TORONTO CITY CLERK

Clause embodied in Report No. 10 of the Works Committee, as adopted by the Council of the City of Toronto at its meeting held on October 1, 2 and 3, 2002.

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Amendments to the Municipal Code Chapter 681 - Sewers, Article 1 - Sewage and Land Drainage (Sewer Use By-law No. 457-2000)

(City Council on October 1, 2 and 3, 2002, adopted this Clause, without amendment.)

The Works Committee recommends the adoption of the following report (September 3, 2002) from the Commissioner of Works and Emergency Services:

Purpose:

To make a number of amendments to the Sewer Use By-law as a result of a comprehensive review of the By-law.

Financial Implications and Impact Statement:

There are no financial implications to the City as a result of this report.

Recommendation:

It is recommended that Municipal Code Chapter 681- SEWERS, ARTICLE I - Sewage and Land Drainage, be amended as set out in this report.

Background:

At its meeting of June 7, 8 and 9, 2000, City Council, by adoption of Clause No. 1 of Joint Report No. 2 of the Works Committee and Economic Development and Parks Committee, approved a new Toronto Sewer Use By-law (the "By-law"). At that time, Council also requested that the Commissioner of Works and Emergency Services report back to Council at the end of a two-year phase-in period on any modifications to the new discharge limits contained in Section 2 and Section 4 of the new By-law.

On July 6, 2000, Council officially enacted the By-law. It has since been incorporated into the City of Toronto Municipal Code Chapter 681- SEWERS, ARTICLE I - Sewage and Land Drainage.

Comments:

The following sets out each section that we are recommending be changed, the change proposed and the reasons why.

(1) Subsection 681-1. (Definitions), add a definition for non-contact cooling water as follows:

"NON-CONTACT COOLING WATER – Water which is used to reduce temperature for the purpose of cooling and which does not come into direct contact with any raw material, intermediate product other than heat, or finished product."

(2) Subsection 681-2. B. (Sanitary and combined sewer requirements), in its current form reads:

"B. The discharge of storm water, groundwater, non-contact cooling water or uncontaminated water to a sanitary or combined sewer is prohibited unless expressly authorized in writing by the Commissioner in accordance with guidelines adopted by the City from time to time."

This section should be amended to read:

"B. The discharge of non-contact cooling water or uncontaminated water to a sanitary sewer or combined sewer from any new residential properties is prohibited. The discharge of non-contact cooling water or uncontaminated water to a sanitary or combined sewer from industrial, commercial or institutional properties is permissible where:

(1) In the case of a proposed building, no storm sewer exists adjacent to the building; or

(2) In the case of an existing building, no storm connection exists to the building."

The reference to storm water and groundwater has been deleted as they are addressed under changes proposed to Subsection 681-2. C. in this report. We are proposing that the discharge of non-contact cooling water or uncontaminated water to a sanitary or combined sewer from a residential property not be allowed under any conditions. This will discourage the residential use of water-cooled air conditioning systems, a use which is not in accordance with the City's water conservation policies. We are providing an exception for industrial, commercial or institutional properties to discharge either to a sanitary or combined sewer where either a proposed building does not have a storm sewer adjacent to the building, or an existing building that has no storm connection to the building.

(3) Subsections 681-2. C.(1) and (2) (Sanitary and combined sewer requirements) in their current forms read:

"C. Discharge of water originating from a source other than the City water supply.

(1) The discharge of water originating from a source other than the City water supply directly or indirectly to a sanitary sewer or combined sewer is prohibited, unless:

(a) The discharge is expressly authorized in writing by the Commissioner in accordance with guidelines adopted by the City from time to time, prior to the discharge; and/or

(b) The discharge is in accordance with a sanitary discharge agreement; and

(c) Any fees required to be paid to the City pursuant to an industrial waste agreement are paid within 30 days of the date of the invoice from the City.

(2) The provisions of Subsection A.(4) do not apply where:

(a) The discharge is in accordance with an industrial waste surcharge agreement or expressly authorized in writing by the Commissioner in accordance with this article prior to the discharge; and

(b) Any fee set by the City has been paid within 30 days of invoicing."

Subsections 681-2. C.(1) and (2) should be deleted and replaced with the following:

"C. The discharge of water originating from a source other than the City water supply, including storm water or groundwater, directly or indirectly to a sanitary sewer or combined sewer is prohibited, unless:

(1) The discharge is in accordance with a sanitary discharge agreement, pursuant to Section 681-6. Agreements of the Municipal Code; and

(2) The discharge does not exceed the limits set out under Table 1 - Limits for Sanitary and Combined Sewers Discharge, with respect to biochemical oxygen demand, phenolics (4AAP), total phosphorus or total suspended solids; or

(3) In the event the discharge does exceed the limits set out under Table 1 - Limits for Sanitary and Combined Sewers Discharge, with respect to any of; biochemical oxygen demand, phenolics (4AAP), total phosphorus or total suspended solids, the discharge is in accordance with

an industrial waste surcharge agreement pursuant to Section 681-6 of the Municipal Code."

We have included reference to storm water and groundwater under this subsection to deal with water not supplied by the City. The references to Section 681-6 of the Municipal Code are added for clarity. As well, the amendments make it clear that only the four parameters mentioned in this section (biochemical oxygen demand, phenolics (4AAP), total phosphorus or total suspended solids) may be allowable for surcharge, under an industrial waste surcharge agreement.

(4) Under Section 681-2, Table 1 - (Limits for Sanitary and Combined Sewers Discharge), the limit for Chromium (total) is listed as 2 mg/L, the same as for Chromium (hexavalent).

The limit for Chromium (total) should be changed from 2 mg/L to 4 mg/L, and the limit for Chromium (hexavalent) should stay unchanged at 2 mg/L.

Total chromium consists of hexavalent and trivalent chromium. Hexavalent chromium is soluble in water and is much more toxic than trivalent chromium, which is in the insoluble form of hydroxide precipitate. We should not have a limit of 2 mg/L for total chromium and at the same time a limit of 2 mg/L as well for hexavalent chromium. We recommend that the limit for total chromium be changed to 4 mg/L and the limit for hexavalent chromium stays at 2 mg/L. The change is necessary because you cannot have the same limit for total chromium and one of its constituents - hexavalent chromium.

(5) Under Section 681-2, Table 1 - (Limits for Sanitary and Combined Sewers Discharge) and Section 681-4, Table 2 - (Limits for Storm Sewer Discharge), the limit for nonylphenols (NPs) is listed as 0.001 mg/L and nonylphenol ethoxylates (NPEs) is listed as 0.01 mg. The sanitary and combined sewer discharge limits should be less stringent than the storm sewer discharge limits as sanitary and combined sewer discharge receives further treatment at the sewage treatment plants while storm discharge goes directly to a receiving stream without any treatment. Accordingly the limits for sanitary and combined sewers discharge can be less stringent. We are recommending that the limit for NP be changed from 0.001 mg/L to 0.02 mg/L and the limit for NPEs be changed from 0.01 mg/L to 0.2 mg/L under Table 1. The limits for NPs and NPEs under Table 2 should stay the same at 0.001 and 0.01 mg/L, respectively.

Environment Canada now recommends a guideline of 1.0 µg/L for nonylphenol and its ethoxylates for the protection of aquatic freshwater life under the Canadian Environmental Quality Guidelines (CEQG). We should be applying the same general protocol used to develop By-law discharge limits for other organics for nonylphenols and nonylphenol ethoxylates. Our general discharge limit development protocol for deriving sanitary discharge limits for organics is 20 times PWQO (Provincial Water Quality Objectives) or in the case of nonylphenols 20 times CEQG since the Ontario objective was based on highly conservative uncertainty factor due to scarcity of toxicological data back in 1991. Much more aquatic toxicity data is now available. Therefore, using the 20 times factor, the sanitary discharge limit for nonylphenols should be 20 µg/L or

0.02 mg/L, and correspondingly the limit for nonylphenol ethoxylates should be 200 µg/L or 0.2 mg/L. The storm discharge limits for nonylphenols and nonylphenol ethoxylates should remain at 0.001 mg/L and 0.01 mg/L, respectively. We will be approaching the Ontario Ministry of Environment and Energy to evaluate the new aquatic toxicity data and will request that they revise the PWQO in order to harmonize with CEQG.

(6) Subsection 681-6. A. (Agreements) in its current form reads:

"A. Subject to Subsections B, the discharge or deposit of sewage by a person that would otherwise be prohibited by this article may be permitted into or in any connection to any sanitary sewer or combined sewer to an extent fixed by an industrial waste surcharge agreement or a sanitary discharge agreement entered into between the person and City on such terms and conditions as set out in this article, including conditions with respect to the payment of additional sewage service rates to compensate the City for its additional costs of operation, repair and maintenance of the sewage works, and on other terms and conditions as may be deemed appropriate by the City."

This section should be deleted and replaced with the following:

"A. The discharge or deposit of sewage by a person that would otherwise be prohibited by this article may be permitted into or in any connection to any sanitary or combined sewer to an extent fixed by:

(1) An industrial waste surcharge agreement, subject to Subsection B. (1), including conditions for payment of additional costs of operation, repair and maintenance of the sewage works, and on other terms and conditions as may be deemed appropriate by the City; and/or

(2) A sanitary discharge agreement, subject to Subsection B. (2), including conditions for payment for water pollution control treatment purposes that otherwise would have been obtained from a surcharge on the water had it been supplied by the City and on other terms and conditions as may be deemed appropriate by the City; and

(3) The industrial waste surcharge rate and the sanitary discharge rate will be reviewed and adjusted accordingly from time to time as determined by the City."

The proposed wording clarifies the charges that can be included in the industrial waste surcharge agreements and the sanitary discharge agreements.

(7) Subsection 681-8. A. (Sampling and analytical requirements) in its current form reads:

"A. The sampling and analysis required by this article shall be carried out in accordance with the procedures, modified or unmodified, as described in Standard

Methods or the "Guidance Document for the Sampling and Analysis of Wastewater for the 1999 Model Sewer Use By-law", the United States Environmental Protection Agency methods or analytical methods adopted by the City."

This section should be amended to read:

"A. The sampling and analysis required by this article shall be carried out in accordance with the procedures, modified or validated by the City, as set out in the City document entitled "Quality System, Analytical Methods Manual", as it may be amended from time to time."

The City is currently using analytical methods either adopted from Standard Methods, United States Environmental Protection Agency methods or our own methods, as set out in our internal document entitled "Quality System, Analytical Methods Manual". This change gives the City the flexibility to adopt the most up to date methods, as they may be available form time to time without having to amend the By-law each time a newer method is proposed.

(8) Subsection 681-10. A. (3) (Maintenance access hole) in its current form reads:

"A.(3) Each maintenance access hole, device or facility installed as required by Subsection A(2) shall be designed and constructed in accordance with good engineering practice and the requirements of the municipal standard, as established by the City from time to time, and shall be constructed and maintained by the owner or operator of the premises at his or her expense."

This section should be amended to read:

"A.(3) Each maintenance access hole, device or facility installed as required by Subsection A.(2) shall be designed and constructed in accordance with good engineering practice and the requirements of the City of Toronto Water and Wastewater Services Standard Construction Specifications and Drawings for Sewers and Watermains, as it may be amended from time to time, and shall be constructed and maintained by the owner or operator of the premises at his or her expense."

The City has recently developed a document setting out standards for sewers and watermains. This document is being cited in the amended section.

(9) Subsection 681-10. A. (4) (Maintenance Access hole) in its current form reads:

"A.(4) The owner or operator of the commercial, institutional or industrial premises or multi-storey residential buildings shall at all times ensure that every maintenance access hole, alternative device or facility installed as required by Subsection A(1) is accessible to the Commissioner for purposes of maintaining, observing,

sampling and flow measurement of the sewage, uncontaminated water or storm water therein."

This section should be amended to read:

"A.(4) The owner or operator of an industrial, commercial or institutional premises or a multi-storey residential building shall at all times ensure that every maintenance access hole, alternative device or facility installed as required by Subsection A.(1) is accessible to the Commissioner for the purposes of observing, sampling and flow measurement of the sewage, uncontaminated water or storm water therein."

The revision eliminates the word "maintaining", as the City does not do maintenance on private property.

(10) Add Subsection 681-10. A. (5) (Maintenance access hole) as follows:

"A. (5) The provisions of A. (1) to (4) inclusive do not apply to those who own or operate dental offices. Dental offices are to provide a sampling port consisting of a valve, tap, or similar device consistent with technical guidelines that the Commissioner may establish from time to time."

Subsection 681-10. A(1) requires the owners of premises with connections to sewage works to install and maintain in good repair a maintenance access hole. If that is not possible, the By-law provides for an alternative device or facility to be substituted with the prior written approval of the Commissioner. In the case of dental practices, sampling from a maintenance access hole is not feasible. It is not practical to provide "prior written approval" for all dental practices. For purposes of clarity, the By-law should be amended to specify the access required for dental practices.

(11) Subsection 681-10. B. (Food-related grease interceptors) in its current form reads:

"B. Food-related grease interceptors - Every owner or operator of a restaurant or other industrial, commercial or institutional premises where food is cooked, processed or prepared, which premises is connected directly or indirectly to a sewer, shall take all necessary measures to ensure that oil and grease are prevented from entering the sewer. In particular, the owner or operator shall install, operate and maintain a grease interceptor in any piping system at its premises that connects directly or indirectly to a sewer."

This section should be amended to read:

"B. Food-related grease interceptors.

(1) Every owner or operator of a restaurant or other industrial, commercial or institutional premises where food is cooked, processed or prepared, which premises is connected directly or indirectly to a sewer, shall take all

necessary measures to ensure that oil and grease are prevented from entering the sewer.

(2) The owner or operator of a premises as set out in Subsection 10.B.(1) shall install, operate, and properly maintain a grease interceptor in any piping system at its premises that connects directly or indirectly to a sewer. The grease interceptors shall be installed in compliance with the most current requirements of the Ontario Building Code."

We have re-organized this subsection and added a requirement that the grease interceptors must be installed in compliance with the Ontario Building Code.

(12) Subsection 681-10. C. (Interceptors for motor oil and lubricating grease) in its current form reads:

"C. Every owner or operator of a commercial, industrial or institutional premises at which floor drains of a service garage are connected directly or indirectly to a sewer shall install and maintain an oil interceptor designed to prevent motor oil and lubricating grease from passing into drainage piping which is connected directly or indirectly to a sewer."

This section should be amended to read:

"C. Interceptors for motor oil and lubricating grease.

(1) Every owner or operator of a motor vehicle service station, repair shop or garage or of an industrial, commercial or institutional premises or any other establishment where motor vehicles are repaired, lubricated or maintained and where the sanitary discharge is directly or indirectly connected to a sewer, shall install and maintain an oil interceptor designed to prevent motor oil and lubricating grease from passing into the drainage piping which is connected directly or indirectly to a sewer.

(2) The owner or operator of a premises as set out in Subsection 10.C.(1) shall install, operate, and properly maintain an oil interceptor in any piping system at its premises that connects directly or indirectly to a sewer. The oil interceptors shall be installed in compliance with the most current requirements of the Ontario Building Code."

We have re-organized this subsection, added some specific types of businesses, and added a requirement that the oil interceptors must be installed in compliance with the Ontario Building Code.

(13) Subsection 681-10. D. (Sediment interceptors) in its present form reads:

"D. Every owner or operator of a premises from which sediment may directly or indirectly enter a sewer, including but not limited to premises using a ramp drain

or area drain, car and vehicle wash establishments, shall take all necessary measures to ensure that such sediment is prevented from entering the drain or sewer."

This section should be amended to read as follows:

"D. Sediment interceptors.

(1) Every owner or operator of a premises from which sediment may directly or indirectly enter a sewer, including but not limited to premises using a ramp drain or area drain and car and vehicle wash establishments, shall take all necessary measures to ensure that such sediment is prevented from entering the drain or sewer.

(2) Catch basins installed on private property for the purposes of collecting storm water and carrying it into the storm sewers shall be equipped with goss traps or an equivalent and the installation of these catch basins on private property shall comply with the City of Toronto Water and Wastewater Services Standard Construction Specifications and Drawings for Sewers and Watermains, as it may be amended from time to time.

(3) No combination of a maintenance access hole and catch basin shall be installed on private property."

We have added two provisions to this subsection. The first ensures that the installation of catch basins will comply with the City's standard. The second prohibits the installation of combination maintenance access hole/catch basin because of the failure of combination manhole catch basins to allow the collection of sediment.

(14) Subsection 681-10. E. (Garbage grinders) in its current form reads:

"E. Garbage grinders.

(1) No person shall install or operate within the City any garbage grinding devices for industrial or commercial purposes, the effluent from which will discharge directly or indirectly into the sewage works.

(2) No person shall install or operate within the City any garbage grinding devices for domestic purposes, the effluent from which will discharge directly or indirectly into a storm or combined sewer.

(3) No person shall install or operate a garbage grinding device for domestic purposes, the effluent from which is discharge into a sanitary sewer system, unless such garbage grinding device is of a type which will permit 40 percent of all grindings to pass a 2.36 mm sieve (3/32 inch), 60 percent to pass a 6.35 mm sieve (1/4 inch), and all grindings to pass a 12.7 mm sieve (1/2 inch)."

This section should be amended to read as follows:

"E. Garbage grinders.

(1) No person shall install or operate within the City any garbage grinding devices for domestic purposes, the effluent from which will discharge directly or indirectly into a storm or combined sewer.

(2) In the case of industrial, commercial or institutional properties where garbage grinding devices are installed in accordance with the Building Code, the effluent from such garbage grinding devices must comply with Section 681-2 of the Municipal Code."

We are suggesting the deletion of the current Subsection 681-10. E. (1) since the Ontario Building Code permits garbage grinders to be installed downstream of a grease interceptor. However, we are adding a new Subsection E. (2) to require that the effluent from these garbage grinders must meet the discharge limits under Section 681-2 of the By-law. Since industrial, commercial and institutional garbage grinders would now be regulated through limits on discharge concentrations, there is no need for the current subsection E. (3). Therefore we recommend that it be deleted. Garbage grinders should not be permitted to be connected to a storm sewer because the effluent from them will end up in receiving water untreated. The rationale for prohibiting garbage grinders from combined sewers is to prevent the effluent from overflowing into storm sewer and into receiving water during a heavy rainfall event.

(15) Subsection 681-11.A.(1) (Sewer connections) in its current form reads:

"11.A. No person shall:

(1) Erect or cause or permit to be erected any new building on lands that are serviced by a sanitary sewer unless the new building is connected to the sanitary sewer; and"

This section should be amended to read:

"11.A. No person shall:

(1) Erect or cause or permit to be erected any new building unless the new building is connected to the sanitary sewer or combined sewer for sanitary drainage purposes; and"

We are adding a reference to combined sewers to reflect the fact that some areas in the City are still on combined sewers.

(16) Subsection 681-11. B. (Sewer connections) currently reads:

"B. No sewer connection shall be constructed on any road allowance, easement, or other public land, except by the City or under a contract or agreement with the City."

This section should be amended to read:

"B. No sewer connection shall be constructed on any road allowance, easement, or other public land, except by the City or under a contract, agreement, or undertaking satisfactory to the Commissioner. The owner of the building shall be responsible for the cost of the sewer connection."

We are adding a reference to an "undertaking satisfactory to the Commissioner" as sometimes the developer will provide the Commissioner with a written undertaking that they would do certain things, rather than a formal contract or agreement between the developer and the City. We have also added a provision to require the owner of the building to be responsible for the cost of the sewer connection.

(17) Subsection 681-11. G. (Sewer connections) currently provides, in part:

"G. Any person desiring a sewer connection shall make application to the City on forms supplied by the City …"

This part of the section should be amended to read:

"G. Any person desiring a sewer connection shall make an application for such connection on forms supplied by the Commissioner …"

The purpose of this change is to delegate authority to the Commissioner with respect to sewer connection applications in order to streamline the application process.

(18) Subsection 681-11. H. (Sewer connections) currently reads:

"H. A sewer connection on public property between the sewer main and private property shall be installed by the City at the expense of the owner on conditions and at rates and to specifications determined from time to time by the City. Sewer connections on private property shall be installed by the owner pursuant to a building permit having been previously issued for such purpose by the City and at the expense of the owner."

This section should be amended to read:

"H. (1) A sewer connection on public property between the sewer main and private property shall be installed:

(a) By the City at the expense of the owner on conditions and rates determined from time to time by the City; or

(b) With the prior written consent of the Commissioner, by the owner of the property, at the property owner's expense under a contract, agreement, or undertaking satisfactory to the Commissioner, in compliance with the City of Toronto Water and Wastewater Services Standard Construction Specifications and Drawings for Sewers and Watermains, as it may be amended from time to time.

(2) Sewer connections on private property shall be installed by the owner pursuant to a building permit having been issued for such purpose by the Chief Building Official of the City and in compliance with the City of Toronto Water and Wastewater Services Standard Construction Specifications and Drawings for Sewers and Watermains, as it may be amended from time to time."

We are recommending that owners have the option to arrange with a contractor to have the work done, instead of requiring the City to do the work. We are also specifying that sewer connections must meet City standards.

(19) Subsection 681-11. I. (Sewer connections) currently reads:

"I. Methods and materials used in the construction of sewer connections shall resist entry of roots and acid or alkali damage, and otherwise in accordance with the requirements determined by the City from time to time."

This section should be amended to read:

"I. Methods and materials used in the construction of sewer connections shall resist entry of roots and acid or alkali damage, and otherwise be in accordance with requirements determined by the Commissioner from time to time."

The purpose of the changes is to correct a grammatical error and to delegate authority to the Commissioner with respect to determining appropriate requirements for the method and materials of sewer connections

(20) Subsections 681-11. K. (3) and (4) (Sewer connections) currently read:

"K. A private sanitary sewer connection shall not be installed until:

(3) The backfilling is properly completed around the building and the lot has been sufficiently graded to eliminate the possibility of any ponding on the property and the subflooring has been installed over the foundation to prevent the entry of storm water which could run off through the private sewer connection; and

(4) All existing surface water in the excavation or basement has been pumped out."

These sections should be deleted as they relate to work performed on the private property side and they are dealt with under the Ontario Building Code.

(21) Subsection 681-11. L. (Sewer connections) currently reads:

"L. In the event that any person constructs a municipal sewer connection in a manner other than provided for in this section, the Commissioner may order the re-excavation of the connection for the purpose of inspection and testing and, if necessary, reconstruction of the work, and the Commissioner may have these works performed at the expense of the owner or disconnect the sewer connection, in which case it shall not be reconnected except with the approval of the City."

This section should be amended to read:

"L. In the event that any person constructs a municipal sewer connection in a manner other than provided for in this section, the Commissioner may order the re-excavation of the connection for the purpose of inspection and testing and, if necessary, reconstruction of the work, and the Commissioner may have these works performed at the expense of the owner or disconnect the sewer connection, in which case it shall not be reconnected except with the approval of the Commissioner."

The changes are for the purpose of correcting a typographical error, and to delegate to the Commissioner the authority to approve a reconnection in order to expedite the process.

(22) Subsection 681-11. N. (Sewer connections) currently reads:

"N. In the case of storm sewers, Subsection D(1) shall not apply:

(1) Where a building or structure located upon a lot on which any portion of the roof elevations lower than the street elevation at the front or side thereof;

(2) Where a storm sewer has been constructed at such an elevation that the connection from a roof drain or from the weeping drain cannot be connected with an adequate fall for proper drainage;

(3) Where a building or structure is constructed adjacent to a watercourse, provided that the roof drains from such building or structure are directed to the water subject to the approval of the City and the Toronto and Region Conservation Authority; or

(4) Where the building or structure has adequate potential to manage storm water on site, except where connections are necessary to provide an overflow route."

This section should be deleted as it is in conflict with Subsection 681-11. S. (1) and redundant as it is addressed in Subsections 681-11. Q. and R.

(23) The first sentence of Subsection 681-11. O. (Sewer connections) currently reads:

"O. Where a catch basin has been installed on private property to drain storm water from any driveway which slopes towards any structure located on the property, the installation shall include:"

This sentence should be amended to read:

"O. Where a catch basin has been installed on private property to drain storm water from a driveway which slopes towards any structure located on the property, the catch basin shall be connected to the City storm sewer where such is available, and the installation shall include:"

The purpose of this change is to make it clear that the catch basin is to be connected to the City storm sewer where such is available.

(24) Subsection 681-11. O. (1) (Sewer connections) currently reads:

"O.(1) A flap gate backwater valve installed directly downstream of the private catch basin, so that no storm water may backup from the storm sewer into the private catch basin."

This subsection should be amended to read:

"O.(1) A flap gate backwater valve installed directly downstream of the private catch basin, so that no storm water may back up from the City storm sewer into the private catch basin; and"

We are inserting the word City in front of storm sewer to clarify that this requirement applies with respect to City storm sewers.

(25) Subsection 681-11. O. (3) (Sewer connections) currently reads:

"O.(3) A flap gate backwater valve installed on the subsurface drainage pipe lead adjacent to the sump pit, so that no storm water may flow from the sump pit into the subsurface drainage pipe system."

This section should be deleted as a flap gate backwater valve can only add to the damages and cause storm water back up.

(26) The heading of subsection 681-11. Q. (Sewer connections) currently reads:

"Q. Infiltration of storm water into sanitary or combined sewer system."

The heading should be amended to read:

Q. Inflow and infiltration of storm water into sanitary sewer system."

Entry of storm water into sanitary sewer could be through infiltration due to loose joints or through inflow from maintenance access hole cover. Therefore we are adding the word "inflow". We are deleting "combined sewer", as its purpose is to accept both storm water as well as sanitary wastewater, therefore we cannot prevent storm water from entering a combined sewer.

(27) Subsection 681-11. Q. (3) (Sewer connections) currently reads:

"Q.(3) An owner may request an inspection by means of an excavation or closed circuit television inspection of any existing municipal sewer connection by the City. The owner shall deposit a sum of money with the City, the amount of which shall from time to time be determined by the City with respect to the inspection. If upon inspection a structural problem is found in the City portion of the connection, the deposit will be refunded."

This subsection should be amended to read:

"Q.(3) An owner may request the Commissioner to conduct an inspection by means of an excavation or closed circuit television inspection of any existing municipal sewer connection. The owner shall deposit a sum of money with the City, in an amount determined by the Commissioner, with respect to the inspection. If upon inspection a structural problem is found in the City portion of the connection, the deposit will be refunded."

Some references to the City have been replaced with references to the Commissioner in order to provide better and more efficient service.

(28) In Subsections 681-11. Q. (4) and (5) (Sewer connections), references to combined sewers should be deleted.

The purpose of these sections is to prevent entry of storm water into sanitary sewers. This should not apply to combined sewers as combined sewers are supposed to convey sanitary waste as well as storm water.

(29) Subsection 681-11. R. (1) (Sewer connections) currently reads:

"R.(1) No owner of industrial, commercial or institutional premises shall do anything which may increase peak flow rates of storm water or impair the quality of storm water discharged to a sewer."

This subsection should be amended to read:

"R.(1) No owner of industrial, commercial or institutional premises shall do anything which may increase design peak flow rates of storm water or impair the quality of storm water discharged to a storm sewer."

We recommend adding the word, "design" before the words, "peak flow rates" to clarify that it is the design peak flow of the City storm sewer. We have added the word, "storm" in front of the word, "sewer" as this requirement only applies with respect to storm sewers.

(30) Subsection 681-11. R. (2) (Sewer connections) currently reads:

"R.(2) The direct connection of any new private drainage works to the municipal storm sewer system is prohibited without the prior approval of the City, which approval may be given by the Commissioner where, in the opinion of the Commissioner, there is no practical alternate means of drainage available."

This section should be amended to read:

"R.(2) The direct connection of any new private storm drainage system to the municipal storm sewer is prohibited, except that if in the opinion of the Commissioner there is no practical alternate means of drainage available, the Commissioner may approve the direct connection."

This subsection is being reworded for clarity.

(31) Subsection 681-11. R. (3) (Sewer connections) currently reads:

"R.(3) Before considering a request for an approval pursuant to Subsection R(2), the owner or operator of commercial, institutional, or industrial premises may be required to submit to the Commissioner a storm water management report identifying the storm water quantity and quality control measures being proposed for the site."

This subsection should be amended to read:

"R.(3) "Before considering a request for an approval pursuant to Subsection R. (2), the owner or operator of industrial, commercial or institutional premises shall be required to submit to the Commissioner for approval a storm water management report identifying the storm water quantity and quality control measures being proposed for the site."

The word "may" is being changed to "shall" to emphasize that the owner must submit a storm water management report. The words "for approval" are inserted after "Commissioner" for clarity.

(32) The first sentence of Subsection 681-11. R. (4) (Sewer connections) currently reads, in part:

"R.(4) Where a new connection is approved by the City …"

This sentence should be amended to read:

"R.(4) Where a new connection is approved by the Commissioner …"

This is being amended to permit the Commissioner to grant approvals for the connection.

(33) In Subsection 681-11. R. (4)(a) (Sewer connections), the period at the end of this subsection should be changed to a semicolon.

(34) Subsection 681-11. R. (5) (Sewer connections) currently reads:

"R.(5) No direct or indirect interconnection between the private storm drain system and the sanitary drainage system is permitted."

This subsection should be amended to read:

"R.(5) No direct connection or indirect interconnection between the private storm drainage system and the private sanitary drainage system is permitted."

The changes are for the purpose of clarity.

(35) Subsection 681-11. S. (1) (Sewer connections) currently reads, in part:

"S.(1) No person shall construct, install or maintain, or cause or permit to be constructed, installed or maintained, drainage from any roof water leader or downspout that conveys storm water from a new free-standing building …"

The words "free-standing building" should be changed to "single family dwelling or residential building" as this is a more accurate description of the type of building intended to be regulated by this subsection.

(36) Subsection 681-11. S. (2) (Sewer connections) currently reads:

"S.(2) An application may be made to the City for an exemption from the provisions set out in Subsection S(1)."

This subsection should be amended to read:

"S.(2) Where compliance with Subsection 681-11. S. (1) compromises or creates a hazardous situation, an application may be made to the Commissioner for an exemption from the provisions of Subsection 681-11. S. (1)."

This section has been amended to provide some guidelines in relation to when an exemption may be permissible. As well, the authority to approve an application for an exemption is being delegated to the Commissioner in order to provide more efficient service.

(37) The heading of Subsection 681-11. T. (Sewer connections) currently reads: "Waste water." It should be changed to "Private swimming pool water", as this is a more accurate subject title for this subsection.

(38) By-law No. 96-80 of the former Municipality of Metropolitan Toronto, a By-law "To regulate the discharge of water obtained from a private water works system into the Metropolitan sewer system and to charge a rate therefor" and By-law No. 70-81 and By-law No. 192-95, amending By-law No. 96-80 should all be repealed.

These By-laws should all be repealed as they are now being incorporated into the Municipal Code Chapter 681.

Staff from Urban Development Services, Building Section, Works and Emergency Services, Technical Services and Water and Wastewater Services Sections, and Legal Services have been consulted in the writing of this report.

Conclusions:

As a result of an ongoing review of the Sewer Use By-law since its passage in July 2000, staff from Technical Services, Urban Development Services, and Works and Emergency Services have identified certain technical changes to the By-law. A number of sections contained in the By-law gave City Council direct authority over certain administrative procedures such as approval of sewer connections, application forms to be used, etc. These powers are administrative in nature and should be delegated back to the Commissioner in order to streamline the process, provided that guidelines and policies adopted by City Council from time to time are adhered to. The other amendments are administrative in nature and there are no substantive changes to the intent or direction of the Sewer Use By-law. The change in the total chromium limit is that the original intent was to control hexavalent chromium, which is more toxic than trivalent chromium. And since total chromium is made up of both hexa- and tri-valent chromium, hexavalent chromium should be restricted to only 2 mg/L, but if it is mainly trivalent chromium we could accept up to 4 mg/L. Regarding nonylphenols and nonylphenol ethoxylates, we are using the latest Environment Canada Canadian Environmental Quality Guidelines and the City's general discharge limit development protocol to bring these two discharge limits up to date.

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