



INFORMATION REPORT

TO:	Mayor and Members Board of Health
COMMITTEE DATE:	July 9, 2015
SUBJECT/REPORT NO:	Public Health Services Actions Related to Air Quality - BOH15019 (City Wide)
WARD(S) AFFECTED:	City Wide
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Council Direction:

At the March 24, 2015 General Issues Committee (GIC) meeting, Council requested that Public Health Services (PHS) staff report back with an overview of work performed in regards to air quality in Hamilton.

Information:

Work performed by PHS staff related to air quality is guided by the *Ontario Public Health Standards, 2008 (OPHS)*. Within the OPHS, the Health Hazard Prevention and Management Standard requires that “*the board of health (BOH) shall increase public awareness of health risk factors associated with indoor air quality and outdoor air quality*”, and that these efforts shall include:

- a) Adapting and/or supplementing national and provincial health communications strategies, and/or;*
- b) Developing and implementing regional/local communications strategies*

The OPHS also require that the BOH shall assist community partners to develop healthy policies related to reducing exposure to health hazards related indoor and outdoor air quality.

In addition to work performed to comply with the OPHS, PHS staff also work to satisfy direction given by the BOH related to air quality (i.e. Council-approved objectives identified by the Air Quality Task Force).

The following work was performed with 2014 staffing levels, which are allocated to air quality initiatives as follows: 0.5 FTE Air Quality Coordinator, 0.3 FTE Health Hazard Specialist, 0.4 FTE Public Health Inspector and 0.2 FTE Manager.

Below is a summary of both program and project work performed by PHS staff related to air quality which addresses the OPHS requirements and BOH direction.

1. Monitoring and interpreting air quality and associated health impacts on the local population.

PHS staff responds to various air quality issues in the City of Hamilton (i.e. indoor air quality complaints, smog, contaminants released to air) to determine potential population health impacts and to notify stakeholders to take measures to protect public health. This work requires PHS to:

- Investigate reported health hazards related to air quality in both indoor and outdoor environments.
- Evaluate Acute Care Enhanced Surveillance (ACES) data for time periods following environmental episodes to determine potential effect on the population (i.e. industrial emission episodes; smog events).
- Communicate risk to public health along with recommended health protective measures to be implemented.
- Coordinate the scheduling, maintenance, and operation of two 'Airpointer' air monitoring units on the City's behalf as a member of the Hamilton Air Monitoring Network (HAMN). This work includes conducting preliminary site planning to identify suitable placement of the units, and collaborating with other City departments (i.e. Parks and Recreation, Facilities) and stakeholders (Ministry of Environment and Climate Change, (MOECC), Rotek Inc., HAMN) to secure and operate the Airpointer units.
- Collect air quality data and monitor air pollutants at specified sites to determine local sources of air emissions.
- Interpret air quality data to determine potential health impacts.

2. Identifying and implementing strategies to improve health-related outcomes associated with exposure to air quality

PHS promotes behaviours that protect public health from exposure to air pollution (outdoor and indoor). This work requires PHS to:

- Conduct Air Quality Health Index (AQHI) outreach and education to both at-risk and general populations (www.hamilton.ca/aqhi).
- Secure funding for AQHI work from external partners (i.e. Health Canada).
- Raise radon gas awareness among City of Hamilton residents and encourage radon testing in homes.
- Investigate public concerns pertaining to radon in homes to assist homeowner with recommendations for remediation strategies to decrease the potential for adverse health effects.

3. Identifying and implementing strategies to reduce local air pollution associated with adverse health outcomes

PHS collaborates with various stakeholders to improve air quality in the City of Hamilton and protect public health. This work requires PHS to:

- Pursue council-approved recommendations set out in the Air Quality Task Force Report, 2013 (BOH13029).
- Lead and coordinate City Smog Alert notifications to City staff and to inform City Departments to implement their actions outlined in the Corporate Smog Plan.
- Review land-use planning applications to identify and recommendation strategies to control/mitigate contributions to air pollution (i.e. dust abatement actions and best practices for developers, inclusion of clauses in land-use development agreements regarding requirement of developers to implement dust control measures (i.e. wetting, sodding, sweeping, dust inhibitors, etc.).
- Review demolition permits issued along with mitigation plans to assess risk of dust generation and recommend appropriate actions, as needed.
- Coordinate the funding to community stakeholders that partner with Clean Air Hamilton (i.e. Green Venture, Environment Hamilton, Corr Research) to develop and deliver programming that will improve air quality in Hamilton.
- Coordinate, administer and partner with Clean Air Hamilton (CAH) to support air quality research, provide policy advice and encourage emissions reductions.
- Plan and organize the bi-annual Upwind/Downwind Conference that attracts over 200 attendees to learn practical solutions for air quality, trans-boundary and climate problems in the fields of health, planning, municipal action and partnerships.
- Administer and support Clean Air Hamilton's website – www.cleanair.hamilton.ca to provide a central information hub on air quality in Hamilton and the work of Clean Air Hamilton.
- Work with other City staff to identify a process for funding environmental projects that seek to improve local air quality using proceeds from Provincial Offences Act fines received by the City (still in development).

- Administer, coordinate, and contribute content to the annual Clean Air Hamilton Progress Report.
- Engage with and support MOECC working groups (i.e. External Working Group, Cumulative Effects Subgroup) and various industrial stakeholder Community Liaison Committees to provide.
- Provide comments to Environmental Bill of Rights postings related to potential air quality issues.
- Research and report back as directed to BOH on issues such as municipal particulate bylaws and smoke from fireplaces and woodstoves impacts.

Future Work:

At the March 24, 2015 GIC meeting on 2015 Budget Enhancements, 1.0 FTE Senior Project Manager and 1.0 FTE Project Manager were approved. Future PHS work related to air quality will strive to expand and improve work in the following areas:

- 1. Risk Communication (RC) and outreach with the public and commercial/industrial stakeholders about health-effects related to air quality.** Working directly with Neighbourhood Action Strategy groups to deliver information and presentations on air quality and health impacts and prevention strategies. Work to improve risk communication efforts that will make it easier for the public to understand.
- 2. Air Monitoring Activities.** Manage routinely scheduled air monitoring projects (i.e. Airpointer), health hazard investigations related to air quality (i.e. fugitive dust resulting from improper demolition and/or construction practices), and neighbourhood AQ surveys. These initiatives will work to satisfy recommendation #2 of the AQTF Action Plan.
- 3. Management of Air Quality Intelligence.** The enhancement will allow for improved coordination, management and interpretation of air quality data that is available for the City of Hamilton (i.e. HAMN data, MOECC data, mobile monitoring data, airpointer data, etc.).
- 4. Inter-departmental collaboration within the City,** especially with the Planning Department. PHS will work to support planning decisions in the City by providing public health evidence related to AQ and health effects. Address AQTF recommendation #3 – Develop appropriate air quality related guidelines for new and redeveloping neighbourhood land use planning.

- 5. Collaboration with other levels of government.** Interact and provide advocacy for the City at the inter-municipal, provincial and federal levels. Resources are needed to adequately review and provide commentary and recommendations to decision-making tools posted to the Environmental Registry under the Ontario Environmental Bill of Rights (i.e. review Site Specific Standard Applications for large industrial facilities).