Chapter 307 Draft Rule Language
Water Quality Standards Workgroup –May 5, 2008
TCEQ Staff DRAFT

Deleted text is in brackets [ ]. Added text is underlined.

Appendix E – Site-specific Criteria

The water bodies found in this appendix now have a site-specific standard for the chemical parameter listed. The procedures for obtaining a site-specific standard are specified in §307.2(d) and result in a site-specific adjustment factor (such as a water-effect ratio (WER), multiplier, etc.). For most of the chemical parameters listed, this factor is used along with hardness in the formulas listed in Table 1 to calculate the dissolved portion of the parameter. The newly calculated criteria from Table 1 are then normally used to calculate discharge limits for permitted facilities. To calculate discharge limits, use the site-specific adjustment factors listed in this appendix in accordance with the most current *Procedures to Implement the Texas Surface Water Quality Standards* (RG-194). If a smaller portion of a water body has a separate and different site-specific adjustment factor, this factor supersedes any others specified for the larger water body of which it is a part. In establishing TPDES permit conditions, the site-specific criteria only apply to the referenced facility except where otherwise noted in footnote 3.

[The water bodies listed in this appendix are those waters which now have a site-specific standard for the chemical parameter listed. These changes were initiated by one or more permitted facilities discharging to the water body cited. If a smaller portion of a water body has a separate and different water effects ratio (WER), its WER supersedes the WER of the larger water body of which it is a part. The procedures for obtaining a site-specific standard are specified in §307.2(d). The values and equations shown in the table are not to be interpreted as the values that are to appear in the final discharge permit. These values and equations replace the criteria found in Table 1 that are normally used to calculate discharge limits. The site-specific standards for metals listed below use the equations found in Table 1. The equations calculate the criteria based on the dissolved portion of the metal using hardness (H), the water effects ratio (w), and EPA conversion factor. The values and equations in Appendix E are to be used in computing discharge limits in accordance with the current procedures for *Procedures to Implement the Texas Surface Water Quality Standards*.]

SEGMENT	SITE DESCRIPTION	TPDES	FACILITY	PARAMETER	SITE-SPECIFIC ADJUSTMENT FACTOR [WATER-EFFECT RATIO]	ADDITIONAL SITE-SPECIFIC CONSIDERATIONS [SITE-SPECIFIC STANDARD (µg/L) Acute/Chronic]
[0101]	[Dixon Creek in Hutchison County]	[01064-000]	[ConocoPhillips]	[Selenium]	[NA]	[219] [34.6]
0303	River Crest Reservoir from the confluence with Segment 0303 upstream to the canal receiving the discharge from the permitted outfall in Red River County	00945-000	TXU	Copper[1, 3]	3.4	
0403	Johnson Creek Reservoir in Marion County	01331-000	SWEPCO	Copper[1][1]	5.15	Hardness = 20 mg/L

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						TSS = 4 mg/L[20.8 16.0]
0404	Welsh Reservoir in Titus County	01811-000	SWEPCO	Aluminum[1]	10	[9,910 no chronic]
0404	Big Cypress Creek in Camp, [/]Titus, and Morris counties	00348-000	Lone Star Steel	Lead[2,3]	Acute Criterion = 41.4 µg/L Chronic Criterion = 5.7 µg/L[NA]	Hardness = 40.1mg/L [41.4 5.7]
0409	Sugar Creek from the confluence with Segment 0409 upstream to the permitted outfall in Upshur County	10457-001	City of Gilmer	Copper[1]	6.8	
0501	Sabine River Tidal in Orange County	00475	E.I. DuPont de Nemours	Copper[1]	1.9	[25.6 6.8]
0505	Sabine River from [Highway 149 in Gregg County downstream to] the confluence with Brandy Branch approximately 1 mile (1.6 km) upstream from Highway 43 in Harrison County upstream to SH 149 in Gregg County	00471-000	Eastman Chemical Co.	Copper[1][3]	6.7	Hardness = 40 mg/L [52.1 37.6]
0510	Mill Creek from the confluence with Segment 0510 upstream to the confluence with Adaway Creek in Rusk County	10187-002	City of Henderson	Copper[1]	5.0	
0511	Unnamed tidal drainage ditch from the confluence with Segment 0511 upstream to the permitted outfall in Orange County	00670-000	Honeywell, Inc.	Copper[1]	2.4	
0511	Unnamed tidal drainage ditch from the confluence with Segment 0511 upstream to the permitted outfall in Orange County	00454-000	Firestone Polymers	Copper[1]	2.5	
0603	Sandy Creek from the confluence with Segment 0603 upstream to the permitted outfall in Jasper County	10197-001	City of Jasper	Copper[1]	4.7	
0604	Unnamed tributary of Bear Creek from the confluence with Bear Creek upstream to the permitted outfall in Polk County	01902-000	International Paper – Corrigan	Aluminum[1]	5.6	

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0604	Buck Creek from the confluence Segment 0604 upstream to the confluence with the unnamed tributary receiving the discharge from the permitted outfall in Angelina County	01268-000	Lufkin Industries	Copper[1]	7.9	
0604	One-eye Creek from the confluence with Box Creek upstream to the permitted outfall[and its tributaries] in Cherokee County	10447-001	City of Rusk	Copper[1][3]	4.3	Hardness = 40 mg/L [33.4 24.1]
0611	Ragsdale Creek from the confluence with Keys Creek upstream to the permitted outfall[and its tributaries] in Cherokee County	10693-001	City of Jacksonville	Copper[1][4]	4.6	Hardness = 48 mg/L [42.4 30.2]
0615	Papermill Creek from the confluence with Segment 0615 upstream to the permitted outfall in Angelina County	00368-000	Abitibi Consolidated	Aluminum[1]	8.4	
0805	Forney Branch from the confluence with White Rock Creek upstream to the permitted outfall in Dallas County	01251-000	TXU	Copper[1]	3.9	
0806	West Fork Trinity River in Tarrant County	00555-000	TXU	Copper[1]	2.5	
1001[, 1005, 1006, 1007, 1013, 2427]	[Houston Ship Channel segments, tidal tributaries and bays, and]San Jacinto River Tidal in Harris County[Bay]	NA	NA	Copper[1, 3]	1.8	[24.3 6.5]
1005	Houston Ship Channel/San Jacinto River Tidal in Harris County	NA	NA	Copper[1, 3]	1.8	
1005	The Houston Ship Channel/San Jacinto River tidal from [the confluence with Santa Anna's Bayou down to] the confluence with Segment 2421 upstream to the confluence	02097-000	Oxy Vinyls	Copper[1]	1.8	[24.3 6.5]

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	with Santa Annas Bayou in Harris County					
1006	Houston Ship Channel Tidal in Harris County	NA	NA	Copper[1, 3]	1.8	
1006	Tucker Bayou from the confluence with Segment 1006 upstream to the permitted outfall in Harris County	01429-000	Safety-Kleen	Copper[1]	2.3	[31 8.3]
1006	Greens Bayou Tidal from the confluence with the Houston Ship Channel/Buffalo Bayou upstream to the confluence with Spring Creek in Harris County	01031-000	Texas Genco	Copper[1][5]	2.4	TSS = 14.75 Dissolved Fraction Available = 87%[32.7 8.7]
1007	Houston Ship Channel/Buffalo Bayou Tidal in Harris County	NA	NA	Copper[1, 3]	1.8	
1008	Panther Branch from the confluence with Lake Woodlands upstream to the permitted outfall in Montgomery County	12597-000	San Jacinto River Authority	Copper[1]	6.45	
1013	Buffalo Bayou Tidal in Harris County	NA	NA	Copper[1, 3]	1.8	
1201	Segment 1201 [and its tidal tributaries]in Brazoria County	00007-000	Dow Chemical	Copper[1][6]	1.6	Dissolved Fraction Available = 84% [21.6 5.8]
1236	Ft. Phantom Hill Reservoir in Jones County	01422-000	AEP North Texas	Aluminum[1]	2.9	[2,904 no chronic]
1242	Lake Creek Reservoir in McClennan County	00954-000	TXU	Copper[1]	2.4	
[1304]	[Linnville Bayou in Brazoria and Matagorda counties]			[Selenium]	[NA]	[219] [23]
1412	Red Draw Reservoir in Howard County	01768-000	Fina Oil & Chemical Co.	Selenium	Acute Criterion = 219 µg/L Chronic Criterion = 7.5 µg/L[NA]	[219] [7.5]
1701	Victoria Barge Canal (1701) in Calhoun County	00447-000	Dow Chemical	Copper[1]	1.8	
1701	Victoria Barge Canal (1701) in Victoria County	03943-000	Air Liquide	Copper[1]	2.6	

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2427	San Jacinto Bay in Harris County	NA	NA	Copper[1, 3]	1.8	
2431	Moses Bayou from the confluence with Segment 2431 upstream to the drainage ditches receiving the discharge from the permitted outfall in Galveston County	01263-000	ISP Technologies	Copper[1]	2.0	
2481	Kinney Bayou Tidal/[and]Jewel Fulton Canal from the confluence with Ingleside Cove upstream to the permitted outfall in San Patricio County	10422-001	City of Ingleside	Copper[1]	2.0	[27 7.2]
2481	Kinney Bayou Tidal/[and]Jewel Fulton Canal from the confluence with Ingleside Cove upstream to the permitted outfall in San Patricio County	10422-001	City of Ingleside	Zinc[1]	[2.0]1.14	[185 168]
2484	Freshwater portion of Heldenfels Ditch in Nueces County	00465-000	Coastal Refining and Marketing, Inc.	Selenium	Acute Criterion = 219 µg/L Chronic Criterion = 5 µg/L[NA]	[219] [5]
2485	La Volla Creek from the confluence with Oso Creek upstream to the permitted outfall in Nueces County	10401-001	City of Corpus Christi	Copper[1]	2.07	
2494	Vidia Ancha from the confluence with Segment 2494 upstream to the tidal mud flats receiving the discharge from the permitted outfall in Cameron County	10350-001	Laguna Madre Water District	Copper[1]	2.5	

1 Results based on a water-effect ratio study.[Calculated with site-specific hardness value of 20 mg/L. Site-specific TSS is 4 mg/L and dissolved fraction available is 77%.]

2 [Calculated with a site-specific hardness value of 40.1 mg/L.]The equation used for acute criterion calculation is $e^{(1.273(\ln \text{hardness})-0.9744)}$, and the equation used for chronic criterion calculation is $e^{(1.273(\ln \text{hardness})-2.958)}$.

3 Site-specific criteria apply to the entire water body listed under the site description as opposed to applying solely to the mixing zone of a single facility.[Calculated with site-specific hardness value of 40 mg/L.]

[4 Calculated with site-specific hardness value of 48 mg/L.]

[5 Dissolved fraction available is 87%; site specific TSS is 14.75 mg/L.]
[6 Dissolved fraction available is 84%.]