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Alliance for Healthier Canadians

Association of Supervisors of
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Canadian Institute of Public Health
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Ontario Society of Physical Activity
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Charitable Registration
Number 11924 8771 RR0001

August 6, 2021

Mr. Sanjay Coelho
Ministry of the Environment, Conservation and Parks - Environmental
Policy Branch, 40 St Clair Avenue West, Floor 10
Toronto, ON M4V1M2

Dear Mr. Coelho,

**RE: ERO # 019-2785: Proposal to update Land Use Compatibility
Guideline**

The Ontario Public Health Association (OPHA) appreciates the opportunity to comment on the Ministry of Environment, Conservation and Parks (MECP) proposal to update the Land Use Compatibility Guideline (the Guideline). OPHA supports strong legislation and guidance that protects the health and safety of all Ontarians by reducing exposure to environmental contaminants including toxic substances, dust, odour and noise.

GENERAL COMMENTS:

OPHA supports clear and prescriptive Land Use Compatibility Guidelines that align with the Planning Act and the Provincial Policy Statement, ensuring that growth and development prioritizes “*the protection of public health and safety*”. **We strongly encourage the incorporation of evidence-based and health-protective guidance** related to “*the placement of major facilities and sensitive land uses in order to avoid potential adverse effects from odour, noise, dust and other contaminants*”. To ensure that health evidence is incorporated into the development of the draft Land Use Compatibility Guidelines, **OPHA strongly urges the MECP to consult with public health agencies who have expertise in air pollution health effects, including the health impacts of exposure to dust, noise and other contaminants and measures to reduce these adverse effects.** These agencies include Health Canada, the Public Health Agency of Canada, the Ontario Ministry of Health, and Public Health Ontario. OPHA supports the *Objectives of the Guide* (page 3) and would like to see “*the protection of public health and safety*” as the number one priority of the guide. As currently written, the draft Land Use Compatibility Guideline lists the prevention of “*adverse effects to existing or planned sensitive land uses from new and/or expanding major facilities*” as the last of 3 objectives of land use

compatibility planning. While protecting employment areas and major facilities are important objectives, **OPHA strongly urges the MECP to prioritize the prevention of adverse effects to sensitive land uses (e.g. residences, hospitals, schools, etc.) by placing it as the first objective of the Land Use Compatibility Guideline.**

Alignment with other regulations and guidelines:

OPHA appreciates the reference to related/supportive legislation and guidelines within the proposed Land Use Compatibility Guidelines as the latter must align with other regulations. **OPHA recommends that any gaps or overlapping areas of legislation and policy be identified and addressed within the guideline to help support effective measures to ensure compatible land uses and protect public health and safety.**

Processes for updating the Guideline and risk communication:

OPHA recommends that policies and guidelines be updated regularly based on a review of available information and research, e.g. health evidence on the impact of exposure to air pollution including dust, noise and other contaminants. This will help inform recommended procedures and actions (e.g. revisions to *Areas of Influence* or *Minimum Separation Distances*). OPHA recommends that MECP ensure that a process is in place to review the newest and best available evidence to assess *Areas of Influence* (AOI) or *Minimum Separation Distances* (MSD) that are protective of public health.

The Guideline should also consider notification processes to relevant stakeholders such as sensitive land uses in the event of changes to regulations and policies. A notification system to inform, notify and update appropriate groups of any changes and new site updates as well as emergency response communication would be useful.

HEALTH EVIDENCE

OPHA is concerned that the draft Land Use Compatibility Guideline fails to account for the most up-to-date evidence on the health impacts of air pollutants such as fine particulate matter (PM_{2.5})¹, of which dust is the major component. Dust sources account for almost 60% of total PM_{2.5} emissions in Canada².

The Government of Ontario acknowledges the negative health impacts of PM_{2.5} and the components of PM_{2.5}: “*Particulate matter includes aerosols, smoke, fumes, dust, fly ash and pollen.*”; “*Fine particulate matter can have various negative health effects, especially on the*

¹ PM_{2.5} refers to a mixture of particles less than 2.5 microns in diameter, including aerosols, smoke and dust. (Pinault et al, 2017. Exposure to fine particulate matter air pollution in Canada. <https://www150.statcan.gc.ca/n1/pub/82-003-x/2017003/article/14781-eng.pdf>)

² Health Canada, 2021. *Health Impacts of Air Pollution in Canada. Estimates of Premature Deaths and Non-Fatal Outcomes.* <https://www.canada.ca/en/health-canada/services/publications/healthy-living/2021-health-effects-indoor-air-pollution.html>

*respiratory and cardiovascular systems... People with heart or lung disease, children and older adults are particularly sensitive to this pollutant.”*³

Health Canada’s *Health Impacts of Air Pollution in Canada. Estimates of Premature Deaths and Non-Fatal Outcomes. 2021 Report*⁴, estimates that air pollution contributes to 15,300 premature deaths per year in Canada. This includes an estimated 6,600 premature deaths in Ontario, of which 4,200 are from exposure to PM_{2.5} alone. According to Health Canada’s report PM_{2.5}, nitrogen dioxide and ozone account for the majority of population health impacts from air pollution and “*There is robust scientific evidence of health effects at very low concentrations of these pollutants, and no evidence of an exposure threshold in the population. In other words, any incremental increase in air pollutant concentration is associated with an increased risk of adverse health outcomes.*”

OPHA is concerned that the Land Use Compatibility Guideline and supporting guidelines suggest that the hazardous aspect of fugitive dust relates only to the constituents in the dust, and not the size of the particles: Appendix B – Compatibility Studies Addressing Noise, Dust and Odour, and Guideline A-10: Procedure for Preparing an Emission Summary and Dispersion Modelling Report: “*Fugitive dust emissions from roadways, storage piles, or other fugitive sources may generally be considered to be a negligible source for facilities in sectors that are not included in Tables 7-2 Sectors Where Metal Content Within Fugitive Particulate Must Be Considered and 7-3 Sectors where Metals in Fugitive Particulate is Generally Not Anticipated*”. This is concerning given the health evidence that the size of particles is directly linked to their potential health impact as smaller particles can get deep into the lungs, decreasing lung function and contributing to respiratory and cardiovascular illness.

In addition, *Appendix B* and *B.2 Dust and other Air Emissions* identify how adverse effects from these emissions can be addressed under Ontario Regulation 419/05: Air Pollution – Local Air Quality. This section goes on to say “*However, there might still be nuisance dust effects beyond the property line.*” and that “*Certain types of facilities may emit potentially hazardous fugitive dust.*”, with reference to Guideline A-10. **Given the most current evidence on health impacts of fine particulate matter (of which dust is a major component), and that there is no evidence of an exposure threshold in the population, OPHA is concerned with the rationale provided in the Guidelines on what constitutes “hazardous fugitive dust”, what is considered “nuisance dust”, in what circumstance “the nature of the fugitive dust emissions is such that they are not likely to pose a health risk to humans”, and how facilities and planning authorities would use this information to estimate health-protective separation distances.**

The Land Use Compatibility Guideline (page 6-7) draws from the Environmental Protection Act in defining “adverse effect” to include: “*an adverse effect on the health of any person*” and notes that “*minor nuisance effects may not meet the definition of adverse effect.*” Current and emerging scientific studies are increasingly recognizing the potential adverse human health impacts of exposure to environmental contaminants such as noise and dust. **OPHA recommends**

³ Government of Ontario. 2019. Air Quality in Ontario. 2017 Report. <https://www.ontario.ca/document/air-quality-ontario-2017-report/fine-particulate-matter>

⁴ Health Canada, 2021. *Health Impacts of Air Pollution in Canada. Estimates of Premature Deaths and Non-Fatal Outcomes.* <https://www.canada.ca/en/health-canada/services/publications/healthy-living/2021-health-effects-indoor-air-pollution.html>

that the most current health evidence on noise and dust exposure be incorporated into the development of values for Areas of Influence and Minimum Separation Distances.

Additional references to health evidence for these contaminants are provided later in this submission.

The Land Use Compatibility Guideline (page 19) states that “*AOIs and MSDs are based on analysis of the Ministry’s complaint data (specific to noise, dust and odour) ... and considering other ministry guidelines and regulations.*” **While OPHA agrees it is important to consider the Ministry’s complaint data, it is vitally important that the AOI and MSD are based on current evidence of the impacts of the exposure to contaminants on human health in order to ensure community health protection. OPHA recommends that MECP data and other data sources on toxic air emissions/exceedances also be considered when updating the AOI and MSD.** To expand on this point, OPHA feels that the Land Use Compatibility Guidelines should provide more details on how the AOI and MSD values (separation distances) were selected, why they were “*mainly based on adverse effects related to noise, dust and odour*” given the health evidence that “*other air contaminants, toxins and traffic*” contribute significantly to adverse effects, and whether the determination of “*adverse effects*” in the context of the AOI and MSD values encompassed the full definition of the term including “*an adverse effect on the health of any person*”.

COMPATIBILITY STUDIES

OPHA supports the rationale and criteria for requiring compatibility studies to assess potential impacts associated with a planning proposal, to determine recommended separation distances and to identify mitigation measures if needed. However, OPHA feels that the technical guidance should be strengthened and go beyond the “*focus on noise, dust and odour*” to include guidance on minimizing and mitigating other relevant adverse effects that may exist “(e.g. *other air contaminants, toxins, traffic.*)”

CUMULATIVE EMISSIONS AND CUMULATIVE IMPACTS

In addition to ensuring that AOI and MSD are health-based, they must also take into account cumulative emissions. Page 21 of the Land Use Compatibility Guideline indicates that “*An alternate AOI may also be larger if the planning authority has determined that adverse effects may occur outside of the Guideline’s AOI, for example in consideration of other area or facility specific emissions.*” The Guideline goes on to say that “*The development of an alternate AOI is a voluntary activity undertaken by the planning authority that is intended to support its broader land use planning framework.*” **In the situation where there are other area or facility emissions, the process to determine an alternate AOI should be mandatory in order to take into account cumulative emissions resulting from multiple facilities and other point sources.** The AOI guidelines should include provisions to address existing Major Facilities and the impact of those facilities (i.e. cumulative emissions) on sensitive uses.

OPHA recommends that the AOI and MSD Tables highlight or acknowledge that these minimum separation distances apply where there is only one Major Facility that could potentially impact Sensitive Land Uses. Where there are multiple Major Facilities,

compatibility studies should be required to assess potential adverse effects of cumulative impacts of all area Major Facilities (whether air toxics, noise, dust or odours). Multiple sources of pollutants may impact the boundaries for AOI/MSDs which can impact sensitive land use areas.

Building on the comments above, OPHA recommends that the MECP provide additional direction and guidance to support cumulative impact assessments and update/expand the Ministry’s Cumulative Effects Assessment in Air Approvals policy (published April 2018)⁵ to capture the entire province and additional contaminants, and as noted in the policy “consider more effectively cumulative impacts from multiple air pollution sources.” Currently, the Cumulative Effects Assessment policy only applies to two areas (Hamilton/Burlington area and Sarnia/Corunna area) and two contaminants (benzene and benzo[a]pyrene). While OPHA appreciates that Appendix B of the Guideline notes that “*The compatibility study should also consider whether there are cumulative effects from multiple major facilities on the proposed land use.*” and “*The ministry publishes maps which show the cumulative effects of air quality from multiple air pollution sources.* <https://www.ontario.ca/page/pre-submission-requirements-industry-air-approvals>.”, these maps only cover the two areas and the two contaminants to which the Cumulative Effects Assessment policy apply.

As noted in the 2018 Policy Notice on the Ministry’s Environmental Registry, the Ministry committed to “*reviewing the cumulative effects policy within two years*” and “*further analyze air quality data and other data sources to identify additional contaminants and geographic areas that could be included in the policy.*”⁶ **Given the very significant potential for cumulative impacts, and the opportunity to avoid these impacts through MECP air approvals policy, through the land use compatibility process, and by establishing health-protective separation distances, OPHA strongly urges the Ministry to make cumulative effects assessment a priority.**

OPHA does not support the approach suggested as “worst case” on page 25 of the Guideline: “*Where major facility development plans are unknown or where the planning authority is determining an AOI for an area which contains multiple major facilities, the AOI for the largest scale major facility that could be permitted by the existing planning framework should be assumed (“worst case” scenario), ...*”. The scenario outlined above should not be considered “worst case” as the impact of cumulative emissions from multiple facilities would be much greater than the impact from the largest scale major facility. The “*AOI for the largest scale major facility*” is not sufficient if there are multiple Major Facilities. The approach suggested in the Guideline does not take into consideration the impact of cumulative emissions on human health.

OPHA does not support the allowance to measure separation distances from the Major Facility’s building or equipment as opposed to the property line (Page 28 section 2.4 How to Measure Separation Distances, AOIs and MSDs). As noted in the Guideline “*this method does not take into account any future expansions or future outdoor works such as vehicular traffic, or*

⁵ Cumulative Effects Assessment (CEA) in Air Approvals https://prod-environmental-registry.s3.amazonaws.com/2018-04/Cumulative%20Effects%20Assessment%20in%20Air%20Approvals%2020180426_0.pdf

⁶ <https://ero.ontario.ca/notice/013-1680>

onsite storage and maintenance.” While the Guideline goes on to say that the method “*should only be used if the planning authority and major facility is agreeable and if future expansions of the major facility are not expected.*”, there is no assurance that there would not be future expansion with the major facility’s property boundaries. Also, it fails to acknowledge input, or consent from existing sensitive uses.

OPHA supports the statements in reference to the planning authority’s responsibility in cases where new development must not be permitted (page 30): “*When adverse effects from major facilities cannot be minimized and mitigated such that no adverse effects are expected, the planning authority must not permit the new development.*”

OPHA recommends that the Ministry provide more details (e.g. technical guidance) for how other air contaminants, toxins and traffic-related air pollution are to be addressed through the Land Use Compatibility process, and include stronger language (e.g. requirements) for cumulative impact modeling. The Environmental Registry of Ontario proposal summary for the Land Use Compatibility Guideline (ERO 019-2785) states: “*We are proposing an updated Land Use Compatibility Guideline to help municipalities and planning authorities plan sensitive land uses and major facilities. This will help to avoid or minimize and mitigate potential adverse effects from odour, noise, dust and other contaminants.*” Section 2.6 of the Guideline (page 31) indicates that “*Although this Guideline focuses on noise, dust and odour, the planning authority can and should require the proponent to avoid, minimize and mitigate any other relevant adverse effects that may exist (e.g. other air contaminants, toxins, traffic).* The planning authority can also, at their discretion, undertake or require broader studies outside of a site-specific study, such as regional or cumulative impact modeling. This could be appropriate if there are multiple existing major facilities or multiple proposals for potentially incompatible development in a regional area, and the planning authority may want to assess impacts on an area-wide scale.” **OPHA strongly believes that cumulative impact modeling should be required when there are multiple existing or proposed major facilities.** OPHA also recommends that the Ministry provide technical guidance for preparing compatibility studies addressing “*other air contaminants, toxics, traffic*” or refer planning authorities to other guidance or indicate how this is addressed by the Ministry.

OPHA is pleased to see that the Guideline acknowledges the need to consider compatibility and cumulative effects in areas undergoing infill and intensification, and that “*the potential implications of approving an additional industrial use near existing sensitive land uses may have a cumulative impact on the existing sensitive land uses.*” (Page 55/56: 4.2.3 Considerations for Infill and Intensification Scenarios); however, this should be emphasized, the language should be strengthened (i.e. requiring planning authorities and proponents to assess cumulative impacts) and technical guidance should be provided.

The Land Use Compatibility Guideline outlines additional mechanisms to support compatibility including municipal by-laws (page 57, section 4.3.1) and encourages municipalities to “*consider the elements of the Ministry’s Technical Bulletin: Management Approaches For Industrial Fugitive Dust Sources when developing relevant by-laws.*” **OPHA recommends updating dust management guidelines to reflect more current science on the human health impacts of dust.** An example of a guideline that could be used as references includes: British Columbia

Ministry of Environment and Climate Change Strategy – How to Develop a Fugitive Dust Management Plan/June 2020⁷.

OPHA supports the MECP recommendation that municipalities “maintain inventories of the location of all existing, committed and former major facilities within their respective jurisdictions” (page 58, section 4.3.3 Inventories) to inform studies, decisions and engagement. OPHA also recommends that the MECP ensure that their inventories of major facilities are easily accessible to planning authorities, stakeholders and communities.

With respect to Recommendations for Facilities Registered for Technical Standards, Site-Specific Standards or Sector Specific Regulations (page 70/71), given the complexity and specificity of requirements for these facilities, and acknowledgement that certain facilities cannot meet required air standards, OPHA recommends that the Land Use Compatibility Guideline provide additional guidance to planning authorities and proponents – specifically, outline MECP responsibility in setting and ensuring compliance with technical, site-specific or sector specific standards, outline how the planning authority would determine “*that no adverse effects related to significant air emissions are expected from the facility*” and consult with planning authorities in cases where a potential incompatibility issue relates to a facility to which these standards apply.

OPHA appreciates the inclusion of case studies in the Land Use Compatibility Guideline (Appendix I). They provide some good examples of how the Guideline can be used to ensure public health and safety, and the benefits of considering land use compatibility as part of the local planning approvals process.

TRAFFIC-RELATED EMISSIONS AND SENSITIVE LAND USES

The following comments relate to how mitigating exposure to transportation-related emissions are addressed within the Land Use Compatibility Guidelines. **OPHA appreciates that Appendix K – Information on Sectors Not Included In This Guideline provides some guidance in this area, however, it is lacking in terms of guidance on protecting sensitive land uses from traffic-related air pollution (TRAP).**

The Guideline’s definition of major facility is taken from the Provincial Policy Statement and defined as: “*facilities which may require separation from sensitive land uses, including but not limited to airports, manufacturing uses, transportation infrastructure and corridors, rail facilities, marine facilities, sewage treatment facilities, waste management systems, oil and gas pipelines, industries, energy generation facilities and transmission systems, and resource extraction activities (PPS).*”

Appendix K indicates that “*This Guideline does not provide specific land use compatibility direction with regards to locating some major facilities, or their approvals, including: airports, transportation infrastructure and corridors (e.g., transit stations), rail facilities, marine facilities, oil and gas pipelines, energy generation facilities and transmission systems and some*

⁷ https://www2.gov.bc.ca/assets/gov/environment/waste-management/waste-discharge-authorization/guides/templates/gui-tec-031_fugitive_dust_mgmt_plan_guidance.pdf

resource extraction activities. This Guideline, however, applies to encroachment of sensitive land uses on some of these facilities.”

OPHA thinks that the Guideline should provide guidance on how proponents of transportation infrastructure (as per the definition of major facilities) and sensitive land uses address land use compatibility to reduce potential exposure of populations to traffic-related air pollution. The current MECP Land Use Compatibility Guidelines series do not provide separation distance recommendations from high traffic areas and this has been recognized as a gap from a land use planning and public health perspective. Comprehensive reviews have been conducted in health research relating to TRAP and health impacts (see references below).

While OPHA appreciates that Appendix K provides some guidance to assess compatibility when sensitive land uses are proposed near existing highways and roads (e.g. *Ministry’s Environmental Noise Guideline: Stationary and Transportation Sources – Approval and Planning NPC-300; Ministry of Transportation permits under the Public Transportation and Highway Improvement Act, Ministry of Transportation’s Highway Corridor Management Manual, and Ministry of Transportation’s Freight-Supportive Guidelines*), the Land Use Compatibility Guideline is missing important health evidence and guidance on protecting sensitive uses from traffic-related air pollution.

There is strong and growing evidence of the impact of exposure to traffic-related air pollution (TRAP) on health. It is a significant omission, and a missed opportunity, in not including any reference to transportation emissions and health impacts of exposure to traffic-related air pollution. **OPHA strongly urges the MECP to include, within the Land Use Compatibility Guidelines and Appendix K, the following documents and evidence on the health impacts of exposure to traffic-related air pollution and measures to mitigate exposure and protect human health:**

- ***Health Canada 2020 – Traffic-Related Air Pollution: Asthma, Allergies and Lung Function*** https://publications.gc.ca/collections/collection_2020/sc-hc/H144-70-2020-eng.pdf

Health Canada conducted this risk assessment to inform and support programs and policies designed to mitigate exposure to, and health impacts of traffic-related air pollution. Health Canada has concluded that *“the evidence supports a causal relationship between TRAP exposure and asthma incidence (i.e., diagnosis of cases) and asthma prevalence (i.e., existing cases) in children.”* TRAP can reduce lung function and may worsen allergies.

- ***Health Canada (n.d.) Health Canada’s assessment of TRAP – Exposure, health effects & population health impacts.*** Mathieu Rouleau, Air Health Effects Assessment Division, Health Canada. <https://static.tti.tamu.edu/conferences/carteeh19/presentations/poster-2/rouleau.pdf>
“Preliminary estimates suggest that 1,700 premature deaths in Canada every year are attributable to TRAP.”

- Health Canada, 2017. Human Health Risk Assessment for Gasoline Exhaust.**
<https://www.canada.ca/en/health-canada/services/publications/healthy-living/human-health-risk-assessment-gasoline-exhaust-summary.html>

“For calendar year 2015, on-road gasoline emissions are associated with 700 premature mortalities (valued at \$5.0 billion), ... On-road and off-road gasoline emissions are associated with 940 premature mortalities (valued at \$6.8 billion).”

“A similar health impact analysis was previously undertaken by Health Canada for on-road and off-road diesel emissions in Canada, also for calendar year 2015... it was estimated that on-road diesel emissions were associated with 320 premature mortalities and combined on-road and off-road diesel emissions were associated with 710 premature mortalities... It also highlights that the geographic distribution of gasoline emission sources and human populations are closely aligned, increasing population exposures.”
- Develop With Care 2012: Environmental Guidelines for Urban and Rural Land Development in British Columbia. Supporting Information on Air Quality**
<https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/best-management-practices/dwc-air-quality.pdf>

“Buildings: Locating the Site: To minimize the exposure of building occupants to traffic-related air pollution associated with proximity to major roads, recommendations include:

 - *Setbacks: 150 metre (500 feet) setbacks from “busy roads” [greater than 15,000 vehicles/day] especially for buildings such as daycare facilities, schools, hospitals, long-term care facilities and residences.*
 - *Truck Routes: Avoiding development of buildings for vulnerable populations on truck routes or using additional setbacks near truck routes or truck distribution centers is recommended (elevated air pollutant concentrations are measurable as far as 750 metres from truck routes).*
- Traffic-related air pollution and health in Canada.** Brauer, M., Reynolds, C., & Hystad, P. (2013). *Traffic-related air pollution and health in Canada.* CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne, 185(18), 1557–1558. <https://doi.org/10.1503/cmaj.121568>

“... about 10 million people — 32% of the Canadian population — live in areas where they are exposed to traffic-related air pollution (exposure zones). These elevated exposure zones are defined as the 500 m on either side of highways (average daily traffic ≥ 18 000 vehicles) or the 100 m on either side of major urban roads (average daily traffic ≥ 15 000 vehicles, ≥ 2 lanes spanning several kilometres, speed limit > 50 km/h). This high prevalence of exposure, in addition to evidence of associated health problems, suggests that traffic-related air pollution is a substantial public health concern in Canada and points to the need for policies to reduce population exposure.” Strategies to mitigate exposure to TRAP include “land-use planning and transportation management”, specifically:

 - *Implementing integrated land-use planning that incorporates health impact assessments.*

- Siting new buildings that will house vulnerable populations (e.g., schools, daycares, retirement homes) at least 150 m from busy roads.
- Brauer, M., Reynolds, C., & Hystad, P. (2012, March 1). **Traffic-related air pollution and health : a Canadian perspective on scientific evidence and potential exposure-mitigation strategies** [R]. doi:http://dx.doi.org/10.14288/1.0132718
- **Traffic-related air pollution: a critical review of the literature on emissions, exposure, and health effects.** *Final Version of Special Report No. 17.* Boston (MA): Health Effects Institute. 2010. <http://pubs.healtheffects.org/view.php?id=334>
- **U.S. Environmental Protection Agency, 2015. Best Practices for Reducing Near-Road Pollution Exposure at Schools** https://www.epa.gov/sites/default/files/2015-10/documents/ochp_2015_near_road_pollution_booklet_v16_508.pdf and **U.S. EPA School Siting Guidelines** https://www.epa.gov/sites/default/files/2015-06/documents/school_siting_guidelines-2.pdf

In response to concerns about the impacts of near-road air pollution, several agencies, including EPA and several state agencies in California, have established siting guidelines for new schools that recommend reducing traffic-related air pollution exposure. The EPA School Siting Guidelines note that: “... states, tribes and communities should seek to avoid situations in which new nearby sources of potentially harmful pollutants are sited in such close proximity to schools that they may pose a potential hazard to the school occupants.”

- **Halton Region, 2014. Land Use Compatibility Guidelines** <https://www.halton.ca/getmedia/678ca03c-ed4e-4f35-893e-4e160a84b295/LPS-rop-guidelines-land-use-compatibility-guidelines.pdf.aspx?ext=.pdf>
- **City of Toronto. Avoiding the TRAP: Traffic-Related Air Pollution in Toronto and Options for Reducing Exposure. Technical Report. October 2017.** <https://www.toronto.ca/legdocs/mmis/2017/hl/bgrd/backgroundfile-108070.pdf>
“Land-Use Planning at the City-Wide and Neighbourhood Level ...Separation distances ... Municipalities have a number of tools at their disposal such as official plans, zoning, and other planning policies that allow them to modify the built environment in order to separate vehicular traffic from places where people spend their time ... The most widely reported mitigation strategy is the implementation of separation distances, or buffer zones.”

NOISE AND SENSITIVE LAND USES

OPHA requests that the MECP include within the Land Use Compatibility Guidelines the following documents and evidence on the health impacts of exposure to environmental noise and measures to mitigate exposure and protect human health:

- Toronto Public Health (2017). *How Loud is Too Loud? Health Impacts of Environmental Noise in Toronto. Technical Report*
<https://www.toronto.ca/legdocs/mmis/2017/hl/bgrd/backgroundfile-104525.pdf>

“The growing body of evidence indicates that exposure to excessive environmental noise does not only impact quality of life and cause hearing loss but also has other health impacts, such as cardiovascular effects, cognitive impacts, sleep disturbance and mental health effects.”

- World Health Organization Regional Office for Europe (2018) *Environmental Noise Guidelines for the European Region*. WHO, Copenhagen.
<https://www.euro.who.int/en/health-topics/environment-and-health/noise/publications/2018/environmental-noise-guidelines-for-the-european-region-2018>

“Considering the common transport-related sources of environmental noise and air pollution, and in particular the evidence of independent effects on the cardiovascular system, a coordinated approach to policy development in the sectors related to urban planning, transport, climate and energy should be adopted for policies with an impact on environmental noise, air quality and/or climate. Such an approach should yield multiple benefits through increased commitment and financial resources; increased attention to securing health considerations in all policies; and use of policy to control noise and other environmental risks such as air pollutants, including short-lived climate pollutants.”

HUMAN HEALTH IMPACT ASSESSMENTS

It is helpful to see that the Environmental Assessment (EA) processes that apply to transportation infrastructure projects are included, and the acknowledgement that *“The EAs may not have been completed recently, and therefore should not be fully relied upon in the preparation of detailed compatibility studies.”* (Page 122: *Transportation Infrastructure and Corridors, Rail and Marine Facilities*). **OPHA recommends that the Land Use Compatibility Guidelines also consider examples of when a Health Impact Assessment or Human Health Risk Assessment may provide useful information to inform land use compatibility processes and recommendations for Area of Interest and Minimum Separation Distances.**

In closing, OPHA would like to stress that upstream health protective measures, such as land use planning policies which incorporate land use compatibility guidelines and are evidence-based and prescriptive, are important tools to reduce exposure to environmental contaminants and improve population health.

Thank you for the opportunity to provide input on the Ministry's Land Use Compatibility Guidelines.

Sincerely

A handwritten signature in black ink, appearing to read 'P. Walsh', is positioned above a vertical line that extends downwards.

Pegeen Walsh,
Executive Director
Ontario Public Health Association

More about the Ontario Public Health Association:

OPHA is a member-based, not-for-profit charitable organization that has been advancing the public health agenda since 1949. OPHA provides leadership on issues affecting the public's health and strengthens the impact of those who are active in public and community health throughout Ontario. OPHA does this through a variety of means including influencing public policy, capacity building, research, and knowledge exchange. Our membership represents many disciplines from across multiple sectors. OPHA is also home to Nutrition Connections (formerly the Nutrition Resource Centre) which advances nutrition knowledge and collaboration.