



2008 CWWA Surveys –FOG (Fats Oil Grease)

2008 CWWA FOG SURVEY SURVEY QUESTIONS - RESPONSES

CWWA FOG SURVEY QUESTIONS (1- 10)

1	Population of your Municipality (wastewater population served if available):
2	Is there currently any guidance in your Bylaw on grease traps & interceptors
	If yes is there a url:
3	Do you have a FOG management program in place?
	If yes please describe
4	Is your municipality planning on implementing a FOG Management Program in the next 12 months ?
5	Is your municipality planning on revising the Sewer Service Bylaw to include reference to new CSA Standard B481 (Grease Traps/Interceptors)
6	Number of Food Service Establishments
	Restaurants - fast food:
	Restaurants - regular:
	Schools (with food preparation):
	Hospitals / Nursing Homes / Retirement homes (with food preparation):
	Other (eg: packaged food / meal preparation industries):
	Any specific additional comments on FOG sources:
7	Are there commercial grease trap maintenance services in your community?
	If yes, how many?

8	Do you have an estimate of the total FOG collected (not including separated yellow grease, see below)?
	If yes, how much (please specify units)?
9	Is Yellow Grease (Fryer Oils) collected from Food Service Establishments ?
	If yes, how much (please specify units)?
	Who uses the collected "Yellow Grease"?
	Rendering Company
	Energy Recovery Facility
	Other (please specify)
	Do you have an estimate of volume of Yellow Grease (Fryer Oils) currently being collected per month (please specify units)?
Additional comments on yellow grease sources:	
10	How are collected fats, oils or greases handled in your municipality?
	Landfilled
	Land applied
	Anaerobic Digester at Wastewater Treatment Plant
	Composting
	Energy Recovery Program
	Other (please specify)

CWWA FOG SURVEY QUESTIONS (11 – 19)

11	If you accept FOG into your Wastewater Treatment Plant, how is it received?
	at the Septage Dump Station
	at a receiving station where it is pumped to digesters
	at the plant's scum pits
	Other (please specify)
12	If you receive FOG into your WWTP's digesters, how is the digester gas utilized?
	% flared:
	% used for heating:
	% used for electricity generation:
	% used as fuel for vehicles:
	What do you charge grease haulers to receive FOG at your WWTP (\$/m3)?
	Additional Comments on FOG collection:
13	Does your municipal plumbing code currently specify grease trap & interceptor standards and sizes for FSEs?
	Do you currently have municipal staff inspecting grease traps & interceptors at your FSEs?
	If yes, how many staff are dedicated to grease traps & interceptors inspections?
	On average, how many grease traps & interceptors inspections are done?
	per week
	per month
	Additional comments on inspection activities:

14	Do you have restaurants on your wastewater surcharge program?
15	What is your surcharge factor for FOG in your surcharge formula (\$/kg)?
16	How many kilometers of sewers do you have in your municipality (km)?
17	What is the approximate annual expenditures associated with grease blockage cleanouts (\$)?
18	Can you estimate additional wastewater treatment plant operating costs due to FOG (\$/year)?
19	a) What has been, if any, the amount of compensation paid to building owners for sewer backups caused by FOG blockages (\$/year)?
	b) Additional Comments on sewer maintenance:

WWA FOG SURVEY - Responses to Questions # 1-2

City/Town:	Province:	Population of your Municipality (wastewater population served if available):	Is there currently any guidance in your Bylaw on grease traps & interceptors	If yes is there a url:
Burnaby	BC	220,000	Yes	http://burnaby.ihostez.com/contentengine/launch.asp?ID=303
City of Trail	BC	7,237	No	
District of West Vancouver	BC	42,000	No	
Fort St. John	BC	18000	Yes	
Kelowna	BC	100,000	Yes	http://www.kelowna.ca/CityPage/Docs/PDFs/%5CBylaws/Sanitary%20Sewer%20Storm%20Drain%20Regulation%20Bylaw%20No%2E%206618%2Epdf
Surrey	BC			
Calgary	AB	1,042,892	Yes	www.calgary.ca
Edmonton	AB	750,000	Yes	http://www.edmonton.ca/bylaws/C9425.doc
Lloydminster	AB	26,000	No	
Nisku	AB	13,000 during peak	Yes	
Red Deer	AB	85,0000	Yes	
Town of Banff	AB	8,400, plus 15,000 visitors	Yes	no
North Battleford	SK	14,000	Yes	
Regina	SK	200,000	Yes	
Winnipeg	MB	670,000	Yes	

CWWA FOG SURVEY - Responses to Questions # 1-2

City/Town:	Province:	Population of your Municipality (wastewater population served if available):	Is there currently any guidance in your Bylaw on grease traps & interceptors	If yes is there a url:
Barrie	ON	135000	No	
Brantford	ON	approx. 90,000	No	
Brockville	ON	21000	No	
Cambridge	ON	500000	No	
Centre Wellington	ON	12500 / 15000	Yes	
City of Windsor	ON	270000	No	
Delhi	ON	62,000 (32,000)	Yes	
District Municipality of Muskoka	ON	25000	Yes	no
Greater Sudbury	ON	165000	Yes	
Hamilton	ON	500000	No	
Kingston	ON	100000	No	
Kitchener	ON	220000		
London	ON	350000	No	
Loyalist Township	ON	10078	Yes	
Mississauga	ON	1000000	No	
Napanee	ON	8500	No	
Ottawa	ON			
St. Catharines	ON	130000	Yes	http://www.stcatharines.ca/cityservices/citydepartments/engineering/bylaw_91_364.pdf
Town of Smiths Falls	ON	8999	No	
Welland	ON	50331	No	
Woodstock	ON	30000	No	
Halifax	NS	187000	Yes	http://www.halifax.ca/hrwc/documents/ScheduleC-RulesandRegs-WW-REVISEDperOrder-April3-08.pdf

CWWA FOG SURVEY - Responses to Question # 3

City/Town:	Pro	Do you have a FOG management program in place?	
Fort St. John	BC	yes	Grease traps must be installed on all restaurants, commercial shops and garages must have oil separator sumps installed Sewer main line flushing program
Burnaby	BC	no	
City of Trail	BC	no	
District of West Vancouver	BC	no	
Kelowna	BC	no	
Surrey	BC		
Lloydminster	AB	no	We currently do not have a FOG Management Program in place but have recently had AB/SK Environment come out and do a SWEEP.
Calgary	AB	no	
Edmonton	AB	yes	Currently, there is an inspection program for all institutional, commercial and industrial facilities including food preparations facilities. The City has published tow educational pamphlets for food preparation facilities. A major educational campaign is presently in preparation with a professional communications firm for launch in early 2009. Discussions have also commenced regarding the collection of FOG for digestion with municipal compost and the propduction of gas for power production.
Nisku	AB	yes	Monotoring for acceptable limits for discharge into the Capital Region Sewage Commission Truck Main.
Red Deer	AB	yes	Food prep businesses are inspected, grease interceptors/traps are inspected for proper operation, as well as sampling takes place.
Town of Banff	AB	yes	Inspections of grease traps roughly every 2 years. Utilities personnel with Bylaw Officer. Cleaning/flushing of sewer mains
Regina	SK	yes	Initial stages still working on procedures & bylaw ammendments
North Battleford	SK	no	
Winnipeg	MB	yes	The City of Winnipeg Water & Waste Deoartment has an enforcement policy to ensure that grease interceptors are installed on all kitchen sinks and dishwasher waste pipes found in hotels, restaurants, and institutional and commercial buildings. The by-law is enforced by issuing a Notice of By-Law Violation when a premise is found to not have a grease trap or a properly maintained and functional grease trap, with a period of time to comply; issuing an Order giving the owner 5 days to comply if the follow-up inspection from the Notice determines continued non-compliance; and, if the Order is ignored, an Offence Notice that would result in fines being applied. There is also a Grease Trap Waiver form that could be issued if it is determined that food is not prepared (cooked) at the premise.

CWWA FOG SURVEY - Responses to Question # 3

City/Town:	Pro	#3: Do you have a FOG management program in place?	
Mississauga	ON	no	
Brantford	ON	yes	Program is in its infancy. Restaurants in known FOG problem areas are inspected with regard to interceptor location and cleaning frequency. Public information campaign initiated encouraging residents not to pour grease down the drain. Solvent extractables in sewage limited to 100 mg/L.
Centre Wellington	ON	no	
Greater Sudbury	ON	no	
Welland	ON	no	Historically we have just been doing preventative maintenance (but in the case of grease, it is usually emergency maintenance; in particular the havoc that grease build up plays with our sanitary pumping station)
Kitchener	ON		
Barrie	ON	yes	Inspections and sampling.
Brampton	ON		
Brockville	ON	no	
Cambridge	ON	no	
Centre Wellington	ON	no	
City of Windsor	ON	yes	Restaurants and automotive service garages require grease trap/oil interceptor inspection and waste disposal practice review prior to receiving or renewing their business license.
Delhi	ON	no	
District Municipality of Muskoka	ON	no	
Hamilton	ON	no	
Kingston	ON	no	
London	ON	yes	Deal with "hot spots" based on sewer cleaning for restaurants and monitoring program for industries.
Loyalist Township	ON	no	
Napanee	ON	no	
Ottawa	ON		
St. Catharines	ON	no	Note that the City's sewer-use by-law references the Region of Niagara's by-law which has additional info on grease traps: By-law 39-2002
Town of Smiths Falls	ON	no	
Woodstock	ON	yes	By-Law enforcement person takes information from collection personnel on problems goes back to business to determine if and when separator was cleaned. Public Health also includes oil and grease separator question on their restaurant inspection sheets.
Halifax	NS	yes	Regular FSE inspections.

CWWA FOG SURVEY - Responses to Question # 4 & 5

City/Town:	Province:	#4: Is your municipality planning on implementing a FOG Management Program in the next 12 months ?	#5: Is your municipality planning on revising the Sewer Service Bylaw to include reference to new CSA Standard B481 (Grease Traps/Interceptors)
Burnaby	BC	Yes	
City of Trail	BC	No	
District of West Vancouver	BC	Yes	No
Fort St. John	BC	No	No
Kelowna	BC	No	
Surrey	BC		
Calgary	AB	Yes	Yes
Edmonton	AB	Yes	Yes
Lloydminster	AB	No	
Nisku	AB	Yes	
Red Deer	AB	Yes	
Town of Banff	AB	Yes	
North Battleford	SK	No	
Regina	SK	Yes	
Winnipeg	MB	No	Yes

CWWA FOG SURVEY - Responses to Question # 4 & 5

City/Town:	Province:	#4: Is your municipality planning on implementing a FOG Management Program in the next 12 months ?	#5 Is your municipality planning on revising the Sewer Service Bylaw to include reference to new CSA Standard B481 (Grease Traps/Interceptors)
Napanee	ON	No	No
Woodstock	ON	No	No
Cambridge	ON	No	
Centre Wellington	ON	Yes	
Hamilton	ON	Yes	
Kingston	ON	No	
Loyalist Township	ON	No	
Mississauga	ON	No	
St. Catharines	ON	Yes	
Welland	ON	No	
Barrie	ON	No	Yes
Brantford	ON	Yes	Yes
Brockville	ON	Yes	Yes
City of Windsor	ON		Yes
Delhi	ON	No	Yes
District Municipality of Muskoka	ON	No	Yes
Greater Sudbury	ON	Yes	Yes
London	ON		Yes
Town of Smiths Falls	ON	No	Yes
Kitchener	ON		
Ottawa	ON		
Halifax	NS		Yes

CWWA FOG SURVEY - Responses to Question # 6

City/Town:	Province:	Restaurants - fast food:	Restaurants - regular:	Schools (with food preparation):	Hospitals / Nursing Homes / Retirement homes (with food preparation):	Other (eg: packaged food / meal preparation industries):	Any specific additional comments on FOG sources:
Burnaby	BC						
City of Trail	BC						
District of West Vancouver	BC						
Fort St. John	BC	10	28	1	4	0	
Kelowna	BC						approximately 400 FSEs connected to sewer
Surrey	BC						
Calgary	AB		3000	4	190		schools are post secondary, restaurants include regular & fast food
Edmonton	AB						Approximately 2,000 restaurants of all types holding a City business licence. No firm data on details.
Lloydminster	AB						
Nisku	AB	15	15				
Red Deer	AB	51	126	4	12	24	Program is currently operating
Town of Banff	AB	40	40	1	1	0	
North Battleford	SK	13	14	10	3	1	
Regina	SK	250	450	5	45	12	GROCERY Stores, Meat processors, Bakerys

CWWA FOG SURVEY - Responses to Question # 6

City/Town:	Province:	Restaurants - fast food:	Restaurants - regular:	Schools (with food preparation):	Hospitals / Nursing Homes / Retirement homes (with food preparation):	Other (eg: packaged food / meal preparation industries):	Any specific additional comments on FOG sources:
Winnipeg	MB	see # 8	see # 8	unknown	see # 8	see # 8	There is a total of approximately 2400 restaurants in Winnipeg. It is not possible to segregate them by fast food or regular categories. There are approximately 450 institutions and businesses, such as hospitals, nursing homes, retirement homes (with food preparation) and packaged food / meal preparation businesses.
Barrie	ON	300	200	25	23	0	
Brantford	ON	714	211	10	87	3	fast food stats are for anywhere with take -out food - from local health unit. Day care with food included in Hospitals numbers.
Brockville	ON	20	30	4	5		
Cambridge	ON						I do not have this information
Centre Wellington	ON	12	21	1	4	0	residential sources
City of Windsor	ON						There are approximately 500 facilities on our business license clearance list
Delhi	ON						
District Municipality of Muskoka	ON	approx. 50	approx. 50	2	8		
Greater Sudbury	ON						
Hamilton	ON						

CWWA FOG SURVEY - Responses to Question # 6

City/Town:	Province:	Restaurants - fast food:	Restaurants - regular:	Schools (with food preparation):	Hospitals / Nursing Homes / Retirement homes (with food preparation):	Other (eg: packaged food / meal preparation industries):	Any specific additional comments on FOG sources:
Kingston	ON	?	?	3	20 ?	3	Other includes prisons.
Kitchener	ON						
London	ON						
Loyalist Township	ON	1	8	1	3		
Mississauga	ON	2500	1708	86		2617	
Napanee	ON	9	18	1	3		
Ottawa	ON						
St. Catharines	ON	Unknown	Unknown	Unknown	Unknown	Unknown	
Town of Smiths Falls	ON						
Welland	ON	40	60	6	7	0	while we dont seem to have a formal FOG action plan in place, this survey has brought the issue to light that maybe we can "do something about it." As Welland is a relatively old city, many of the existing food establishments were allowed to be constructed without grease interceptors. as a result, the City wastes a lot of money cleaning pipes and laterals doe to grease blockage. our pump station has almost caused basement flooding on several occasions when globs of fat prevent the pump floats and high water alarm from going off.
Woodstock	ON						
Halifax	NS	300	300	40	35	125	

CWWA FOG SURVEY - Responses to Question # 7

City/Town:	Province:	Are there commercial grease trap maintenance services in your community?	If yes, how many?
Burnaby	BC	Yes	
City of Trail	BC		
District of West Vancouver	BC		
Fort St. John	BC	Yes	3
Kelowna	BC	Yes	3
Surrey	BC		
Calgary	AB	Yes	6
Edmonton	AB	Yes	10
Lloydminster	AB		
Nisku	AB	Yes	unknown
Red Deer	AB	Yes	3
Town of Banff	AB	No	
North Battleford	SK	No	
Regina	SK	Yes	6
Winnipeg	MB	Yes	37 licenced wastewater haulers

CWWA FOG SURVEY - Responses to Question # 7

City/Town:	Province:	Are there commercial grease trap maintenance services in your community?	If yes, how many?
Barrie	ON	Yes	5
Brantford	ON	Yes	6
Brockville	ON	Yes	
Cambridge	ON	Yes	
Centre Wellington	ON	No	2
City of Windsor	ON	Yes	4
Delhi	ON		
District Municipality of Muskoka	ON	Yes	1 or 2
Greater Sudbury	ON	Yes	unknown
Hamilton	ON		
Kingston	ON	Yes	?
Kitchener	ON		
London	ON	Yes	2
Loyalist Township	ON	No	
Mississauga	ON	No	
Napanee	ON	Yes	3
Ottawa	ON		
St. Catharines	ON	Yes	Unknown
Town of Smiths Falls	ON	No	
Welland	ON	No	they have to come in from toronto
Woodstock	ON	No	
Halifax	NS	Yes	3

CWWA FOG SURVEY - Responses to Question # 8

City/Town:	Province:	Do you have an estimate of the total FOG collected (not including separated yellow grease, see below)?	If yes, how much (please specify units)?
Burnaby	BC	no	
City of Trail	BC		
District of West Vancouver	BC		
Fort St. John	BC	no	
Kelowna	BC	no	
Surrey	BC		
Calgary	AB	yes	240 m3 per month
Edmonton	AB	no	
Lloydminster	AB		
Nisku	AB	no	
Red Deer	AB	yes	2007 (483,985) litres
Town of Banff	AB	no	
North Battleford	SK	no	
Regina	SK	no	
Winnipeg	MB	no	

CWWA FOG SURVEY - Responses to Question # 8

City/Town:	Province:	Do you have an estimate of the total FOG collected (not including separated yellow grease, see below)?	If yes, how much (please specify units)?
Barrie	ON	no	
Brantford	ON	no	
Brockville	ON	no	
Cambridge	ON	no	Note: Collected by private industry
Centre Wellington	ON	no	
City of Windsor	ON	no	
Delhi	ON		
District Municipality of Muskoka	ON	no	
Greater Sudbury	ON	no	
Hamilton	ON		
Kingston	ON	no	
Kitchener	ON		
London	ON	no	
Loyalist Township	ON	no	
Mississauga	ON	no	
Napanee	ON	no	
Ottawa	ON		
St. Catharines	ON	no	
Town of Smiths Falls	ON	no	
Welland	ON	no	
Woodstock	ON	no	
Halifax	NS	no	

CWWA FOG SURVEY - Responses to Question # 9a

City/Town:	Province:	Is Yellow Grease (Fryer Oils) collected from Food Service Establishments ?	If yes, how much (please specify units)?
Burnaby	BC		n/a
City of Trail	BC		
District of West Vancouver	BC		
Fort St. John	BC	Yes	
Kelowna	BC	Yes	unknown
Surrey	BC		
Calgary	AB	Yes	no accurate
Edmonton	AB	Yes	Unknown
Lloydminster	AB		
Nisku	AB	Yes	Unknown
Red Deer	AB	Yes	volume unknown
Town of Banff	AB	Yes	Unknown
North Battleford	SK	No	
Regina	SK	Yes	Unknown
Winnipeg	MB	Yes	unknown

CWWA FOG SURVEY - Responses to Question # 9a

City/Town:	Province:	Is Yellow Grease (Fryer Oils) collected from Food Service Establishments ?	If yes, how much (please specify units)?
Barrie	ON	Yes	
Brantford	ON	Yes	
Brockville	ON	Yes	
Cambridge	ON	Yes	Done by private industry. Do not have info
Centre Wellington	ON	Yes	dont know
City of Windsor	ON	No	
Delhi	ON		
District Municipality of Muskoka	ON		
Greater Sudbury	ON	No	
Hamilton	ON		
Kingston	ON	Yes	
Kitchener	ON		
London	ON	Yes	
Loyalist Township	ON	No	
Mississauga	ON	No	
Napanee	ON	Yes	don't know
Ottawa	ON		
St. Catharines	ON	No	
Town of Smiths Falls	ON	No	
Welland	ON	Yes	i assume so, but again the contractors are not local
Woodstock	ON		
Halifax	NS	Yes	

Question #9

CWWA FOG SURVEY - Responses to Question # 9b

		Who uses the collected "Yellow Grease"?				
City/Town:	Province:	Rendering Company	Energy Recovery Facility	Other (please specify)	Do you have an estimate of volume of Yellow Grease (Fryer Oils) currently being collected per month (please specify units)?	Additional comments on yellow grease sources:
Burnaby	BC			n/a	n/a	
City of Trail	BC					
District of West Vancouver	BC					
Fort St. John	BC	Rendering Company				
Kelowna	BC	Rendering Company	Energy Recovery Facility		unknown	
Surrey	BC					
Calgary	AB	Rendering Company			no	no accurate figure on volume of yellow grease
Edmonton	AB	Rendering Company			No	
Lloydminster	AB					
Nisku	AB		Energy Recovery Facility	Unknown	N/A	It is up to the Busniess to look after thier own collection and final desposal.
Red Deer	AB	Rendering Company		farmers, biofuel	No	
Town of Banff	AB	Rendering Company			no	
North Battleford	SK					
Regina	SK	Rendering Company			unknown	
Winnipeg	MB	Rendering Company			no	

CWWA FOG SURVEY - Responses to Question # 9b

City/Town:	Province:	Rendering Company	Energy Recovery Facility	Other (please specify)	Do you have an estimate of volume of Yellow Grease (Fryer Oils) currently being collected per month (please specify units)?	Additional comments on yellow grease sources:
Barrie	ON			Farms	No	
Brantford	ON	Rendering Company			No	
Brockville	ON					
Cambridge	ON			Unknown	No	Collected by private industry. Do not have info
Centre Wellington	ON	Rendering Company		do not know	unknown	
City of Windsor	ON	Rendering Company				
Delhi	ON					
District Municipality of Muskoka	ON					
Greater Sudbury	ON					
Hamilton	ON					
Kingston	ON			Unknown	NO	
Kitchener	ON					
London	ON	Rendering Company				
Loyalist Township	ON					
Mississauga	ON					
Napanee	ON			don't know	no	
Ottawa	ON					
St. Catharines	ON				Unknown	
Town of Smiths Falls	ON					
Welland	ON			dont know	no	
Woodstock	ON					
Halifax	NS	Rendering Company				

CWWA FOG SURVEY - Responses to Question # 10

		How are collected fats, oils or greases handled in your municipality					
City/Town:	Prov	Landfilled	Land applied	Anaerobic Digester at Wastewater Treatment Plant	Composting	Energy Recovery Program	Other (please specify)
Burnaby	BC						n/a
City of Trail	BC						
District of West Vancouver	BC						
Fort St. John	BC					Energy Recovery Program	
Kelowna	BC						third parties handle grease for the most part
Surrey	BC						
Calgary	AB			Anaerobic Digester at Wastewater Treatment Plant			
Edmonton	AB	Landfilled			Composting		
Lloydminster	AB						
Nisku	AB						Unkown again it is up to the Business to mange thier own
Red Deer	AB	Landfilled		Anaerobic Digester at Wastewater Treatment Plant			Some businesses still place in garbage
Town of Banff	AB	Landfilled			Composting		
North Battleford	SK	Landfilled					
Regina	SK			Anaerobic Digester at Wastewater Treatment Plant			
Winnipeg	MB			Anaerobic Digester at Wastewater Treatment Plant			

CWWA FOG SURVEY - Responses to Question # 10

City/Town:	Province:	?	Landfilled	Land applied	Anaerobic Digester at Wastewater Treatment Plant	Composting	Energy Recovery Program	Other (please specify)
Barrie	ON		Landfilled					
Brantford	ON				Anaerobic Digester at Wastewater Treatment Plant			wastewater collection system only
Brockville	ON							
Cambridge	ON							Collected by private industry. Do not have info. Likely a mix.
Centre Wellington	ON		Landfilled		Anaerobic Digester at Wastewater Treatment Plant			do not know
City of Windsor	ON							Disposed of by private contractors
Delhi	ON							
District Municipality of Muskoka	ON							private facilities
Greater Sudbury	ON		Landfilled					
Hamilton	ON							
Kingston	ON							Unknown
Kitchener	ON							
London	ON			Land applied				
Loyalist Township	ON		Landfilled					

CWWA FOG SURVEY - Responses to Question # 10

City/Town:	Province:	?	Landfilled	Land applied	Anaerobic Digester at Wastewater Treatment Plant	Composting	Energy Recovery Program	Other (please specify)
Mississauga	ON							
Napanee	ON							
Ottawa	ON							
St. Catharines	ON							FOG as collected & disposed of privately
Town of Smiths Falls	ON							
Welland	ON		Landfilled					
Woodstock	ON		Landfilled					
Halifax	NS							Majority removed from municipality for processing

CWWA FOG SURVEY - Responses to Question # 11

City/Town:	Province:	If you accept FOG into your Wastewater Treatment Plant, how is it received?	at the Septage Dump Station	at a receiving station where it is pumped to digesters	at the plant's scum pits	Other (please specify)
Burnaby	BC					no
City of Trail	BC					
District of West Vancouver	BC					
Fort St. John	BC					not accepted
Kelowna	BC					
Surrey	BC					
Calgary	AB				at the plant's scum pits	
Edmonton	AB					
Lloydminster	AB					
Nisku	AB					We do not have a Treatment Facility, Wastewater goes to the Regional Facility
Red Deer	AB			at a receiving station where it is pumped to digesters	at the plant's scum pits	
Town of Banff	AB					
North Battleford	SK					
Regina	SK		at the Septage Dump Station			
Winnipeg	MB		at the Septage Dump Station			

CWWA FOG SURVEY - Responses to Question # 11

City/Town:	Province:	If you accept FOG into your Wastewater Treatment Plant, how is it received?	at the Septage Dump Station	at a receiving station where it is pumped to digesters	at the plant's scum pits	Other (please specify)
Barrie	ON			at a receiving station where it is pumped to digesters		
Brantford	ON					wastewater collection system only
Brockville	ON					
Cambridge	ON					
Centre Wellington	ON				at the plant's scum pits	
City of Windsor	ON		at the Septage Dump Station			
Delhi	ON					
District Municipality of Muskoka	ON					not accepted
Greater Sudbury	ON					
Hamilton	ON					
Kingston	ON					Planning process for receiving station not implemented.
Kitchener	ON					
London	ON					
Loyalist Township	ON					we don't receive FOG
Mississauga	ON					Do not receive
Napanee	ON					
Ottawa	ON					
St. Catharines	ON					Not accepted
Town of Smiths Falls	ON				at the plant's scum pits	
Welland	ON					the region runs our wwtp
Woodstock	ON					
Halifax	NS					

CWWA FOG SURVEY - Responses to Question # 12

City/Town:	Prov:	If you receive FOG into your WWTP's digesters, how is the digester gas utilized?	% flared:	% used for heating:	% used for electricity generation:	% used as fuel for vehicles:	What do you charge grease haulers to receive FOG at your WWTP (\$/m3)?	Additional Comments on FOG collection:
Burnaby	BC						n/a	
City of Trail	BC							
District of West Vancouver	BC							
Fort St. John	BC							
Kelowna	BC							
Surrey	BC							
Calgary	AB		32	40	28	0	9.98	
Edmonton	AB							
Lloydminster	AB							
Nisku	AB						N/A	
Red Deer	AB			100			currently no charge	Once a new FOG receiving station is in place there will be a fee, currently under review.
Town of Banff	AB							
North Battleford	SK							
Regina	SK		50	50			Permit Fees	
Winnipeg	MB		25	75			\$2.51 per kilolitre	

CWWA FOG SURVEY - Responses to Question # 13

City/Town:	Prov	Does your municipal plumbing code currently specify grease trap & interceptor standards and sizes for FSEs?	Do you currently have municipal staff inspecting grease traps & interceptors at your FSEs?	If yes, how many staff are dedicated to grease traps & interceptors inspections?	On average, how many grease traps & interceptors inspections are done?	per week	per month	Additional comments on inspection activities:
Calgary	AB	No	No	none			0	plan tom start a regular grease trap inspection program
Edmonton	AB	No	Yes	1			10	There are no staff dedicated to FSEs. FSEs are done together with all other ICI inspections.
Lloydminster	AB							
Nisku	AB	Yes	Yes	3 only during inatial installation			N/A	
Red Deer	AB	No	Yes	1			5	When the program first started the total was much higher, currently sampling of FOG businesses now flags violators which creates inspections.
Town of Banff	AB	No	Yes	2 every 2 years			all done in one week	all restaurants/users visited once every two years
North Battleford	SK	Yes	No					
Regina	SK	Yes	Yes	1			200	
Winnipeg	MB	Yes	Yes	1			4	

CWWA FOG SURVEY - Responses to Question # 13

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Barrie	ON	Yes	Yes					
Brantford	ON	No	Yes	No dedicated staff.			1	Expect to increase frequency of inspections significantly in the future.
Brockville	ON	Yes	No					
Cambridge	ON		No					The Region of Waterloo does not actively inspect grease traps/interceptors. The various cities in our region do not. I am not familiar with the various municipal plumbing codes in the region.
Centre Wellington	ON	Yes	No					
City of Windsor	ON	No	Yes	0.5 FTE			22	
Delhi	ON							
District Municipality of Muskoka	ON	No	No					Staff to be hired to conduct inspections soon
Greater Sudbury	ON	Yes	No					
Hamilton	ON							

CWWA FOG SURVEY - Responses to Question # 13

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Kingston	ON							Comply with sewer use bylaw inspections, establishments are monitored upon complaints. 2 UK operators and City plumbing inspector.
Kitchener	ON							
London	ON	No	No					
Loyalist Township	ON	Yes	Yes	2			< 0.5	
Mississauga	ON	No	Yes	Health Inspectors approx 20			varies	
Napanee	ON	Yes	No					
Ottawa	ON							
St. Catharines	ON	No	No	0			0	While grease traps are required in building permits, we have no regulatory authority to ensure they are maintained properly.
Town of Smiths Falls	ON	No	No					
Welland	ON	No	No					
Woodstock	ON	No	Yes	2			4	
Halifax	NS	No	Yes	3			3	Staff also perform many other source control inspection duties

CWWA FOG SURVEY - Responses to Question # 14 & 15

City/Town:	Province:	#14: Do you have restaurants on your wastewater surcharge program?	#15: What is your surcharge factor for FOG in your surcharge formula (\$/kg)?
Burnaby	BC	Yes	n/a
City of Trail	BC		
District of West Vancouver	BC		
Fort St. John	BC	No	
Kelowna	BC	No	0.175
Surrey	BC		
Calgary	AB	No	1.18
Edmonton	AB	Yes	0.2165
Lloydminster	AB		
Nisku	AB	Yes	N/A
Red Deer	AB	Yes	\$0.1880/kg based on 80% of delivered water to user
Town of Banff	AB	No	
North Battleford	SK	No	
Regina	SK	No	
Winnipeg	MB	No	n/a

City/Town:	Province:	#14: Do you have restaurants on your wastewater surcharge program?	#15: What is your surcharge factor for FOG in your surcharge formula (\$/kg)?
Barrie	ON	No	
Brantford	ON	Yes	No specific charge for FOG
Brockville	ON	No	
Cambridge	ON	No	
Centre Wellington	ON	No	
City of Windsor	ON	No	0.9179
Delhi	ON		
District Municipality of Muskoka	ON	No	
Greater Sudbury	ON	No	
Hamilton	ON		
Kingston	ON	No	Not surchargeable under the bylaw.
Kitchener	ON		
London	ON	Yes	We do not surcharge for FOG but have a by-law limit
Loyalist Township	ON	No	
Mississauga	ON	No	
Napanee	ON	No	
Ottawa	ON		
St. Catharines	ON	No	
Town of Smiths Falls	ON	No	
Welland	ON	No	
Woodstock	ON	No	
Halifax	NS	No	N/A

CWWA FOG SURVEY - Responses to Questions # 16, 17, 18, 19a, 19b

	Province:	#16: How many kilometers of sewers do you have in your municipality (km)?	#17: What is the approximate annual expenditures City/Town: associated with grease blockage cleanouts (\$)?	#18: Can you estimate additional wastewater treatment plant operating costs due to FOG (\$/year)?	#19a: What has been, if any, the amount of compensation paid to building owners for sewer backups caused by FOG blockages (\$/year)?	19b: Additional Comments on sewer maintenance:
Burnaby	BC	724	?	no	?	
City of Trail	BC					
District of West Vancouver	BC					
Fort St. John	BC	120	5000	0	0	
Kelowna	BC	500	60000			The City does not pay compensation for backups caused by FOG blockages.
Surrey	BC					
Calgary	AB	4136	619764	not available	not available	no
Edmonton	AB	4900				2,900 km of sanitary and combined sewers. 2,000 km of storm sewers.
Lloydminster	AB					
Nisku	AB	Not Available at this time	N/A	N/A		
Red Deer	AB					I'll forward at a later date if I can gather this information, thanks
Town of Banff	AB	40	5000	Unknown	unknown	
North Battleford	SK					
Regina	SK					

CWWA FOG SURVEY - Responses to Questions # 16, 17, 18, 19a, 19b

City/Town:	Province:	#16: How many kilometers of sewers do you have in your municipality (km)?	#17: What is the approximate annual expenditures City/Town: associated with grease blockage cleanouts (\$)?	#18: Can you estimate additional wastewater treatment plant operating costs due to FOG (\$/year)?	#19a: What has been, if any, the amount of compensation paid to building owners for sewer backups caused by FOG blockages (\$/year)?	19b: Additional Comments on sewer maintenance:
Winnipeg	MB	2592	230000	n/a	unknown	City of Winnipeg Local Wastewater Services has a grease cutting program in place, using a product called EC-800-L. The product is applied using a pressure machine. The product is considered to be environmentally-friendly, and has been used in Winnipeg's sewers for approximately 3 years, with great success.
Barrie	ON					
Brantford	ON	400	NA	NA	NA	
Brockville	ON	67.5				
Cambridge	ON					I do not have any of this info. The various municipalities within the region own & operate the sewage collection system. Another department within the Region operate the Wastewater treatment plants but it's unlikely that they could come up with a dollar value on operating cost due to FOG.

CWWA FOG SURVEY - Responses to Questions # 16, 17, 18, 19a, 19b

City/Town:	Province:	#16: How many kilometers of sewers do you have in your municipality (km)?	#17: What is the approximate annual expenditures City/Town: associated with grease blockage cleanouts (\$)?	#18: Can you estimate additional wastewater treatment plant operating costs due to FOG (\$/year)?	#19a: What has been, if any, the amount of compensation paid to building owners for sewer backups caused by FOG blockages (\$/year)?	19b: Additional Comments on sewer maintenance:
Centre Wellington	ON	unknown	10000	no	unknown	
City of Windsor	ON	1635				No data for # 28 - 30
Delhi	ON					
District Municipality of Muskoka	ON	258			0	FOG is a maintenance problem but the costs have not been identified
Greater Sudbury	ON	1237km				
Hamilton	ON					
Kingston	ON	500	not determined	not determined		
Kitchener	ON					
London	ON	1311	\$606,000 for sewer cleaning	Scum/grease removal from pumping stations was \$30,000		Video taping force mains has revealed root , problems, gravel and large rocks.
Loyalist Township	ON	6				
Mississauga	ON	2300	varies	no	do not know	
Napanee	ON	56	unknown	unknown	0	
Ottawa	ON					
St. Catharines	ON	500	Unknown	Unknown	0	
Town of Smiths Falls	ON					
Welland	ON	approx 235 sanitary only	10000	no region runs the wwtp		
Woodstock	ON					
Halifax	NS	1300	N/A	N/A	N/A	

END OF FOG SURVEY