Board of Health

HL30.1 - Path to Healthier Air: Toronto Air Pollution Burden of Illness Update

Good Afternoon to all the Members of the Board of Health, visiting Councillors, staff, media, and members of the public sitting behind me.

I am here today on behalf of the Toronto Environmental Alliance – a non-profit organization with over 35,000 supporters across our great city. For 25 years, the Toronto Environmental Alliance (TEA) has campaigned locally to find solutions to Toronto's urban environmental problems. We advocate on behalf of all Torontonians for a green, healthy and equitable city.

First and foremost, TEA would like to express our strong support for all six recommendations put forward by Toronto’s Medical Officer of Health. Clearly more work needs to be done to reduce the number of Torontonians that are hospitalized or die prematurely in our city.

- 42% of these premature deaths are due to vehicle pollution
- 28% of these premature deaths are due to burning gas for energy
- 18% of these premature deaths are due to industrial emissions

We can reduce the number of hospitalizations and premature deaths in Toronto by reducing air pollution. The Medical Officer of Health clearly recommends a number of solutions in this report and the City of Toronto should not delay in implementing them.

Passenger vehicle use can be vastly reduced by investing in public transit and active forms of transportation.

Public transit and active forms of transportation like walking and cycling are critical if we wish to reduce vehicle related air pollution. This is why Recommendation 1 and 2 are essential. We need an investment of both money and expertise to plan infrastructure projects wisely with the entire population in mind. Toronto is lagging so far behind other Canadian and U.S cities in terms of modal shift. While 55% of all trips in Toronto are conducive to cycling, our cycling mode share is only 1.7%.

These solutions are key to reducing passenger vehicle use, which in turn reduces air pollution. But it doesn’t just reduce pollution and save people money. If we
committed to doubling our active transportation mode share to reach 15%, the City of Toronto could offset 3.3 million tonnes of CO2\(^1\) - helping us reduce GHGs and mitigate climate change.

**A large portion of the vehicle pollution is coming from commercial vehicles.** While heavy duty vehicles make up only 2% of Ontario’s fleet on the road, these heavy-duty vehicles emitted nearly 80% (77%) of the PM2.5 emissions in Ontario. They also emitted over 50% (55%) of the NOx emissions in our province.

Traffic congestion has economic costs\(^2\) as well as health costs. As Pembina recently pointed out in their Greening the Goods report, congestion and a lack of coordination among truck operators has made the delivery of goods very inefficient in the city. Nearly 40% of the trips surveyed were trucks travelling through our streets empty - delivering nothing but the delivery truck. That is why Recommendation 4, a collaboration to develop an urban freight strategy to increase efficiency and reduce emissions is such a welcome addition to this report.

This recommendation is strengthened by another recommendation in Agenda Item HL30.8, the Local Air Quality Study of Ward 5 and Ward 6, which I will discuss in my following deputation on that item.

**Recommendation** - One thing that is missing from both of these recommendations however is the need to engage and collaborate with Economic Development. TEA strongly advises that Recommendation 4 be revised to include collaboration with the General Manager of Economic Development & Culture. This is not only an opportunity to provide businesses with support to reduce their fuel costs, it is also an opportunity for the Green/Cleantech sector to come up with innovative solutions.

**Tracking air pollution is key to success.** As the DeTOx Toronto Campaigner at TEA, I was compelled to look at the most concerning emissions and their sources.

What the Technical Report tells us is that Particulate Matter 2.5 is the major concern as it is responsible for 900 of the premature deaths each year (~ 70%)

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1 A report commissioned by Transport Canada, *The Business Case for Active Transportation*, claims that: "At an active transportation mode share of 15.2%, an equivalent of 3.3 million tonnes of CO2 are not emitted into the atmosphere". [http://thirdwavecycling.com/pdfs/at_business_case.pdf](http://thirdwavecycling.com/pdfs/at_business_case.pdf)

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and about 800 of the hospitalizations. NO2 (and O3) also ranked high for hospital admissions.

We now know that heavy duty vehicles contribute a significant amount of the PM2.5 emissions in Ontario. An urban freight strategy combined with improved emission standards can go a long way to reducing this source of pollution. But what about commercial/industrial emissions from their manufacturing processes as well as heat and power?

According to ChemTRAC 2011 data, Toronto’s reporting businesses and institutions released over 190 tonnes (190,473 kg) of PM2.5 into the air and over 1,000 tonnes (1,170,149 kg) of NOx. These are two of the top 8 priority substances identified by Toronto Public Health for action in 2011 due to health impacts and the excessive amounts released into our air. The top emitting sector for PM2.5 are the Chemical & Related Products Manufacturing sector followed by the Food & Beverage Manufacturing sector. The top emitting sector for NOx is the Power Generation sector (Portlands Energy Centre).

A parallel collaboration should be developed to tackle industrial and commercial air pollution in Toronto through toxics reduction and pollution prevention programs. Many of the same stakeholders should be at the table as with the urban freight strategy with the addition of Economic Development and pollution prevention institutions such as BLOOM.

Air toxics still need to be factored into health studies. It is important to point out that only five air pollutants were considered in this Path to Healthier Air report. There are hundreds of air toxics that contribute to air pollution and impact human health that were not counted. Fortunately, the City of Toronto is beginning to get a handle on toxic chemicals found in our air through the Local Air Quality Studies and the ChemTRAC reporting program for businesses. As a result we now know that substances like Benzene, 1,3-Butadiene, and Tetrachloroethylene are air contaminants that need to be tackled.

That said, City staff desperately need access to some air monitoring tools so that they can sample local air for toxic substances and monitor air quality changes over time.
That is why TEA strongly supports Recommendation 5. Mobile air monitoring equipment, especially with advanced capabilities to measure air toxics, can assist Toronto Public Health and local communities a great deal. It makes good sense to collaborate with both the Ministry of Environment and the Ministry of Health and Long Term Care. They need to be at the table together far more often.

It should be pointed out that Agenda Item HL30.8 also looks at this topic and requests that the Ministry of Environment install air monitoring equipment near highways due to the elevated health risks identified in these zones.

In order to effectively implement Recommendation 3, examination of design alternatives for buildings and other sensitive uses near highways, air monitoring and air modelling will be required to better understand how improvements can be made.

**Recommendation** - TEA recommends that City of Toronto convenes a series of roundtables to design a collaborative air monitoring strategy for Toronto. At this point in time, a range of stakeholders own and operate air monitoring stations but the data is not necessarily shared. [Refer to map]

Decisions about where additional monitors are needed, how to engage the community in decision making, how to share the costs of buying and operating this equipment and much more should be explored in a series of roundtable discussions guided by relevant City of Toronto departments. Especially at a time when we are gearing up for the PanAm Games in 2015, air quality should be top of mind for all levels of government. Let’s set a realistic but achievable goal for having roundtables so that it can inform the PanAm Games and many other local developments that are currently taking place (i.e. Flemingdon CHC’s response on this agenda item).

Sincerely,

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