

**WATER QUALITY CALCULATIONS FOR METALS AND OTHER TOXIC SUBSTANCES
WATER QUALITY BASED EFFLUENT CALCULATIONS
OUTFALL 001**

FACILITY: **Camden Lagoon** PERMIT #: **TN0064611** DATE: **9/11/2023** CALC BY: **SMT**

non-regulated stream worksheet (7Q10)

Stream (7Q10) [MGD]	Stream (30Q5) [MGD]	Waste Flow [MGD]**	Ttl. Susp. Solids [mg/l]	Hardness (as CaCO3) [mg/l]	Margin of Safety [%]
3.60	3.60	0.395	14.15	56.76	90

*** Please note waste flow of 0.395 MGD is not the facility design flow, but the highest allowable discharge flow at 3.6 MGD stream conditions. See permit for more information

PARAMETER	Fish/Aqua. Life (F & AL) WQC			F & AL- instream allowable ambient conditions (Tot)		Calc. Effluent Concentration based on F & AL		In-Stream Criteria			Human Health Water Quality Criteria *			effluent limited case	PARAMETER		
	lab conditions			Fraction Dissolved		Chronic Acute		Organisms			Calc. Effluent Concentration **						
	Conc. [ug/l]	Chronic [ug/l]	Acute [ug/l]	[Fraction]	[ug/l]	[ug/l]	Chronic [ug/l]	Acute [ug/l]	Water/Organisms [ug/l]	DWS [ug/l]	Organisms [ug/l]	Water/Organisms [ug/l]	DWS [ug/l]				
Copper (a,b)	0.846	5.520	7.882	0.328	16.844	24.052	146.39	212.00	N/A	N/A	N/A	N/A	N/A	N/A	80.0	Copper (a,b)	
Chromium III	1.211	46.608	358.307	0.198	234.928	1806.036	2128.51	16429.57	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chromium III	
Chromium VI	1.211	11.000	16.000	1.000	11.000	16.000	90.20	135.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chromium VI	
Chromium, Total	1.211	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100.0	N/A	N/A	900.32	60.0	Chromium, Total
Nickel (a,b)	2.685	32.209	289.991	0.396	81.279	731.785	717.82	6639.07	4600.0	610.0	100.0	41849.62	5530.52	888.23	180.0	Nickel (a,b)	
Cadmium (a,b)	0.127	0.469	1.060	0.261	1.796	4.059	15.31	35.91	N/A	N/A	5.0	N/A	N/A	44.47	5.0	Cadmium (a,b)	
Lead (a,b)	0.570	1.351	34.682	0.174	7.780	199.654	66.15	1812.68	N/A	N/A	5.0	N/A	N/A	40.84	45.0	Lead (a,b)	
Mercury (T) (c)	0.019	0.770	1.400	1.000	0.770	1.400	6.85	12.59	0.051	0.05	2.0	N/A	N/A	18.05	0.4	Mercury (T) (c)	
Silver (a,b,e)	0.607	N/A	1.214	1.000	N/A	1.214	N/A	6.07	N/A	N/A	N/A	N/A	N/A	N/A	5.0	Silver (a,b,e)	
Zinc (a,b)	6.365	73.113	72.520	0.267	273.448	271.229	2436.86	2416.66	26000.0	7400.0	N/A	236613.61	67306.52	N/A	200.0	Zinc (a,b)	
Cyanide (d)	2.600	5.200	22.000	1.000	5.200	22.000	26.01	178.93	140.0	140.0	200.0	1253.03	1253.03	1799.18	230.0	Cyanide (d)	
Toluene	0.000								15000.0	1300.0	1000.0	136537.97	11833.29	9102.53	15.0	Toluene	
Benzene	0.000								510.0	22.0	5.0	4642.29	200.26	45.51	3.0	Benzene	
1,1,1 Trichloroethane	0.000								N/A	N/A	200.0	N/A	N/A	1820.51	30.0	1,1,1 Trichloroethane	
Ethylbenzene	0.000								2100.0	530.0	700.0	19115.32	4824.34	6371.77	4.0	Ethylbenzene	
Carbon Tetrachloride	0.000								16.0	2.3	5.0	145.64	20.94	45.51	15.0	Carbon Tetrachloride	
Chloroform	0.000								4700.0	57.0	N/A	42781.90	518.84	N/A	85.0	Chloroform	
Tetrachloroethylene	0.000								33.0	6.9	5.0	300.38	62.81	45.51	25.0	Tetrachloroethylene	
Trichloroethylene	0.000								300.0	25.0	5.0	2730.76	227.56	45.51	10.0	Trichloroethylene	
1,2 trans Dichloroethylene	0.000								10000.0	140.0	100.0	N/A	1274.35	910.25	1.5	1,2 trans Dichloroethylene	
Methylene Chloride	0.000								5900.0	46.0	5.0	53704.94	418.72	N/A	50.0	Methylene Chloride	
Total Phenols	0.000								860000.0	10000.0	N/A	7828177.22	91025.32	N/A	50.0	Total Phenols	
Naphthalene	0.000								N/A	N/A	N/A	N/A	N/A	N/A	1.0	Naphthalene	
Total Phthalates	0.000								N/A	N/A	N/A	N/A	N/A	N/A	64.5	Total Phthalates	
Chlorine (T. Res.)	0.000	11.000	19.000	1.000	11.000	19.000	111.25	192.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Chlorine (T. Res.)

Application Reported BDL

2.3

0.8

0.9

0.05

0.6

0.0025

0.03

7

7

5

- a Denotes metals for which Fish & Aquatic Life Criteria are expressed as a function of total hardness.
- b The criteria for this metal is in the dissolved form at lab conditions. The calculated effluent concentration is in the total recoverable form.
- c The chronic criteria for mercury is not converted to dissolved, since it is based on fish tissue data rather than toxicity.
- d The criteria for this parameter is in the total form.
- e Silver limit is daily max if column 8 is most stringent.
- f When columns 7 or 8 result in a negative number, use results from columns 5 or 6, respectively.
- g When columns 12, 13 or 14 result in a negative number, use results from columns 9, 10 or 11, respectively, as applicable.

* Domestic supply not included in river use so pick from columns 7, 8, 12 or 15.

** Water Quality criteria for stream use classifications other than Fish & Aquatic Life are based on the 30Q5 flow.

Worksheet Name	DWR Station ID	Date	Characteristic [unit]	Value	1/2 of MCL	MCL Measure	Unit	Detection Condition	Qualifier	Worksheet Name	DWR Station ID	Date	Characteristic [unit]	Value	1/2 of MCL	MCL Measure	Unit	Detection Condition	Qualifier
Cypress Creek	CYPR012.8BN	8/20/21	Aluminum	21.1	2.1	4.2	ug/L			Cypress Creek	CYPR012.8BN	8/20/21	Mercury	0.00212	0.00212	0.00424	ug/L	Not Detected	U
Cypress Creek	CYPR012.8BN	7/18/2021	Aluminum	27.8	2.1	4.2	ug/L			Cypress Creek	CYPR012.8BN	7/18/2021	Mercury	0.00212	0.00212	0.00424	ug/L	Not Detected	U
Cypress Creek	CYPR012.8BN	6/30/21	Aluminum	63	1.9	3.8	ug/L			Cypress Creek	CYPR012.8BN	6/30/21	Mercury	0.0185	0.0185	0.037	ug/L	Not Detected	U
Cypress Creek	CYPR012.8BN	6/30/21	Aluminum	110	1.9	3.8	ug/L			Cypress Creek	CYPR012.8BN	6/30/21	Mercury	0.0185	0.0185	0.037	ug/L	Not Detected	U
Cypress Creek	CYPR012.8BN	5/20/21	Aluminum	200	1.9	3.8	ug/L			Cypress Creek	CYPR012.8BN	5/20/21	Mercury	0.0185	0.0185	0.037	ug/L	Not Detected	U
Cypress Creek	CYPR012.8BN	4/14/21	Aluminum	450	1.9	3.8	ug/L			Cypress Creek	CYPR012.8BN	4/14/21	Mercury	0.0185	0.0185	0.037	ug/L	Not Detected	U
Cypress Creek	CYPR012.8BN	4/14/21	Aluminum	719	2.7	5.4	ug/L			Cypress Creek	CYPR012.8BN	4/14/21	Mercury	0.0185	0.0185	0.037	ug/L	Not Detected	U
Cypress Creek	CYPR012.8BN	2/4/21	Aluminum	1400	2.7	5.4	ug/L			Cypress Creek	CYPR012.8BN	2/4/21	Mercury	0.0185	0.0185	0.037	ug/L	Not Detected	U
Cypress Creek	CYPR012.8BN	1/21/21	Aluminum	1020	2.7	5.4	ug/L			Cypress Creek	CYPR012.8BN	1/21/21	Mercury	0.0185	0.0185	0.037	ug/L	Not Detected	U
Cypress Creek	CYPR012.8BN	12/10/21	Aluminum	180	2.7	5.4	ug/L			Cypress Creek	CYPR012.8BN	12/10/21	Mercury	0.0185	0.0185	0.037	ug/L	Not Detected	U
Cypress Creek	CYPR012.8BN	12/10/21	Aluminum	48	2.7	5.4	ug/L			Cypress Creek	CYPR012.8BN	12/10/21	Mercury	0.0185	0.0185	0.037	ug/L	Not Detected	U
Cypress Creek	CYPR012.8BN	12/20/21	Aluminum	48	2.7	5.4	ug/L			Cypress Creek	CYPR012.8BN	12/20/21	Mercury	0.0185	0.0185	0.037	ug/L	Not Detected	U
Cypress Creek	CYPR012.8BN	11/20/21	Aluminum	200	2.7	5.4	ug/L			Cypress Creek	CYPR012.8BN	11/20/21	Mercury	0.0185	0.0185	0.037	ug/L	Not Detected	U
Cypress Creek	CYPR012.8BN	10/16/21	Aluminum	64	2.7	5.4	ug/L			Cypress Creek	CYPR012.8BN	10/16/21	Mercury	0.0185	0.0185	0.037	ug/L	Not Detected	U
Cypress Creek	CYPR012.8BN	10/16/21	Aluminum	120	2.7	5.4	ug/L			Cypress Creek	CYPR012.8BN	10/16/21	Mercury	0.0185	0.0185	0.037	ug/L	Not Detected	U
Cypress Creek	CYPR012.8BN	9/17/2021	Aluminum	140	2.7	5.4	ug/L			Cypress Creek	CYPR012.8BN	9/17/2021	Mercury	0.0185	0.0185	0.037	ug/L	Not Detected	U
Cypress Creek	CYPR012.8BN	8/20/21	Ammonia-nitrogen	0.0021	0.0015	0.0030	mg/L		J	Cypress Creek	CYPR012.8BN	8/20/21	Nickel	4.04	0.285	0.571	ug/L		
Cypress Creek	CYPR012.8BN	6/30/21	Ammonia-nitrogen	0.007	0.017	0.034	mg/L			Cypress Creek	CYPR012.8BN	6/30/21	Nickel	1.7	0.125	0.25	ug/L		
Cypress Creek	CYPR012.8BN	5/20/21	Ammonia-nitrogen	0.011	0.014	0.028	mg/L			Cypress Creek	CYPR012.8BN	5/20/21	Nickel	2.1	0.125	0.25	ug/L		
Cypress Creek	CYPR012.8BN	5/20/21	Ammonia-nitrogen	0.008	0.017	0.034	mg/L		J	Cypress Creek	CYPR012.8BN	5/20/21	Nickel	2.5	0.125	0.25	ug/L		
Cypress Creek	CYPR012.8BN	4/14/21	Ammonia-nitrogen	0.26	0.095	0.191	mg/L			Cypress Creek	CYPR012.8BN	4/14/21	Nickel	2.4	0.125	0.25	ug/L		
Cypress Creek	CYPR012.8BN	4/14/21	Ammonia-nitrogen	0.17	0.017	0.034	mg/L			Cypress Creek	CYPR012.8BN	4/14/21	Nickel	2.6	0.125	0.25	ug/L		
Cypress Creek	CYPR012.8BN	2/4/21	Ammonia-nitrogen	0.059	0.085	0.171	mg/L		J	Cypress Creek	CYPR012.8BN	3/5/21	Nickel	3.1	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	2/4/21	Ammonia-nitrogen	0.110	0.085	0.171	mg/L		J	Cypress Creek	CYPR012.8BN	2/4/21	Nickel	2.9	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	12/10/21	Ammonia-nitrogen	0.068	0.085	0.171	mg/L		J	Cypress Creek	CYPR012.8BN	2/4/21	Nickel	2.8	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	12/10/21	Ammonia-nitrogen	0.067	0.085	0.171	mg/L		J	Cypress Creek	CYPR012.8BN	12/10/21	Nickel	2.2	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	12/20/21	Ammonia-nitrogen	0.057	0.085	0.171	mg/L		J	Cypress Creek	CYPR012.8BN	12/10/21	Nickel	3.2	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	12/20/21	Ammonia-nitrogen	0.067	0.085	0.171	mg/L		J	Cypress Creek	CYPR012.8BN	12/20/21	Nickel	2.7	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	8/20/21	Asbestos-Asbestos	0.156	0.06	0.12	ug/L		U	Cypress Creek	CYPR012.8BN	11/20/21	Nickel	2.9	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	7/18/2021	Asenic	1.1	0.6	1.2	ug/L			Cypress Creek	CYPR012.8BN	11/20/21	Nickel	2.8	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	6/30/21	Asenic	1.2	0.3	0.6	ug/L			Cypress Creek	CYPR012.8BN	11/20/21	Nickel	2.8	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	5/20/21	Asenic	0.3	0.6	1.2	ug/L			Cypress Creek	CYPR012.8BN	11/20/21	Nickel	2.4	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	5/20/21	Asenic	0.3	0.6	1.2	ug/L			Cypress Creek	CYPR012.8BN	11/20/21	Nickel	2.4	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	4/14/21	Asenic	0.3	0.6	1.2	ug/L			Cypress Creek	CYPR012.8BN	11/20/21	Nickel	2.4	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	3/5/21	Asenic	0.3	0.6	1.2	ug/L			Cypress Creek	CYPR012.8BN	11/20/21	Nickel	2.4	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	3/5/21	Asenic	0.38	0.72	1.44	ug/L			Cypress Creek	CYPR012.8BN	11/20/21	Nickel	2.5	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	2/4/21	Asenic	0.38	0.72	1.44	ug/L			Cypress Creek	CYPR012.8BN	11/20/21	Nickel	2.5	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	12/10/21	Asenic	0.38	0.72	1.44	ug/L			Cypress Creek	CYPR012.8BN	11/20/21	Nickel	2.5	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	12/10/21	Asenic	0.38	0.72	1.44	ug/L			Cypress Creek	CYPR012.8BN	11/20/21	Nickel	2.5	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	12/20/21	Asenic	0.38	0.72	1.44	ug/L			Cypress Creek	CYPR012.8BN	11/20/21	Nickel	2.5	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	11/20/21	Asenic	0.38	0.72	1.44	ug/L			Cypress Creek	CYPR012.8BN	11/20/21	Nickel	2.5	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	10/16/21	Asenic	0.38	0.72	1.44	ug/L			Cypress Creek	CYPR012.8BN	11/20/21	Nickel	2.5	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	10/16/21	Asenic	0.38	0.72	1.44	ug/L			Cypress Creek	CYPR012.8BN	11/20/21	Nickel	2.5	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	9/17/2021	Asenic	0.38	0.72	1.44	ug/L			Cypress Creek	CYPR012.8BN	11/20/21	Nickel	2.5	0.18	0.36	ug/L		
Cypress Creek	CYPR012.8BN	8/20/21	Cadmium	0.0005	0.007	0.014	ug/L		U	Cypress Creek	CYPR012.8BN	7/18/2021	Phosphorus	0.033	0.0036	0.0072	mg/L		
Cypress Creek	CYPR012.8BN	6/30/21	Cadmium	0.015	0.023	0.046	ug/L			Cypress Creek	CYPR012.8BN	6/30/21	Phosphorus	0.031	0.0055	0.011	mg/L		
Cypress Creek	CYPR012.8BN	5/20/21	Cadmium	0.115	0.023	0.046	ug/L			Cypress Creek	CYPR012.8BN	5/20/21	Phosphorus	0.041	0.0055	0.011	mg/L		
Cypress Creek	CYPR012.8BN	5/20/21	Cadmium	0.115	0.023	0.046	ug/L			Cypress Creek	CYPR012.8BN	5/20/21	Phosphorus	0.037	0.0055	0.011	mg/L		
Cypress Creek	CYPR012.8BN	4/14/21	Cadmium	0.107	0.023	0.046	ug/L			Cypress Creek	CYPR012.8BN	4/14/21	Phosphorus	0.040	0.0055	0.011	mg/L		
Cypress Creek	CYPR012.8BN	3/5/21	Cadmium	0.145	0.029	0.058	ug/L			Cypress Creek	CYPR012.8BN	4/14/21	Phosphorus	0.029	0.006	0.012	mg/L		
Cypress Creek	CYPR012.8BN	3/5/21	Cadmium	0.145	0.029	0.058	ug/L			Cypress Creek	CYPR012.8BN	4/14/21	Phosphorus	0.029	0.006	0.012	mg/L		
Cypress Creek	CYPR012.8BN	2/4/21	Cadmium	0.145	0.029	0.058	ug/L			Cypress Creek	CYPR012.8BN	4/14/21	Phosphorus	0.029	0.006	0.012	mg/L		
Cypress Creek	CYPR012.8BN	12/10/21	Cadmium	0.145	0.029	0.058	ug/L			Cypress Creek	CYPR012.8BN	4/14/21	Phosphorus	0.029	0.006	0.012	mg/L		
Cypress Creek	CYPR012.8BN	12/10/21	Cadmium	0.145	0.029	0.058	ug/L			Cypress Creek	CYPR012.8BN	4/14/21	Phosphorus	0.029	0.006	0.012	mg/L		
Cypress Creek	CYPR012.8BN	11/20/21	Cadmium	0.145	0.029	0.058	ug/L			Cypress Creek	CYPR012.8BN	4/14/21	Phosphorus	0.029	0.006	0.012	mg/L		
Cypress Creek	CYPR012.8BN	10/16/21	Cadmium	0.145	0.029	0.058	ug/L			Cypress Creek	CYPR012.8BN	4/14/21	Phosphorus	0.029	0.006	0.012	mg/L		
Cypress Creek	CYPR012.8BN	10/16/21	Cadmium	0.145	0.029	0.058	ug/L			Cypress Creek	CYPR012.8BN	4/14/21	Phosphorus	0.029	0.006	0.012	mg/L		
Cypress Creek	CYPR012.8BN	9/17/2021	Cadmium	0.145	0.029	0.058	ug/L			Cypress Creek	CYPR012.8BN	4/14/21	Phosphorus	0.029	0.006	0.012	mg/L		
Cypress Creek	CYPR012.8BN	8/20/21	Cadmium	0.145	0.029	0.058	ug/L			Cypress Creek	CYPR012.8BN	4/14/21	Phosphorus	0.029	0.006	0.012	mg/L		
Cypress Creek	CYPR012.8BN	8/20/21	Chromium	0.022	1.1	2.2	ug/L			Cypress Creek	CYPR012.8BN	8/20/21	Selenium	0.033	0.0036	0.0072	mg/L		
Cypress Creek	CYPR012.8BN	7/18/2021	Chromium	0.005	1.1	2.2	ug/L			Cypress Creek	CYPR012.8BN	8/20/21	Selenium	0.033	0.0036	0.0072	mg/L		
Cypress Creek	CYPR012.8BN	6/30/21	Chromium	0.8	0.4	0.8	ug/L			Cypress Creek	CYPR012.8BN	8/20/21	Selenium	0.033	0.0036	0.0072	mg/L		
Cypress Creek	CYPR012.8BN	6/30/21	Chromium	1.3	0.4	0.8	ug/L			Cypress Creek									

TN0064611	PTL 6/28/2018	85% PTL	PTL 10/6/2023	Apr-23	Oct-22	Apr-22	Oct-21	Apr-21	Oct-20	Apr-20	Oct-19	Apr-19	Oct-18
COPPER	0.08000	0.06800	0.08000	0.00150	0.00180	0.00310		0.00490	0.00435	0.00164	0.01800	0.01070	0.00546
CHROMIUM, III	Report	N/A	Report	0.00070	0.00090	0.00100		0.00100	0.01000	0.00100	0.00981	0.00100	0.00100
CHROMIUM, VI	0.07470	N/A	0.09020	0.01000	0.01000	0.01000		0.01000	0.01000	0.01000	0.01000	0.01000	0.00100
CHROMIUM	N/A	N/A	N/A	0.00070	0.00090	0.00100							
NICKEL	0.18000	0.15300	0.18000	0.00130	0.00140	0.00180		0.00200	0.00240	0.00146	0.01010	0.00171	0.00100
CADMIUM	0.00330	0.00425	0.00500	0.00005	0.00007	0.00010		0.00100	0.00100	0.00100	0.00100	0.00100	0.00100
LEAD	0.04166	0.03825	0.04500	0.00050	0.00070	0.00150		0.00200	0.00200	0.00100	0.01200	0.00104	0.00100
MERCURY	0.00034	0.00026	0.00031	1.53E-06	2.05E-06	4.00E-06		1.56E-06	2.59E-06	3.42E-06	1.60E-06	1.11E-06	2.30E-06
SILVER	0.00359	0.00425	0.00500	0.00002	0.00004	0.00010		0.00100	0.00100	0.00100	0.00100	0.00100	0.00100
ZINC	0.20000	0.17000	0.20000	0.00800	0.00500	0.02000		0.02000	0.02000	0.01000	0.05790	0.01000	0.01050
CYANIDE	0.02153	0.02211	0.02601	0.00200	0.00600	0.00600		0.00500	0.00500	0.00500	0.00500	0.00500	0.00500
TOLUENE	0.01500	0.01275	0.01500	0.00040	0.00040	0.00040		0.04500	0.00100	0.00219	0.00164	0.00219	0.00100
BENZENE	0.00300	0.00255	0.00300	0.00040	0.00040	0.00040		0.00100	0.00100	0.00100	0.00100	0.00100	0.00100
1,1,1 TRICHLOROETHANE	0.03000	0.02550	0.03000	0.00040	0.00040	0.00040		0.00100	0.00100	0.00100	0.00100	0.00100	0.00100
ETHYLBENZENE	0.00400	0.00340	0.00400	0.00050	0.00050	0.00050		0.00100	0.00100	0.00100	0.00100	0.00100	0.00100
CARBON TETRACHLORIDE	0.01500	0.01275	0.01500	0.00050	0.00050	0.00050		0.00100	0.00100	0.00100	0.00100	0.00100	0.00100
CHLOROFORM	0.08500	0.07225	0.08500	0.00080	0.00080	0.00080		0.00500	0.00500	0.00500	0.00500	0.00500	0.00500
TETRACHLOROETHYLENE	0.02500	0.02125	0.02500	0.00090	0.00040	0.00040		0.00100	0.00100	0.00100	0.00100	0.00100	0.00100
TRICHLOROETHYLENE	0.01000	0.00850	0.01000	0.00060	0.00040	0.00060		0.00100	0.00100	0.00100	0.00100	0.00100	0.00100
1,2 TRANS-DICHLOROETHYLENE	0.00150	0.00128	0.00150	0.00050	0.00050	0.00050		0.00100	0.00100	0.00100	0.00100	0.00100	0.00100
METHYLENE CHLORIDE	0.05000	0.04250	0.05000	0.00190	0.00190	0.00190		0.00500	0.00500	0.00500	0.00500	0.00500	0.00500
TOTAL PHENOLS	0.05000	0.04250	0.05000	0.00600	0.00800	0.02230		0.00100	0.04000	0.04000	0.04600	0.04000	0.04000
NAPHTHALENE	0.00100	0.00085	0.00100	0.00300	0.00070	0.00050		0.00100	0.00100	0.00100	0.00100	0.00100	0.00500
TOTAL PHTHALATES	0.06450	0.05483	0.06450	0.00100	0.00020	0.00050		0.01200	0.01200	0.01200	0.01200	0.01200	0.01200

Bolded in effluent data exceeds 85% of proposed PTLs

Shaded means detection level

green indicates changed 2023

PRETREATMENT PASS-THROUGH LIMIT REQUEST SHEET

DATE: 9/12/23
NPDES: TN0064611
FACILITY: Camden STP
COUNTY: Benton

DESIGN FLOW (MGD): 0.5 (Please note: 0.395 MGD used in calculations. Permittee is not allowed to discharge greater than 0.395 MGD, or greater than 11% of the stream flow at critical low flow conditions)

RECEIVING STREAM: Cypress Creek at river mile 12.8 (discharges to Kentucky Lake)

Stream flows based on permit (no discharge below 3.6 MGD)

7Q10 5.57 (CFS) 3.6 (MGD)
30Q5 5.57 (CFS) 3.6 (MGD)

 Domestic in stream uses (use columns 7, 8, 12 – 15 in PTL spreadsheet)

X Domestic NOT in stream uses (use columns 7, 8, 12 & 15 in PTL spreadsheet)

X Not on 303(d) list X Not on 305(b) report

N Tier evaluated (Y/N) (Lagoon system)

OTHER DISCHARGERS ON SAME STREAM +/- 5 RM (FACILITY, PERMIT #, FLOW, RM):

None (only TMSP, RMCP, CGP, non-contact cooling water)

LIST ANY CONCERNS, SPECIAL CONSIDERATIONS:

I used two DWR stations near the point of discharge for background concentrations, and only the 10 most recent years of data. CYPRE012.8BN and CYPRE011.3BN. Low flow 7Q10 and 30Q5 both use 3.6 MGD based on requirement that permittee will not discharge below that flow; therefore 3.6MGD considered most protective conditions.

INFORMATION PROVIDED BY: SMT
CALCULATED BY: SMT REVIEWED BY: GRH
DATE: 09/12/23 DATE: 10/4/23

0400-40-04-.04 TENNESSEE RIVER BASIN - WESTERN VALLEY.

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Tennessee River	Mile 49.1 (Tenn-Ky Line) to 215.1 (Tn-Miss Line)	X	X	X	X	X	X	X		
Big Sandy River	Mile 0.0 to 15.1		X	X	X	X	X	X		
Big Sandy River	Mile 15.1 to Origin		X	X	X	X	X			
West Sandy Creek	Mile 0.0 to Origin			X	X	X	X			
Holly Fork Creek	Mile 0.0 to Origin			X	X	X	X			
Bailey Fork Creek	Mile 0.0 to Origin			X	X	X	X			
Town Creek	Mile 0.0 to Origin			X	X	X	X			
Big Beaver Creek	Mile 0.0 to Origin			X	X	X	X			
Little Beaver Creek	Mile 0.0 to Origin			X	X	X	X			
Little Beaver Creek	Mile 0.0 to Origin			X	X	X	X			
Hurricane Creek	Mile 0.0 to Origin			X	X	X	X		X	
S. Fk Hurricane Cr	Mile 0.0 to Origin			X	X	X	X			
Beaverdam Creek	First bridge above mouth to origin.			X	X	X	X		X	
Cane Creek	Mile 0.0 to Origin			X	X	X	X			
Trace Creek	Mile 0.0 to Origin			X	X	X	X			
Cypress Creek	Mile 0.0 to Origin			X	X	X	X			
Cane Creek	Mile 0.0 to Origin			X	X	X	X			
North Indian Creek	Mile 0.0 to Origin			X	X	X	X			

