EXHIBIT A

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

Arkansas Pollution Control
& Ecology Commission
#014.-002

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

TABLE OF CONTENTS

Stream	Concentration–mg/L Cl	SO_4	TDS
Ouachita River Basin			
Bayou Bartholomew	50	20	500
Chemin-A- Haut Creek	50	20	500
Overflow Creek	20	30	170
Bayou Macon	30	40	330
Bocuf River	90	30	500
Big Cornie Creek	230	30	500
Little Cornie Creek	200	10	400
Three Creek	250	10	500
Little Cornie Bayou	200	20	500
Walker Branch	180	ER	970
Gum Creek	104*	ER	311*
Loutre Creek – from Hwy 15 South to the confluence of Bayou de Loutre	256*	997*	1756*
Bayou de Loutre – from Loutre Creek to the discharge for the City of El Dorado South facility	264*	635*	1236*
Bayou de Loutre – from the discharge from the City of El Dorado-South downstream to the mouth of Gum Creek	250*	431*	966*
~~Bayou de L'Outre above Gum Creek~~	~~250~~	~~90~~	~~500~~
~~Bayou de L'Outre below Gum Creek~~	~~250~~	~~90~~	~~750~~
Bayou de Loutre – from the mouth of Gum Creek downstream to the mouth of Boggy Creek	250*	345*	780*
Bayou de Loutre – from the mouth of Boggy Creek downstream to the mouth of Hibank Creek	250*	296*	750*
Bayou de Loutre – from the mouth of Hibank Creek downstream to the mouth of Mill Creek	250*	263*	750*
Bayou de Loutre – from the mouth of Mill Creek downstream to the mouth of Buckaloo Branch	250*	237*	750*
Bayou de Loutre – from the mouth of Buckaloo Branch downstream to the mouth of Bear Creek	250*	216*	750*
Bayou de Loutre - from the mouth of Bear Creek to the final segment of Bayou de Loutre	250*	198*	750*
Bayou de Loutre (Final Segment) - from the mouth of Bear Creek to the Arkansas/Louisiana State Line	250*	171*	750*
Ouachita River (Louisiana Line to Camden)	160	40	350
Saline River	20	40	120
Saline River east bifurcation at Holly Creek	ER	250	500
Hurricane Cr above Hurricane Lake Dam	20	250	500
Hurricane Cr from Hurricane Lk. Dam to Ben Ball Brdg	125	730	1210
Ben Ball Bridge to Hwy 270	125	700	1200
Hwy 270 to Saline River	100	500	1000
Alcoa unnamed tribs to Hurricane Cr.	125	700	1100
Dry Lost Creek and tribs	ER	560	880
Lost Creek to Little Lost Creek	ER	510	820
Lost Creek below Little Lost Creek	ER	300	550
Holly Creek	30	860	1600
Moro Creek	30	20	260
Smackover Creek	250	30	500
Ouachita River (Camden to Carpenter Dam)	50	40	150
Town Creek below Acme tributary	ER	200	700
Unnamed trib from Acme	ER	330	830
Little Missouri River	10	90	180
Muddy Fork Little Missouri	ER	250	500
Bluff Creek and unnamed trib.	ER	651*	1033*
Garland Creek	250	250	500
South Fork Caddo	ER	60	128
Back Valley Creek	ER	250	500
Ouachita River (Carpenter Dam to Headwaters, including Lake Ouachita tributaries)	10	10	100
Red River Basin			
Bayou Dorcheat	100	16*	250

Stream	Concentration-mg/L Cl^-	$SO_4^=$	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
* - based on critical background flow of 4 cfs
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.

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-l, #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)

Caney Creek - chlorides 113 mg/l; sulfates 283 mg/l; total dissolved solids 420 mg/l(GC-l,#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-l,#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.l),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,#2I)

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-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-l. #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/l; Sulfate 431mg/l, 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 3rd 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)