Ammonia Calculations

Facility Name	EDCC
Major or Minor	Major
Permit Number	AR0000752
Receiving Stream	ELCC Tributary
7Q10, cfs	0
0.25/0.67 multiplier	0.67
Qb, cfs	0.00
Qe, MGD	0.017
Qe, cfs	0.03
Cb, mg/l	0

Ecoregion or River name	Ouachita Mo
Watershed area (mi^2)	1

Regulation No. 2 Chronic Toxicity Critieria (Instream Concentration)

	AML, mg/l	DML, mg/l
April	2.4	6.1
May - October	2.4	6.1
November - March	6.8	17

Allowable Effluent Conc., mg/l

(Qe * Ce) + (Qb* Cb) = (Qe + Qb) * IWC

Qe	Effluent Flow
Ce	Allowable Effluent Concentration
Qb	% of Low Flow of Receiving Stream
Cb	Background Concentration
IWC	Instream Waste Concentration Chronic Toxicity Criteria

Allowable Effluent Conc. (Ce), mg/l

Ce = (IWC (Qe + Qb) - Cb X Qb) / Qe

	Monthly Avg.,mg/l	Daily Max, mg/l
April	2.40	6.10
May - October	2.40	6.10
November - March	6.80	17.00

Chronic Toxicity Criteria vs. D.O. Model Limits

	Monthly Average, mg/l		**Permit Limits**	Daily Maximum,mg/l		**Permit Limits**
Month	Toxicity limit	D.O. limit		Toxicity limit	D.O. limit	
April	2.40	10	2.40	6.10	15	6.10
May - October	2.40	5	2.40	6.10	7.5	6.10
November - March	6.80	10	6.80	17.00	15	15.00

Arkansas River
Arkansas River Valley
Boston Mountains
Delta
Gulf Coastal Plains
Ouachita Mountains
Ouachita River (L. Mo. to Mouth)
Ozark Highlands
Red River
White River (Dam #10 Mouth)