

Development application guidelines

Air quality report

What is the purpose of this?	An <i>air quality report</i> is used to determine if a proposed use or facility is suitable for its location, to assess impacts to human health and the natural environment, and to indicate mitigation measures for any adverse impacts the development may cause. An <i>air quality report</i> is also used to determine if a proposed use will be impacted by surrounding existing uses and to indicate mitigation measures to reduce any negative impacts.
Who should prepare this?	The report should be completed by a qualified professional with expertise in air quality.
When is this required?	<p>Applications which may require an <i>air quality report</i> include, but are not limited to:</p> <ul style="list-style-type: none">▪ Official Plan Amendment▪ Zoning By-law Amendment▪ Draft Plans of Subdivision <p>Sensitive land uses include but are not limited to, residences, day care centres, educational and health care facilities, and other uses identified as sensitive by the Town.</p> <p>If the proposed development is determined not to include a sensitive land use, assessment of nearby industrial uses is not required unless requested by the Town.</p>
Why do we need this?	<p>The rationale for the report is to ensure that air quality levels are maintained, improved, or kept within the appropriate concentration levels as determined by the Ministry of the Environment, Conservation and Parks (MECP) and other Town By-laws, and that land use compatibility issues relating to human health and air quality have been considered, mitigated, and resolved.</p> <p>This report may also be prepared to support or extend an application for an Environmental Compliance Approval (ECA) through the MECP in conjunction with other required reporting for Environmental Compliance Approval.</p> <p>The primary objective of this report is to:</p> <ul style="list-style-type: none">▪ determine if a proposed land use is suitable for a site;▪ determine if the proposal meets human health and air quality criteria, including the Town's Health Protection Air Quality By-law 2010-035; and,▪ assist staff with their analysis and report preparation. <p>Note: The town will hire an outside consultant to peer review air quality studies submitted in support of a development application and the cost of any such services must be paid for by the applicant.</p>
How should this be prepared?	When an <i>air quality report</i> is being prepared in conjunction with an application for an ECA, the report should be consistent with the guidelines published by the MECP. These guidelines include, among others, the procedure for preparing an Emission Summary and Dispersion Modeling (ESDM) Report.

An ESDM Report should:

- describe the proposed facility
- identify pollution sources and contaminants
- assess the significance of the sources of contaminants
- describe the operating conditions, emissions estimation and data quality
- include source summary tables
- include a site plan and dispersion modeling
- provide an emission summary table and interpretation of results

When required, an *air quality report* should also, but not limited to:

- describe the proposed use/facility
- describe the short-term actions and long term goals of the use/facility
- describe any odorous emissions that may be present
- include a site location plan
- include a list of industrial uses within 1000 m of the proposed development
- include a site plan with roof layout and sources of emissions identified with distances to nearest incompatible use identified
- identify any plume conditions which may occur at varying environmental conditions
- explain how the proposal meets the MECP land use compatibility guidelines D-1 through D-6, as applicable
- explain how the proposal meets the Town's Health Protection Air Quality By-law 2010-035 to assess and control health effects of major emissions of fine particulate matter
- explain how the proposal will address the provincial and federal requirements, e.g., Federal Chemicals Management Plan
- describe the mitigation measures to be implemented and their intended outcome, including both potential emission control upgrades at sources and any adjustments to the site plan and architectural design as are necessary to minimize exposure to air emissions odour, and dust
- demonstrate compliance with relevant regulations and standards, including, if necessary, applying for the Environmental Activity and Sector Registry (EASR) registrations or Environmental Compliance Approvals to the MECP.

If it is suspected that some of the above noted requirements cannot be satisfied, additional information may be required:

- background air concentrations levels (existing levels before the proposed new use/facility is introduced)
- cumulative air emission concentration levels with the new use/facility introduced
- frequency analysis of modeled concentrations
- justification for the proposed use based on the data collected

What else should we know?

Detailed 'Benchmark and Threshold Air Impact Assessment Guidelines' are being done at Halton Region. These Terms of Reference are subject to change in accordance with the Region's guidelines. The objective of these guidelines is to identify when an *air quality report* is needed when distance separation criteria for developments cannot be met.

In addition, the MECP has developed land use compatibility guidelines and procedures. Many of these focus on air quality in the context of land use compatibility and should be addressed as part of any air quality report, where applicable.

When preparing an *air quality report* for the purposes of obtaining an ECA, additional criteria is required including an Emission Summary and Dispersion Modelling (ESDM) Report as per Ontario Regulation 419/05: Air Pollution - Local Air Quality. Please contact the MECP, or visit their website, for additional information and guidance.

What other resources are available?

Town of Oakville - Health Protection Air Quality By-law – guidance documents and support materials:
<https://www.oakville.ca/town-hall/by-laws-enforcement/popular-by-laws/air-quality/>

Region of Halton – Air Quality Guidelines (June, 2014): [Microsoft Word - IMLC01-14 DUSC 1-10 - Air Quality Guidelines \(halton.ca\)](#)

Ministry of the Environment, Conservation and Parks Environmental Land Use Planning Guides – refer to Guides and Resources Documents D-1 – D-6:
<https://www.ontario.ca/page/environmental-land-use-planning-guides>

Ministry of the Environment, Conservation and Parks - Guidance for Emission Summary and Dispersion Modelling Reports under Ontario Regulation 419/05 Air Pollution – Local Air Quality made under the Environmental Protection Act (March 2018):
<https://www.ontario.ca/document/guideline-10-procedure-preparing-emission-summary-and-dispersion-modelling-esdm-report-description>

Ministry of the Environment - An ESDM Report should be structured to correspond to each of the items listed in the MECP Emission Summary and Dispersion Modelling Report Checklist:
<https://forms.mgcs.gov.on.ca/en/dataset/5357>

Federal Chemicals Management Plan
<https://www.canada.ca/en/health-canada/services/chemical-substances/chemicals-management-plan.htm> 1

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