EXHIBIT A

Black-lined version of specific changes to Regulation No. 2

ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION



REGULATION NO. 2

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

DRAFT

Submitted to the Arkansas Pollution Control and Ecology Commission October, 2006

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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REGULATION 2 BLACK LINE

	Pollution Co.	ntrol a	ind Ecolo	ogy Commission 014.00-002
Stream				ion-mg/L
PA		21		TDS
Ouachita River Basin				
Bayou Bartholomew		50	20	500
Chemin-A- Haut Creek		50	20	500
Overflow Creek	2	20	30	170
Bayou Macon		30	40	330
Bocuf River	0.9	X)	30	500
Big Cornie Creek	- 2	230	30	500
Little Cornie Creek	2	200	10	400
Three Creek	2	250	10	500
Little Comie Bayou	2	200	20	500
Walker Branch	1	80	ER	970
Gum Creek	1	()4*	ER	311*
Loutre Creek - from Hwy 15 South to the confluence				
of Bayou de Loutre	2	56	9978	1756*
Bayou de Loutre - from Loutre Creek to the discharge for				
the City of El Dorado South facility	0.2	64*	635*	1236*
Bayou de Loutre - from the discharge from the City of				
El Dorado-South downstream to the mouth of Gum Creek	2	50	431*	966*
Bayou de L'Outre above Gum Creek	2	150	90	500
Bayou de L'Outre below Gum Creek	2	250	90	750
Bayou de Loutre - from the mouth of Gum Creek				
downstream to the mouth of Boggy Creek	- 2	50*	345*	780*
Bayou de Loutre - from the mouth of Boggy Creek				
downstream to the mouth of Hibank Creek	2	50*	296*	750*
Bayou de Loutre - from the mouth of Hibank Creek				
downstream to the mouth of Mill Creek	- 2	250=	263*	750*
Bayou de Loutre - from the mouth of Mill Creek				
downstream to the mouth of Buckaloo Branch	. 2	25()*	237*	750*
Bayou de Loutre - from the mouth of Buckaloo Branch				
downstream to the mouth of Bear Creek	: 2	50*	2164	750*
Bayou de Loutre - from the mouth of Bear Creek to the				
final segment of Bayou de Loutre	2	250	198*	750*
Bayou de Loutre (Final Segment) - from the mouth of Bear				
Creek to the Arkansas/Louisiana State Line	2	50*	171*	750*
Ouachita River (Louisiana Line to Camden)	1	60	40	350
Saline River	2	0.0	40	120
Saline River east bifurcation at Holly Creek	E	R	250	500
Hurricane Cr above Hurricane Lake Dam	2	20	250	500
Hurricane Cr from Hurricane Lk. Dam to Ben Ball Brdg		25	730	1210
Ben Ball Bridge to Hwy 270	1	25	700	1200
Hwy 270 to Saline River	1	00	500	1000
Alcoa unnamed tribs to Hurricane Cr.		25	700	1100
Dry Lost Creek and tribs	E	R	560	880
Lost Creek to Little Lost Creek		ZR.	510	820
Lost Creek below Little Lost Creek		ZR.	300	550
Holly Creek		0	860	1600
Moro Creek	3	0	20	260
Smackover Creek	2	250	30	500
Ouachita River (Camden to Carpenter Dam)		0	40	150
Town Creek below Acme tributary	E	R	200	700
Unnamed trib from Acme		R	330	830
Little Missouri River		0	90	180
Muddy Fork Little Missouri		ER	250	500
Bluff Creek and unnamed trib.		ER		1033*
Garland Creek		50	250	500
South Fork Caddo		3R	60	128
Back Valley Creek		ER	250	500
Ouachita River (Carpenter Dam to Headwaters,		000	ATT TOTAL	20070
including Lake Ouachita tributaries)	1	0	10	100
Red River Basin		MASS.	12.83	7,075/5
Bayou Dorcheat	1	00	16*	250
5-10	9	900	22.6	C-866(E)

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Stream	Concentration-mg/L			
	CI	<u>SO4</u> =	TDS	
Albemarle unnamed trib (AUT) to Horsehead Creek	137*	ER	383	
Horsehead Creek from AUT to mouth	85*	ER	260	
Cypress Creek	250	70	500	
Crooked Creek	250	10	500	
Dismukes Creek	26	ER	157	
Big Creek from Dismukes to Bayou Dorcheat	20	ER	200	
Bois d'Arc Creek from Caney Creek to Red River	113*	283*	420*	
Caney Creek	113*	283*	420*	
Bodcau Creek	250	70	500	
Poston Bayou	120	40	500	
Kelley Bayou	90	40	500	
Red River from Oklahoma to confluence with Little River	250	200	850	
Red River from Little River to Louisiana	250	200	500	
Sulphur River	120	100	500	
Days Creek	250	250	500	
McKinney Bayou	180	60	480	
Little River	20	20	100	
Saline River	20	10	90	
Mine Creek from Hwy 27 to Millwood Lake	90	65	700	
Cossatot River	10	15	70	
Upper Rolling Fork	20	20	100	
Rolling Fork from unnamed trib A to DeQueen Lake	130	70	670	
Unnamed tribs A and A1 at Grannis	135	70	700	
Mountain Fork	20	20	110	
Mississippi River (Louisiana line to Arkansas River)	60	150	425	
Mississippi River (Arkansas River to Missouri line)	60	175	450	

ER - ecoregion standard

Any modification of these values must be made in accordance with Reg. 2.306.

The following values determined from Arkansas' least-disturbed ecoregion reference streams are considered to be the maximum naturally occurring levels. For waterbodies not listed above, any discharge which results in instream concentrations more than 1/3 higher than these values for Cl and SO4= or more than 15 mg/l, whichever is greater, is considered to be a significant modification of the water quality. Similarly, such modification exists if the following TDS values are exceeded after being increased by the sum of the increases to Cl and SO4. Such modifications may be made only in accordance with Reg. 2.306.

^{* -} based on critical background flow of 4 cfs

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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-l, #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-l,#10)

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

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

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

Cancy 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 mg/l(GC-1,#13)

Town Creek below Acme tributary - sulfates 200 mg/l; TDS 700 mgll(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, (Le., 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)

Alcos 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 Creck - see Reg. 2.511(GC-4,#22)

Albemarle unnamed trib (AUT) to Horschead 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-Z, #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 of5 degrees above natural temperature does not apply) (GC-1, #30).

Loutre Creek from Hwy 15 South to the confluence of Bayou de Loutre Chloride, 256mg/l. Sulfate 997mg/l. TDS. 1756* (GC-3. =41)

Bayou de Loutre from Loutre Creek to the discharge for the City of El Dorado South facility Chloride, 264mg l, Sulfate 635mg l, TDS, 1236* (GC-3. #42)

Bayou de Loutre from the discharge from the City of El Dorado-South downstream to the mouth of Gum Creek. Chloride, 250mg I; Sulfate 431mg I, TDS, 966 (GC-3, #43)

Bayou de Loutre from the mouth of Gum Creek downstream to the mouth of Boggy Creek Chloride, 250mg/l, Sulfate 345mg/l, TDS, 780 (GC-3, =44)

Bayou de Loutre from the mouth of Boggy Creek downstream to the mouth of Hibank Creek Chloride, 250mg/L Sulfate 296mg/l, TDS, 750 (GC-3, =45)

Bayou de Loutre from the mouth of Hibank Creek downstream to the mouth of Mill Creek Chloride, 250mg/l, Sulfate 263mg/L

TDS, 750 (GC-3, #46)

Bayou de Loutre from the mouth of Mill Creek downstream to the mouth of Buckaloo Branch Chloride, 250mg/L Sulfate

237mg l, TDS, 750 (GC-3: #47)

Bayou de Loutre from the mouth of Buckaloo Branch downstream to the mouth of Bear Creek Chloride, 250mg/l; Sulfate

216mg/l, TDS, 750 (GC-3, #48)
Bayou de Loutre from the mouth of Bear Creek to the final segment of Bayou de Loutre. Chloride, 250mg/l; Sulfate 198mg/l,

TDS, 750(GC-3, =49)

Bayou de Loutre (Final Segment) to the Arkansas / Louisiana State Line. Chloride, 250mg/l; Sulfate 171 mg/l, TDS, 750(GC-3, =50)

*Note: numbers 31-36 are reserved for proposed 3r6 party rule making by Great Lakes Chemical Company.

*Note: numbers 37-40 are reserved for proposed 3rd party rule making by El Dorado Chemical Company.

Plate GC-2 (Gulf Coastal Plain)

