

2016 ANNUAL REPORT

INDUSTRIAL WASTE PRETREATMENT PROGRAM

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

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APPENDIX I
JWPCP MASS EMISSION BENCHMARKS

**JOINT WATER POLLUTION CONTROL PLANT
2016 12-MONTH AVERAGE EFFLUENT MASS EMISSION BENCHMARKS**

Ocean Plan constituent	Average Concentration (ug/L)	2016 Annual Average Flow (MGD)	12-month Average Mass Emission Benchmarks From Permit (MT/yr)	Calculated MER (using Average Concentration) (MT/yr)	Percentage of Mass Emission Benchmark
Marine Aquatic Life Toxicants					
Arsenic	2.08	253	0.95	0.73	77%
Cadmium	ND	253	0.47	ND	ND
Chromium (hexavalent)	0.1	253	46.70	0.03	0.07%
Copper	2.77	253	5.78	0.97	17%
Lead	ND	253	3.74	ND	ND
Mercury	0.0028	253	0.23	0.0010	0.4%
Nickel	7.53	253	22.58	2.63	12%
Selenium	4.13	253	5.00	1.44	29%
Silver	ND	253	2.33	ND	ND
Zinc	10.70	253	11.67	3.74	32%
Cyanide	5.34	253	4.05	1.87	46%
Chlorine Residual	10.0	253	N/a	3.5	N/a
Ammonia as N	44700	253	17070	15624	92%
Phenolic compounds (non-chlorinated)	ND	253	23.35	ND	ND
Phenolic compounds (chlorinated)	ND	253	23.35	ND	ND
Endosulfan	ND	253	0.047	ND	ND
HCH	ND	253	0.0047	ND	ND
Endrin	ND	253	0.0047	ND	ND
Acute Toxicity		253	N/a		N/a
Chronic Toxicity		253	N/a		N/a
Radioactivity		253	N/a		N/a
Human Health Toxicants - Non Carcinogens					
Acrolein	ND	253	4.67	ND	ND
Antimony	3.79	253	1.61	1.32	82%
Bis(2chloroethoxy)methane	ND	253	11.67	ND	ND
Bis(2chloroisopropyl)ether	ND	253	4.67	ND	ND
Chlorobenzene	ND	253	0.23	ND	ND
Chromium (III)	1.4	253	5.60	0.49	9%
Di-n-butyl-phthalate	ND	253	23.35	ND	ND
Dichlorobenzenes	ND	253	4.67	ND	ND
Diethyl phthalate	ND	253	4.67	ND	ND
Dimethyl phthalate	ND	253	4.67	ND	ND
2-Methyl-4,6-dinitrophenol	ND	253	11.67	ND	ND
2,4-Dinitrophenol	ND	253	11.67	ND	ND
Ethyl benzene	ND	253	0.23	ND	ND
Fluoranthene	ND	253	2.33	ND	ND
Hexachlorocyclopentadiene	ND	253	11.67	ND	ND
Nitrobenzene	ND	253	2.33	ND	ND
Thallium	ND	253	4.67	ND	ND
Toluene	ND	253	0.23	ND	ND
Tributyltin	ND	253	0.028	ND	ND
1,1,1-Trichloroethane	ND	253	0.23	ND	ND
Human Health Toxicants - Carcinogens					
Acrylonitrile	ND	253	2.33	ND	ND
Aldrin	ND	253	N/a	ND	N/a
Benzene	ND	253	0.23	ND	ND
Benzidine	ND	253	N/a	ND	N/a
Beryllium	ND	253	0.47	ND	ND
Bis(2-chloroethyl) ether	ND	253	2.33	ND	ND
Bis(2-ethylhexyl) phthalate	0.58	253	15.25	0.20	1%
Carbon tetrachloride	ND	253	0.23	ND	ND
Chlordane	ND	253	N/a	ND	N/a
Chlorodibromomethane	ND	253	1.15	ND	ND
Chloroform	12.9	253	20.78	4.51	22%
DDT	ND	253	N/a	ND	N/a
1,4-Dichlorobenzene	ND	253	2.33	ND	ND
3,3'-Dichlorobenzidine	ND	253	0.065	ND	ND
1,2-Dichloroethane	ND	253	0.23	ND	ND
1,1-Dichloroethylene	ND	253	0.23	ND	ND
Bromodichloromethane	0.44	253	0.84	0.15	18%
Dichloromethane	1.7	253	5.38	0.59	11%
1,3-Dichloropropene	ND	253	0.23	ND	ND
Dieldrin	ND	253	N/a	ND	N/a
2,4-Dinitrotoluene	ND	253	11.67	ND	ND
1,2-Diphenylhydrazine	ND	253	2.33	ND	ND
Halomethanes	ND	253	1.50	ND	ND
Heptachlor	ND	253	N/a	ND	N/a
Heptachlor epoxide	ND	253	N/a	ND	N/a
Hexachlorobenzene	ND	253	N/a	ND	N/a
Hexachlorobutadiene	ND	253	2.33	ND	ND
Hexachloroethane	ND	253	2.33	ND	ND
Isophorone	ND	253	2.33	ND	ND
N-Nitrosodimethylamine	0.12	253	11.67	0.04	0%
N-Nitrosodi-N-propylamine	ND	253	11.67	ND	ND
N-Nitrosodiphenylamine	ND	253	2.33	ND	ND
PAHs	ND	253	23.35	ND	ND
PCBs	ND	253	N/a	ND	N/a
TCDD equivalents	ND	253	N/a	ND	N/a
1,1,2,2-Tetrachloroethane	ND	253	0.23	ND	ND
Tetrachloroethylene	0.14	253	4.41	0.05	1%
Toxaphene	ND	253	N/a	ND	N/a
Trichloroethylene	ND	253	0.23	ND	ND
1,1,2-Trichloroethane	ND	253	0.23	ND	ND
2,4,6-Trichlorophenol	ND	253	23.35	ND	ND
Vinyl Chloride	ND	253	0.23	ND	ND

ND = Not Detected, N/a = No Benchmark was established in the permit for this constituent