



Air quality and human health

The **Environmental Impact Statement (EIS)** provides comprehensive documentation of the extensive technical work undertaken by CN to assess the potential environmental and socio-economic effects of the Milton Logistics Hub, consistent with the EIS Guidelines issued by the Canadian Environmental Assessment Agency (CEAA). The full EIS (submitted December 7, 2015) is available on the public registry at ceaa.gc.ca, Reference Number: 80100 (Doc. #57).

About the assessment

- An air quality assessment was conducted to evaluate background (existing) air quality conditions for the Halton Region airshed, and to analyze how emissions from the proposed Project during construction and operation may change air quality conditions in the vicinity of the Project.
- The assessment examined chemicals of potential concern (COPCs) commonly associated with air emissions, including carbon monoxide (CO₂), nitrogen dioxide (NO₂), fine particulates, particulate matter, and volatile organic compounds (VOCs).
- The assessment, including air quality modelling, also examined existing farmhouses and residences in the area, as well as potential future development areas near the proposed Project location.
- In concert with the air quality assessments, a Human Health Risk Assessment (HHRA) was conducted to evaluate potential health risks associated with exposure to the COPCs, and to assess the changes in risk between existing conditions and the construction and operation phases of the Project.

Assessment findings

- The main emissions sources associated with the proposed Project would be locomotives, non-road equipment, stationary equipment (generators), and trucks.
- Data used to determine existing levels of COPCs showed that most compounds assessed are currently below federal or provincial air quality standards. Only two types of VOCs (benzene and benzo(a)pyrene) were found to be currently (pre-Project) above relevant standards.
- Human health risks from exposure to the COPCs during construction and operation were assessed by comparing predicted maximum concentrations of COPCs to federal or provincial air quality criteria (AAQC), or to federal risk thresholds.
- The HHRA determined that the maximum concentrations of COPCs predicted in each scenario considered alone (baseline, construction, operation) were within acceptable risk limits from established guidelines.
- The results of the HHRA indicated that Project-related emissions are not expected to result in changes to human health between existing conditions and the construction and operation phases of the Project.

Overall, there is expected to be no significant adverse effect to human health as a result of the Project.

For more information about the air quality and human health assessments, refer to Section 6.0 of the EIS, as well as Appendix E.1 and E.7.



Proposed mitigation measures

Proposed mitigation measures to reduce emissions of air contaminants and greenhouse gases include:

- Implementing measures to control emissions, including a no-idling policy during construction and operations.
- Using equipment with low emissions and high fuel combustion efficiency engines to the extent possible.
- Properly maintaining equipment and using ultra-low sulphur fuel where applicable.
- Controlling dust and minimizing activities that generate dust during construction and operations.
- Monitoring fugitive dust at selected off-site locations.
- Streamlining the operation process where applicable, so that outbound trucks can travel less distance on-site and expedite the container handling turnaround time, reducing idling.

About CN's Milton Logistics Hub

CN is proposing to build and operate a new intermodal hub on CN-owned land, east of Tremaine Road and south of Britannia Road in Milton, Ontario. The Project is proposed to accommodate the growing demand for infrastructure to handle the increasing flow of goods in and out of the Greater Toronto and Hamilton Area (GTHA), Canada's largest population area and the fastest-growing region in the country. The Project is currently undergoing an environmental assessment by an independent joint review panel, under the *Canadian Environmental Assessment Act, 2012*. CN is committed to ongoing engagement with Aboriginal communities, local governments and local communities to continue to find ways to mitigate potential effects and to enhance potential benefits locally. More information is available at cnmilton.ca.

For more information

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