

# Discharge Limits and Prohibited Substances - Sanitary and Combined Sewers

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**April 2016**

[Sewer Use By-law 2003-514](#)

Many substances cannot be put in the sewer system as they endanger workers, damage the sewer system, upset the treatment process and negatively affect the quality of our rivers.

## Prohibited substances

The following materials are prohibited from being discharged or directed into sanitary or combined sewers\*:

- A matter of any type, at any temperature or in any quantity, which may:
  - Represent a health or safety hazard to a sewer worker
  - Interfere with the proper operation of the sewage works
  - Impair or interfere with the sewage treatment plant process
  - Pass, untreated, through the sewage treatment plant, e.g. heavy metals and toxic organics
  - Cause the biosolids to fail to meet the criteria for beneficial reuse
  - Result in a hazard to any person, animal, property or vegetation.
  - Result in the production of hazardous gases of such quality that prevents a manhole lid from being lifted
- Solid or viscous substances in quantities or of such size that they may obstruct the flow in a sewer
- Sewage that may cause an offensive odour
- Stormwater, water from drainage of roofs or land, water from a watercourse or uncontaminated water

- Water that has originated from a source separate from the City's water distribution system
- Sewage, which consists of two or more separate liquid layers
- Sewage containing dyes or coloring materials
- The following materials or hazardous waste:
  - Acute hazardous waste chemicals
  - Biomedical waste
  - Combustible liquid
  - Fuels
  - Hauled liquid waste
  - Hazardous industrial waste
  - Hazardous waste chemicals
  - Nuclear waste
  - PCBs
  - Ignitable waste
  - Pathological waste
  - Pesticides
  - Reactive waste
  - Severely toxic materials
  - Severely toxic waste
  - Sludge
  - Waste disposal site leachate

**\*Note:** The discharge of some of these products may be permissible when authorization has been given by the City and specific conditions are met. For more information, please contact a representative of the Sewer Use Program at 613-580-2424, ext. 23326 or refer to [Sewer Use By-law 2003-514](#).

## Restricted substances (discharge limits)

Pollutants discharged into sanitary and combined sewers may interfere with the wastewater treatment process if they pass through the treatment plant, ending up in the river or in the biosolids. Discharge limits are maximum concentrations which are established to minimize these interferences. Facilities must ensure that their discharge does not exceed these limits. Dilution cannot be used to meet the discharge limits.

## Limits for sanitary and combined sewers discharge

### Legend:

- **mg/L** - milligrams/litre (parts per million)
- **ug/L** - micrograms/litre (parts per billion)
- **mL** – millilitre
- **C** - Celsius

**Table 1 - Limits for sanitary and combined sewers discharge.**

Parameter	Limit (mg/L)
Biochemical Oxygen Demand	300
Cyanide (total)	2
Fluoride	10
Total Kjeldahl Nitrogen	100
Oil & Grease - Animal & Vegetable	150
Oil & Grease - Mineral & Synthetic	15
Phenolics (4AAP)	1

Phosphorous (total)	10
Sulphates	1500
Sulphides	2
Suspended solids	350
Aluminum (total)	50
Antimony (total)	5
Arsenic (total)	1
Bismuth (total)	5
Boron (total)	25
Cadmium (total)	0.02
Chromium (total)	5
Cobalt (total)	5
Copper (total)	3
Lead (total)	5
Manganese (total)	5

Mercury (total)	0.001
Molybdenum (total)	5
Nickel (total)	3
Selenium (total)	5
Silver (total)	5
Tin (total)	5
Titanium (total)	5
Vanadium	5
Zinc (total)	3
Benzene	0.01
Bromodichloromethane	0.35
Bromoform	0.63
Bromomethane	0.11
Carbon Tetrachloride	0.057
Chloroform	0.08

Chlorobenzene	0.057
Chloroethane	0.27
Chloromethane	0.19
Dibromochloromethane	0.057
1,2 Dibromoethane	0.028
1,2 Dichlorobenzene/o	0.088
1,3-Dichlorobenzene/m	0.036
1,4- Dichlorobenzene/p	0.017
1,1-Dichloroethane	0.2
1,2-Dichloroethane	0.21
1,1-Dichloroethylene	0.04
cis-1,2-dichloroethylene	0.2
trans-1,2-dichloroethylene	0.2
1, 2-Dichloropropane	0.85
cis-1,3-Dichloropropylene	0.07

trans-1,3-Dichloropropylene	0.07
Ethylbenzene	0.057
Methylene Chloride	0.21
Styrene	0.04
1,1,2,2-Tetrachloroethane	0.04
Tetrachloroethylene	0.05
Toluene	0.08
1,1,1-Trichloroethane	0.054
1,1,2-Trichloroethane	0.8
Trichloroethylene	0.054
Trichlorofluoromethane	0.02
1,3,5-Trimethylbenzene	0.003
Vinyl Chloride	0.4
Xylene (total)	0.32
Bis(2-chloroethoxy)methane	0.036

Bis(2-ethylhexyl)phthalate	0.28
Benzylbutylphthalate	0.017
Diethylphthalate	0.2
Di-n-butylphthalate	0.057
Di-n-octylphthalate	0.03
Fluorene	0.059
Indole	0.05
1-Methylnaphthalene	0.032
2-Methylnaphthalene	0.022
Naphthalene	0.059
Total PAHs	0.015
2,4-Dichlorophenol	0.044
Dioxins and Furans (total)	0.00072
Formaldehyde	0.3
Hexachlorobenzene	0.0001



N-Nitrosodimethylamine	0.4
Nonylphenols	0.0025
Nonylphenol ethoxylates	0.025
Temperature	60 C
pH	5.5-11

**Note:** Special Discharge Agreements may be entered into for the discharge of certain parameters which exceed the discharge limits. The three (3) parameters eligible for a Special Discharge Agreement are:

- Biochemical Oxygen Demand (BOD)
- Total Suspended Solids (TSS)
- Total Phosphorus (TP)

For more information, please contact a representative of the Sewer Use Program at 613-580-2424 ext. 23326 or refer to [Sewer Use Bylaw 2003-514](#).