

## Sewer Use By-law Update

By:

Joanne Di Caro

Manager

Environmental Monitoring & Protection

Operational Support

Toronto Water

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## OBJECTIVES OF THE SEWER USE BYLAW

- To regulate the quality of storm and sanitary discharges into City's storm & sanitary sewers
- To continuously improve biosolids quality
- Environmental protection and long term health of receiving waters
- Maintain the treatability of sewage at treatment plants
- Sewer use equity

## HIGHLIGHTS OF THE BY-LAW

- Stringent limits on chromium, copper, lead, mercury, nickel, selenium and zinc
- 27 organic limits in sanitary and storm sections
- Toronto first municipality to require P2 planning for any industry discharging Subject Pollutants
- 11 heavy metals & 27 organics to sanitary sewer = Subject Pollutants for Pollution Prevention (P2) planning
- Other municipalities considering Toronto's approach with stringent metals and P2 planning

## HIGHLIGHTS OF THE BY-LAW

- Allow dischargers who are above treatable parameter limits to enter into Surcharge Agreements to discharge at the higher levels for a fee to the City
- Surcharge Agreement fees generate ~\$7-8 Million annually
- Compliance Agreements - where dischargers are commencing correction of discharge but require time
- Spill reporting within 5 days
- Fines

## MONITORING SEWER USE BYLAW COMPLIANCE

- Industries classified according to impact to sewer system:
  - High Potential – eg. Metal platers sampled once per month, inspected frequently as needed
  - Medium Potential – sampled every 2 months, inspected yearly
  - Low Potential – sampled once per year, inspected annually- biannually

## ENFORCEMENT

- Stepwise enforcement
  - Eliminated verbal warnings in 2006 for limit violations
  - Written Notice of Violation
  - Compliance Program option
  - Prosecution for deliberate or ongoing offence(s)
- Fines
  - Maximum fines of \$ 10,000 for individuals & \$ 100,000 for corporations
- \* Ticketing package provided and under legal review

## Environmental Monitoring & Protection Unit

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- 49 Staff in EM&P: Management, Engineer, Admin, & Provincial Offences Officers
- Industrial Waste Control Group
  - 12 areas within the City
  - 24/7 Spill and Complaint Response via
  - 416-338-8888
- Stormwater Quality Group
  - 6 Tributary Watersheds & Lake Ontario
- Pollution Prevention Group

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## Environmental Monitoring & Protection Unit


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### Industrial Waste Group

- Enforce Sewer Use By-law
- Monitor industrial discharges & P2 plans
- Industrial Waste Surcharge & Sanitary Discharge Agreements - ~\$8M/year
- Respond to water pollution complaints, industrial- commercial spills
- Sewer Surcharge Rebate

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## Environmental Monitoring & Protection Unit

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### Stormwater Quality Group

- Outfall Monitoring Program
  - Monitor storm outfall discharges
- Beach & water quality monitoring
- Stormwater complaint investigations
- Special stormwater projects
  - Road Salt Run-off

\*\*\*Only clean water to Storm\*\*\*





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## Environmental Monitoring & Protection Unit

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### Pollution Prevention Group

- Enforce P2 / BMP section of the By-law for commercial operations
- Promote & Assist in P2 planning via Workshops, Phone-in Assistance
- Review & Approve P2 Plan Summaries
- Inspect commercial sites




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## What's new since 2005?

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- Formal name change of Unit - EM& P
- Manager & 3 supervisors hired in 2006
- Filling Staff vacancy
- Outfall Monitoring Program priority
  - Taylor Massey Creek (TMC) & Black Creek (BC)
  - Surveying and sampling in 2005 & 2006
  - 15 cross connections in TMC; 45 in BC
  - Investigations into 2 outfalls at Highland Creek and cross connections found
- Best Management Plans for the Automotive Service, Gas Stations & Car Washes was incorporated into the By-law – late 2005

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## What's new since 2005?

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- Focused on BMP outreach with the sector, review of BMP submissions & inspections
- **Commenced dental clinics inspections late 2006 to determine compliance with amalgam separators and P2 compliance**
- Ticketing package prepared and under review by legal.
- Working cooperatively and jointly with MOE on certain files of interest
- Reviewed & revised Hauled Sewage Program
- EM&P, P2 brochures, XConnection flyer

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## What's new since 2005?

- Initiated Notice of Violations for stormwater offences – cross connections & non submission of P2 plans in addition to limit offences
- 2006 statistics
  - 108 Notice of Violations (NOVs) issued
  - 10 investigations commenced
  - Copper in Biosolids declined in late 2006
- 2007 2nd quarter statistics
  - 164 NOVs issued;
  - 14 prosecutions cases
  - 4 investigations commenced

## What's new since 2005?

- By-law amendments - June 2007
  - Photofinishing BMP
  - Industrial Waste Surcharge Agreement change in ownership notification &/or termination
  - new general P2 forms
  - Right of Entry per *City of Toronto Act 2007*
  - Housekeeping of clauses
- Development of Backflow prevention program and enforcement of upcoming Water Supply By-law

## ACHIEVEMENTS

- 40-70% reduction of Mercury in the biosolids since 2000 By-law passed at all treatment plants
- Reduction of NPE use by Industrial Laundry sector
- 98% reduction of NP/NPE by personal care product manufacturer through R&D substitution
- Reduction in Copper in biosolids by late 2006
- Finding and eliminating ~ 65 cross connections to storm sewer outfalls

## RECOGNITION

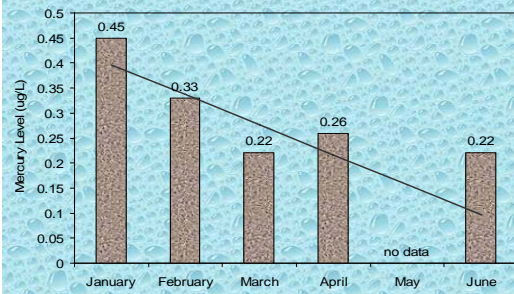
- May 2007 Green Awards Finalist for category of City Division



## Highland Creek Sewershed

- 7 prosecutions before the courts in 2007 and 1 withdrawn = 7 current prosecutions
- 30-35 NOVs
- Investigations ongoing
- 15 surcharge companies
- 2 compliance agreements
- At Highland Creek - 50% drop in Mercury influent levels since Jan'07 due to dental inspections in Scarborough

Highland Creek Treatment Plant Influent Mercury Levels for 2007



## Highland Creek Sewershed

- Major contributors of wastewater:
  - Metal finishers
  - Paperboard
  - Food processing
  - Chemical manufacturing
  - Dental clinics
  - Restaurants

## Environmental Monitoring & Protection



## INDUSTRIES REQUIRED TO PREPARE P2 PLANS COMPLIANCE RATE

- Metal Finishing - 93%
- Health Care - 93%
- Textile Processing + Industrial Laundries - 73%
- Dry Cleaning - 100 %
- Photofinishing - 97%
- Manufacturing - 94%
- Printing & Graphics - 90%
- Autobody Repairs & Refinishing - 96%
- Dental Clinics - 95%