

NPDES Attachment

Practical Quantitation Limits (PQL) and Approved Test Methods

No.	Parameter	PQL (µg/l)	Sample Type	Approved Method(s)
a.	Biochemical oxygen demand	2000	Comp	SM5210B
b.	Chemical oxygen demand	20,000	Comp	SM 5220D, Hach Method 8000, or EPA 410.4
c.	Total organic carbon	1000	Grab	SM5310 B, SM5310 C, SM5310 D
d.	Total suspended solids	1000	Comp	SM2540D
e.	Ammonia	100	Comp	SM4500NH3 C, F, G or H
f.	Flow	-	-	-
g,h.	Temperature	**	Grab	170.1
i.	pH	**	Grab	SM4500H B
Metals, Cyanide, and Phenols				
a.	Bromide	2000	Comp	320.1, 300.0
b.	Chlorine, total residual	50	Grab	SM4500Cl B, C, D, F or G
c.	Color	5 CU	Grab	NCASI-TB253 (Platinum Cobalt), SM 2120B (visual method)
		25 CU	Grab	SM2120E (ADMI)
d.	Fecal Coliform	2/100mL	Grab	SM9221C, SM9221E
		1/100mL	Grab	SM9222D
e.	Fluoride	100	Comp	300.0, SM4500F C, SM4500F D, SM4500F E
f.	Nitrate-Nitrite	20	Comp	353.3
g.	Nitrogen, total organic	-	**	TKN-NH3
h.	Oil & Grease	5 mg/l	Grab	1664A
i.	Phosphorus, total	50	Comp	365.1, 365.2, 365.3, 365.4 or 300.0
j.	Radioactivity	-	-	-
j(1)	Alpha, total	-	Comp	**
j(2)	Beta, total	-	Comp	**
j(3)	Radium, total	10	Comp	**
j(4)	Radium 226, total	10	Comp	**
k.	Sulfate	5000	Comp	375.4, 300.0 or 375.3
l.	Sulfide	1000	Grab	376.1
		100	Grab	376.2

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m.	Sulfite	2000	Comp	377.1
n.	Surfactants	50	Grab	425.1
o.	Aluminum, total	50	Comp	200.7, 200.8
p.	Barium	50	Comp	200.7, 200.8, 200.9 or SM3113B
q.	Boron	50	Comp	200.7, 200.8
r.	Cobalt	20	Comp	200.7, 200.8
s.	Iron	20	Comp	200.7, 200.8
t.	Magnesium	50	Comp	200.7, 200.8
u.	Molybdenum	20	Comp	200.7, 200.8
v.	Manganese	10	Comp	200.7, 200.8
w.	Tin	10	Comp	200.7, 200.8, 200.9
x.	Titanium	50	Comp	200.7, 200.8
Metals, Cyanide, and Phenols				
1M	Antimony	5.0	Comp	200.8, 200.9, SM3113B
2M	Arsenic, total	5.0	Comp	200.8, 200.9, SM3113B
3M	Beryllium	1.0	Comp	200.8, 200.9, SM3113B
4M	Cadmium, total	0.10	Comp	200.8, 200.9, SM3113B
5M	Chromium, total	5.0	Comp	200.7, 200.8, 200.9, SM3113B
6M	Copper, total	10	Comp	200.7, 200.8, 200.9, SM3113B
7M	Lead	2.0	Comp	200.8, 200.9, SM3113B
8M	Mercury	0.0005	Grab	1669(sampling)/1631E (analysis)
9M	Nickel	10	Comp	200.8, 200.9, SM3113B
10M	Selenium	5.0	Comp	200.8, 200.9, SM3113B
11M	Silver, total	5.0	Comp	200.8, 200.9, SM3113B
12M	Thallium	0.5	Comp	200.8, 200.9, SM3113B
13M	Zinc, total	10	Comp	200.7, 200.8, 200.9, 289.1, SM3113B, SM3111B
14M	Cyanide, total	10	Grab	335.2, 335.3, SM4500Cn C,E
15M	Phenols, Total	5.0	Grab	420.1, 420.2, SM510B
Dioxin				
	2,3,7,8-Tetrachlorodibenzo-p-dioxin	10 pg/l	Comp	1613B

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1V	Acrolein	5.0	Grab	8260B, 1624B
2V	Acrylonitrile	5.0	Grab	8260B, 1624B
3V	Benzene	2.0	Grab	624, 1624B, 8260B
4V	Bis (Chloromethyl) Ether	-	Comp	**
5V	Bromoform	2.0	Grab	624, 1624B, 8260B
6V	Carbon Tetrachloride	2.0	Grab	624, 1624B, 8260B
7V	Chlorobenzene	2.0	Grab	624, 1624B, 8260B
8V	Chlorodibromomethane	2.0	Grab	624, 1624B, 8260B
9V	Chloroethane	2.0	Grab	624, 1624B, 8260B
10V	2-Chloroethyl vinyl ether	5.0	Grab	624, 1624B, 8260B
11V	Chloroform	2.0	Grab	624, 1624B, 8260B
12V	Dichlorobromomethane	2.0	Grab	624, 1624B, 8260B
13V	Dichlorodifluoromethane	2.0	Grab	624, 1624, 8260B
14V	1,1-Dichloroethane	2.0	Grab	624, 1624B, 8260B
15V	1,2-Dichloroethane	2.0	Grab	624, 1624B, 8260B
16V	1,1-Dichloroethene	2.0	Grab	624, 1624B, 8260B
17V	1,2-Dichloropropane	2.0	Grab	624, 1624B, 8260B
18V	1,3-Dichloropropylene	2.0	Grab	624, 1624B, 8260B
19V	Ethylbenzene	2.0	Grab	624, 1624B, 8260B
20V	Methyl bromide	2.0	Grab	624, 1624B, 8260B
21V	Methyl chloride	2.0	Grab	624, 1624B, 8260B
22V	Methylene chloride	2.0	Grab	624, 1624B, 8260B
23V	1,1,2,2-Tetrachloroethane	2.0	Grab	624, 1624B, 8260B
24V	Tetrachloroethylene	2.0	Grab	624, 1624B, 8260B
25V	Toluene	2.0	Grab	624, 1624B, 8260B
26V	1,2-Trans-dichloroethylene	2.0	Grab	624, 1624B, 8260B
27V	1,1,1-Trichloroethane	2.0	Grab	624, 1624B, 8260B
28V	1,1,2-Trichloroethane	2.0	Grab	624, 1624B, 8260B
29V	Trichloroethylene	2.0	Grab	624, 1624B, 8260B
30V	Trichlorofluoromethane	2.0	Grab	624, 1624B, 8260B
31V	Vinyl chloride	2.0	Grab	624, 1624B, 8260B

No.	Parameter	PQL (ug/l)	Sample Type	Approved Method(s)
1A	2-Chlorophenol	10	Comp	625, 1625B, 8270C
2A	2,4-Dichlorophenol	10	Comp	625, 1625B, 8270C
3A	2,4-Dimethylphenol	10	Comp	625, 1625B, 8270C
4A	4,6-Dinitro-o-cresol	10	Comp	625, 1625B, 8270C
5A	2,4-Dinitrophenol	50	Comp	625, 1625B, 8270C
6A	2-Nitrophenol	10	Comp	625, 1625B, 8270C
7A	4-Nitrophenol	10	Comp	625, 1625B, 8270C
8A	P-Chloro-m-cresol	10	Comp	625, 1625B, 8270C
9A	Pentachlorophenol	10	Comp	625, 1625B, 8270C
10A	Phenol	10	Comp	625, 1625B, 8270C
11A	2,4,6-Trichlorophenol	10	Comp	625, 1625B, 8270C
Base Neutral Compounds				
1B	Acenaphthene	10	Comp	625, 1625B, 8270C
2B	Acenaphthylene	10	Comp	625, 1625B, 8270C
3B	Anthracene	10	Comp	625, 1625B, 8270C
4B	Benzidine	100	Comp	625, 1625B, 8270C
5B	Benzo(a)anthracene	10	Comp	625, 1625B, 8270C
6B	Benzo(a)pyrene	10	Comp	625, 1625B, 8270C
7B	3,4-benzofluoranthene	10	Comp	625, 1625B, 8270C
8B	Benzo(ghi)perylene	10	Comp	625, 1625B, 8270C
9B	Benzo(k)fluoranthene	10	Comp	625, 1625B, 8270C
10B	Bis(2-chloroethoxy) methane	10	Comp	625, 1625B, 8270C
11B	Bis(2-chloroethyl) ether	10	Comp	625, 1625B, 8270C
12B	Bis(2-chloroisopropyl) ether	10	Comp	625, 1625B, 8270C
13B	Bis(2-ethylhexyl) phthalate	10	Comp	625, 1625B, 8270C
14B	4-Bromophenyl phenyl ether	10	Comp	625, 1625B, 8270C
15B	Butyl Benzyl Phthalate	10	Comp	625, 1625B, 8270C
16B	2-Chloronaphthalene	10	Comp	625, 1625B, 8270C
17B	4-Chlorophenyl phenyl ether	10	Comp	625, 1625B, 8270C
18B	Chrysene	10	Comp	625, 1625B, 8270C

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No.	Parameter	PQL (ug/l)	Sample Type	Approved Method(s)
19B	Dibenzo(a,h)anthracene	10	Comp	625, 1625B, 8270C
20B	1,2-Dichlorobenzene	2.0	Grab	624, 1624B, 8260B
21B	1,3-Dichlorobenzene	2.0	Grab	624, 1624B, 8260B
22B	1,4-Dichlorobenzene	2.0	Grab	624, 1624B, 8260B
23B	3,3'-Dichlorobenzidine	10	Comp	625, 1625B, 8270C
24B	Diethyl phthalate	10	Comp	625, 1625B, 8270C
25B	Dimethyl phthalate	10	Comp	625, 1625B, 8270C
26B	Di-n-butyl phthalate	10	Comp	625, 1625B, 8270C
27B	2,4-Dinitrotoluene	10	Comp	625, 1625B, 8270C
28B	2,6-Dinitrotoluene	10	Comp	625, 1625B, 8270C
29B	Di-n-octyl phthalate	10	Comp	625, 1625B, 8270C
30B	1,2 Diphenylhydrazine	10	Comp	8270C
31B	Fluoranthene	10	Comp	625, 1625B, 8270C
32B	Fluorene	10	Comp	625, 1625B, 8270C
33B	Hexachlorobenzene	10	Comp	625, 1625B, 8270C
34B	Hexachlorobutadiene	10	Comp	625, 1625B, 8270C
35B	Hexachlorocyclopentadiene	10	Comp	625, 1625B, 8270C
36B	Hexachloroethane	10	Comp	625, 1625B, 8270C
37B	Indeno(1,2,3-c,d)pyrene	10	Comp	625, 1625B, 8270C
38B	Isophorone	10	Comp	625, 1625B, 8270C
39B	Naphthalene	10	Comp	625, 1625B, 8270C
40B	Nitrobenzene	10	Comp	625, 1625B, 8270C
41B	n-Nitrosodimethylamine	10	Comp	625, 1625B, 8270C
42B	n-Nitrosodi-n-propylamine	10	Comp	625, 1625B, 8270C
43B	n-Nitrosodiphenylamine	10	Comp	625, 1625B, 8270C
44B	Phenanthrene	10	Comp	625, 1625B, 8270C
45B	Pyrene	10	Comp	625, 1625B, 8270C
46B	1,2,4-Trichlorobenzene	2.0	Grab	624, 1624B, 8260B
Section 10.10.1.1 - Pesticides				
1P	Aldrin	0.050	Comp	608, 8081A
2P	alpha-BHC	0.050	Comp	608, 8081A
3P	beta-BHC	0.050	Comp	608, 8081A
4P	gamma-BHC	0.050	Comp	608, 8081A

No.	Parameter	PQL (ug/l)	Sample Type	Approved Method(s)
5P	delta-BHC	0.050	Comp	608, 8081A
6P	Chlordane	0.50	Comp	608, 8081A
7P	4,4'-DDT	0.050	Comp	608, 8081A
8P	4,4'-DDE	0.050	Comp	608, 8081A
9P	4,4'-DDD	0.050	Comp	608, 8081A
10P	Dieldrin	0.050	Comp	608, 8081A
11P	a-Endosulfan	0.050	Comp	608, 8081A
12P	b-Endosulfan	0.050	Comp	608, 8081A
13P	Endosulfan sulfate	0.050	Comp	608, 8081A
14P	Endrin	0.050	Comp	608, 8081A
15P	Endrin aldehyde	0.050	Comp	608, 8081A
16P	Heptachlor	0.050	Comp	608, 8081A
17P	Heptachlor Epoxide	0.050	Comp	608, 8081A
18-24 P	Polychlorinated Biphenyls (PCBs, Aroclors)	0.50	Comp	608, 8081A
25P	Toxaphene	0.50	Comp	608, 8081A
Section 10.10.1.2 - Other Parameters				
	Acetone	50	Grab	8260B
	Alachlor	0.05	Comp	8081A
	Aesthetic Qualities	-	-	**
	Atrazine	1.0	Comp	8141A
	AOX (Adsorbable Organic Halides)	20		1650, 1653
	Bacteria	-	-	**
	n-Butylbenzene	5.0	Grab	8260B
	sec-Butylbenzene	5.0	Grab	8260B
	tert-Butylbenzene	5.0	Grab	8260B
	Carbofuran	10	Comp	8318
	3-Chlorophenol	10	Comp	8270C
	4-Chlorophenol	10	Comp	8270C
	Chlorophenoxy Herbicide 2,4,5,-TP	0.025	Comp	6640B, 8151A
	Chlorophenoxy Herbicide 2,4-D	0.05	Comp	6640B, 8151A

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No.	Other Parameters	PQL (µg/l)	Sample Type	Approved Method(s)
	Chlorophyll a	**	Grab	SM10200H
	Chlorophyris	1.0	Comp	8141A
	Chromium III	10	Comp	Cr(T) - Cr(+6)
	Chromium VI	10	Grab	SM3500Cr D
	Dalapon	5.0	Comp	8151A
	Demeton, O & S	2.0	Comp	8141A
	Di(2-ethylhexyl) adipate	10	Comp	525.2
	1,2-Dibromo-3-chloropropane (DBCP)	0.02	Grab	8011
	1,1-Dichloroethylene	2.0	Grab	624, 1624, 8260B
	1,2-cis-Dichloroethylene	2.0	Grab	8260B
	1,2-trans-Dichloroethylene	2.0	Grab	624, 1624, 8260B
	2,3-Dichlorophenol	10	Comp	8270C
	2,5-Dichlorophenol	10	Comp	8270C
	2,6-Dichlorophenol	10	Comp	8270C
	3,4-Dichlorophenol	10	Comp	8270C
	Diisopropylether	**	Grab	8260B
	Dinoseb	2.0	Comp	8151A
	1,4 Dioxane	50	Comp	8260B
	Diquat	1.0	**	549.2
	Dissolved Oxygen	**	Grab	360.1, 360.2, SM45000 C, SM45000 G
	Endothall	20.0	**	548.1
	Ethylene dibromide	0.02	Grab	8011
	Formaldehyde	50	Grab	8315
	Glyphosate	10	**	547
	Guthion (Azinphos-methyl)	1.0	Comp	8141A
	2-Hexanone	10	Grab	8260B
	Isopropylbenzene	5.0	Grab	8260B
	p-Isopropyltoluene	5.0	Grab	8260B
	Malathion	1.0	Comp	8141A
	2-Methyl-4-Chlorophenol	20	Comp	8270C
	3-Methyl-6-Chlorophenol	20	Comp	8270C
	4-Methyl-2-Pentanone	10	Grab	8260B
	1-Methylnaphthalene	**	Comp	8270C

	2-Methylnaphthalene	10	Comp	8270C
	Methoxychlor	0.50	Comp	8081A
	Mirex (Hexachlorocyclopentadiene)	10	Comp	8270C
	Monochlorobenzene	-	-	**
	Nitrate	20	Comp	353.3 minus 354.1, 300.0, 353.2 minus 354.1
	Nitrite	20	Comp	354.1, 300.0
	Nitrosodibutylamine	10	Comp	8270C
	Nitrosodiethylamine	10	Comp	8270C
	Nitrosopyrrolidine	10	Comp	8270C
	Oxamyl	20	Comp	8321, 531.1
	Parathion, methyl & ethyl	0.20	Comp	8141A
	Pentachlorobenzene	10	Comp	8270C
	Pentachlorethane	2.0	Grab	8260B(DAI)
	Picloram	1.0	Comp	8151A
	n-Propylbenzene	5.0	Grab	8260B
	Salinity	-	Grab	**
	Simazine	0.10	Comp	8141A
	Solids, Suspended	-	**	SM2540D
	Styrene	2.0	Grab	8260B
	1,2,4,5-Tetrachlorobenzene	10	Comp	8270C
	2,3,4,6-Tetrachlorophenol	10	Comp	8270C
	Tetrahydrofuran	10	Comp	8270C
	Total Residual Chlorine	50	Grab	SM4500Cl, B, C, D, F or G
	Tributyltin	-	-	**
	Trichlorofluoromethane	2.0	Grab	624, 1624B, 8260B
	2,4,5-Trichlorophenol	10	Comp	8270C
	1,2,4-Trimethylbenzene	5.0	Grab	8260B
	1,3,5-Trimethylbenzene	5.0	Grab	8260B
	Turbidity	1000	Grab	180.1
	Vinyl Acetate	5.0	Grab	8260B
	Xylenes, total	6.0	Grab	8260B

Comp: Composite
 ** Contact Lab Certification at 803-896-0992 for further information.