Canadian Environmental Law Association
EQUITY. JUSTICE. HEALTH.

Beyond the Bylaw Sarah Miller, Canadian Environmental Law Association, May, 2013

A. ChemTRAC, poverty and pollution

The City of Toronto has been quick to recognize that a vital issue provoked by ChemTRAC[1] is the relationship between poverty and pollution. Once the ChemTRAC data grow and are superimposed on neighbourhoods, patterns and trends emerge. Questions thus raised are not easily answered but they hold promise for improving outcomes for civic equity and social justice in planning, public health, and economic development decision-making in the future. ChemTRAC is an informative opportunity to begin to explore the relationship between poverty and pollution and to seek ways to prevent further deepening this relationship.

The City of Toronto's first ChemTRAC annual report begins to map this relationship.[2] In figure 4.3 of this report (reproduced below), the distribution of reporting facilities is placed over a map of socioeconomic status. This status is determined by the proportion of residents living at or below the Low Income Cut-Off. In general, more facilities are located in neighbourhoods with deeper poverty compared to neighbourhoods with high incomes.

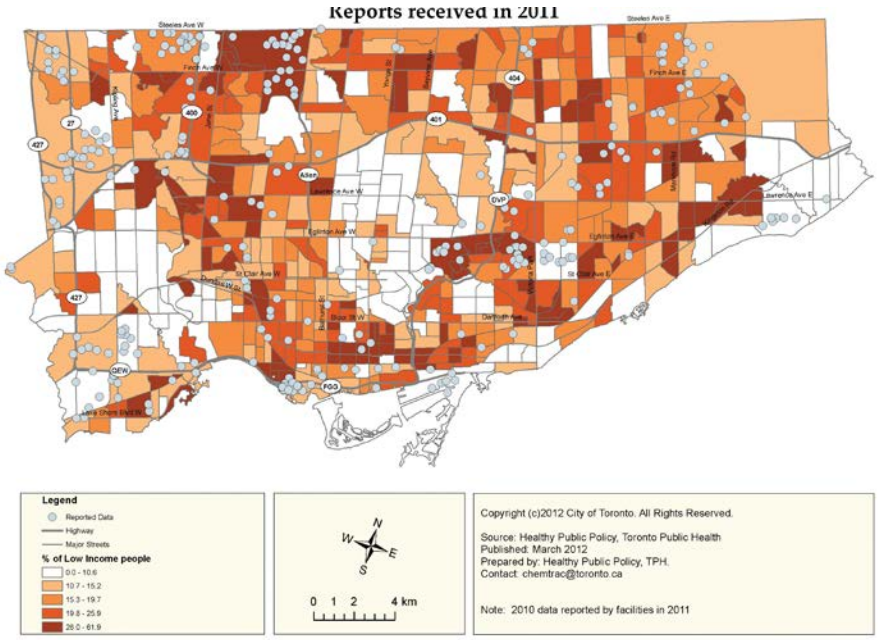


Figure 4-3: Distribution of facilities (all phases) that provided information on the manufacture, use or release of priority substances in 2010, and socioeconomic status (represented by proportion of residents living at or below the Low Income Cut-Off (LICO)).

Planning as a tool for pollution prevention

As the City of Toronto has grown, land use changes have come in waves. In the old city neighbourhoods mixed uses were common during industrialization. Industry located in neighbourhoods where many of their workers lived and power and water sources were nearby. Toronto neighbourhoods like South Riverdale, Niagara, and the Junction Triangle inherited a legacy

[1] ChemTRAC stands for Chemicals in Toronto: Reduction and Awareness in our Community. http://www.toronto.ca/health/chemtrac/index.htm

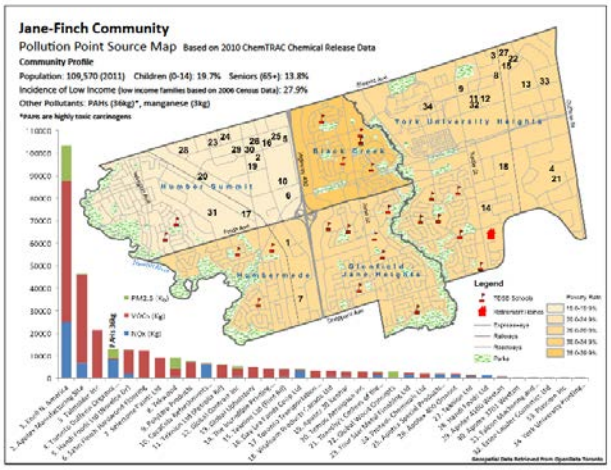
[2] See: Tracking and Reducing Chemicals in Toronto: ChemTRAC Annual Report 2010 Reporting Year, June 2012, available at: http://www.toronto.ca/health/chemtrac/pdf/final_report_2012.pdf

of pollution burdens from this era for example with soils contaminated with lead, PCBs, and other hazardous substances. Costly soil and house cleanups occurred because exposure levels put children at risk. Today South Riverdale remains challenged with the re-development of industrial brownfields in the eastern Portlands.

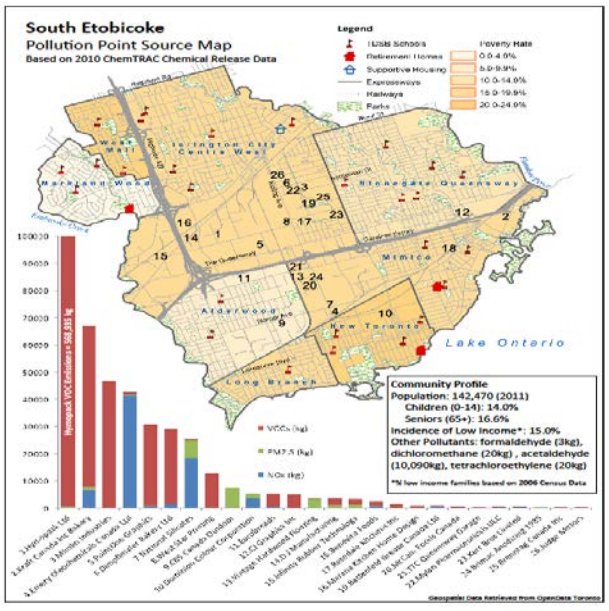
Another development form in Toronto has been the establishment of industrial parks on the outskirts of the City. However, as Toronto has grown and its boundaries have sprawled, new neighbourhoods like Jane-Finch Black Creek grew closer to and downwind from these industries.

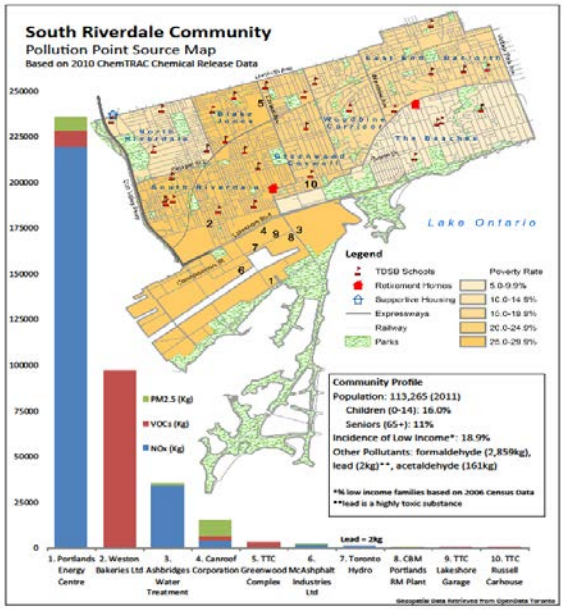
B. Mapping ChemTRAC emissions in three vulnerable communities

In June 2012 Phase 1 ChemTRAC Reporting Data were released. CELA volunteer University of Toronto student Nick Smith mapped these data for three vulnerable Toronto neighbourhoods, Jane and Finch, South Etobicoke and South Riverdale/Beaches.



These maps are posted in full page PDF files on the CELA website here:
Jane-Finch:
http://www.cela.ca/publications/map-jane-finch-community-pollution-point-sources
South Etobicoke:
http://www.cela.ca/publications/map-south-etobicoke-pollution-point-sources
South Riverdale:
http://www.cela.ca/publications/map-south-riverdale-pollution-point-sources





It is anticipated that Phase 2 ChemTRAC data will be released in June 2013. Once it is available we will endeavour to update these maps to reflect a fuller picture of neighbourhood exposures. **Thank you Nick**.

C. Decoupling pollution and poverty with healthy communities

Recent reports[3] predict that Toronto is fast becoming not one but three cities, each in economic solitude from each other due to income polarization. The gap between rich and poor is deepening while the middle class is shrinking.

The campaign to "make poverty history" in Toronto is a complex challenge. Planners in the City of Toronto strive to create numerous healthy hubs, communities where people can live and work sustainably, have access to food and other services and amenities. However, many people who cannot afford to live in Toronto travel in to the city to work. In October 2012 Dr. David McKeown, Toronto's Medical Officer of Health put forward a vision to turn around these troubling trends in a report *Healthy Toronto by Design*.[4] He recognized that health is embedded in all City services and that many City departments need to coordinate their work to overcome deepening inequities.

What Makes a Great City?

- ✓ Access to health care
- ✓ Quality education
- ✓ Affordable housing
- ✓ Recreational opportunities
- ✓ Clean environment
- ✓ Safety
- ✓ Employment opportunities
- ✓ Sanitation
- ✓ Food security
- ✓ Social inclusion
- ✓ Good governance
- ✓ Vibrant culture
- ✓ Good transportation system

> *Although all orders of government, business and the community play a vital role in enabling and supporting positive health outcomes for everyone, municipal governments are in a unique leadership and strategic position, with power to protect and promote their residents' health and well-being. The decisions they make across the whole of government in areas such as urban planning, economic development, housing, parks, forestry and recreation, and transportation have impacts on health and equity.*
>
> David McKeown, Medical Officer of Health, City of Toronto, Healthy Toronto by Design, October 2011, page 28.

Focusing on turnaround - South Riverdale initiatives

For communities like South Riverdale the pollution of their neighbourhood was galvanizing. Activity centered on the local community health centre which remains a model of excellence for the rest of the province. The South Riverdale Community Health Centre provides programs that span primary health care, prevention, education in plain language (provided in multiple languages) and it has played a leadership role in environmental health since the 1970s. Residents have the opportunity to participate in many aspects of building the health of their community in one or more wide-ranging environmental health programs such as the Southeast Toronto Bicycle Users group and a bicycle repair clinic, prenatal health and the environment, children's environmental health education, green workplace practices, indoor air quality, the Leslieville Riverdale Tree Project, Portlands Action Committee, and the South Riverdale Environmental Liaison Committee.

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[3] See: David Hulchanski, University of Toronto (2010) *The Three Cities Within Toronto: Income Polarization Among Toronto's Neighbourhoods, 1970-2005* (http://www.urbancentre.utoronto.ca/pdfs/curp/tnrn/Three-Cities-Within-Toronto-2010-Final.pdf); See also the Poverty by Postal Code reports produced by the United Way of Greater Toronto and the Canadian Council on Social Development: *Poverty by Postal Code: The Geography of Neighbourhood Poverty, City of Toronto, 1981-2001* (April, 2004) (http://www.unitedwaytoronto.com/whatWeDo/reports/povertyByPostalCode.php); Poverty by Postal Code 2: Vertical Poverty, Declining Income, Housing Quality and Community Life in Toronto's Inner Suburban High-Rise Apartments (January, 2011)(http://www.unitedwaytoronto.com/whatWeDo/reports/verticalPovertyReport.php); and Canadian Environmental Law Association, An Examination of Pollution and Poverty in the Great Lakes Basin (November 2008) (http://www.cela.ca/publications/examination-pollution-and-poverty-great-lakes-basin).

[4] City of Toronto, Healthy Toronto By Design (October, 2011) (http://www.toronto.ca/health/hphe/pdf/healthytoronto_oct04_11.pdf)

D. Improved emergency response and disaster prevention

Legal requirements for pollution prevention planning, for example as is required by the State of Minnesota, have tended to arise from related requirements for community right-to-know and emergency planning for environmental spills or other hazardous accidents. Hence, in providing guidance for industry to conduct pollution prevention planning, the State of Minnesota Pollution Prevention Planning Guide[5] was created by experts in pollution control, community right-to-know, and emergency planning and preparedness. The guide notes: "Pollution prevention is preferred over waste management because preventing the generation of regulated chemicals can be much less costly in the long run than managing them as waste or pollution." (at Page 1)

Ontario now requires Pollution Prevention Plans for large emitters some of whom are in Toronto. Learn more about these plans here http://www.ene.gov.on.ca/environment/en/subject/toxics/.

While reducing risks and responses to emergencies is not an explicit goal of Toronto's ChemTRAC bylaw it can become an advantageous benefit. Knowing more about the use of chemicals in your neighbourhood can stimulate local conversations about better preparedness for accidents, spills and fires from nearby facilities reporting under the bylaw. Toronto's Environmental Disclosure and Reporting By-law[6] was in the proposal stage before the Board of Health and City Council just after the Sunrise propane explosion in August 2008 in North York. Although propane is not covered by Toronto's bylaw, the consequences of the mass evacuation, loss of life and property, neighbourhood contamination, clean-up, and legal costs, bolstered the preventative advantages of the bylaw. Consequently there was widespread support from City Hall for passage of the bylaw.

It has long been known that emergency responders to spills, leaks, explosions and fires involving hazardous chemicals are at high risk of short term and long term chronic health impacts from exposures. For example, a study from 1994 concluded that "This study is consistent with others in demonstrating that fire fighters experience increased risk of death from cancer of the brain, and in suggesting increased risk for various other causes of death."[7]

New York City's long standing right-to-know legislation along with other emergency response and occupational health and safety and labeling requirements have led to computer access within NYC emergency response vehicles to facility data on hazardous substance use and location.

Toronto emergency responders could follow this example to improve the information they have to rely on when assessing the involvement of hazardous substances while on their way to an emergency situation. Almost all building fires and explosions will involve some exposure to hazardous substances contained in building products, furniture and household and office products. These exposures are increased when chemicals are used in manufacturing and a production process. ChemTRAC could become a stepping stone to a similar database.

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[5] Minnesota Guide to Pollution Prevention Planning, 3rd Ed. (May, 2010) (http://www.mntap.umn.edu/prevention/index.htm)

[6] City of Toronto By-law 1293-2008. To adopt a new Municipal Code Chapter 423, Environmental Reporting and Disclosure. (http://www.toronto.ca/legdocs/bylaws/2008/law1293.pdf)

[7] Aronson, K. J., Tomlinson, G. A. and Smith, L. (1994), Mortality among fire fighters in metropolitan Toronto. *American Journal of Industrial Medicine*, 26: 89-101.