

**2021 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**  
**2021 CALCULATED MASS EMISSION RATE**

Ocean Plan Constituent	Annual Average Concentration (ug/L)	Annual 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	2.42	242	0.810	1.3	62%
Cadmium	ND	242	ND	0.1	ND
Chromium (hexavalent)	ND	242	ND	0.8	ND
Copper	3.65	242	1.22	2.6	47%
Lead	ND	242	ND	0.2	ND
Mercury	ND	242	ND	0.02	ND
Nickel	7.08	242	2.37	6.9	34%
Selenium	4.93	242	1.65	5.9	28%
Silver	0.05	242	0.02	0.1	18%
Zinc	8.13	242	2.72	9.0	30%
Cyanide	ND	242	ND	5.3	ND
Ammonia as N	42900	242	14359	25000	57%
Phenolic compounds (non-chlorinated)	ND	242	ND	1.9	ND
Phenolic compounds (chlorinated)	ND	242	ND	1.0	ND
Endosulfan	ND	242	ND	0.008	ND
HCH	ND	242	ND	0.008	ND
Endrin	ND	242	ND	0.005	ND
<b>Human Health Toxicants - Non Carcinogens</b>					
Acrolein	ND	242	ND	2.7	ND
Antimony	1.49	242	0.499	3.6	14%
Bis(2chloroethoxy)methane	ND	242	ND	0.7	ND
Bis(2chloroisopropyl)ether	ND	242	ND	0.8	ND
Chlorobenzene	ND	242	ND	0.6	ND
Chromium (III)	1.5	242	0.50	1.5	33%
Di-n-butyl-phthalate	ND	242	ND	2.3	ND
Dichlorobenzenes	ND	242	ND	0.3	ND
Diethyl phthalate	ND	242	ND	1.1	ND
Dimethyl phthalate	ND	242	ND	1.0	ND
2-Methyl-4,6-dinitrophenol	ND	242	ND	6.9	ND
2,4-Dinitrophenol	ND	242	ND	9.0	ND
Ethylbenzene	ND	242	ND	1.0	ND
Fluoranthene	ND	242	ND	1.0	ND
Hexachlorocyclopentadiene	ND	242	ND	4.0	ND
Nitrobenzene	ND	242	ND	1.2	ND
Thallium	ND	242	ND	0.3	ND
Toluene	0.37	242	0.12	0.3	41%
Tributyltin	ND	242	ND	0.005	ND
1,1,1-Trichloroethane	ND	242	ND	1.0	ND
<b>Human Health Toxicants - Carcinogens</b>					
Acrylonitrile	ND	242	ND	1.4	ND
Aldrin	ND	242	ND	0.002	ND
Benzene	ND	242	ND	0.399	ND
Beryllium	ND	242	ND	0.1	ND
Bis(2-chloroethyl) ether	ND	242	ND	0.5	ND
Bis(2-ethylhexyl) phthalate	38	242	13	7.4	172%
Carbon tetrachloride	ND	242	ND	0.5	ND
Chlorodibromomethane	ND	242	ND	1.3	ND
Chloroform	12.2	242	4.08	13.5	30%
1,4-Dichlorobenzene	ND	242	ND	0.5	ND
1,2-Dichloroethane	ND	242	ND	0.3	ND
1,1-Dichloroethylene	ND	242	ND	0.6	ND
Bromodichloromethane	0.47	242	0.16	0.8	20%
Dichloromethane	1.2	242	0.40	1.6	25%
1,3-Dichloropropene	ND	242	ND	0.3	ND
2,4-Dinitrotoluene	ND	242	ND	0.5	ND
1,2-Diphenylhydrazine	ND	242	ND	0.3	ND
Halomethanes	ND	242	ND	0.5	ND
Hexachlorobutadiene	ND	242	ND	0.4	ND
Hexachloroethane	ND	242	ND	0.4	ND
Isophorone	ND	242	ND	0.3	ND
N-Nitrosodimethylamine	0.21	242	0.07	0.4	18%
N-Nitrosodi-N-propylamine	ND	242	ND	0.3	ND
N-Nitrosodiphenylamine	ND	242	ND	0.4	ND
PAHs	ND	242	ND	0.5	ND
1,1,2,2-Tetrachloroethane	ND	242	ND	0.2	ND
Tetrachloroethylene	ND	242	ND	10.6	ND
Trichloroethylene	ND	242	ND	0.5	ND
1,1,2-Trichloroethane	ND	242	ND	0.2	ND
2,4,6-Trichlorophenol	ND	242	ND	0.3	ND
Vinyl Chloride	ND	242	ND	0.7	ND

1. ND = Not Detected

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