

Penalties

- For every day that an offence occurs or continues, you are liable to a fine of \$5,000 to \$10,000 per day; corporations are liable for \$50,000 to \$100,000 per day
- You may be asked to install a manhole or other sampling device. Failure to do so may result in a maximum fine of \$5,000 per day



What can you do to avoid pollution?

- Install ISO 11143 waste separator and ensure that waste is recycled
- Tie in all mercury-containing drains to the separator
- Clean out residual mercury deposits from plumbing traps and pipes
- Send scrap amalgam for recycling
- Keep a range of capsule sizes
- Encourage patients to consider alternatives to amalgam
- Train your dental team to properly dispose of amalgam waste
- Read Best practice for managing dental wastes published by the ODA



To learn more
about the sewer use
by-law or pollution
prevention contact:

Email: P3help@toronto.ca

Vijay: phone:
416-791-3588
e-mail:
P3help@toronto.ca

Martin: phone:
416-392-9932
e-mail:
mshaw@toronto.ca

The City of Toronto
**Sewer Use
By-law
and Dental
Offices**

How does the Toronto Sewer Use By-law affect businesses?

The City of Toronto's Sewer Use By-law now includes pollution prevention planning requirements and new limits on waste discharges. This means that your business must prepare a pollution prevention plan and submit a summary to the city. The plan is mandatory and it identifies ways to reduce, avoid, or eliminate the creation of certain pollutants in your business.

What must dentists do?

- All dentists must complete a pollution prevention plan and submit the plan summary to the Toronto Works and Emergency Services department by December 31, 2001.
- The Sewer Use By-law requires dental practices to install waste amalgam separators before January 1, 2002, in order to meet the By-law limit of 0.01 mg/L for mercury.
- The Sewer Use By-law limits (effective June 30, 2002) include:
 - Mercury (Hg) (0.01 mg/L)
 - Silver (Ag) (5 mg/L)
 - Copper (Cu) (2 mg/L)
 - Zinc (Zn) (2 mg/L)
 - Tin (Sn) (5 mg/L)

Why is dental waste a concern?

- Dental practices have a liquid waste stream containing amalgam waste and solid waste streams containing scrap amalgam and lead (foils and vests).
- According to the Ontario Dentist Association (ODA), dental practices may contribute from eight to 14 percent of the mercury to the sewer systems.

- Amalgam is very dense and will accumulate in plumbing. Recent studies suggest mercury may then slowly vaporize or methylate.
- Mercury will accumulate in sewage treatment sludge, which may be incinerated or spread onto farmland.
- Dental waste may have up to 500 mg/L of mercury. On average, dental offices produce approximately 1.0 litre per day per dentist.
- Methylmercury is a deadly neurotoxin, which causes "Minimata disease".

How to comply with the Sewer Use By-law

- Owners or operators of premises from which amalgam waste may be discharged must install waste amalgam separators.
- Consider purchasing an advanced waste amalgam separator that meets or exceeds the ISO 11143 standard. Consider one that is guaranteed to meet the Toronto Sewer Use By-law limits. Contact suppliers of these amalgam separators now. Order as soon as possible because the supplier may be back-ordered.
- Ensure that your cuspidor is connected into the advanced waste amalgam separator intake line.
- The City of Toronto will mail you a pollution prevention plan template. Please complete it and submit a pollution prevention plan summary by December 31, 2001 to: Water and Wastewater Services, Works and Emergency Services, Station 1180, 18th floor, Metro Hall, 55 John Street, Toronto, ON M5V 3C6
- If the waste from your separator is not recycled, the City may reject your pollution prevention plan.

- If the waste collected in the waste amalgam separator is not transported in accordance with the law, the City may reject your pollution prevention plan.

What else is required?

- You must submit a Pollution Prevention Plan update to the City every 2 years
- You must revise your Pollution Prevention Plan update every 6 years

Conditions which may result in By-law compliance audits and enforcement

- No high efficiency separator has been installed
- Home-made separators were installed
- Your separator is not certified to ISO 11143 standards or better
- Your separator has not been maintained or operated to manufacturer's specification
- Amalgam waste is not recycled
- Cuspidor or other waste sources not connected to separator
- A pollution prevention plan summary was not submitted
- Your pollution prevention plan summary was not approved
- Illegal or unverifiable transportation of waste
- Exceedence of By-law limits

