

Correction #1

Rule	Description	Request
335-6-10-.07(a)(1)	Conversion Factor equations not included for Cadmium freshwater acute criteria or Cadmium freshwater chronic criteria	Ensure conversion factor equations appear in the published rule.

Current LSA Official Version (pg. 10-7, 10-8) (INCORRECT VERSION – CF OMITTED)

1. Cadmium

(i) freshwater acute aquatic life:

$$\text{conc. } (\mu\text{g/l}) = (e^{(0.9789 [\ln(\text{hardness in mg/l as CaCO}_3)] - 3.866)})(CF); \text{ (Eq. 1)}$$

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(ii) freshwater chronic aquatic life:

$$\text{conc. } (\mu\text{g/l}) = (e^{(0.7977 [\ln(\text{hardness in mg/l as CaCO}_3)] - 3.909)})(CF); \text{ (Eq. 2)}$$

9/1/24 LSA Version (pg. 10-7, 10-8) (CORRECT VERSION FOR OMITTED CF FACTORS – See Highlights)

1. Cadmium

(i) freshwater acute aquatic life:

$$\text{conc. } (\mu\text{g/l}) = (e^{(1.0166 [\ln(\text{hardness in mg/l as CaCO}_3)] - 3.924)})(CF); \text{ (Eq. 1)}$$

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$$\text{conversion factor } (CF) = 1.136672 - [\ln(\text{hardness})(0.041838)]$$

(ii) freshwater chronic aquatic life:

$$\text{conc. } (\mu\text{g/l}) = (e^{(.7409 [\ln(\text{hardness in mg/l as CaCO}_3)] - 4.719)})(CF); \text{ (Eq. 2)}$$

$$\text{conversion factor } (CF) = 1.101672 - [\ln(\text{hardness})(0.041838)]$$

Correction #2

Rule(s)	Description of Issue	Request
335-6-10-.07(a)(4)	Conversion Factor equations not included for Lead freshwater acute criteria or Lead freshwater chronic criteria	Ensure conversion factor equations appear in the published rule.

Current LSA Official Version (pg. 10-8) (INCORRECT VERSION – conversion factors excluded)

4. Lead

(i) freshwater acute aquatic life:

$$\text{conc. } (\mu\text{g/l}) = (e^{(1.273[\ln(\text{hardness in mg/l as CaCO}_3)] - 1.460)})(CF); \text{ (Eq. 7)}$$

(ii) freshwater chronic aquatic life:

$$\text{conc. } (\mu\text{g/l}) = (e^{(1.273[\ln(\text{hardness in mg/l as CaCO}_3)] - 4.705)})(CF); \text{ (Eq. 8)}$$

9/1/24 LSA Version (pg. 10-8) (CORRECT VERSION)

4. Lead

(i) freshwater acute aquatic life:

$$\text{conc. } (\mu\text{g/l}) = (e^{(1.273[\ln(\text{hardness in mg/l as CaCO}_3)] - 1.460)})(CF); \text{ (Eq. 7)}$$

$$\text{conversion factor } (CF) = 1.46203 - [\ln(\text{hardness})(0.145712)]$$

(ii) freshwater chronic aquatic life:

$$\text{conc. } (\mu\text{g/l}) = (e^{(1.273[\ln(\text{hardness in mg/l as CaCO}_3)] - 4.705)})(CF); \text{ (Eq. 8)}$$

$$\text{conversion factor } (CF) = 1.46203 - [\ln(\text{hardness})(0.145712)]$$

Correction #3

Rule(s)	Description of Issue	Request
335-6-10-.09(1)(c)3(i) through (iv) 335-6-10-.09(2)(e)3(i) through (iv) 335-6-10-.09(3)(c)3(i) through (iv) 335-6-10-.09(4)(e)3(i) through (iv) 335-6-10-.09(5)(e)3(i) through (iv)	Several degree symbols for temperature appear as the “Filter” symbol.	Correct “Filter” symbols to appear as “Degree” (°) symbols in all 20 parts referenced.

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Example of incorrect symbols in 335-6-10-.09(1)(c)3(i) through (iv)

3. Temperature:

(i) The maximum temperature in streams, lakes, and reservoirs, other than those in river basins listed in subparagraph (ii) hereof, shall not exceed 90°F.

(ii) The maximum temperature in streams, lakes, and reservoirs in the Tennessee and Cahaba River Basins, and for that portion of the Tallapoosa River Basin from the tailrace of Thurlow Dam at Tallassee downstream to the junction of the Coosa and Tallapoosa Rivers which has been classified by the Alabama Department of Conservation and Natural Resources as supporting smallmouth bass, sauger, or walleye, shall not exceed 86°F.

(iii) The maximum in-stream temperature rise above ambient water temperature due to the addition of

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artificial heat by a discharger shall not exceed 5°F in streams, lakes, and reservoirs in non-coastal and non-estuarine areas.

(iv) The maximum in-stream temperature rise above ambient water temperature due to the addition of artificial heat by a discharger shall not exceed 4°F in coastal or estuarine waters during the period October through May, nor shall the rise exceed 1.5°F during the period June through September.

*These symbols appear incorrectly in all versions of the regulations in the LSA Portal

Correction #4

Rule(s)	Description of Issue	Request
335-6-10-.11(2)(h)4(i)	2 different chlorophyll <i>a</i> values are given for the dam forebay of RL Harris Lake in the Tallapoosa Basin. The correct value is 10 µg/L for the forebay.	Remove repeated sentence containing incorrect value (highlighted below).

Current LSA Version (INCORRECT VERSION – NEED TO REMOVE HIGHLIGHTED PORTION)

4. R. L. Harris Lake: those waters impounded by R. L. Harris Dam on the Tallapoosa River. The lake has a surface area of 10,660 acres at full pool.

(i) Chlorophyll a (corrected, as described in *Standard Methods for the examination of Water and Wastewater, 20th Edition, 1998*): the mean to photic zone composite chlorophyll *a* samples collected monthly April through October shall not exceed 10µg/l, as measured at the deepest point, main river channel, dam forebay; or 12 µg/l, as measured at the deepest point, main river channel, dam forebay; or 12µg/l, as measured at the deepest point, main river channel, immediately upstream of the Tallapoosa River - Little Tallapoosa River conference.

Correction #5		
Rule(s)	Description of Issue	Request
335-6-10-.11(2)(a)3	Surface area of Woodruff Lake is listed as “12.510 acres” and should be “12,510 acres”, replacing the decimal with a comma.	Replace the decimal (highlighted) in 12.510 with a comma. This entry does not appear in previous version as it was added in the rulemaking effective June 14, 2025.
Current LSA Version (pg. 10-50) (INCORRECT VERSION – NEED TO REPLACE “.” with “,”) Channel, dam forebay.		
3. Woodruff Lake: those waters impounded by Robert F. Henry Lock and Dam on the Alabama River. The lake has a surface area of 12,510 acres at full pool. (i) Chlorophyll <u>a</u> (corrected, as described in <i>Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998</i>): the mean of the photic zone composite chlorophyll a samples collected monthly April through October shall not exceed 16 µg/l, as measured at the deepest point, main river channel, dam forebay.		

Correction #6

Rule(s)	Description of Issue	Request
335-6-10-A (Appendix A)	Several values in Appendix A are incorrect, including the following: Acrolein RfD listed as 0.00056, should be 0.0005 1,2-Dichloropropane CPF listed as 0.67, should be 0.067 Hexachlorocyclohexane (gamma) RfD listed as 0.003, should be 0.0003	Please correct these values as they appear to have been transcribed incorrectly during migration to the LSA Portal. These values were not changed in the June 14, 2025, rulemaking and the Appendix A as last Amended, effective November 24, 2008.

Acrolein

Current LSA Version (INCORRECT VERSION)

335-6-10-A Appendix A.

APPENDIX A

POLLUTANT	CAS Registry Number	REFERENCE DOSE mg (kg-day)	CANCER POTENCY FACTOR (kg-day)/mg	BIO-CONCENTRATION FACTOR 1/kg	RELATIVE SOURCE CONTRIBUTION
Acenaphthene	83329	0.06		242	1.0
Acrolein	107028	0.00056		215	1.0
Acrylonitrile	107131		0.54	30	
Aldrin	309002		17	4670	
Anthracene	120127	0.3		30	1.0
Antimony	7440360	0.0004		1	0.4

Division 6, Effective November 24, 2008 (CORRECT VERSION)

APPENDIX A

POLLUTANT	CAS Registry Number	REFERENCE DOSE mg/(kg-day)	CANCER POTENCY FACTOR (kg-day)/mg	BIO-CONCENTRATION FACTOR 1/kg	RELATIVE SOURCE CONTRIBUTION
Acenaphthene	83329	0.06		242	1.0
Acrolein	107028	0.0005		215	1.0
Acrylonitrile	107131		0.54	30	
Aldrin	309002		17	4670	
Anthracene	120127	0.3		30	1.0
Antimony	7440360	0.0004		1	0.4

1,2-Dichloropropane**Current LSA Version (INCORRECT VERSION)**

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1,2-Dichloropropane	78875		0.67	4.1	
1,3-Dichloropropylene	542756		0.1	1.9	
Dieldrin	60571		16	4670	
Diethyl phthalate	84662	0.8		73	1.0
2,4 Dimethylphenol	105679	0.02		93.8	1.0
Dimethyl phthalate	131113	10		36	1.0

Division 6, Effective November 24, 2008 (CORRECT VERSION)

1,2-Dichloroethane	107062		0.091	1.2	
1,1-Dichloroethylene	75354	0.05		5.6	0.2
2,4-Dichlorophenol	120832	0.003		40.7	1.0
1,2-Dichloropropane	78875		0.067	4.1	
1,3-Dichloropropylene	542756		0.1	1.9	
Dieldrin	60571		16	4670	
Diethyl phthalate	84662	0.8		73	1.0
2,4 Dimethylphenol	105679	0.02		93.8	1.0
Dimethyl phthalate	131113	10		36	1.0

Hexachlorocyclohexane (gamma)**Current LSA Version (INCORRECT VERSION)**

Hexachlorobutadiene	87683		0.078	2.78	
Hexachlorocyclohexane (alpha)	319846		6.3	130	
Hexachlorocyclohexane (beta)	319857		1.8	130	
Hexachlorocyclohexane (gamma)	58899	0.003		130	0.2
Hexachlorocyclopentadiene	77474	0.006		4.34	0.2
Hexachloroethane	67721		0.014	86.9	
Indeno (1,2,3-cd) pyrene	193395		7.3	30	
Isophorone	78591		0.00095	4.38	

Division 6, Effective November 24, 2008 (CORRECT VERSION)

Heptachlor epoxide	1024573		9.1	11200	
Hexachlorobenzene	118741		1.6	8690	
Hexachlorobutadiene	87683		0.078	2.78	
Hexachlorocyclohexane (alpha)	319846		6.3	130	
Hexachlorocyclohexane (beta)	319857		1.8	130	
Hexachlorocyclohexane (gamma)	58899	0.0003		130	0.2
Hexachlorocyclopentadiene	77474	0.006		4.34	0.2
Hexachloroethane	67721		0.014	86.9	
Indeno (1,2,3-cd) pyrene	193395		7.3	30	

Correction #7

Rule(s)	Description of Issue	Request
335-6-11-.02(1)	Big Flat Creek (from Alabama River to its source) is missing the Swimming classification	Correct the classification for Big Flat Creek to "S/F&W".

Current LSA Version (INCORRECT VERSION – missing "S/")

Bear Creek	Randons Creek	Its source	F&W
Limestone Creek	ALABAMA RIVER	Its source	F&W
Double Bridges Creek	Limestone Creek	Its source	F&W
Hudson Branch	Limestone Creek	Its source	F&W
Big Flat Creek	ALABAMA RIVER	Its source	F&W
Pursley Creek	Claiborne Lake	Its source	F&W
Beaver Creek (Claiborne Lake)	ALABAMA RIVER	Extent of reservoir	F&W
Beaver Creek	Claiborne Lake	Its source	F&W

Division 6, Effective October 4, 2019 (CORRECT VERSION – "S/F&W")

Limestone Creek	ALABAMA RIVER	Its source	F&W
Double Bridges Creek	Limestone Creek	Its source	F&W
Hudson Branch	Limestone Creek	Its source	F&W
Big Flat Creek	ALABAMA RIVER	Its source	S/F&W