Food Service Establishment Environmental Code of Practice





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1. Introduction

Why is effluent from a food premises a concern? When warm fats, oils, and grease (FOG) are washed down the sink or toilet into the plumbing system, they cool, harden and stick to the inside of sanitary sewer pipes and in City sanitary sewers under the streets. Fats, oil and grease build-up in the pipes can cause blocked sewers which can lead to problems, such as:

- Blocked sewer lines causing sewage overflow on the property, yards, streets, parks, creeks, rivers and the lake
- Basement flooding an expensive and unpleasant clean-up
- Contact with disease-causing germs
- Attraction of vermin and spreading of diseases via animals
- Increased costs to clean and repair damaged sewer pipes

Sanitary sewer systems convey wastewater to wastewater treatment plants, which process and treat wastewater before it is discharged into the natural environment. Sewer pipe blockages are the leading cause of sewer overflows, and grease is the primary cause of sewer blockages. Even if accumulated FOG does not escalate into blockages and sanitary sewer overflows, it can disrupt wastewater utility operations and increase operations and maintenance requirements. No oil or grease is allowed in storm sewers as the sewers are meant for rainwater and melted snow.

Municipalities and the *Ontario Building Code* (OBC) require kitchen operations, except those of residential occupancy, to install an interceptor device to collect the grease before it enters the sanitary sewer. Municipalities have inspection programs to determine if these grease traps and/or interceptors are being maintained properly on a routine basis.

There are thousands of Food Service Establishments (FSEs) in Toronto. These establishments are involved in the preparation, processing, heating, cooking, packaging, shipping, sales or serving of food. Food services can generate a variety of by-products and recoverable wastes in their operations, including substances such as fats, oils and grease.

This Environmental Code of Practice (ECP) document is intended to assist owners and operators of food service establishments in the City of Toronto to minimize detrimental effects of their operations on the quality of wastewater sent to sewers from their sites, comply with Municipal Code Chapter 681, Sewers ("Chapter 681"), and improve their overall wastewater operations.

2. Scope and Applicability

This ECP applies to all industrial premises (as defined by the Sewers Bylaw), except premises used solely as a private residence, where food is prepared, processed, heated, cooked, packaged, or served or otherwise handled in a manner that results in the formation of fats, oils and grease. Examples of such industrial premises include restaurants, cafes, coffee shops, snack bars, bakeries, banquet halls, delicatessens, grocery stores (with food counter), butcher shops, ice cream shops, etc., but also mobile food vendors and institutions with cafeterias, coffees shops, cafes or restaurants (e.g. a school with a cafeteria, a hospital with a coffee shop or restaurant, or a place of worship with a kitchen used for large functions on a regular basis).

This ECP document forms part of the requirements in Chapter 681 that applies to a FSE and is aligned with the OBC requirements for grease interceptors.

Nothing in this ECP exempts a person from complying with any applicable federal, provincial or municipal requirements. In the event of any discrepancy between this ECP and any applicable federal, provincial or municipal legislation or regulations, the federal, provincial or municipal legislation or regulations, including Chapter 681, shall take precedence.

3. Summary of Regulatory Requirements

While the following is not intended to be a complete list of all applicable laws that may apply, it provides a very brief summary of notable applicable law.

3.1. Federal Government

The federal *Fisheries Act* prohibits the deposit of a deleterious substance of any type in water frequented by fish or in any place where it eventually may enter water frequented by fish. The *Act* places obligations on any person who owns or has the charge, management or control of a deleterious substance, or undertaking or activity that resulted in the deposit of a deleterious substance to take all reasonable measures consistent with public safety and with the conservation and protection of fish and fish habitat to prevent the occurrence or to counteract, mitigate or remedy any adverse effects that result from the occurrence or might reasonably be expected to result from it.

Improper connections to sanitary or storm sewers, or runoff that could introduce deleterious substances to local watercourses is in violation of the *Fisheries Act*.

3.2. Provincial Government

The *Environmental Protection Act* (EPA) prohibits the discharge of contaminants into the natural environment in an amount, concentration or level in excess of prescribed limits or that may cause or likely to cause an adverse effect to the natural environment. It also imposes duties to report and clean up pollutant spills.

The *Building Code Act* and *Building Code* prescribe mandatory standards for building construction, including building, plumbing, drainage and private sewer systems and on-site sewage disposal systems.

3.3. Municipal Government - Municipal Code Chapter 681 - Sewers

It is important that permitted wastewater be directed to a municipal sanitary sewer and that only stormwater meeting the requirements of Chapter 681 are discharged to the municipal storm sewer.

The City of Toronto has the authority to regulate discharges to municipal sanitary, storm and combined sewers within its boundaries. The intent of the bylaw is to protect:

- persons, animals, aquatic life and the natural environment from adverse effects from discharges of wastewater to the municipal sewers;
- public health and safety;
- sewage works;
- wastewater treatment processes;
- biosolids quality; and
- promote responsible waste management practices.

3.3.1. Discharge Prohibition

The owner and operator of a FSE shall not discharge into a municipal sanitary, storm, or combined sewer any waste or matter that contravenes Chapter 681 – Sewers.

3.3.2. Spill Reporting Requirement

Any spill must be reported immediately to the City via 311, Toronto's 24-hour hotline. A spill report shall be submitted to Toronto Water in accordance with Chapter 681 within 5 days of the spill and sent by email to NOV@toronto.ca or by mail to:

Attention: Manager, Environmental Monitoring and Protection Unit Toronto Water 2126 Kipling Avenue Toronto, ON M9W 4K5

3.3.3. Spill Response Plan

The owner/operator of a FSE shall:

- Have an up-to-date spill response plan demonstrating it has provided suitable training on its plan to its employees.
- Post the spill response plan in a location readily accessible by facility staff with a list of names and telephone number of those persons that need to be contacted in the event of a spill.
- Have an appropriate quantity of clean-up equipment and supplies in stock at all times.
- Ensure that all employees know the location of spill response material and equipment and are trained in its use.

In the event of a spill to the municipal sewage works, the person responsible or the person having the charge, management and control of the spill shall:

- Report to the City by calling 311.
- Do everything reasonably possible to contain the spill (e.g. use sorbents to absorb and prevent spilled material from entering the sewer system), protect the health and safety of persons, animals and aquatic life, protect the natural environment, minimize damage to property, clean up the spill and contaminated residue and restore the affected area to its condition prior to the spill.
- Provide a detailed report on the spill to the City, within five days after the spill, containing the information required under Chapter 681 Sewers.

3.3.4. Licensing

All food service establishments operating in the City of Toronto shall have a business licence issued by the Municipal Licensing and Standards Division.

3.3.5. Permitting

All food service establishments operating in the City of Toronto shall have a permit issued by the Toronto Building Division for the installation of a grease interceptor(s).

4. Record Keeping and Retention

The owner/operator of a FSE shall keep and maintain accurate and up-to-date records (e.g. service contracts, invoices) on grease, oil and waste oil and grease disposed of offsite. Each of these records shall be retained for a minimum period of seven (7) years. The records must contain:

- Name of the disposal company.
- Date of disposal.
- Type of waste disposed.
- Measured quantity of waste disposed.
- An up-to-date grease interceptor maintenance log which shall be kept on-site at all times. Sample logs are included in Appendix 1 and 2.

If a FSE changes its owner or operator, the departing owner or operator shall transfer to the incoming owner or operator, as the case may be, all records required to be maintained under this provision or Chapter 681 – Sewers (e.g. inspections, maintenance, waste disposal, etc.).

5. Common Grease & Solids Removal Technologies

The grease removal technologies referred to in this ECP are installed in drainage systems to reduce the amount of organic fats, oils, and greases entering the municipal sanitary system. These may be of indoor or outdoor applications depending on the size and flow rate of the devices installed.

5.1. Hydro-Mechanical Grease Interceptor

The most common grease interceptor, also known as a grease trap, is a small point of use unit typically installed under the sinks in the kitchen. These devices employ a flow restrictor and are designed to remove over 85% of the incoming FOG. Food solids along with fats, oils, and grease are trapped and stored in these devices. They have a flow rating of not less than 26 L/min (7 gpm) and not more than 380 L/min (100 gpm).



5.2. Solids Interceptor

A solids interceptor may be used where solids are an issue to prevent overloading of the grease interceptor. Instead of the solids settling at the bottom of the tank, they are separated out for easier access and removal from the interceptor. This can be a stand-alone unit or built into the grease interceptor.

5.3. Grease Recovery Device

This is a hydro-mechanical grease interceptor with the capability of removing the floating grease to an outside vessel. The recovered grease or "yellow grease" is recycled with the waste vegetable oil from the kitchen deepfryers. This device reduces the pump-out requirement but involves a daily task of removing the strained solids and grease and the up-front cost may also be significantly higher. A grease recovery device is suited to kitchens with more concentrated solid and FOG discharge and where the location is difficult to access by a pump truck. It requires regular daily maintenance and less or no pump-out.

5.4. Gravity Grease Interceptor

Gravity grease interceptors are large in-ground passive interceptors that have long retention time (about 30 minutes instead of 1 minute) to separate and trap the FOG and solids from the waste stream. These interceptors range in size from 300 to 2000 gallons and are constructed of concrete, fiberglass, or steel. By nature of their larger size, they have larger grease and solid retention capacities for high-flow applications. This is used in large kitchens and industrial premises and can accommodate discharges from multiple fixtures and dishwashers.

6. Grease Interceptor Installation Requirements

Chapter 681 – Sewers requires that owners and operators of FSEs properly install, operate, and maintain a grease interceptor in any piping system at its premise that connects directly or indirectly to a municipal sanitary sewer.

6.1. Selection

For point-of-source installation (which include most grease interceptor types), the owner or operator of a FSE shall use an appropriately sized grease interceptor and one that conforms to CSA Standard B481 Series-12 Grease Interceptors, as per the *Ontario Building Code*.

Grease interceptors which conform to the above CSA Standard will have markings that show the flow rating, removal efficiency, maximum containment capacity and inlet size. The illustration on page 8 is an example of a label with such markings.

Name of manufacturer

CSA B481.1 Grease interceptor

Flow rating: 135 L/min (35 gpm)

Grease removal efficiency: 90.0%

Maximum grease containment capacity: 32 kg (7-lp)

Access cover load rating:

Inlet size: 50 mm (NPS-4)

Flow control device: Required (part number)

If the markings are not visible following installation, manufacturer and installation drawings of the grease interceptor must be maintained at the food service establishment and available for inspection on request by the General Manager.

In addition to these markings, the inlet and outlet shall be clearly identified to indicate the direction of flow.

There are no CSA standards for gravity grease interceptors, however, the OBC applies in regards to appropriate size. These devices are acceptable as an outdoor/indoor interceptor option.

6.2. Location

The owner or operator of a FSE is required to locate a grease interceptor (including a gravity grease interceptor) in areas:

- That provide adequate access for interceptor maintenance and inspection.
- That provide access for an effluent sampling port when required under Chapter 681 Sewers.

6.3. Installation

The owner/operator of a FSE shall:

- Obtain a building permit for the installation of a grease interceptor, gravity grease interceptor, or a grease recovery device. This is applicable to new installations and replacement of existing devices.
- Provide easy access for maintenance.
- Provide easy access for inspection by the General Manager.

If the Toronto Water General Manager determines that an existing grease interceptor is detrimentally affecting the municipal sewage works or any part of it (e.g. a municipal sewer connection or sewer), such as by interfering with water flow or drainage, a new grease interceptor shall be installed in accordance with Chapter 681 – Sewers.

A new grease interceptor shall be required where there has been a significant change in the operation of the FSE (e.g. re-organization of infrastructure or expansion) or where a new business commences activity at the premises and/or a new building on the lands is built.

6.4. Fixtures

- A. The owner or operator of a FSE shall have the following plumbing fixtures connected to a grease interceptor, grease recovery device, or a gravity grease interceptor:
 - Sinks used for washing pots, pans, dishes, cutlery and kitchen utensils.
 - Drains serving self-cleaning exhaust hoods installed over commercial cooking equipment.
 - Drains serving commercial cooking equipment.
 - Any other fixture that discharges wastewater containing oil and grease.
- B. The following plumbing fixtures may be connected to a grease interceptor, grease recovery device, or gravity grease interceptor if there is a potential of grease discharge from these fixtures:
 - Floor drains.
 - Mop sinks.
 - Garbage disposal drains.
 - Dishwashers.
 - Drains serving a garbage compactor used to compact garbage that may contain or be contaminated with food waste.
- C. The owner/operator of a FSE shall not allow the following plumbing fixtures to be connected to a grease interceptor, grease recovery device, or gravity grease interceptor:
 - Toilets, urinals and hand sinks.
 - Food/garbage grinders, potato peelers and similar equipment discharging solids (unless they discharge to a solids interceptor prior to being connected to the grease interceptor, grease recovery device or gravity grease interceptors).

D. Dishwasher

The owner/operator of a FSE shall connect a commercial dishwasher to an appropriately sized grease interceptor (as per the *Ontario Building Code*). This can include:

- An appropriately sized dedicated grease interceptor specifically for the dishwasher.
- A grease interceptor sized to accept the maximum discharge of all connected FOG discharging plumbing fixtures (e.g. gravity grease interceptor with a 30-minute residence time).

Alternatively, a pre-rinse sink positioned at the inlet to the dishwasher can be installed. This pre-rinse sink shall discharge into a properly sized grease interceptor and allows the dishwasher not to be connected to a grease interceptor (refer to Appendix 3 for visual depiction of installation requirements).

Appropriately sized grease interceptors are required as dishwasher effluent causes FOG emulsification. This is caused when high temperatures melt FOG and the water surge from the dishwasher creates turbulence that mixes the FOG and water while the industrial strength detergent combines the grease. The forward flow pushes the FOG laden wastewater to the outlet and out to the sanitary sewer system.

7. Grease Interceptor Maintenance Requirements

The owner/operators of FSEs must maintain and repair grease interceptors so that they are fully operational and effective at all times. Maintenance includes removing 100% of the intercepted substances, thoroughly cleaning the grease interceptor and inspecting its components. Regular servicing of grease interceptors prevents excessive odour, attraction of vermin and maintains operational efficiency. Facility owners will experience fewer blockages in their drainage waste lines, saving costs of maintenance, line jetting and repairs.

All FSEs that discharge wastewater containing fat, oil and grease shall maintain a grease interceptor in accordance with this ECP.

7.1. Servicing Frequency

The owner/operator of a FSE shall service a grease interceptor according to the below frequency:

- Except otherwise determined by the General Manager, the grease interceptor shall be serviced before the grease and solids, combined, reach 25% of the interceptor's liquid volume or every four weeks, whichever is earlier.
- The General Manager may authorize in writing a longer servicing frequency (up to a maximum of 8 weeks) than noted above if the FSE establishes through records of daily grease measurement that the grease and solids, combined, does not reach 25% of the interceptor's liquid volume within the first four weeks.
- Solids interceptor with a built-in container to collect solids shall be serviced as indicated above but the solids and liquids from the strainer and vessel will be removed on a daily basis.
- A grease recovery device shall be maintained in the following manner:
 - As per the manufacturer's recommendation.
 - Remove solids and liquids from strainer and vessel on a daily basis.
 - Daily logs of maintenance and grease removal shall be kept (refer to Appendix 2 for maintenance log sample).
- Gravity grease interceptor shall be maintained in the following manner:
 - Pump-out is required before the FOG and solids exceed 25% of the wetted volume of the tank.

7.2. Professional Servicing / Manual Servicing

The owner/operator of a FSE shall decide on grease interceptor (including gravity grease interceptor) servicing type according to the below requirements:

- Servicing (cleaning) shall be performed by a Ministry of the Environment and Climate Change (MOECC) approved waste carrier.
- The owner/operator of a FSE shall obtain from the MOECC approved waste carrier the following servicing information (refer to Appendix 1 for maintenance log sample):
 - i. Level of FOG and solids estimate.
 - ii. Proper maintenance frequency estimate.
 - iii. Condition of the grease interceptor.
 - iv. Waste destination.
- Manual servicing (cleaning) of interceptors is only permitted where an FSE generates a low volume of FOG and has no stove or fryer. The FSE performing this manual cleaning shall:
 - Perform a weekly surface bailout where surface FOG and solids are removed.
 - Perform a monthly vacuuming where FOG, solids and water are removed and the grease interceptor thoroughly cleaned, including pieces of the grease interceptor that can be removed.
 - Keep log sheets as proof of maintenance on site at all times for the General Manager to review.
- Installation of a maintenance access hole or alternative device approved by the Toronto Water General Manager may also be required for FSEs performing manual servicing (cleaning).

7.3. Proper Disposal

The owner/operator of a FSE shall properly dispose of oil and grease collected by a grease interceptor (including a gravity grease interceptor) accordingly:

- Oil and grease removed from grease interceptors shall not be disposed in the regular garbage.
- Oil and grease removed from grease interceptors shall not be discharged into the municipal sanitary or combined sewer, municipal storm sewer, or connection to such a sewer including, without limitation, a catch basin, a drainage ditch or surface water.
- Only MOECC approved waste carriers are permitted to transport the wastes from the grease interceptors.
- Where manual cleaning of the grease interceptor is done by the FSE, the waste grease and bottom solids should be directed into the organic waste bin and the liquid waste must be stored in a designated waste bin until it can be picked up by a MOECC approved waste carrier.

7.4. Chemical or Other Agents

The owner/operator of a FSE shall not use or permit the use of chemical agents, bleach, enzymes, bacteria, solvents, hot water, or other agents to facilitate the passage of FOG through a grease interceptor (including a gravity grease interceptor).

These chemicals and agents temporarily break down FOG only to move them down stream where it coagulates causing blockages in the restaurant (FSE) drainage system and potentially detrimentally affecting the municipal sewage works. Bleach can break down and cause chloroform to be created and a health hazard to City employees working in the sewer system.

8. Kitchen Practices

8.1. Employee Education

The owner/operator of a FSE shall perform the following tasks to ensure adequate employee training/education:

- Hold regular employee training on regulations, safety, proper waste management, spill response and record keeping and retention and document the training and keep records on site for 7 years.
- Have employees perform regular site inspections to ensure spills are cleaned up, grease bins are secured, covered and not overflowing and log sheets are maintained.





8.2. Material and Equipment

The owner/operator of an FSE shall:

- Use low-phosphate content, water-based cleaners.
- Place strainers on all sink drains to capture solids and dispose of solids in the green bin.
- Keep cooking oil out of drains waste oil can be sold to rendering facilities.
- Scrape food and grease from plates, pots/pans and utensils into food recycling bin (green bin) before washing.
- Use absorption material to soak up FOG spills on the kitchen floor and under fryer baskets and FOG from exhaust system filters and hoods. Dispose of soiled material in the green bin or garbage (depending on absorption material used e.g. paper towel, rag, etc.).

It is also recommended that the owner/operator of an FSE should:

- Influence suppliers by:
 - Purchasing products that are free of subject pollutants identified in Municipal Code Chapter 681 – Sewers.
 - Requesting less-toxic alternative products.
 - Requesting they accept materials and containers back for recycling.
- Not use food/garbage grinders, which may cause your effluent to be high on several parameters and over the Chapter 681 Sewers limits.
- Use an efficient pre-rinse spray valve to reduce water and energy consumption.

8.3. Grease and Wastewater Disposal

The owner/operator of a FSE shall dispose of grease and wastewater in compliance with Chapter 681 – Sewers and in the following manner:

- Collect excess grill/frying grease into the waste grease bin for recycling.
- The wastewater from any indoor cleaning operations (e.g. kitchen exhausts/ducts) shall go through a grease interceptor.
- Do not pour bleach down any drains.

9. Outdoor Practices – Protection of Storm Sewer

The municipal storm sewer and catch basins, the square grates on the sides of roads and in parking lots, convey rainwater and melted snow to the natural watercourses and/ or Lake Ontario without treatment. Anything other than rain water or melted snow that enters a catch basin or municipal storm sewer can cause damage to the municipal sewer system, pollute the natural environment, harm the health of the public, animals, aquatic life and the natural environment, generate unpleasant odours and may constitute a spill and is therefore, prohibited.



The owner/operator of a FSE shall not permit wastewater entering catch basins from, but not limited to:

- Inside the facility (e.g. mop water).
- Outdoor cleaning (e.g. power washing).
- Leakage from outdoor waste/oil bins.
- Exhaust system cleaning.

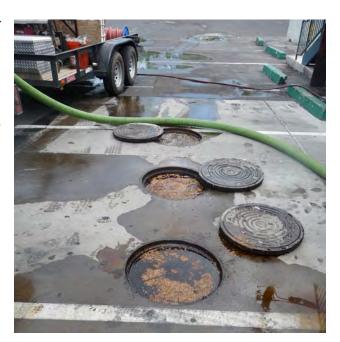
The owner/operator of a FSE shall ensure the following practices are performed to prevent wastewater from entering catch basins:

- Use watertight outdoor receptacles of adequate size that are not easily tipped over.
- Recycling barrels and containers for transporting oil shall be covered and secured from spillage and tipping over.
- Ensure spill response plan, equipment, devices and materials are readily available.
- Clean up spills immediately using an absorbent material and place it in the dry trash bin.
- The wastewater from any indoor cleaning operations (e.g. kitchen exhausts/ducts) shall go through a grease interceptor and shall never be poured down or flow into a catch basin.
- Any outdoor cleaning (e.g. power washing) shall have the wastewater contained, collected and hauled away. Outdoor cleaning wastewater may only be poured into a connection to a municipal sanitary sewer (indoor drain) if the wastewater meets the sanitary sewer limits in Chapter 681 – Sewers. Sweep the outside area first before cleaning with water and place the swept material into a waste disposal/trash bin.
- Ontario Fire Code, Regulation 213/07, regulates exhaust and fire protection systems in cooking operations and prescribes cleaning of the fans and duct system to remove oil buildup. At no time is the wastewater allowed to be left on the roof or allowed to escape down the gutter and into a municipal storm sewer connection or storm sewer in any way. Consider supervising exhaust cleaning to ensure wastes are handled properly.

10. Sewer Blockage Servicing

When an owner/operator of a FSE is required to repair and/or unclog a privately owned plumbing/sewer line the following shall be performed:

- Use a MOECC approved flusher truck to flush any FOG blocked lines and vacuum to suck up the FOG and other contents.
- Use a MOECC approved waste carrier to pump up the FOG and other contents so as to prevent the FOG laden wastewater from reaching the City's sewer system. FOG and any other contents in blocked lines cannot be flushed to the City sewer system.
- Use a MOECC approved waste carrier to transport the intercepted wastes from line flushing, blockages and catch basin servicing.

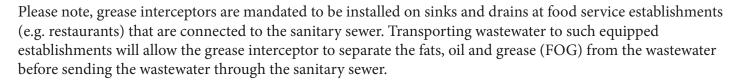


Costs incurred by the City as a result of a grease-blocked sewer or damage to the sewers will be charged back to those responsible. Anyone found responsible could also face enforcement under the Sewers Bylaw.

11. Mobile Food Vendor

All mobile food vendor owners/operators shall:

- Store wastewater on site in a separate container from the clean (potable) water and have it labelled dirty water and/or wastewater.
- Never dispose dirty water/wastewater into the natural environment, roads, catch basins or a municipal storm sewer. Catch basins convey rainwater and melted snow to natural watercourses or Lake Ontario without treatment.
- Collect waste cooking oil for proper disposal.
- Properly dispose of wastewater:
 - At their normal place of business in the municipal sewer connection, provided that the connection to the municipal sewer is approved by the General Manager and the discharge meets the sanitary discharge limits in Table 1 – Limits for Sanitary and Combined Sewers Discharge in § 681-2; or
 - By having a MOECC approved waste carrier transport it to a legally authorized (by MOECC and municipality, as applicable) place of disposal.



The mobile food vendor owner/operator has the option of installing a grease interceptor. Should this option be pursued, cleaning of the grease interceptor shall be performed by either a MOECC approved waste carrier or the mobile food truck operator. The method chosen will depend on the volume of FOG generated.

- If cleaned by a MOECC approved waste carrier, cleaning receipts/invoices shall be kept on site at all times showing date and time the grease interceptor was cleaned and what work was performed and where possible the percentage of FOG, solids and water found in the grease interceptor at the time the interceptor was to be cleaned.
- If cleaned by an operator, cleanings shall be logged, log sheets shall be kept on site at all times and the FOG disposed of properly (e.g. green bin). Clean out consists of removing all wastewater and FOG as well as cleaning grease interceptor pieces that can be removed. The wastewater collected from the grease interceptor must be stored in a designated waste bin until it can be picked up by a MOECC approved waste carrier.

Please note, anything other than rain water or melted snow that enters a catch basin can cause damage to the sewer system, pollute the natural environment, harm aquatic habitat, create a public health concern, generate unpleasant odours and may constitute a spill.



12. Special Events and Festivals

Organizers of special events and festivals shall ensure that:

- Wastewater is not discharged into the natural environment, roads, ditches, catch basins or directly or indirectly into a municipal storm sewer.
- Wastewater from food preparation (e.g. mobile food trucks) shall discharge through a grease interceptor. See Section 11 "Mobile Food Vendor" for details.
- Waste cooking oil shall be collected for proper disposal.
- For each permitted direct connection to the sanitary or combined sewer, the wastewater shall pass through a grease interceptor.
- Domestic wastewater (e.g. from toilets) shall not pass through a grease interceptor.

Organizers of such events may provide <u>a designated wash area</u> to be used by mobile food vendors, generating minimal FOG, to wash utensils, containers etc. The central washing location shall be connected to a grease interceptor.

13. Inspections, Monitoring and Enforcement

Toronto Water General Manager may carry out inspections, examine records or other documents. The General Manager may take samples of effluent for analysis as specified under Chapter 681 – Sewers. Corrective measures will be imposed by the General Manager if it is determined that the ECP is not being complied with.

A premise that causes a Municipal sewer blockage may be charged back for the cost of sewer repair, in addition to any other remedies or enforcement. Conviction for contraventions of Chapter 681 – Sewers can range up to \$75,000 for an individual and up to \$100,000 for a corporation.

14. More Information

For more information about the ECP, please contact:

Toronto Water, City of Toronto Environmental Monitoring and Protection Unit 416-392-9940 emp_fse@toronto.ca

For any other questions on the Sewers Bylaw, call 311.

For reporting a **spill, illegal discharge, and non-drinking water quality complaints or concerns,** such as odours emanating from sewers or basement drains or discoloured discharge from storm outfalls, call Toronto Water's 24 hour spill reporting line at 311.

15. Glossary of Terms

Canadian Standards Association (CSA): A private, not-for-profit membership-based Standards Development Organization (SDO) in Canada.

Catch basins: The square grates by roadsides and parking lots are called catch basins and these are part of the storm sewer system. Catch basins transmit rainwater and snowmelt to the nearest creek, river or lake without treatment.

Contaminant: A substance that is not naturally present in the environment or is present in elevated amounts, which, if in sufficient concentration, can adversely affect human health, flora, fauna and/or the natural environment.

Effluent: The liquid flowing out of a facility or household into a sewer system or water body.

Flow control: A device that is installed upstream from an interceptor and has a permanent orifice that controls the rate of flow through the interceptor.

Flow rating: The maximum flow at which a grease interceptor will meet the FOG or sediment retention requirements of the CSA B481 Series.

Fixture: A receptacle, appliance, apparatus or other device that discharges wastewater and includes floor drains.

FOG: Non-soluble organic fats, oils, and greases from animal or vegetable sources.

Food/garbage grinder: A fixture that is a mechanical device (also known as a garburator) used to reduce the particle size of food waste.

Garbage compactor: A mechanical device used to compress garbage to reduce volume.

GPM: Gallons (US liquid) per minute. All references to gallons are to US liquid gallons.

Grease interceptor: A device designed and installed to separate and retain oil and grease from wastewater, while permitting wastewater to discharge to sanitary sewer.

Grease removal device (GRD): A plumbing device that intercepts free-floating fats, oils, and grease from wastewater and discharges automatically without intervention from the user except for maintenance.

Ontario Building Code (OBC): A code regulated under the Ministry of Municipal Affairs and Housing.

Sanitary sewer: A sewer for the collection and transmission of domestic or industrial sewage or any combination thereof.

Sewers Bylaw - Toronto's Municipal Code: Sewers, Chapter 681, to regulate the quality of wastewater into the natural environment and sewer systems.

Solids interceptor: A plumbing device installed in upstream of a grease interceptor to intercept particles or sediments.

Spill Response Plan: A written plan developed by the owner or operator of a food service establishment to respond to any spills at the facility's site.

Storm sewer: A sewer for the collection and transmission of uncontaminated water, storm water, drainage from land or from a watercourse or any combination thereof.

Wastewater: Any liquid containing animal, vegetable, mineral or chemical matter in solution or in suspension but does not include storm water or uncontaminated water.

16. References and Links

American Society of Mechanical Engineers (ASME):

https://www.asme.org/

Canadian Environmental Protection Act (CEPA):

http://www.ec.gc.ca/lcpe-cepa/default.asp?lang=En&n=26A03BFA-1

Canadian Standards Association (CSA):

http://www.csagroup.org/

Municipal Licensing & Standards (MLS):

www.toronto.ca/mlslicences

Ministry of the Environment and Climate Change (MOECC):

http://www.ontario.ca/ministry-environment-and-climate-change

MOECC Regulation 347: General – Waste Management:

http://www.ontario.ca/laws/regulation/900347

Ontario Building Code (OBC):

http://www.mah.gov.on.ca/Page7393.aspx

Plumbing and Drainage Institute (PDI):

http://www.pdionline.org/

Toronto Municipal Code Chapter 681 – Sewers:

http://www.toronto.ca/legdocs/municode/1184_681.pdf

17. Appendix 1: Grease Interceptor Maintenance Log Sample

This log is to demonstrate compliance with Toronto's ECP and shall be kept on site for seven years.

Date	FOG Depth	Solid Depth	Water Depth	Interceptor Condition	Contractor Name	Disposal Location	Comments

Any wastes removed from the site shall be managed in accordance with the requirement of the Ontario Waste Management Regulation 347.

18. Appendix 2: Grease Interceptor Maintenance Log Sample – Grease Recovery Device

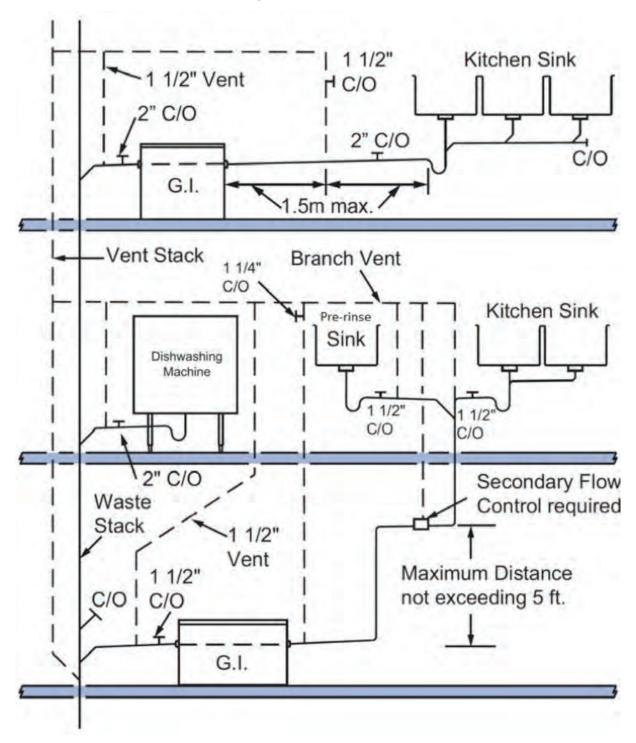
This log is to demonstrate compliance with Toronto's ECP and shall be kept on site for seven years. Check when task complete

Date	Basket emptied - do not run water through sink	Oil emptied (quantity)	Oil outlet assembly cleaned	Silt valve held for 10 seconds (run water through sink)	Maintenance performed by:

Any wastes removed from the site shall be managed in accordance with the requirement of the Ontario Waste Management Regulation 347.

19. Appendix 3: Installation Requirements

A-7.5.5.2.(6) and (7) Grease Interceptor (G.I.) Installation



See 7.4.4.3.(9) All grease and oil interceptors shall have an internal flow control and, where the head will exceed five feet, a secondary flow control shall be required.

Reference: Ontario Building Code, Appendix