Submission from Heather Marshall PW9.5.11

Good afternoon,

I am here today as a representative of TEA - the Toronto Environmental Alliance. We participated in the Toronto Water consultation process on these proposed Sewer By-law changes, as did a number of other reputable environmental organizations such as the Canadian Environmental Law Association, the Safe Sewage Committee, Lake Ontario Waterkeeper and Citizens for a Safe Environment.

We were willing and eager to share our expertise and time in this consultation because the Sewers By-law has been heralded as a gold standard across Canada. Our city, and especially Toronto Water, showed great leadership when this policy was passed in the year 2000. Many of the recommendations being put forward today will build on this great work - such as requiring dental offices to maintain their pollution control equipment regularly so that it prevents toxic mercury from entering the sewer.

TEA realizes that for a busy Committee like yours, these topics may seem complicated and best left to the experts. The issue here is that the experts who were consulted did not agree on everything. The environmental stakeholders wanted to see Pollution Prevention planning strengthened in the by-law review, but instead we are seeing a proposal that does quite the opposite.

What is being proposed will result in fewer companies in Toronto making a sustained effort to reduce the pollution they put into the sewer system. As you can see from Toronto Water's latest report, many companies are not complying with this by-law. How is making the by-law softer on businesses going to help us achieve our pollution prevention goals, especially when provincial regulations are becoming more challenging for our treatment plants to meet?

Since none of our recommendations have been brought forward by Toronto Water, I'm here today to draw your attention to two considerations when deciding on changes to the Sewers By-law:

NUMBER 1: Choose an evidence-based threshold for pollution prevention planning, not a threshold based on convenience.

- While Toronto Water's proposed 25% threshold is a nice clean number that's easy to do the math on, that doesn't mean it is the safest choice for protecting our water.
- This proposal will mean that 21% of the companies releasing contaminants into the sewer will no longer be required to develop a pollution prevention plan. While they may release in smaller concentrations, we still don't know how much they actually release per year. We also know that a lot of small concentrations can still add up to a lot of pollution, so this proposal seems to water down the Sewer By-laws goals of protecting our drinking water and Lake Ontario from chemical pollution.
- The amount a company can safely release into our waterways without impacting the environment should be used as a benchmark for pollution prevention, not 25%.

- As you can see here [DISPLAY], at times there is a big difference between what is considered environmentally safe to enter the water system and what is considered, by Toronto Water, to be environmentally significant to warrant a pollution prevention plan.
- Environmental stakeholders repeatedly suggested that the Stormwater limits were a more evidence-based threshold, but our feedback was not taken into account.

We recommend that the Stormwater Limits be used to set the reporting threshold for Pollution Prevention Planning, not the across the board 25% threshold proposed by Toronto Water.

NUMBER 2: Plan for the future: we need to add new chemicals of concern to our Sewers By-law to keep up with rapidly changing times. Toronto Water hasn't reviewed the list of chemicals since the by-law was passed 15 years ago and since that time other levels of government have identified new problematic chemicals that are polluting the Great Lakes and they're coming from our sewer systems.

- Toronto Water is planning to removing certain chemicals from the list in the Sewers By-law. These pesticides are so toxic they have been banned by various levels of government and therefore should no longer pose a threat to Toronto's water system.
- However, there was no process in place during this consultation to add new chemicals of concern to the list - which is something environmental experts raised over and over again during this consultation.
- Chemicals like flame retardants, triclosan, and phthalates have toxic impacts on Lake Ontario and put our drinking water at risk.
- The Sewers By-law is well placed to add new chemicals of concern to the Subject Pollutants list, which gives Toronto Water the mandate to monitor these chemicals released into our sewer system that can end up in our biosolids and wastewater released into the Lake.
- This would also require industries that use these substances to develop pollution prevention plans to eliminate these toxic substances - since it is unclear whether or not our water department could treat these chemicals at our wastewater plants.

We recommend that City Council direct Toronto Water to undertake a full review of the chemicals listed in the Sewers By-law in 2016 with the intention of adding new chemicals of concern that have already been recognized by other levels of government as a threat to the Great Lakes.

Table 2: City Response to Information Requested at 2014 Fall Meeting – Subject Pollutant Limits Comparison

Subject Pollutant	Current Toronto Water Lab Reporting Limit (mg/L)	Storm Sewers Discharge By-Law Limit (mg/L)	Sanitary and Combined Sewers Discharge By-Law Limit (mg/L)	25% Proposed Threshold Limit Based on Sanitary By-Law Limit (mg/L)
Arsenic (total)	0.04	0.02	1	0.25
Cadmium (total)	0.001	0.008	0.7	0.175
Chromium (hexavalent)	0.01	0.04	2	0.5
Chromium (total)	0.04	0.08	4	1
Cobalt (total)	0.002	N/A	5	1.25
Copper (total)	0.004	0.04	2	0.5
Lead (total)	0.02	0.12	1	0.25
Mercury (total)	0.0006	0.0004	0.01	0.0025
Molybdenum (total)	0.002	N/A	5	1.25
Nickel (total)	0.0055	0.08	2	0.5
Selenium (total)	0.01	0.02	1	0.25
Zinc (total)	0.04	0.04	2	0.5
1,1,2,2-tetrachloroethane	0.0014	0.017	1.4	0.35
1,2-dichlorobenzene	0.0002	0.0056	0.05	0.0125
1,4-dichlorobenzene	0.0002	0.0068	0.08	0.02
3,3'-dichlorobenzidine	0.0005	0.0008	0.002	0.0005
Aldrin/dieldrin	0.00002	0.00008	0.0002	See note[1]
Alkylphenol ethoxylates	N/A	N/A	N/A	N/A
Alkylphenols	N/A	N/A	N/A	N/A
Benzene	0.0002	0.002	0.01	0.0025
Bis (2-ethylhexyl) phthalate	0.0005	0.0088	0.012	0.003
Chlordane	0.00002	0.04	0.1	See note[1]
Chloroform	0.0002	0.002	0.04	0.01
Cis-1,2-dichloroethylene	0.0002	0.0056	4	1
DDT	0.00002	0.00004	0.0001	See note[1]
Di-n-butyl phthalate	0.0005	0.015	0.08	0.02
Ethyl benzene	0.0002	0.002	0.16	0.04
Hexachlorobenzene	0.00002	0.00004	0.0001	See note[1]
Hexachlorocyclohexane	0.00002	0.04	0.1	0.025
Methylene chloride	0.0002	0.0052	2	0.5
Mirex	0.00002	0.04	0.1	See note[1]
PCBs	0.0004	0.0004	0.001	0.0004 – see note[2]
Pentachlorophenol	0.004	0.002	0.005	0.004 - see note[2]
Tetrachloroethylene	0.0003	0.0044	1	0.25
Toluene	0.0002	0.002	0.016	0.004
Total PAHs	0.0005	0.002	0.005	0.00125

Subject Pollutant	Current Toronto Water Lab Reporting Limit (mg/L)	Storm Sewers Discharge By-Law Limit (mg/L)	Sanitary and Combined Sewers Discharge By-Law Limit (mg/L)	25% Proposed Threshold Limit Based on Sanitary By-Law Limit (mg/L)
Total xylenes	0.0006	0.0044	1.4	0.35
Trans-1,3-dichloropropylene	0.0002	0.0056	0.14	0.035
Trichloroethylene	0.0002	0.0076	0.4	0.1

[1]The five pesticides, which have been banned from North America are proposed to be removed from Appendix 2: Subject Pollutants, Table 1: Limits for Sanitary and Combined Sewers Discharge and Table 2: Limits for Storm Sewer Discharge. **Instead no person shall discharge or deposit any amount (0 mg/L)** of these five pesticides into the sewer system, including Section 2 (Sanitary and Combined Sewer Requirements) and Section 4 (Storm Sewer Requirements).

[2]Given that a 25% threshold based on the sanitary by-law limit (0.00025 mg/L for PCBs and 0.00125 mg/L for pentachlorophenol) would be below the Toronto Water lab reporting limit, the proposed threshold was adjusted to the lab reporting limit.

Health Effects/Health Based Limits

The Sewers Bylaw limits, implemented in 2000 and which include all 39 subject pollutants in the Sanitary Sewers Bylaw limits, was based on Federal and Provincial documentation that took into account environmental and health related risks of each pollutant listed in the bylaw.

For Storm Sewer Bylaw limits, data was based on levels that can be released into the natural environment and for Sanitary Sewer Bylaw limits; data was based on levels that can be treated by the wastewater treatment plants. The government documents and bodies consulted at that time include:

- Provincial Water Quality Objectives (PWQO)
- Ministry of the Environment's draft model Sewer Use Bylaw
- Canada Ontario Agreement (COA) Tier 1 and 2 substances
- Canadian Environmental Quality Guidelines (CEQG)
- Health Canada's 'Persistent Environmental Contaminants & Great Lakes Basin Pollution'
- Health Canada's 'Priority Substances Lists Assessment Report Nonylphenol and its Ethoxylates'

Treatability at Wastewater Treatment Plants

The fate of the subject pollutants in Toronto Wastewater Treatment Plants varies with each plant and as such Toronto Water cannot give definitive answers for each subject pollutant.