

OWQScreen-SVersion
3.35

For pollutants requiring water quality-based limits, the limiting monthly average limit (see "MAL" worksheet) and its associated daily maximum limit are established in the permit. The number of samples per month (N) must be specified before any limits can be calculated. In the absence of water quality-based limits, effluent monitoring may be required (see POT(TSD) worksheet). Background monitoring may also be required (see BTC and CRIT worksheets). Where there is RP to exceed an NRWQC criterion (see "NRWQC" worksheet), the pollutant will reflect a "Report" requirement only if there is no applicable state criterion of any kind. Monitoring frequency is normally set to 2/month in accordance with OAC 252:690-3-89(2). If warranted, the frequency may be increased. Agricultural mineral calculations are found in the Ag tab.

Conc Limits, Effl & Backgrd Monitoring
LENPOOL PIPELINE BREAKOUTSTATION

Outfall	Calculation of Water Quality-Based Concentration Limits and Background Monitoring Requirements							
Parameters	Units	No. of Samples per Month (N)	Limiting Criterion	WQ-Based Conc Limits		Effluent Monitoring Required? (if no limit reqd)	Background Monitoring	
				Eqn 42 Monthly Average	Eqn 43 Daily Maximum		Background Monitoring Required?	Additional Reqmts?
PART A								
Ammonia	mg/l							
PART B								
Color								
Fluoride (at 90 deg F)	mg/l							
Nitrate-Nitrite (as N)	mg/l							
Phosphorus (as P) (Scenic Rivers only)	mg/l							
Barium, total	mg/l							
Manganese, total	mg/l							
METALS and CYANIDE								
Antimony, total	ug/l							
Arsenic, total	ug/l							
Beryllium, total								
Cadmium, total	ug/l							
Chromium, total	ug/l							
Copper, total	ug/l							
Lead, total	ug/l	3	FFW	10.00	18.94	N/A (limit reqd)	YES (zero backgrd-based limit)	Hardness
Mercury, total	ug/l							
Nickel, total	ug/l							
Selenium, total	ug/l							
Silver, total	ug/l							
Thallium, total	ug/l							
Zinc, total	ug/l					NO	NO	
Cyanide, total	ug/l							
DIOXINS								
2,3,7,8-Tetrachlorodibenzo-P Dioxin	ug/l							
GC/MS FRACTION - VOLATILE COMPOUNDS								
Acrolein	ug/l							
Acrylonitrile	ug/l							
Benzene	ug/l							
Bromoform	ug/l							
Carbon Tetrachloride	ug/l							
Chlorobenzene	ug/l							
Chlorodibromomethane	ug/l							
Chloroethane								
2-Chloroethylvinyl Ether								
Chloroform	ug/l							
Dichlorobromomethane	ug/l							
1,1-Dichloroethane								
1,2-Dichloroethane	ug/l							
1,1-Dichloroethylene	ug/l							
1,2-Dichloropropane	ug/l							
1,3-Dichloropropylene	ug/l							
Ethylbenzene	ug/l							
Methyl Bromide	ug/l							
Methyl Chloride								
Methylene Chloride	ug/l							
1,1,2,2-Tetrachloroethane	ug/l							
Tetrachloroethylene	ug/l							
Toluene	ug/l							
1,2-Trans-dichloroethene								
1,1,1-Trichloroethane	ug/l							
1,1,2-Trichloroethane	ug/l							
Trichloroethylene	ug/l							
Vinyl Chloride	ug/l							
GC/MS FRACTION - ACID COMPOUNDS								
2-Chlorophenol	ug/l							
2,4-Dichlorophenol	ug/l							
2,4-Dimethylphenol	ug/l							
4,6-Dinitro-o-cresol	ug/l							
2,4-Dinitrophenol	ug/l							
2-Nitrophenol								

Calculation of Water Quality-Based Concentration Limits and Background Monitoring Requirements								
Parameters	Units	No. of Samples per Month (N)	Limiting Criterion	WQ-Based Conc Limits		Effluent Monitoring Required? (if no limit reqd)	Background Monitoring	
				Eqn 42 Monthly Average	Eqn 43 Daily Maximum		Background Monitoring Required?	Additional Reqmts?
4-Nitrophenol								
p-Chloro-m-cresol								
Pentachlorophenol	ug/l							
Phenol	ug/l							
2,4,6-Trichlorophenol	ug/l							
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS								
Acenaphthene	ug/l							
Acenaphthylene								
Anthracene	ug/l							
Benzidine	ug/l							
Benzo (a) Anthracene	ug/l							
Benzo (a) Pyrene	ug/l							
3,4-Benzofluoranthene	ug/l							
Benzo (ghi) Perylene								
Benzo (k) Fluoranthene	ug/l							
Bis (2-Chloroethoxy) Methane								
Bis (2-Chloroethyl) Ether	ug/l							
Bis (2-Chloroisopropyl) Ether	ug/l							
Bis (2-Ethylhexyl) Phthalate	ug/l							
4-Bromophenyl Phenyl Ether								
Butylbenzyl Phthalate	ug/l							
2-Chloronaphthalene	ug/l							
4-Chlorophenyl Phenyl Ether								
Chrysene	ug/l							
Dibenzo (a,h) Anthracene	ug/l							
1,2-Dichlorobenzene	ug/l							
1,3-Dichlorobenzene	ug/l							
1,4-Dichlorobenzene	ug/l							
3,3'-Dichlorobenzidine	ug/l							
Diethyl Phthalate	ug/l							
Dimethyl Phthalate	ug/l							
Di-n-butyl Phthalate	ug/l							
2,4-Dinitrotoluene	ug/l							
2,6-Dinitrotoluene								
Di-n-octyl Phthalate								
1,2-Diphenylhydrazine (as Azobenzene)	ug/l							
Fluoranthene	ug/l							
Fluorene	ug/l							
Hexachlorobenzene	ug/l							
Hexachlorobutadiene	ug/l							
Hexachlorocyclopentadiene	ug/l							
Hexachloroethane	ug/l							
Indeno (1,2,3-cd) Pyrene	ug/l							
Isophorone	ug/l							
Naphthalene								
Nitrobenzene	ug/l							
n-Nitrosodimethylamine	ug/l							
n-Nitrosodi-n-propylamine								
n-Nitrosodiphenylamine	ug/l							
Phenanthrene								
Pyrene	ug/l							
1,2,4-Trichlorobenzene								
GC/MS FRACTION - PESTICIDES								
Aldrin	ug/l							
alpha-BHC	ug/l							
beta-BHC	ug/l							
gamma-BHC	ug/l							
delta-BHC								
Chlordane	ug/l							
4,4'-DDT	ug/l							
4,4'-DDE	ug/l							
4,4'-DDD	ug/l							
Dieldrin	ug/l							
Endosulfan, total ($\alpha + \beta$)	ug/l							
Endosulfan Sulfate	ug/l							
Endrin	ug/l							
Endrin Aldehyde	ug/l							
Heptachlor	ug/l							
Heptachlor Epoxide	ug/l							

Permit Limits, Effluent Monitoring and Background Monitoring

Calculation of Water Quality-Based Concentration Limits and Background Monitoring Requirements								
Outfall			No. of Samples per Month (N)	Limiting Criterion	WQ-Based Conc Limits		Effluent Monitoring Required? (if no limit reqd)	Background Monitoring
	Parameters	Units			Eqn 42 Monthly Average	Eqn 43 Daily Maximum		Background Monitoring Required? Additional Reqmts?
	PCB-1242	ug/l						
	PCB-1254	ug/l						
	PCB-1221	ug/l						
	PCB-1232	ug/l						
	PCB-1248	ug/l						
	PCB-1260	ug/l						
	PCB-1016	ug/l						
	Toxaphene	ug/l						
ADDITIONAL PARAMETERS								
	Chlorides						See AG Worksheet	
	Sulfates						See AG Worksheet	
	Total Dissolved Solids (TDS)						See AG Worksheet	
	2,4,5-TP	ug/l						
	2,4,6-Trinitotoluene	ug/l						
	2,4-D	ug/l						
	Bis-chloromethyl ether	ug/l						
	Chlorpyrifos (Dursban)	ug/l						
	Demeton	ug/l						
	Detergents, total	mg/l						
	Diazinon	ug/l						
	Dinitrophenols	ug/l						
	Guthion	ug/l						
	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	ug/l						
	Malathion	ug/l						
	Methoxychlor	ug/l						
	Methylene Blue Active Substances	ug/l						
	Mirex	ug/l						
	n-Nitrosodibutylamine	ug/l						
	n-Nitrosodiethylamine	ug/l						
	n-Nitrosopyrrolidine	ug/l						
	Nonylphenol (mixed isomers)	ug/l						
	Parathion	ug/l						
	PCB's, total	ug/l						
	Pentachlorobenzene	ug/l						
	Perchlorate	ug/l						
	Phthalate Esters (except Butylbenzyl)	ug/l						
	1,2,4,5-Tetrachlorobenzene	ug/l						
	2,4,5-Trichlorophenol	ug/l						
Equation for Determining Water Quality-Based Monthly Average and Daily Maximum Concentration Limits								
Eqn 42	$MAL_{CONC} = \min(MAL_{AES}, MAL_{RAW}, MAL_{FFW}, MAL_{TOX}, MAL_{FF})$							
Eqn 43	$DML_{CONC} = DML \text{ paired with minimum } MAL$							