

Lowland Wastewater Treatment Plant  
March 21, 2017

Parameter	Pass-Through (µg/l)	Allowable Discharge	Projected Removal	Total Allowable Mass	Calculated Influent	Activated Sludge	Nitrification Process	Controlling Influent	AHL ( LBS. )	AHL ( LBS. )	Domestic/c onc	Dom/Com	Dom/Com	Industrial	Reserve at	Industrial	Conc. At design	Conc. At
Design Flow = 0.5 MGD		lbs./day	Rate %	Headworks ( lbs./day)	Conc. ( mg/l ) @ Q= 0.5 MGD	Inhibitory Conc. ( mg/l )	Inhibitory Conc. ( mg/l)	Conc. ( mg/l)	at 0.245 MGD	AT 0.5 MGD	mg/l	lbs. at 0.245 MGD	lbs. at 0.5	lbs.at 0.245	0.5	lbs. at 0.5	mg/l	0.245
Copper	80.00	0.3336	84	2.085	0.5	1	0.5	0.5	1.02165	2.085	0.062	0.0336102	0.06877164	0.9880398	0.2085	1.80772836	0.5906104	0.59235
Chromium, III		0	0	0	0				0	0		0	0	0	0	0	0	0
Chromium, VI		0	0	0	0				0	0		0	0	0	0	0	0	0
Chromium, Total	60.00	0.2502	80	1.251	0.3	10	0.25	0.25	0.510825	1.0425	0.0095	0.00515	0.01053759	0.50567505	0.10425	0.92771241	0.3030967	0.303163
Nickel	180.00	0.7506	30	1.072285714	0.257142857	1	0.25	0.25	0.510825	1.0425	0.015	0.0081315	0.0166383	0.5026935	0.10425	0.9216117	0.3011035	0.301375
Cadmium	5.00	0.02085	67	0.063181818	0.015151515	1	-	0.0152	0.03105816	0.63384	0.00075	0.0004066	0.000831915	0.310175025	0.0063384	0.056213685	0.0183658	0.185956
Lead	45.00	0.18765	61	0.481153846	0.115384615	0.1	0.5	0.1	0.20433	0.417	0.00575	0.0031171	0.006378015	0.201212925	0.0417	0.368921985	0.120532	0.120631
Mercury	0.40	0.001668	60	0.00417	0.001	0.1	-	0.001	0.0020433	0.00417	0.0002	0.0001084	0.000221844	0.00193488	0.000417	0.003531156	0.0011537	0.00116
Silver	5.00	0.02085	75	0.0834	0.02	5	-	0.02	0.040866	0.0834	0.0008	0.0004337	0.000887376	0.04043232	0.00834	0.074172624	0.0242332	0.02424
Zinc	200.00	0.834	79	3.971428571	0.952380952	0.1	0.1	0.1	0.20433	0.417	0.0123	0.0066678	0.013643406	0.19766217	0.0417	0.361656594	0.1181583	0.118503
Cyanide	230.00	0.9591	60	2.39775	0.575	1	0.34	0.34	0.694722	1.4178	0.003	0.0016263	0.00332766	0.6930957	0.14178	1.27269234	0.4158065	0.415525
Toluene	15.00	0.06255	90	0.6255	0.15			0.15	0.306495	0.6255	0.000025	1.355E-05	2.77305E-05	0.306481448	0.06255	0.56292227	0.1839146	0.183742
Benzene	3.00	0.01251	75	0.05004	0.012			0.012	0.0245196	0.05004	0.00025	0.0001355	0.000277305	0.024384075	0.005004	0.044758695	0.0146233	0.014619
1,1,1-Trichloroethane	30.00	0.1251	85	0.834	0.2			0.2	0.40866	0.834	0.00025	0.0001355	0.000277305	0.408524475	0.0834	0.750322695	0.245141	0.244919
Ethylbenzene	4.00	0.01668	90	0.1668	0.04			0.04	0.081732	0.1668	0.00025	0.0001355	0.000277305	0.081596475	0.01668	0.149842695	0.0489557	0.048919
Carbon Tetrachloride	15.00	0.06255	10	0.0695	0.016666667			0.016666667	0.034055	0.0695	0.00025	0.0001355	0.000277305	0.033919475	0.00695	0.062272695	0.0203454	0.020335
Chloroform	85.00	0.35445	60	0.886125	0.2125			0.2125	0.43420125	0.886125	0.0033	0.0017889	0.003660426	0.43241232	0.0886125	0.793852074	0.2593627	0.25924
Tetrachloroethylene	25.00	0.10425	80	0.52125	0.125			0.125	0.2554125	0.52125	0.00025	0.0001355	0.000277305	0.255276975	0.052125	0.468847695	0.1531792	0.153044
Trichloroethylene	10.00	0.0417	90	0.417	0.1			0.1	0.20433	0.417	0.00025	0.0001355	0.000277305	0.204194475	0.0417	0.375022695	0.1225252	0.122419
1,2 trans Dichloroethylene	1.50	0.006255	80	0.031275	0.0075			0.0075	0.01532475	0.031275	0.00025	0.0001355	0.000277305	0.015189225	0.0031275	0.027870195	0.0091056	0.009106
Methylene Chloride	50.00	0.2085	40	0.3475	0.083333333			0.083333333	0.170275	0.3475	0.0003	0.0001626	0.000332766	0.17011237	0.03475	0.312417234	0.1020711	0.101986
Phenols, Total	50.00	0.2085	80	1.0425	0.25			0.25	0.510825	1.0425	0.045	0.0243945	0.0499149	0.4864305	0.10425	0.8883351	0.2902316	0.291625
Naphthalene	1.00	0.00417	92	0.052125	0.0125			0.0125	0.02554125	0.052125	0.002	0.0010842	0.00221844	0.02445705	0.0052125	0.04469406	0.0146022	0.014663
Phthalates, Total	64.50	0.268965	68	0.840515625	0.2015625			0.2015625	0.41185266	0.84051563	0.04	0.07506	0.0443688	0.336792656	0.084051563	0.712095263	0.2326516	0.201914