

Mercury pollution here a major problem

Oakville area industries among top polluters

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Oakville is surrounded by some of the biggest sources of toxic mercury air pollution in the Golden Horseshoe.

Besides being home to the area's fourth-largest source of toxic mercury pollution, GE Lighting's lamp plant on South Service Road, Oakville sits between the second-largest source, Dofasco's Hamilton steel plant, and the third largest, St. Lawrence Cement in Mississauga. The fifth-ranked source was also in Mississauga, Ontario Power's Lakeview generating station.

The rankings are based on a computer analysis conducted by a Torstar newspaper, the Hamilton Spectator. The analysis was performed on the 2000 National Pollutant Release Inventory (NPRI) to extract information on sources from Mississauga to Niagara Falls.

The industrial emissions data are available in the National Pollutant Release Inventory (NPRI) for the first time this year because the reporting level has been lowered from 10 tonnes to five kilograms, reflecting the dangers of mercury and its compounds at low levels.

The analysis pegged Ontario Power Generation's coal-burning Nanticoke plant as the biggest source of toxic mercury air pollution in the Golden Horseshoe last year.

Ontario Power reported that 229 kilograms of mercury spewed from its Nanticoke smokestacks last year. Another 198 kg was in landfilled ash, with one kilo in wastewater, for a total release of 428 kg, almost five times as much as Dofasco, which released a total of 88 kg into the air and only 0.8 kg in water.

St. Lawrence Cement released almost 53 kg into the air, followed by 41 kg from GE, and 27 kg from the Lakeview power plant.

Next on the list were Stelco's Lake Erie Works in Nanticoke, its Hilton Works in Hamilton and the City of Hamilton's SWARU garbage incinerator, run by Canadian Waste Services.

Releases from the Lake Erie steel plant totaled 21.5 kg, four kilos in water and 17.5 through what are labeled fugitive emissions _ airborne mercury leaking from various openings other than smokestacks. The pattern at Hilton Works is similar with 18.6 kg of fugitive air emissions and one kg released from smokestacks, for a total of 19.6 kg

SWARU reported 8.4 kg of mercury went up its stack and into the air over east Hamilton. Petro-Canada's Oakville Refinery released 4.2 kg, mostly to land disposal, with only half a kilo to the air. Atlas Specialty Steels in Welland sent 3.5 kg into the air and Imperial Oil's Nanticoke Refinery just under one kilo. Camco Inc. in Hamilton reported release of 660 grams into the air, with Slater Steels Inc. 186 grams.

Mercury, a silver-white liquid at room temperature, persists in the natural environment for a long time and builds up in the aquatic food chain. Fish can accumulate enough to be hazardous to birds, humans and other mammals. Mercury compounds are washed out of the air in rain where levels have been measured 73 times higher than the U.S. Environmental Protection Agency allows in water. Everyone is exposed to some level of mercury in air, water and food. Major sources of exposure are through eating fish and shellfish or having teeth filled with silvery amalgam.

Efforts are being made to reduce or eliminate its use in fluorescent lamps, fever thermometers, electrical tilt switches (in such things as auto air bag sensors) and blood pressure reading devices. The largest industrial sources in Canada are metal mining and smelting operations, steel manufacturing, waste incineration and coal-fired power plants (because mercury occurs naturally in coal).

New Canada-wide standards will require dentists to capture waste amalgam now flushed down sewers. A Toronto bylaw requiring amalgam traps goes into effect Jan. 1.

-- With files from the Torstar Newswire