

**2019 ANNUAL REPORT**

INDUSTRIAL WASTE PRETREATMENT PROGRAM

LOS ANGELES COUNTY SANITATION DISTRICTS

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**APPENDIX I**  
JWPCP MASS EMISSION BENCHMARKS

**Table 4.6  
JOINT WATER POLLUTION CONTROL PLANT  
2019 CALCULATED MASS EMISSION RATE**

Ocean Plan Constituent	Average Concentration (ug/L)	Average Flow (MGD)	Calculated Mass Emission Rate (MT/yr)	12-month Average Mass Emission Benchmarks From Permit (MT/yr)	Ratio, Mass Emission Rate to Benchmark (%)
<b>Marine Aquatic Life Toxicants</b>					
Arsenic	1.94	260	0.696	1.3	54%
Cadmium	ND	260	ND	0.1	ND
Chromium (hexavalent)	0.02	260	0.007	0.8	1%
Copper	2.55	260	0.915	2.6	35%
Lead	ND	260	ND	0.2	ND
Mercury	ND	260	ND	0.02	ND
Nickel	10.5	260	3.77	6.9	55%
Selenium	4.54	260	1.63	5.9	28%
Silver	ND	260	ND	0.1	ND
Zinc	13.4	260	4.81	9.0	53%
Cyanide	ND	260	ND	5.3	ND
Ammonia as N	44000	260	15781	25000	63%
Phenolic compounds (non-chlorinated)	0.60	260	0.22	1.9	11%
Phenolic compounds (chlorinated)	ND	260	ND	1.0	ND
Endosulfan	ND	260	ND	0.008	ND
HCH	0.01	260	0.004	0.008	45%
Endrin	ND	260	ND	0.005	ND
<b>Human Health Toxicants - Non Carcinogens</b>					
Acrolein	ND	260	ND	2.7	ND
Antimony	2.32	260	0.83	3.6	23%
Bis(2chloroethoxy)methane	ND	260	ND	0.7	ND
Bis(2chloroisopropyl)ether	ND	260	ND	0.8	ND
Chlorobenzene	ND	260	ND	0.6	ND
Chromium (III)	1.1	260	0.39	1.5	26%
Di-n-butyl-phthalate	ND	260	ND	2.3	ND
Dichlorobenzenes	ND	260	ND	0.3	ND
Diethyl phthalate	ND	260	ND	1.1	ND
Dimethyl phthalate	ND	260	ND	1.0	ND
2-Methyl-4,6-dinitrophenol	ND	260	ND	6.9	ND
2,4-Dinitrophenol	ND	260	ND	9.0	ND
Ethyl benzene	ND	260	ND	1.0	ND
Fluoranthene	ND	260	ND	1.0	ND
Hexachlorocyclopentadiene	ND	260	ND	4.0	ND
Nitrobenzene	ND	260	ND	1.2	ND
Thallium	ND	260	ND	0.3	ND
Toluene	ND	260	ND	0.3	ND
Tributyltin	ND	260	ND	0.005	ND
1,1,1-Trichloroethane	ND	260	ND	1.0	ND
<b>Human Health Toxicants - Carcinogens</b>					
Acrylonitrile	ND	260	ND	1.4	ND
Aldrin	0.004	260	0.001	0.002	72%
Benzene	ND	260	ND	0.399	ND
Beryllium	ND	260	ND	0.1	ND
Bis(2-chloroethyl) ether	ND	260	ND	0.5	ND
Bis(2-ethylhexyl) phthalate	ND	260	ND	7.4	ND
Carbon tetrachloride	ND	260	ND	0.5	ND
Chlorodibromomethane	ND	260	ND	1.3	ND
Chloroform	12.0	260	4.30	13.5	32%
1,4-Dichlorobenzene	ND	260	ND	0.5	ND
1,2-Dichloroethane	ND	260	ND	0.3	ND
1,1-Dichloroethylene	ND	260	ND	0.6	ND
Bromodichloromethane	0.58	260	0.21	0.8	26%
Dichloromethane	1.3	260	0.47	1.6	29%
1,3-Dichloropropene	ND	260	ND	0.3	ND
2,4-Dinitrotoluene	ND	260	ND	0.5	ND
1,2-Diphenylhydrazine	ND	260	ND	0.3	ND
Halomethanes	ND	260	ND	0.5	ND
Hexachlorobutadiene	ND	260	ND	0.4	ND
Hexachloroethane	ND	260	ND	0.4	ND
Isophorone	ND	260	ND	0.3	ND
N-Nitrosodimethylamine	0.26	260	0.093	0.4	23%
N-Nitrosodi-N-propylamine	ND	260	ND	0.3	ND
N-Nitrosodiphenylamine	ND	260	ND	0.4	ND
PAHs	ND	260	ND	0.5	ND
1,1,2,2-Tetrachloroethane	ND	260	ND	0.2	ND
Tetrachloroethylene	ND	260	ND	10.6	ND
Trichloroethylene	ND	260	ND	0.5	ND
1,1,2-Trichloroethane	ND	260	ND	0.2	ND
2,4,6-Trichlorophenol	ND	260	ND	0.3	ND
Vinyl Chloride	ND	260	ND	0.7	ND

1. ND = Not Detected

2. MER = Mass Emission Rate.

3. Mass Emission Rates were calculated using the average concentration and annual average flow and have been rounded in the above table. Values were not rounded when calculating the Ratio.