

Next steps:

New City of Toronto bylaw will help reduce pollution and protect public health

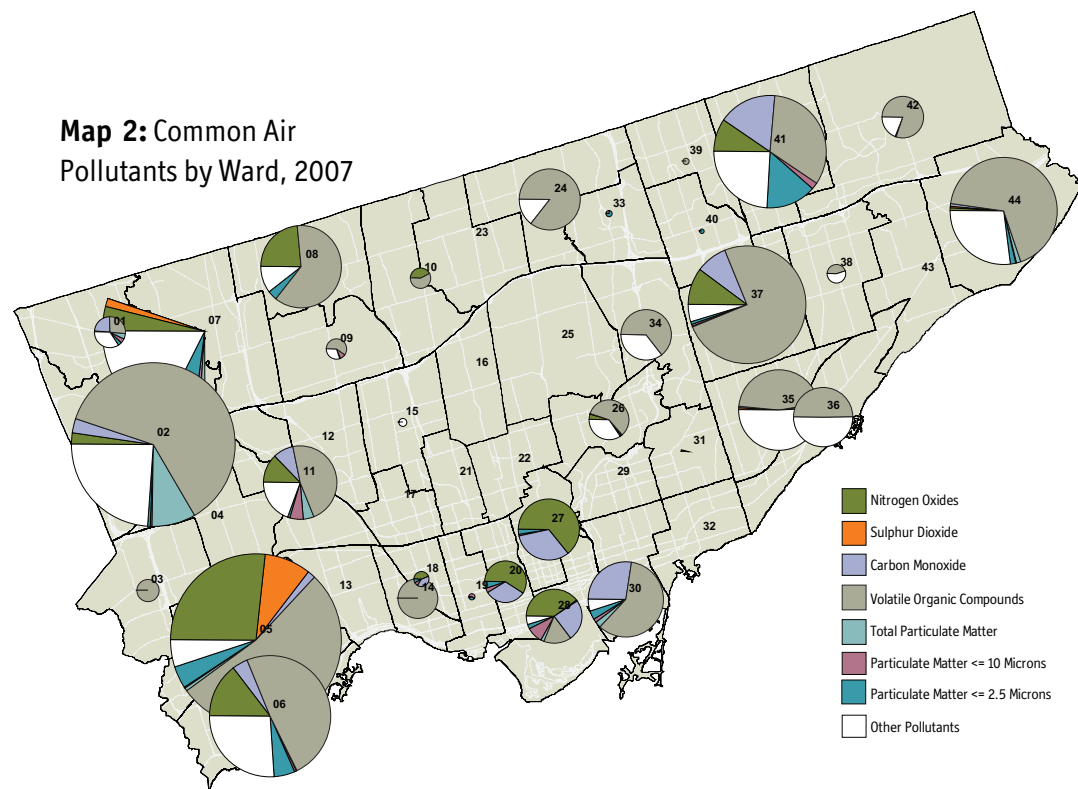
In December 2008, City Council adopted a new Environmental Reporting and Disclosure Bylaw. The new bylaw, which was initiated by Toronto Public Health, will require many more facilities across Toronto to start reporting their use and release of 25 pollutants which pose a concern for public health. The bylaw takes effect January 1, 2010, and by 2013, the number of Toronto facilities that will be required to report is expected to increase from 347 under the NPRI to as many as 7,000.

The new bylaw will ensure that more sources of pollution are identified and monitored, and this information will be included in annual reports

by Toronto Public Health and the Toronto Environment Office. In collaboration with Economic Development, Culture and Tourism, the Toronto Environment Office and other divisions, Toronto Public Health will also deliver pollution prevention information to businesses to help them reduce or eliminate hazardous chemicals.

By expanding the requirements for reporting and disclosure, and by helping facilities find safer alternatives to chemicals, the bylaw will help protect public health by stimulating pollution reduction.

Map 2: Common Air Pollutants by Ward, 2007



More information

Read the City of Toronto staff report **National Pollutant Release Inventory: Toronto's 2006 and 2007 Annual Reports** at: www.toronto.ca/legdocs/mmis/2009/pe/bgrd/backgroundfile-21651.pdf

For more information about the City of Toronto's environmental initiatives, including the Sewer Bylaw and Environmental Reporting and Disclosure Bylaw, visit: www.toronto.ca/environment or call 311.

For more information about Environment Canada's National Pollution Release Inventory, visit: www.ec.gc.ca/inrp-npri

To learn more about the actions that individuals can take to help reduce emissions, visit: www.livegreentoronto.ca



National Pollutant Release Inventory Highlights for Toronto: 2006 and 2007

Introduction

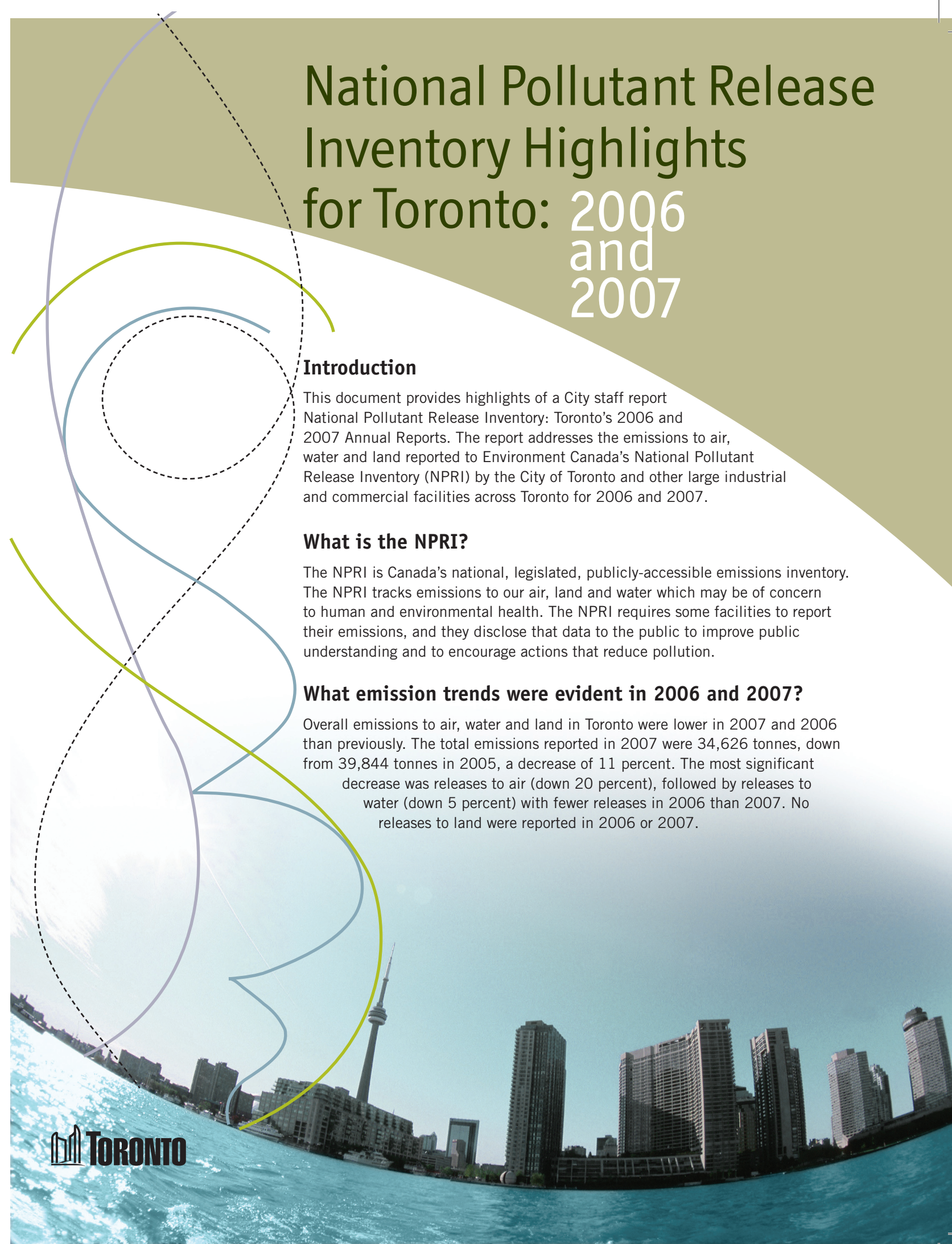
This document provides highlights of a City staff report National Pollutant Release Inventory: Toronto's 2006 and 2007 Annual Reports. The report addresses the emissions to air, water and land reported to Environment Canada's National Pollutant Release Inventory (NPRI) by the City of Toronto and other large industrial and commercial facilities across Toronto for 2006 and 2007.

What is the NPRI?

The NPRI is Canada's national, legislated, publicly-accessible emissions inventory. The NPRI tracks emissions to our air, land and water which may be of concern to human and environmental health. The NPRI requires some facilities to report their emissions, and they disclose that data to the public to improve public understanding and to encourage actions that reduce pollution.

What emission trends were evident in 2006 and 2007?

Overall emissions to air, water and land in Toronto were lower in 2007 and 2006 than previously. The total emissions reported in 2007 were 34,626 tonnes, down from 39,844 tonnes in 2005, a decrease of 11 percent. The most significant decrease was releases to air (down 20 percent), followed by releases to water (down 5 percent) with fewer releases in 2006 than 2007. No releases to land were reported in 2006 or 2007.



Which Toronto facilities report emissions to the NPRI?

Facilities which meet specific thresholds in terms of tonnes of emissions and numbers of employees are required to report their emissions to the NPRI on an annual basis.

Each year, the Toronto Environment Office reports the City government's emissions to land, air and water from its public works facilities and other operations. Large industrial and commercial facilities across Toronto also report their emissions, for example, from their plants and manufacturing activities.

In 2007, reporting to NPRI was required on 347 pollutants. In 2007, 305 facilities in Toronto reported to the the NPRI, which is 28 fewer than reported in 2005. Across Canada, approximately 8,700 facilities reported.

Examples of facilities that report to the NPRI include plastic products industries, printing and publishing industries, and chemical and chemical products industries.

What is not included in the NPRI?

Pollution from facilities with fewer than 10 employees and/or with emissions below specified thresholds (by pollutant) are not required to report to the NPRI. The NPRI also does not include all pollutants known to be used, manufactured, released and sold in Canada. In addition, pollution from individual trucks, cars and households is not reported.

What is the largest source of reported emissions to water?

The City's wastewater treatment plants, which receive and treat the wastewater from 2.8 million residents and all commercial, institutional and industrial sources in Toronto, are the largest emitters to water. The two largest releases from these facilities, ammonia and nitrate, originate primarily from human and animal waste. After treatment, the emissions are safe for release into Lake Ontario, and they are lower than the limits set by the Province of Ontario which regulates wastewater treatment plants.

What emissions to air are reported in Toronto?

The reported emissions to air include by-products from manufacturing and industrial processes such as nitrogen oxides, sulphur oxides, ammonia, carbon monoxide and volatile organic compounds as well as air borne particles, persistent organics and toxic air pollutants. Typically these emissions come from smokestacks, rooftop vents and other activities such as materials storage and handling. Greenhouse gas emissions over 100,000 tonnes are reported to Statistics Canada, not the NPRI.

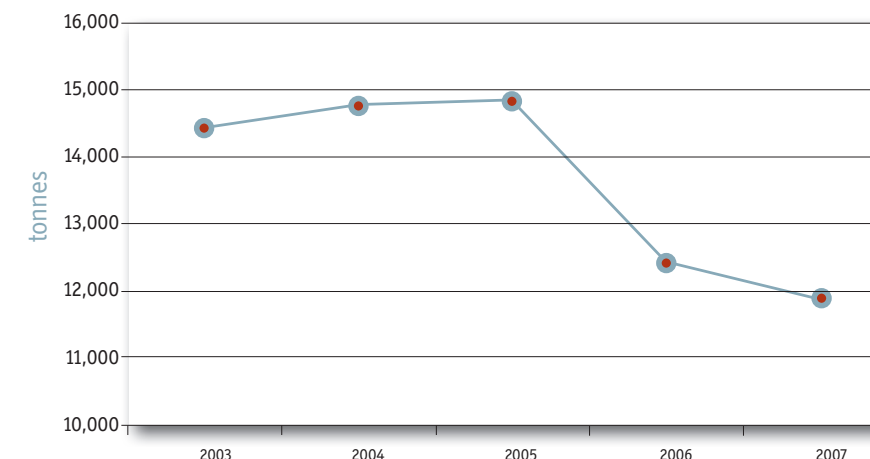
What is the largest source of reported emissions to air?

The printing and publishing industries in Toronto account for the largest portion of the reported emissions to air—more than 20 percent of the total, and more than twice the amount released by the second largest sector, the plastic products industry. However, since 2005 these same industries have also reported the most significant decreases in releases, with the plastic products industry down 33 percent and the paper products industry down 50 percent.

What effect do emissions have on human health?

The effect of emissions on human health depends on a number of factors including the amount of time people are exposed to a pollutant, their sensitivity to it (which may vary depending on age and existing health conditions), and the concentration and toxicity of the pollutant. Exposure to some of the pollutants reported under the NPRI may contribute to specific health effects such as respiratory illnesses, cancer, reproductive and developmental toxicity to name a few.

Common Air Contaminants Released to Air (2003-2007)



What action is the City taking to reduce emissions and pollution?

The City of Toronto works to prevent pollution in a number of ways. Toronto's Climate Change, Clean Air and Sustainable Energy Action Plan includes more than 100 actions to reduce emissions and clean our air. The plan targets an 80 percent reduction in greenhouse gas emissions by 2050 (based on 1990 levels) and a 20 percent reduction in locally generated smog-causing pollutants by 2012 (based on 2004 levels).

Toronto also has measures in place to deal with pollution before it enters our sewers and waterways. The City's Sewer Bylaw, implemented in 2000, protects water quality by imposing strict limits on heavy metals and toxic organic compounds in wastewater. Through monitoring, sampling, testing, investigation and enforcement, we help reduce water pollution and improve lake water quality.

City staff also work with private facilities and businesses to reduce and/or eliminate pollution at source. In addition, the City has a number of bylaws which reduce emissions to air and water such as an anti-idling bylaw.

In 2008, City Council adopted a new Environmental Reporting and Disclosure Bylaw which will greatly expand the reporting and disclosure of pollutants in Toronto. For more information, please see page 4.

Map 1: Community Releases to Water by Sewershed via the City's Wastewater Treatment Plants, 2007

