CITY OF TORONTO
SEWER USE BY-LAW AND ITS P2 REQUIREMENTS

Presentation to:

Great Lakes Regional Pollution Prevention Roundtable Summer Conference
Toronto - August 28, 2002

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PRESENTATION OUTLINE

- Background on the new Sewer Use By-law
- Council Approval Process
- Highlights of New Sewer Use By-law
- P2 requirements
- Update on P2 implementation
BY-LAW OBJECTIVES

- to regulate the quality of storm and sanitary discharges into City’s storm & sanitary sewers
- to continuously improve biosolids quality
WHY A REGULATORY SEWER USE BY-LAW IS NEEDED

- Environmental protection and long term health of receiving waters
- Maintain the treatability of sewage at treatment plants
WHY A REGULATORY SEWER USE BY-LAW IS NEEDED

- Maximize the opportunities for biosolids reuse
- Sewer use equity
BACKGROUND
TO THE CITY’S NEW SEWER USE
BY-LAW

By-laws harmonization due to six former cities and a Metro level of government amalgamated into one new city, January 1, 1998
AMALGAMATION OF SIX MUNICIPALITIES INTO NEW CITY OF TORONTO

Location - North Shore Lake Ontario
5th Largest City in North America
2.4 Million People
Research studies have identified health and environmental risks due to toxic organics and metals.

Trend toward lower limits, particularly in Europe.
BACKGROUND TO THE NEW SEWER USE BY-LAW

- U.S. successes in using Pollution Prevention Planning for industrial discharges
- City Council’s decision to stop incineration and implement 100% beneficial reuse of biosolids
PROCESS FOR COUNCIL APPROVAL OF NEW SEWER USE BY-LAW

- Staff prepared draft By-law in consultation with Federal, Provincial agencies, special interest group (World Wildlife Fund) and relevant research reports
- Council adopted draft by-law and approved a public consultation plan
PROCESS FOR COUNCIL APPROVAL OF NEW SEWER USE BY-LAW

 Draft By-law mailed to 6,000 stakeholders on May 12, 1999 and posted on Web site

6 months of public and industry sector meetings - started June 1999
PROCESS FOR COUNCIL APPROVAL
OF NEW SEWER USE BY-LAW

- 9 industry/public meetings in June 1999
- 20 presentations to neighbourhood liaison committees and business associations
- Draft By-law modified where appropriate
PROCESS FOR COUNCIL APPROVAL OF NEW SEWER USE BY-LAW

Following two days of debate and deputations, on July 6, 2000, City Council adopted a new Sewer Use By-law with lower limits
HIGHLIGHTS OF NEW SEWER USE BY-LAW

- More stringent limits on chromium, copper, lead, mercury, nickel, selenium and zinc
- 27 new organic limits in sanitary and storm sections
- 11 heavy metals and 27 organics = Subject Pollutants
HIGHLIGHTS OF NEW SEWER USE BY-LAW

- 2-year phase-in period for the new limits

- P2 planning requirements for any industry discharging subject pollutants in any amount

- Submission of updated P2 plan summary every two years and updated P2 plan every 6 years
Subject sector industry
- Metal Finishers
- Industrial Launders
- Gas Stations/Auto Repairs
- Photo Finishing/Printing
- Dentists/Medical Labs
- Textile
- Organic Chemical
- Soap & Detergents
- Rubber & Plastics

Every industry discharging

Submit P2 Plan Summary

ANY AMOUNT of Subject Pollutant
HIGHLIGHTS OF NEW SEWER USE BY-LAW

P2 Plan Summary due dates - phased-in sector by sector

- June 30, 2001
  - Metal Finishers
  - Industrial Launders
  - Gas Stations/Auto Repairs
  - Photo finishing/Printing
  - Dentists/Medical Labs
  - Textile

- December 31, 2001
  - Organic Chemical
  - Soaps & Detergents
  - Rubber & Plastics

- June 30, 2002
HIGHLIGHTS OF NEW SEWER USE BY-LAW

- June 30, 2000: any new business in target sector or discharger of subject pollutant will have one year from date of commencement to initiate P2 process.

- 90 days extension to amend P2 plan summary if not approved.
P2 PLAN and P2 PLAN SUMMARY FORMS

P2 Forms Designated by Council

- **Generic P2 Plan and P2 Plan Summary forms for manufacturing industries**

- **Sector specific P2 forms for commercial/institutional sectors**
  - Photo Finishing
  - Printing
  - Dental
Other Sector-specific P2 forms

- Health Care
- Textile
- Gas Bars, Car Washes, Service Bays
- Auto Body Repair
P2 Training

INDUSTRY SPECIFIC P2 TRAINING

- 1 day or 1/2 day training sessions for each subject sector

- Working with industry associations to coordinate training

- Objective is for industry to understand P2 benefits, opportunities and avoid having to hire consultant
Communication to Industries

- Direct contact
- Associations
- Workshops
- Information booths
P2 Submission Status

- Metal Finishing Sector - 95%
- Dental Clinics - 90%
- Auto Body - 40%
- Automotive Service - 65%
- Printing & Graphics - 50%
- Photofinishing - 80%
- Hospitals - 90%
- Industrial Laundries - 70%
P2 OPTIONS SELECTED BY VARIOUS SECTORS

**Auto Body Refinishing**

- use of low VOCs paints
- use of solvent recycler
- employee training
- product substitution - switch to water-based paints
P2 OPTIONS SELECTED BY VARIOUS SECTORS

Textile
- eliminate NPs and NPEs
- reduce subject pollutants through modification of in-house operating systems

Printing
- using Clean Print Check Sheets
- eliminate subject pollutants through product substitution
- process and equipment modifications
P2 OPTIONS SELECTED BY VARIOUS SECTORS

**Metal Finishing**
- waste segregation
- use lower concentration plating solutions
- filtration to reduce bath dumps
- minimize drag-outs
- counter current rinses
- spray and fog rinses
- capture drag-out before rinsing and recycle into the process
- use of flow restrictors in rinse water
P2 OPTIONS SELECTED BY VARIOUS SECTORS

Automotive Service Industries
- product substitution for nonylphenols and nonylphenol ethoxylates
- employee training
- spill prevention
- good housekeeping

Dental Clinics
- installation of amalgam separator
- recycling of waste amalgam
- using alternatives
Every owner or operator of a premises from which dental waste amalgam may be discharged, which waste may directly or indirectly enter a sewer, shall install, operate and properly maintain dental waste amalgam separator(s) in any piping system at its premises that connects directly or indirectly to a sewer by no later than January 1, 2002.
# MERCURY IN BIOSOLIDS

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TORONTO BY-LAW WEB SITE

www.city.toronto.on.ca/involved/wpc/nbylaw.htm