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August 19, 2009
Revised

The Honourable John Gerretsen
Minister of the Environment
12th Floor, 135 St. Clair Avenue West
Toronto, Ontario M4V 1P5

Dear Minister Gerretsen:

Re: Objection to Metrolinx' Proposed Diesel Expansion of Georgetown South GO Service and Union-Pearson Rail Link

The Big Move, Metrolinx' regional transportation plan for the Greater Toronto and Hamilton Area (GTHA), describes a plan for dramatic transformation of our transportation system to achieve a more sustainable transportation future. This vision has the potential to improve air quality, among other health benefits. The provision of clean public transit is a critical component of a sustainable transportation system. It is vitally important that this vision is implemented in a way that improves air quality, and ultimately, that the transportation network in the City of Toronto is one that promotes good health through increased urban sustainability.

Diesel expansion of the Georgetown South GO service and Union-Pearson Rail Link is projected to increase diesel train volumes on the Georgetown South Corridor to between 268 and 464 trains per day. This increased diesel train volume will result in increased air pollution and health risk in adjacent communities. During public consultation for this proposed project, Metrolinx stated that the corridor would be electrified within the next 15 years. Electric trains are desirable from a public health perspective because they do not produce direct air pollution emissions. It is of great concern that the Environmental Project Report (EPR) does not contain a written commitment to electrification, and that electrification has not been identified as a mitigation strategy.

The Georgetown South Service Expansion and Union-Pearson Rail Link are not the only rail expansions planned by Metrolinx. The 15- and 25-year plans in *The Big Move* include plans for many additional rail expansions and new rail services throughout the GTHA. It is a major concern that approval of this project as a diesel rail expansion will set a precedent that may be followed for future projects. If the predicted air quality and human health impacts of the proposed diesel expansion of the Georgetown South GO service and Union-Pearson Rail Link are found to be acceptable, then the impetus to spend money on electrification of this and other planned rail expansions in the region will be undermined.



As part of the Transit Project Assessment process, Metrolinx commissioned an assessment of the air quality impacts of the diesel expansion of the Georgetown South GO service and Union-Pearson Rail Link. This assessment predicts significant increases in concentrations of air pollutants, and exceedances of air quality thresholds in several locations. However, in my view the assessment underestimates air quality impacts, and the predictions do not really represent a worst-case scenario as suggested. Actual air quality impacts of the diesel expansion would be higher than those represented in the EPR.

Operation of the proposed new and expanded train services with diesel engines will result in adverse human health impacts in the adjacent communities. Metrolinx commissioned a human health risk assessment of the diesel expansion that was based on the results of the air quality assessment, which predicts increased risk of acute health effects, such as respiratory irritation, at every location assessed (44 residential areas, 37 schools, 40 child care centres and 4 long term care centres) during peak air pollution events. In addition, unacceptable leukemia risks are predicted for 16 of the residential locations assessed. However, the methods used in the health risk assessment result in an underestimate of risks. Actual risks, especially to the most vulnerable and most exposed individuals, would likely be considerably higher than Metrolinx' Environmental Project Report suggests.

Given these concerns, I am hereby submitting this objection to the proposed Georgetown South Service Expansion and Union-Pearson Rail Link using diesel trains. However, I do support a transit expansion based on electrification. I request that, as Minister of the Environment, you permit the project to proceed only under the following conditions:

1. That new train services and service expansions proceed only as electrified services;
2. That Metrolinx be required to conduct ambient air quality monitoring prior to implementation of new train services or service expansions, in order to establish an air quality baseline and concentration gradient. The chemicals to be measured are:
 - Combustion gases – carbon monoxide, nitrogen dioxide and sulphur dioxide;
 - Particulate matter (ultrafine (PM_{0.1}), respirable (PM_{2.5}) and inhalable (PM₁₀));
 - Volatile organic compounds (VOCs) – formaldehyde, acetaldehyde, 1,3-butadiene, benzene and acrolein;
 - Polycyclic aromatic hydrocarbons (PAHs) – total and benzo(a)pyrene; and,
 - Greenhouse gases – carbon dioxide, methane and nitrous oxide; and
3. That Metrolinx establish a community liaison committee to:
 - Deal with issues arising from the proposed construction;
 - Provide input on selection of mitigation strategies; and,
 - Provide input to the mobility hub planning process.

Both the need for public transit, and the need to protect our air quality and health are important issues. The Georgetown South Service Expansion and Union-Pearson Rail Link must be implemented in a way that is health protective. This project represents an opportunity to reduce air

pollution and the burden of illness in the communities adjacent to the corridor by requiring electrification of the corridor prior to implementing new or expanded services. The detailed rationale for my concerns can be found in the attached comments (Attachment 1). Also attached are my report to the Toronto Board of Health (Attachment 2), and the Board's decision (Attachment 3).

Sincerely,

David McKeown, MDCM, MHSc, FRCPC
Medical Officer of Health

Attachments: 1-3

Electronic distribution:

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Clean Train Coalition
Mount Dennis Community Association
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