



INFORMATION REPORT

TO:	Chair and Members Public Works Committee
COMMITTEE DATE:	June 13, 2016
SUBJECT/REPORT NO:	Sewer Use By-law Program Annual Update (PW16050) - (City Wide)
WARD(S) AFFECTED:	City Wide
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SIGNATURE:	

COUNCIL DIRECTION:

Not Applicable

INFORMATION:

Public Works Committee at its meeting of April 7, 2014 approved the Proposed New Sewer Use By-law (PW13061a), which was then subsequently enacted by Council and came into force on May 1, 2014.

The new Sewer Use By-law ("By-law") includes language to support our Pollution Prevention and Waste Hauler Programs and allowed for the replacement of Sewer Discharge Agreements with a more user friendly Permit system. The new By-law mandates the installation and maintenance of oil, grease, sediment and dental amalgam interceptors to help further reduce the impact of these materials to our infrastructure. A major undertaking for staff since the enactment was to finalize workflows, procedures and form templates to enable administration of the new By-law as it was designed. The new methods of administering the By-law have already revealed several issues with company discharges that the old system missed, such as the occurrence of off-hour discharges and the need for additional sampling points. The new By-law also allowed the implementation of administrative fees for processing permits that were never recovered in the past. This report serves to provide an update to Committee on the progress and successes of the new Sewer Use By-law for 2015.

ENVIRONMENTAL MONITORING AND ENFORCEMENT (EME) MANDATE/MISSION

To protect the City's sewer infrastructure, wastewater treatment facilities and the natural environment by the effective administration and enforcement of the Sewer Use By-law.

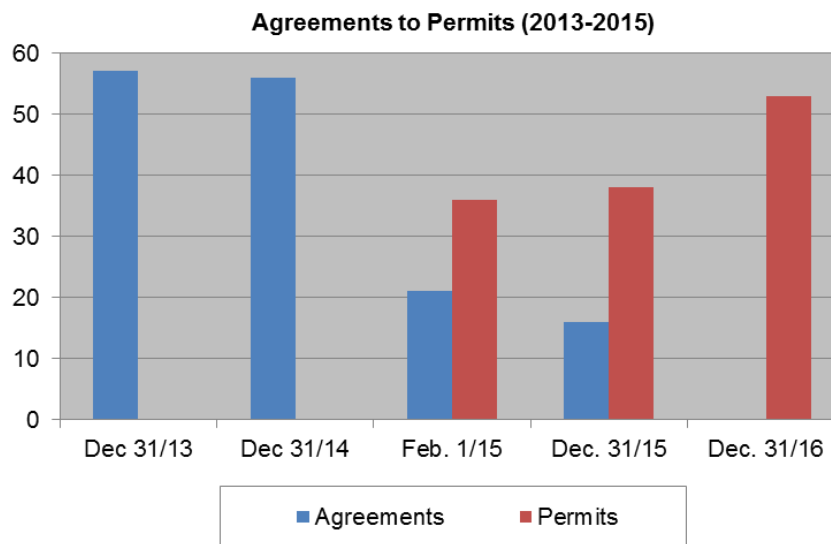
SEWER DISCHARGE PERMITS

One of the major changes to the Sewer Use By-law was the conversion from Sewer Discharge Agreements to Sewer Discharge Permits. Staff administer various permit types by approving applications and processing quarterly invoices.

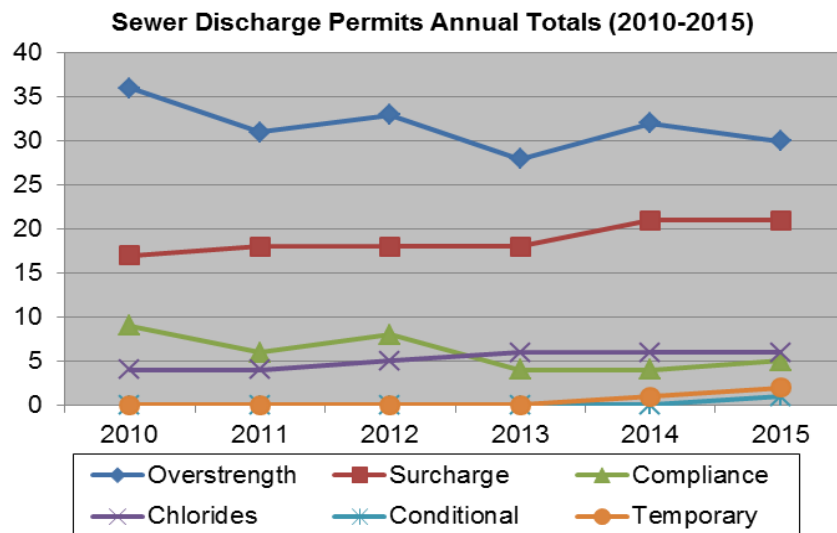
Typically Sewer Discharge Permits (SDPs) are issued to businesses whose discharge does not meet the requirements of the Sewer Use By-law but can be treated effectively at Woodward and will not adversely affect the condition of the sewer system. SDPs are a regulatory tool that allows the City to apply conditions and controls to ICI discharges to the sewer works and recover costs associated with treatment and operations. There are currently 6 different types of SDPs that can be issued by an Officer, which are explained further below. Each discharger must apply to the City with specific details about the discharge which is assessed by EME and Plant Operation staff and only issued once all requirements are met.

With the exception of Compliance Permits, each permit is typically issued for a 3 year cycle. Once expired, the discharger must re-apply.

Since the enactment of the new Sewer Use By-law at the end of 2014, all Agreements under the old By-law were deemed Permits and any Agreements that were older than 3 years were expired and the discharger was required to apply for a new Permit. The chart below displays the number of Agreements vs Permits and shows the forecast of end of 2016 when the former Agreement format will become completely redundant.



By the end of 2015 there were 54 SDPs on record. 36 of which were issued between Q4 2014 and Q1 2015, due to many of the old Agreements expiring (as explained above). The deadline to issue those new Permits was Feb 1st, 2015. EME staff did an excellent job turning over 36 Permits in such a short period of time, especially since this was an entirely new system for everyone.



OVERSTRENGTH PERMIT

If a discharger cannot meet the requirements of the Sewer Use By-law for treatable parameters (BOD, TSS, phosphorus, TKN and Oil & Grease (an/veg)) they can opt to pay the City to treat their waste if they don't have real estate or expertise to install their own treatment system.

SURCHARGE PERMIT

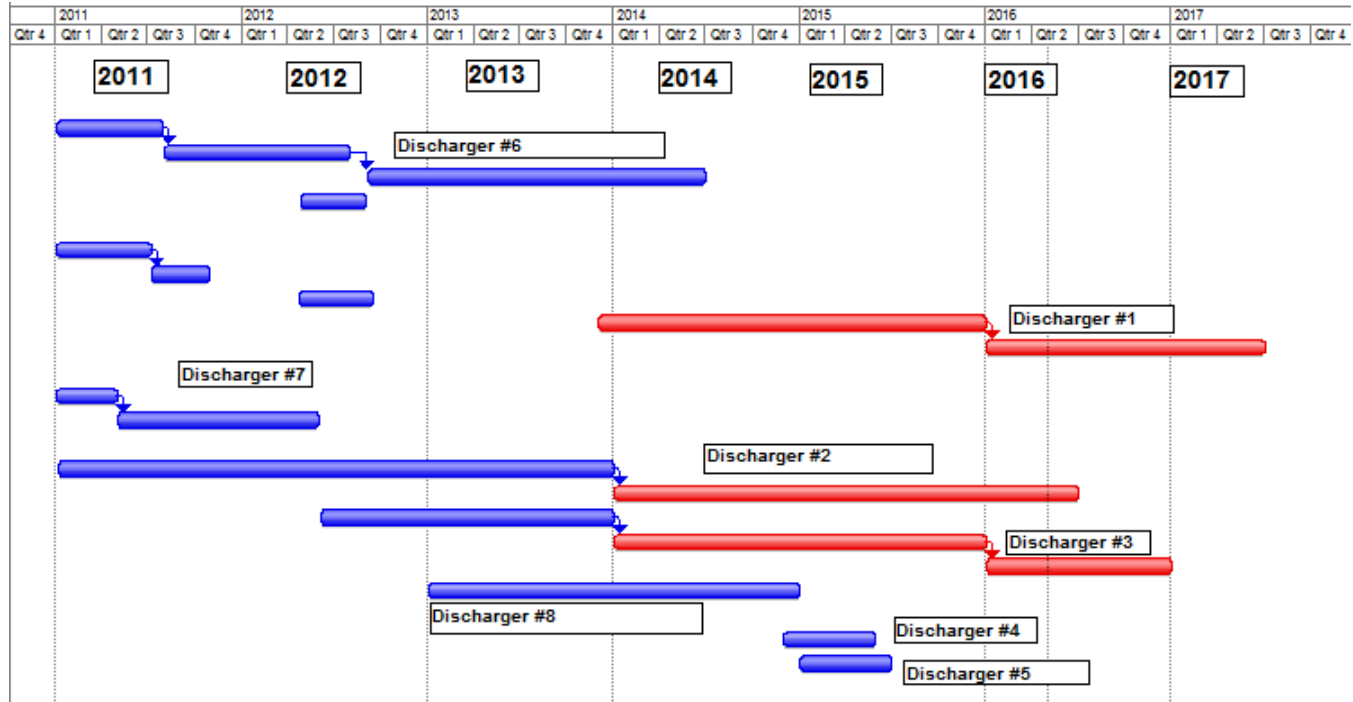
If water is discharged to the sewer but has not been purchased from our potable water system a Surcharge Permit is required to recover the cost of conveying and treating that water.

COMPLIANCE PERMIT

Provides a discharger with certain controlled exemptions to the By-law for a limited time period, to plan and implement treatment works that will bring their discharge into compliance. Once the permit expires, the company is continually monitored until it is verified that compliance was attained.

In 2015 there were 5 active Compliance Permits with the completion of 2 of them, and 3 permits will be continuing into 2016.

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CHLORIDES PERMIT

If a discharger cannot meet the requirements of the Sewer Use By-law for Chlorides a Chlorides Permit lays out the necessary conditions based on a sewer impact study that the discharger is required to conduct. Also the study will determine the life span of the sewer and the discharger may be required to pay the City to replace the sewer if it does not last its expected lifespan.

CONDITIONAL PERMIT

Controls and applies conditions to discharges from landfill leachate collection systems, or where a higher level government authority is required.

TEMPORARY PERMIT

Controls and applies conditions for any of the above discharges that do not exceed a period of 6 months – tank discharges, site excavations, etc.

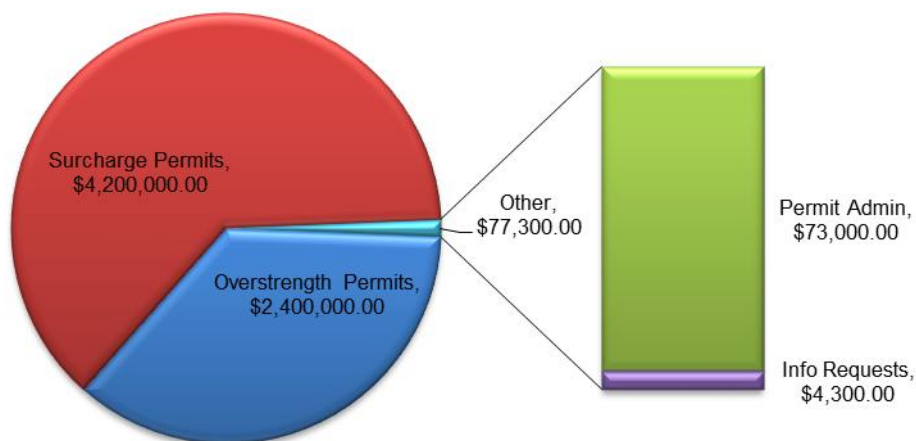
2015 Financials

	Amount Forecasted	Actual Expenditures	% Spent
Operating Budget	\$1,542,460	\$1,510,333	94%

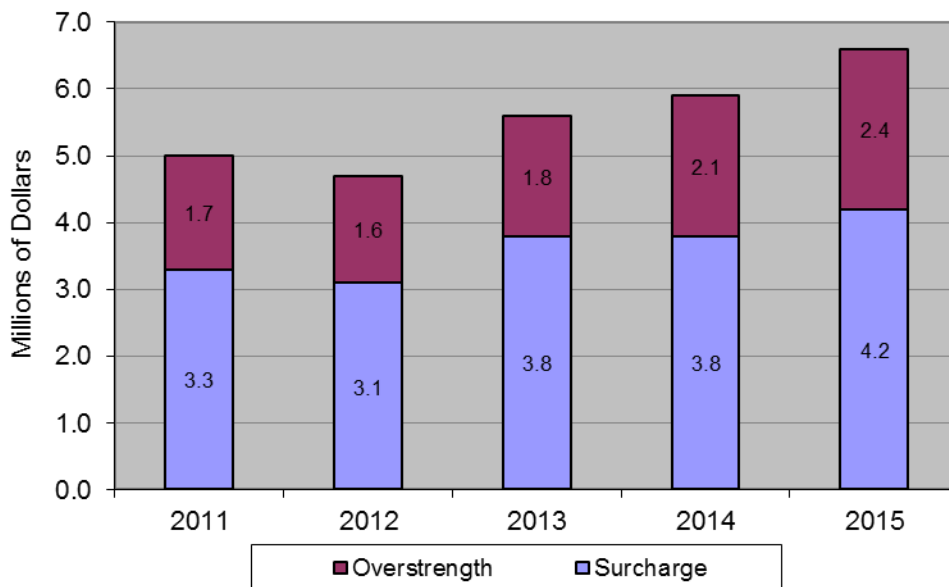
ANNUAL REVENUE (~\$6.7Million)

Sewer Discharge Permits generate approximately \$6.7million in annual revenue, which accounts for the recovery of costs associated with conveying and treating overstrength and surcharge wastewater.

Sewer Discharge Permit Annual Revenue (2015) ~\$6.7M



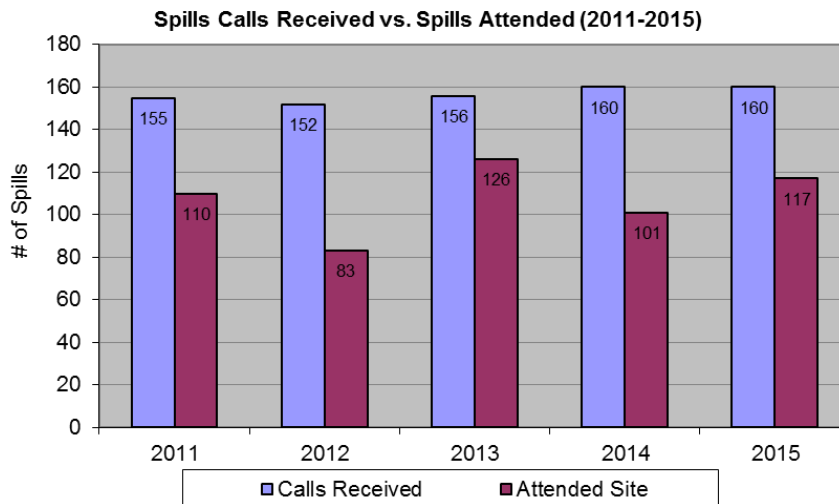
Annual Revenue from Sewer Discharge Permits (2010 - 2015)



SPILL RESPONSE

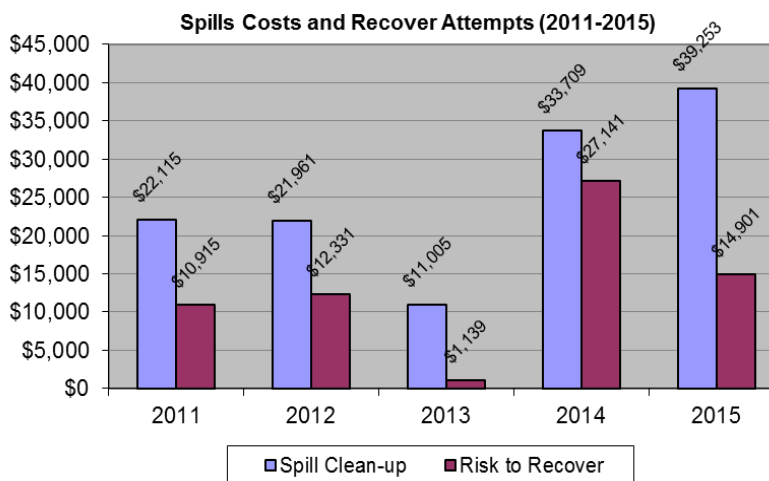
The number of spills calls received and calls attended has remained remarkably consistent over the past few years. Cost recovery efforts are continuous and in some cases yield results. The Spills Response Program will be reviewed in its entirety in 2016, from call handling, to

documentation to note taking. The Spills Database is now over a decade old and is at its end of life. A module in Infor Work Management System to integrate the Spills Database is being designed. This will help staff to track and measure spills data more effectively.



SPILLS CLEAN-UP COSTS RECOVERED

Staff endeavour to ensure spills to the City's sewer infrastructure and natural environment are remediated to our satisfaction. This includes investigating the source of the spill. In 2015, 38% of the costs associated with spills were recovered due to the excellent investigative efforts of staff and a clearer, more concise By-law.

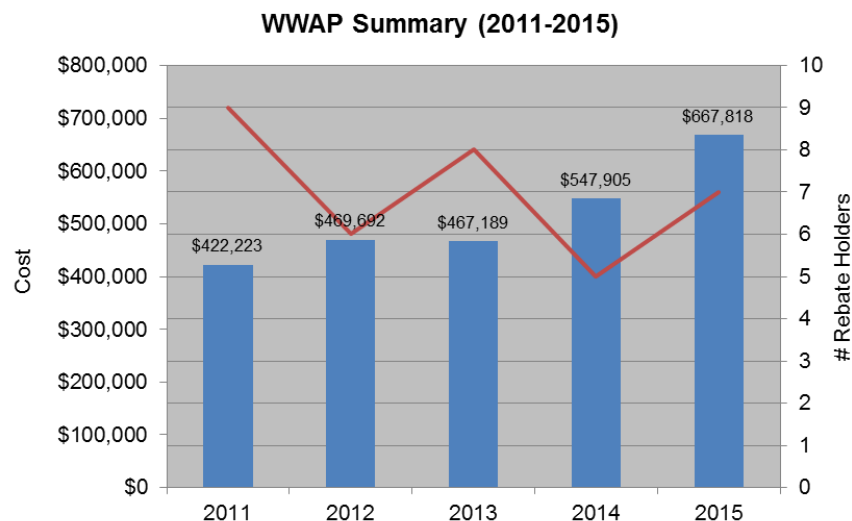


WASTEWATER ABATEMENT PROGRAM

The Wastewater Abatement Program has now been imbedded in the Sewer Use By-law Assessment Report Document, which has increased the program's profile. It appears to be gaining popularity and more dischargers are inquiring about it. The application process has become more simplified over the past few years, but certainly more rigorous in its approach.

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Staff have taken measures to ensure no discharger receives a rebate if they are not in compliance with the Sewer Use By-law or if they are in arrears to the City for any money.



POLLUTION PREVENTION PROGRAM

The enactment of the new Sewer Use By-law has helped to enhance the Pollution Prevention (P2) Program by providing officers with more options for enforcement to help smaller businesses achieve compliance.

FATS, OIL & GREASE (FOG) PROGRAM

Since the enactment of the new Sewer Use By-law EME has been visiting the restaurant and food services sector in order to ensure compliance. The EEO can assess whether or not the restaurant requires a grease control device (GCD) by completing a Risk Matrix that has been built into the By-law. In 2015, EME identified 41 restaurants that required a GCD within a 1.5 - 2 year period.

ICI AND RESIDENTIAL COMMUNITY OUTREACH

EME participated in the 2015 Children's Water Festival where our Residential Programs are discussed with grade 4 students. Billing inserts are distributed to address the residential messaging such as "What Not to Flush". ICI outreach and education is imbedded in the inspection process.

LOOKING FORWARD TO 2016

EME will undertake many improvements and initiatives in 2016, here are a few of the highlights:

Part 3 Tickets

In 2015 staff developed a list of short form wording in order to apply to the courts to enable EME to issue Part 3 tickets under the Sewer Use By-law. The goal is to apply to the courts in Q2 2016 and begin training staff as soon as approval is received.

Preparation for Phase 2 Sewer Use By-Law Update

In 2016 EME staff will begin conducting sampling of various points within the sewage works in order for a consultant to analyze the data in 2017 to prepare for Phase 2 of the By-law update which will consist of a comprehensive review of the by-laws parameters and limits to ensure they are appropriate and effective for the new Woodward Sewage Treatment Plant upgrades. The By-law amendment is scheduled to take place in 2018 with appropriate public consultation.

CONCLUSION:

While it is difficult to confirm with direct evidence it appears the excellent work of the EME group over the last number of years both in the field and administratively has contributed significantly to the extraordinarily effective operation of the wastewater plant at Woodward. The quality of effluent leaving the plant, as well as that of our biosolids has been stable and much better as a result of this great work. The strategic investment that City Council made a number of years ago by adding resources to this business unit and support of ongoing changes to the sewer use by-law continues to be a quiet success story.