows:
 - (a.) The surrounding watershed is low lying, swampy, and heavily wooded. The aquatic life use of upper Boggy Creek is a Typical Gulf Coastal Ecoregion perennial fishery impaired by petroleum contamination of sediments.
 - (b.) Clean Harbors does not discharge TDS, chloride or selenium in toxic amounts into Boggy Creek. Primary/secondary contact, industrial, or agricultural water supply (i.e., livestock, watering or irrigation) and public water uses in Boggy Creek are limited by physical factors such as a lack of consistent flow, mud/silt bottom, the swampy and heavily wooded riparian zone and, in upper Boggy Creek, petroleum contaminants of the sediments.
 - (c.) The Clean Harbor discharges do not limit the attainability of water supply uses, as to the extent that they occur. The "worst case" TDS and chloride concentrations from Cleans Harbors' discharges will support the existing and attainable uses in Boggy Creek and Bayou de Loutre.
 - (d.) The existing selenium concentrations in Boggy Creek are not limiting aquatic life and no downstream effects are apparent in Bayou de Loutre. Fish tissue data indicate the selenium residues in fish in Boggy Creek and Bayou de Loutre are below levels at which adverse effects begin to occur in sensitive fish species. Selenium in Boggy Creek resulting from the Clean Harbors discharge does not accumulate to toxic levels in fish in Boggy Creek or downstream Bayou de Loutre. Therefore, a site-specific criterion for selenium and an associated permit limit for Outfall 009 that does not increase existing selenium concentrations in Boggy Creek will protect

aquatic life in Boggy Creek.

- (e.) Sampling data indicate that Boggy Creek does not cause the elevated TDS, chloride, or selenium concentrations observed in Bayou de Loutre, since these concentrations were higher in Bayou de Loutre than in Boggy Creek and were higher upstream than downstream of the Boggy Creek confluence.
- (f.) The direct discharge of the wastewater from Outfall 009 continues to be the most direct, cost effective and environmentally protective method for managing the wastewater. The three evaluated alternatives for managing effluents with elevated dissolved minerals and selenium are: (i) source control; (ii) treatment; and (iii) pumping wastewater to a larger stream that holds potential for the dilution of minerals. The alternative analysis found that these methods are ineffective, and/or prohibitively expensive.
- 10. The Questionnaire for Filing Proposed Rules and Regulations with the Arkansas Legislative Council and Joint Interim Committee is attached hereto as Exhibit "B" and is incorporated herein.
- 11. The Financial Impact Statement is attached hereto as Exhibit "C" and is incorporated herein.
- 12. Clean Harbors has reviewed Executive Order 05-04 and has determined that the request does not affect small business for the following reasons: (a) there are no commercial operations located on or adjacent to the affected watercourses which use the waters; (b) this rulemaking will not increase the loadings of the affected watercourses but rather will set the Water Quality Standards at a level reflective of historic loadings adjusted by the measures implemented by

Clean Harbors to reduce the historic concentrations and, therefore, will not impact any agricultural or business usage of the affected watercourses; and (c) the aquatic life studies of the affected stream segments demonstrate that the discharge will maintain the designated fishery use. Therefore no economic impact analysis by the Arkansas Department of Economic Development is required. A memorandum on the applicability of the Executive Order 05-04 is attached hereto as Exhibit "D."

- 13. The Economic Impact/Environmental Benefit Analysis is attached hereto as Exhibit "E" and is incorporated herein.
- 14. The Arkansas Natural Resources Commission has provided documentation that the requested changes do not conflict with the Arkansas Water Plan. The Arkansas Department of Health and Human Services has provided documentation that none of the described watercourses herein, Boggy Creek and Bayou de Loutre from Boggy Creek to Gum Creek, has been approved as, or is being considered as, domestic water sources. Copies of these agencies' documentation are attached hereto as Exhibit "F" and incorporated herein.
- 15. The Minute Order to initiate rulemaking is attached hereto as Exhibit "H" and is incorporated herein.

WHEREFORE, Clean Harbors, respectfully requests that the Commission initiate a rulemaking to amend Regulation No. 2 in the manner requested in paragraph 7, above.

Respectfully Submitted

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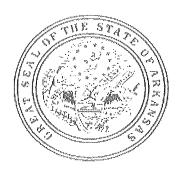
Ву:

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ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION



REGULATION NO. 2

REGULATION ESTABLISHING WATER QUALITY STANDARDS FOR SURFACE WATERS OF THE STATE OF ARKANSAS

INITIAL DRAFT SUBMITTED TO THE PC&E COMMISSION IN JAN. 2007

Arkansas Pollution Control and Ecology Commission Regulation No. 2, As Amended

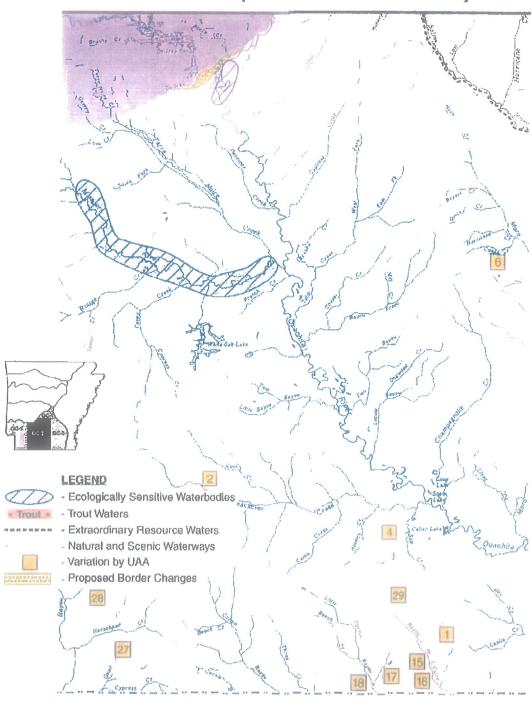
Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas

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Plate GC-2 (Gulf Coastal Plain)



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)

Albemarie 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)

		Typica Strean		Spring Water <u>Streams</u>	Lakes and <u>Reservoirs</u>
^	ature °C (°F)* Ouachita River		i	30 (86)	32 (89.6)
	(state line to Little Missouri River) Red River	32 (89. 32 (89.	,		
Turbidity (NTU)(primary/storm) Red River(primary/storm)		21/32 50/150		21/32	25/45
Minerals		see Reg	see Reg. 2.511		see Reg. 2.511
Dissolved Oxygen (mg/l)**		<u>Pri</u> .	<u>Crit</u> .		see Reg. 2.505
	<10 mi ² watershed 10 mi ² - 500 mi ² >500 mi ² watershed All sizes	5 5 5 6	2 3 5 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-o, 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 Selénium 15.6 úg/L