**Authority:** Item 4, Public Works Committee

Report 22-006 (PW19029(a))

CM: April 27, 2022 Ward: City Wide

**Bill No. 103** 

#### CITY OF HAMILTON

**BY-LAW NO. 22-**

To Amend By-law No. 14-090
(Sewer Use By-law) to provide for the regulation of
Construction Dewatering and to make other Minor
Amendments

**WHEREAS** sections 8 and 10 of the *Municipal Act, 2001* authorize the City of Hamilton to pass by-laws necessary or desirable for municipal purposes, and in particular paragraphs 5, 6, 7, 8 and 10 of subsection 10(2) authorize by-laws respecting: the economic, social and environmental well-being of the City; the health, safety and well-being of Persons; services and things that the municipality is authorized to provide under subsection 10(1); the protection of Persons and property; and structures, including fences and signs;

**AND WHEREAS** it is desirable to regulate the Discharge of all Matter into the City of Hamilton's Storm Sewer, Sanitary Sewer and Combined Sewer systems;

**AND WHEREAS** section 425 of the *Municipal Act, 2001* authorizes the City of Hamilton to pass by-laws providing that a Person who contravenes a by-law of the City of Hamilton passed under that Act is guilty of an offence;

**AND WHEREAS** section 87 of the *Municipal Act, 2001* authorizes the City of Hamilton to enter on land, at reasonable times, to inspect the Discharge of any Matter into the City's Sewage system or into any other Sewage system the contents of which ultimately empty into the City's Sewage system and authorizes the City to conduct tests and take samples for this purpose;

**AND WHEREAS** the *Municipal Act, 2001* further authorizes the City of Hamilton, amongst other things, to delegate its authority, to impose fees or charges, to provide for inspections, and to make orders to discontinue activity or to do work;

**AND WHEREAS** the City of Hamilton wishes to make amendments to By-law 14-090 to to provide for the regulation of Construction Dewatering and to make other minor technical amendments thereto,

**NOW THEREFORE** the Council of the City of Hamilton enacts as follows:

- Section 1.1 of By-law 14-090 is amended by adding thereto the following new definitions, which definitions shall be inserted into the By-law in alphabetical order:
  - **"Construction**" includes land development, renovation, repair, maintenance and demolition activities.
  - "Construction Dewatering" means the removal of water through any means from Premises to facilitate Construction, including but not limited to one or more of the following:
    - (a) Taking water from a well or otherwise extracting Groundwater;
    - (b) Draining water from a permanent or temporary pond or other surface water body, whether natural or man-made;
    - (c) The permanent or temporary alteration of a natural or preexisting drainage pattern; and,
    - (d) Releasing water previously stored in a tank, tanker truck, vessel, or other means of water storage,

where the water so removed is Discharged directly or indirectly into Sewer Works, and such Discharge is not related to a Groundwater Remediation Unit or Site.

- 2. Section 1.1 of By-law 14-090 is amended by deleting the definition of "Building Code" and substituting the following therefor:
  - **"Building Code"** means the Building Code enacted as a regulation under the *Building Code Act, 1992*.
- 3. Section 1.1 of By-law 14-090 is amended by deleting the definition of "Composite Sample" and substituting the following therefor:
  - "Composite Sample" means a sample of Sewage, Groundwater or Stormwater which is composed of a series of Grab Samples taken at intervals during the sampling period and manually or automatically combined.
- 4. Section 1.1 of By-law 14-090 is amended by deleting the definition of "Connection or Drain" and substituting the following therefor:
  - "Connection" means that part of any pipe or hose or those parts of a system of pipes or hoses that Discharge Sewage, Groundwater, or Stormwater directly or indirectly to Sewer Works"
  - **"Drain"** means that part of any pipe or hose, or those parts of a system of pipes or hoses that conduct Sewage, Groundwater, or Stormwater to a Connection.

- 5. Section 1.1 of By-law 14-090 is amended by deleting the definition of "Grab Sample" and substituting the following therefor:
  - "Grab Sample" means an aliquot of Sewage, Groundwater, or Stormwater sampled at one particular place and time.
- 6. Section 1.1 of By-law 14-090 is amended by deleting the definition of "hauled sewage" and substituting the following therefor:
  - **"Hauled Sewage"** means "hauled sewage" as that term is defined in R.R.O. 1990, Reg 347 as amended, and also means any one or more of the following when hauled or otherwise transported by a Carrier:
    - (a) waste removed from a cesspool, a septic tank, a privy vault or privy pit a chemical toilet, a portable toilet, a Sewage holding tank or other container for human excretion;
    - (b) any Sewage originating from a Sewage System as described in Part 8 of the Building Code;
    - (c) Domestic Sewage;
    - (d) Industrial Sewage;
    - (e) Sewage Sludge;
    - (f) leachate from a waste disposal site; and,
    - (g) water originating from Construction Dewatering.
- 7. Section 4.2 of By-law 14-090 is amended by deleting section 4.2 and substituting the following therefor:
  - 4.2 No Person shall, directly or indirectly, Discharge or permit the Discharge of Matter into a Sewer Works or into a Connection to a Sewer Works which has two or more separate liquid layers.
- 8. Section 4.5 of By-law 14-090 is amended by adding the following subsection (d) thereto:
  - (d) water originating from Construction Dewatering, except where:
    - (i) the Discharge complies with a valid Sewer Discharge Permit; and:
    - (ii) all fees required under the Sewer Discharge Permit are paid.
- 9. Section 4.7 of By-law 14-090 is amended to read as follows:

- 4.7 No Person shall, directly or indirectly, Discharge or permit the Discharge of Matter into a Storm Sewer or into a Connection to a Storm Sewer where the Discharge:
- (a) contains Sewage;
- (b) contains Contact Cooling Water;
- (c) contains Oil and Grease (Mineral/Synthetic) which causes a visible film, sheen or discolouration on the water's surface;
- (d) contains any raw material, intermediate product, finished product, byproduct or waste product of an Industrial process;
- (e) contains paint or organic solvent;
- (f) contains liquid or solid Matter generated by carpet or furniture cleaning that is collected in a holding tank;
- (g) exceeds of any one or more of the limits for any one or more of the parameters in Schedule C;
- (h) contains Blowdown Water; or,
- (i) contains water originating from Construction Dewatering.
- 10. Section 4.8 of By-law 14-090 is amended to read as follows:
  - 4.8 Despite subsection 4.7(g), 4.7(h) and 4.7(i) a Person may Discharge or permit the Discharge of Matter into a Storm Sewer or into a Connection to a Storm Sewer where the Discharge:
  - (a) exceeds of any one or more of the limits for any one or more of the parameters in Schedule C, where:
    - (i) the Discharge is in accordance with a valid environmental compliance approval, order, or an approval, licence or permit issued pursuant to the *Environmental Protection Act* or *Ontario Water Resources Act* which expressly allows the Discharge;
    - (ii) a copy of the environmental compliance approval, order or an approval, licence or permit referred to in subsection 4.8(a)(i) has been provided to the General Manager;
    - (iii) the Discharge complies with a valid Sewer Discharge Permit; and
    - (iv) all fees required under the Sewer Discharge Permit are paid;
  - (b) contains Blowdown Water, where:
    - (i) the Discharge is in accordance with a valid environmental compliance approval, order or an approval, licence or permit issued pursuant to the *Environmental Protection Act* or *Ontario Water Resources Act* which expressly allows the Discharge;

- (ii) a copy of the environmental compliance approval, order or an approval, licence or permit referred to in subsection 4.8(b)(i) has been provided to the General Manager;
- (iii) the Discharge complies with a valid Sewer Discharge Permit; and
- (iv) all fees required under the Sewer Discharge Permit are paid; or,
- (c) contains water originating from Construction Dewatering activities, where:
  - (i) the Discharge complies with a valid Sewer Discharge Permit; and
  - (ii) all fees required under the Sewer Discharge Permit are paid.
- 11. Section 11.4 of By-law 14-090 is amended by adding thereto the following subsection (g):
  - (g) Construction Dewatering
- 12. Section 11.21 (b) of By-law 14-090 is amended by adding the following subsection (iv) thereto:
  - (iv) Construction Dewatering Discharge, the quantity of the Discharge shall be determined by a device that measures the Discharge flow that contains water originating from a source other than the City's potable water supply.
- 13. Section 11 of By-law 14-090 is amended by the addition of the following section 11.24:
  - 11.24 A Sewer Discharge Permit for Construction Dewatering Discharges referred to in subsection 11.4(g) authorizes Discharge water originating from Construction Dewatering:
  - (a) in respect of treatable parameters in excess of any of the following limits permitted under Schedule B:
  - cBiochemical Oxygen Demand;
  - (ii) total suspended solids;
  - (iii) total phosphorus;
  - (iv) total kjeldahl nitrogen;
  - (v) Oil and Grease (Animal/Vegetable);
  - (b) which contains water that has originated from a source other than the City's Potable Water supply;
  - (c) that exceeds the limits for any one or more of the parameters contained in Schedule B in accordance with a Compliance Program; or,

# Being a By-law to make amendments to By-law 14-090 (the Sewer Use By-law) to provide for the regulation of Construction Dewatering and to make other minor Amendments

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- (d) that exceeds the limits for Chloride in excess of 1500 milligrams/litre but less than 4000 milligrams/litre, subject to a sampling and reporting program to be outlined in the Permit.
- 14. Section 11 of By-law 14-090 is amended by the addition of the following section 11.25:
  - 11.25 A Person who has applied for a Sewer Discharge Permit for Construction Dewatering shall install and maintain, at their expense, a device acceptable to the General Manager that measures the Discharge flow of Construction Dewatering water.
- 15. Section 11 of By-law 14-090 is amended by the addition of the following section 11.26:
  - 11.26 A Person who has applied for a Sewer Discharge Permit for Construction Dewatering Discharge shall have already complied with and shall continue to meet the requirements of subsection 11.12, if applicable to the proposed Discharge.
- 16. Schedule "B" to By-law 14-090 is deleted and the attached Schedule "B" is substituted therefor.
- 17. Schedule C" to Bylaw 14-090 is deleted and the attached Schedule C" is substituted therefor.
- 18. Schedule "D" to By-law 14-090 is deleted ad the attached Schedule "D" is substituted therefor.
- 19. This By-law shall come into effect of the date of passage.

PASSED this 27th day of April, 2022

| F. Eisenberger | J. Pilon          |
|----------------|-------------------|
| Mayor          | Acting City Clerk |

## SCHEDULE B

# LIMITS FOR SANITARY SEWER AND COMBINED SEWER DISCHARGE

| Parameter *                        | Limit (milligrams/litre) |
|------------------------------------|--------------------------|
| cBiochemical Oxygen Demand (cBOD)  | 300                      |
| Total Suspended Solids (TSS)       | 350                      |
| Total Phosphorus                   | 10                       |
| Total Kjeldahl Nitrogen (TKN)      | 100                      |
| Oil and Grease (Animal/Vegetable)  | 150                      |
| Oil and Grease (Mineral/Synthetic) | 15                       |
| Phenolic Compounds                 | 1                        |
| Chlorides                          | 1500                     |
| Sulphates                          | 1500                     |
| Sulphide (as H <sub>2</sub> S)     | 1.0                      |
| Aluminum (total)                   | 50                       |
| Iron (total)                       | 50                       |
| Fluorides                          | 10                       |
| Antimony (total)                   | 5                        |
| Bismuth (total)                    | 5                        |
| Chromium (total)                   | 5                        |
| Cobalt (total)                     | 5                        |
| Manganese (total)                  | 5                        |
| Silver (total)                     | 5                        |
| Tin (total)                        | 5                        |
| Titanium (total)                   | 5                        |
| Vanadium                           | 5                        |
| Zinc (total)                       | 2                        |

| Cyanide (total)             | 2                        |
|-----------------------------|--------------------------|
| Copper (total)              | 2                        |
| Lead (total)                | 2                        |
| Nickel (total)              | 2                        |
| Arsenic (total)             | 1                        |
| Molybdenum (total)          | 1                        |
| Selenium (total)            | 1                        |
| Cadmium (total)             | 0.7                      |
| Mercury (total)             | 0.01                     |
| Aldrin/Dieldrin**           | 0.0002                   |
| Benzene                     | 0.01                     |
| Bis(2-ethylhexyl)phthalate  | 0.28                     |
| Parameter (cont'd)          | Limit (milligrams/litre) |
| Chlordane**                 | 0.1                      |
| Chloroform                  | 0.04                     |
| DDT**                       | 0.0001                   |
| 1,2-Dichlorobenzene         | 0.05                     |
| 1,4-Dichlorobenzene         | 0.08                     |
| 3,3-Dichlorobenzidine**     | 0.002                    |
| cis-1,2-Dichloroethylene    | 4                        |
| trans-1,3-Dichloropropylene | 0.14                     |
| Di-n-butyl phthalate        | 0.08                     |
| Ethylbenzene                | 0.16                     |
| Hexachlorobenzene           | 0.0001                   |
| Hexachlorocyclohexane**     | 0.1                      |
| Methylene Chloride          | 2                        |
| Mirex**                     | 0.1                      |
| PCBs                        | 0.001                    |
| Pentachlorophenol           | 0.005                    |

| 1,1,2,2-Tetrachloroethane | 1.4                |
|---------------------------|--------------------|
| Tetrachloroethylene       | 1                  |
| Toluene                   | 0.016              |
| Total Xylenes             | 1.4                |
| Total PAHs                | 0.005              |
| Trichloroethylene         | 0.4                |
| Parameter*                | Limit (specified)  |
| рН                        | > 6.0 to < 11.0 pH |
| Temperature               | 60°C               |

<sup>\*</sup> as defined by a Reference Method of an Accredited Laboratory

<sup>\*\*</sup>for the purposes of section 4.3, parameters as marked are Pesticides

## SCHEDULE C

# LIMITS FOR STORM SEWER DISCHARGE

| Parameter*                        | Limit (milligrams/litre)                      |
|-----------------------------------|-----------------------------------------------|
| Total Suspended Solids (TSS)      | 15                                            |
| Oil and Grease (Animal/Vegetable) | 10                                            |
| Zinc (total)                      | 0.5                                           |
| Chromium (total)                  | 0.08                                          |
| Lead (total)                      | 0.12                                          |
| Nickel (total)                    | 0.08                                          |
| Copper (total)                    | 0.05                                          |
| Cadmium (total)                   | 0.008                                         |
| Phenolic Compounds                | 0.02                                          |
| Phosphorus (total)                | 0.4                                           |
| Parameter*                        | Limit (specified)                             |
| рН                                | > 6.0 to < 11.0 pH                            |
| Temperature                       | 60°C                                          |
| E. coli                           | 2400 most probable number per 100 milliliters |

<sup>\*</sup> as defined by a Reference Method of an Accredited Laboratory

#### **SCHEDULE D**

#### CITY LOCATIONS FOR DISCHARGE OF HAULED SEWAGE

## The following are Hauled Sewage Receiving Facilities:

- Woodward Avenue Wastewater Treatment Plant
   Woodward Avenue, Hamilton, Ontario
- Mountain Transfer StationKilbride Road Hamilton, Ontario
- Eastport Drive Wastewater Pumping Station
   Eastport Drive and Pier 25 Gateway S, Hamilton, Ontario