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**Yu San Ong**

Environmental Planner, Environmental Services and Approvals

Mr. Normunds Mierins, Director  
North Rosedale Ratepayers Association  
4 Fairview Blvd  
Toronto, ON M4K 1L9

June 7, 2010

**RE: Hydro One Networks' Midtown Project – Class Environmental Assessment for  
Minor Transmission Facilities (“Class EA”)  
45-Day Review of the Draft Environmental Study Report  
NRRA's comments**

Dear Mr. Mierins,

Thank you for your comments regarding the Midtown Electricity Infrastructure Renewal Project Class EA.

In your comments, you expressed concerns about detailed engineering design, construction activities, project timelines and potential hazards regarding construction accidents, traffic, noise, and air quality, etc. Please see the attachment for Hydro One's responses to your comments.

As you know, we are currently working with the City of Toronto to determine if the Rosehill Pumping Station is technically feasible to relocate the main shaft and construction staging area for the Midtown Project. We hope to update residents and stakeholder on this option very shortly.

We hope to continue to work with you and the North Rosedale Ratepayers Association to develop and implement the mitigation measures that would best address your concerns. If you have further questions or concerns regarding this project, please feel free to contact me at 416-345-5031, or Ms. Cynthia Yu, Environmental Planner, at 416-345-5045.

Sincerely,

A handwritten signature in blue ink, appearing to be "Yu San Ong".

Yu San Ong, Environmental Planner  
Environmental Services & Approvals

Attachments:

Responses to Comments from North Rosedale Ratepayers Association

Appendix A: Preliminary Design of Main Shaft at Rosehill Pumping Station

## Responses to Comments from North Rosedale Ratepayers Association

### 1. Responses to *North Rosedale Ratepayers Association (NRRRA)* OEB Interrogatory #3 List 2

- a) "effective dust suppression techniques" - what kind and amount of dust and debris will this Project generate and what chemicals and toxins will they contain?

**Response:** Effective dust suppression techniques consist of employing water to control dust. We will water the driveway exiting the construction site, and water will also be used to control dust from the stockpile of spoil/rock debris from the tunnel excavation. The watering technique was used effectively on a similar tunnel project constructed in downtown Toronto and no complaints of dust were received during the approximately 2-year construction period from any area residents or businesses.

- b) "Cheminfo (2005) best practices to *minimize* effects on air quality" - provide full copy

**Response:** *Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities* (Cheminfo, 2005) can be downloaded from the link below:

<http://www.bieapfrempp.org/Toolbox%20pdfs/EC%20-%20Final%20Code%20of%20Practice%20-%20Construction%20%20Demolition.pdf>

- c) "locate access routes and lay down areas away from residences *to the extent possible*"

**Response:** To avoid using residential streets for access, a temporary road will be built at the Bayview Junction construction site. The main shaft will be located immediately south of Rosehill Pumping Station if the lands are technically viable for the main shaft, land acquisition and municipal planning issues can be resolved with the City of Toronto. Hydro One will access the site from Mount Pleasant Road.

The access route plan is under development now. Hydro One will update you with the information you require once we have the selected access roads and finalized the traffic plan in consultation with the City of Toronto.

- d) "noise levels will conform to municipal noise by-law" - provide full copy of relevant bylaw (bearing in mind that an industrial type operation is being proposed in the heart of an well-established, low density residential neighbourhood) - what will be the maximum noise level associated with the Project?

**Response:** As requested, a copy of the City of Toronto's Noise By-law can be downloaded from the link below:

<http://www.toronto.ca/legdocs/bylaws/2003/law0111.pdf>

The activities that will be taking place during the Midtown project are not considered industrial in nature but are referred to as construction projects. Noise levels will be within municipal noise bylaws. A "Noise Level Monitor" will monitor noise levels. You can find more information in **Table 7-1** of the draft Environmental Study Report.

- e) *"suitable noise controls or silences, as required"* - please specify the types of equipment and proposed noise controls

**Response:** At this point, the project is still at EA and OEB approval stage. Engineering design is in the early stage. Therefore, we cannot be specific about the types of equipment. For proposed noise controls, please refer to d).

- f) Please provide complete plans and specifications for fences and gates to surround and secure the main-shaft / construction staging area and the exit and intermediate shafts.

**Response:** See (e) above. Hydro One plans to enclose the site of the main shaft and the exit shafts by a temporary barrier fence around the perimeter to secure the site. We have determined that intermediate shafts will not be required. Please see the Appendix A for details.

- g) Air pollution and odours caused or released by the Project or related activities – please provide complete details of all emissions, including those from truck traffic, cranes, ventilation fans

**Response:** All vehicles will meet *Environmental Protection Act (EPA)* requirements. Vehicle engines will be tuned properly, etc.

- h) It was our understanding that construction activity would be limited to the hours of 7:00 a.m. to 7:00 p.m. weekdays, but not on Saturdays, Sundays and public holidays. This is a residential neighbourhood. Please explain why it would be acceptable to have industrial type activity being conducted in a residential neighbourhood on weekends and public holidays. What exactly do you mean by "if activities need to be *extended to facilitate* their completion"?

**Response:** Hydro One plans to adhere to the City of Toronto's Noise By-law which establishes prohibitions by time and place for different types of activities. Typically, our crew works from Monday to Friday 7am to 7pm. However, there could be exceptions to this practice as a result of unforeseen challenges resulting in delays. In order for the project to meet its in-service date, certain activity may require overtime on weekends and holidays.

- i) Will Carstowe Road withstand the loading from the extremely heavy truck traffic that is proposed? Please provide details.

**Response:** If the site south of Rosehill Pumping Station can be used as construction staging area, then heavy trucks will not need to pass through Carstowe Road.

- j) Dozens of heavy trucks will create serious air pollution. Please provide study of this issue

**Response:** There will be a limited number of trucks passing through main streets to carry excavated debris out of the construction site every day. Please refer to the emission figures for vehicles that were taken from Environmental Canada's *2005 Greenhouse Gas Inventory Report*, Section A12.1.4.1 and Natural Resource Canada's *Canadian Vehicle Survey 2007 Summary Report*, Figure 2.8 to calculate the CO<sub>2</sub> emission.

- k) Please provide details of arrangements to ensure that truck traffic serving the project will, with the exception of Carstowe Road, use only major arterial roads and not the local streets in Rosedale and Moore Park

**Response:** Please refer to Response c).

- l) Please provide details consistent with verbal assurances previously received from Mr. Goodfellow

**Response:** please refer to Response f).

If the main shaft location at Rosehill Pumping Station is approved, once the tunnel project is completed, we will clean up the site and restore the temporary access road. We plan to have a small building (2m × 3m) and the permanent shaft will be securely covered.

The site east of Carstowe Road would be used for workers' personal parking. Once the tunnel project is completed, we would restore it to the current condition.

- m) Vibration – Please provide complete details.

**Response:** During the boring of the proposed deep rock tunnel, there will be no noticeable vibration at surface. There will be some vibration felt during the auguring of the shafts at distances very close to the drill. For this project, vibration from tunnel excavation will not be an issue at the surface. This is based on experience with a similar tunnel project constructed in downtown Toronto, where there was no noticeable vibration beyond 20 meters from the shaft locations. A "Contractor Monitor" will monitor vibration levels.

## **2. Responses to comments from NRRA dated April 15, 2010, regarding Midtown Project Draft Environmental Study Report**

### Part A

- a) Since the cost of tunnelling seems very much higher than the cost of trenching, why isn't trenching, on the CPR corridor, being seriously considered? Please provide Plans and/or Surveys showing full details of the existing use of the relevant portion of the CPR corridor with dimensions.
- b) "Hydro One recognizes that some neighbourhood disruption will occur...this temporary disruption will be minimized by mitigation measures addressing resident concerns". For residents and business owners, particularly in the vicinity of the main-shaft and construction staging area, the neighbourhood disruption, in the form of heavy truck traffic, construction noise, dust, dirt and other air pollution will be both severe and long-lasting, since construction of the Project is expected to last nearly 3 years. Please provide detailed comparisons of all such factors relevant to trenching and to tunnelling.
- c) "Hydro One will make best efforts to schedule construction activities in order to minimize adverse effects on the community." Please explain in detail and provide comparisons of all such factors relevant to trenching and to tunnelling.
- d) "Standard best practices will be followed to ensure typical construction disturbances, such as noise, are minimized. What does Hydro One consider to be "typical construction disturbances" in a residential neighbourhood? What steps will Hydro One take to ensure that its contractors and sub-contractors also use well maintained equipment and noise silencers at all times?"
- e) What specific "best practices" will be taken to minimize emissions from vehicles during preparation and construction of the Project?
- f) Please provide detailed support for the statement that "During the boring of the deep rock tunnel, there will be no noticeable vibration at surface."

**Response:** Hydro One provided the response to the above questions to the OEB, please refer to response to North Rosedale Ratepayers Association (NRRA) Interrogatory #1 List 2.

### Part B

- a) Please provide an Addendum to the ESR containing an examination of the environmental issues associated with trenching and a comparison of the environmental impact of trenching and the environmental impact of tunnelling.

**Response: Section 5.4.1** of the Draft ESR provides the detailed comparison between the trenching and tunnelling options.

Part C

- a) "*effective* dust suppression techniques" - what kind and amount of dust and debris will this Project generate and what chemicals and toxins will they contain?
- b) "Cheminfo (2005) best practices to *minimize* effects on air quality" - provide full copy
- c) "locate access routes and lay down areas away from residences *to the extent possible*"
- d) "*noise* levels will conform to municipal noise by-law" - provide full copy of relevant bylaw (bearing in mind that an industrial type operation is being proposed in the heart of an well-established, low density residential neighbourhood) - what will be the maximum noise level associated with the Project?
- e) "*suitable* noise controls or silences, *as required*" - please specific the types of equipment and proposed noise controls
- f) Please provide complete plans and specifications for fences and gates to surround and secure the main-shaft / construction staging area and the exit and intermediate shafts.
- g) Air pollution and odours caused or released by the Project or related activities – please provide complete details of all emissions, including those from truck traffic, cranes, ventilation fans
- h) It was our understanding that construction activity would be limited to the hours of 7:00 a.m. to 7:00 p.m. weekdays, but not on Saturdays, Sundays and public holidays. This is a residential neighbourhood. Please explain why it would be acceptable to have industrial type activity being conducted in a residential neighbourhood on weekends and public holidays. What exactly do you mean by "if activities need to be *extended* to *facilitate* their completion"?

VIBRATION

- i) Please provide complete details and full copies of all relevant studies..

TRAFFIC

- j) Will Carstowe Road withstand the loading from the extremely heavy truck traffic that is proposed? Please provide details.
- k) Dozens of heavy trucks will create serious air pollution. Please provide study of this issue

1) Please provide details of arrangements to ensure that truck traffic serving the project will, with the exception of Carstowe Road, use only major arterial roads and not the local streets in Rosedale and Moore Park

**AESTHETICS - DURING PREPARATION AND CONSTRUCTION PERIODS**

1) Please provide details consistent with verbal assurances previously received from Mr. Goodfellow.

***Response:*** Please refer to *1. Responses to North Rosedale Ratepayers Association (NRRA) OEB Interrogatory #3 List 2* for responses.

### 3. Responses to NRRA’s comments dated May 17, 2010, Midtown Project Draft Environmental Study Report

a) Preliminary project milestone schedule

**Response:** The construction and in-service schedule is shown in the table below. The schedule is subject to the EA and OEB approvals.

<b>Task</b>	<b>Start</b>	<b>Finish</b>
Submit Section 92		December 2009
Projected Section 92 Approval		July 2010
Projected EA Approval		June 2010
Land Acquisition	July 2010	April 2011
<b>STATION</b>		
Detailed Engineering	January 2010	December 2010
Tender & Award Major Station Equipment	January 2011	June 2011
Receive Major Station Equipment	January 2012	June 2012
Construction	January 2012	November 2012
Commissioning	January 2013	April 2013
<b>LINES</b>		
Detailed Engineering	January 2010	December 2010
Tender & Award Major Station Equipment	September 2010	March 2011
Received Structural Steel	September 2011	September 2012
Construction	September 2011	November 2012
Construction (Road Removal, Restoration)	April 2012	November 2012
<b>Tunnel</b>		

Tunnel Design	January 2010	May 2010
Tender & Award Tunnel Contract	May 2010	July 2010
Tunnel Construction	September 2010	June 2012
Tender & Award Cable Contract	April 2011	June 2011
Cable Installation	July 2012	March 2013
<b>In Service</b>		April 2013

- b) Outline drawing showing a layout of the staging area and location of onsite buildings, machinery, truck loading area, on-site storage of spoil etc.

**Response:** At this stage, we can provide the conceptual drawing for the proposed staging area south of Rosehill Pumping Station showing the size, location, entrance and access road. Please see the attached drawing for details (Appendix A).

- c) Provide a drawing and specification of the fence encompassing the work site and details of noise suppression capability.
- d) Please provide a sketch or drawing of any other areas along Carstowe Road that will be used for storage and worker parking.
- e) Provide detailed descriptions, specifications and drawings showing the type of machinery to be used for the mining operation. This should include the boring machinery and associated auxiliary equipment, the lifting equipment used to lift the spoil from the tunnel to the surface, equipment used to load the dump trucks and the dump trucks.
- f) Please confirm that Carstowe Road is rated to support sustained loading from the movement of heavy equipment and fully loaded dump trucks. How approvals been granted by the City of Toronto? Will Hydro One return Carstowe Road to its original condition once construction is completed?
- g) The boring operation will likely utilize water lubrication. Provide details of water collection and treatment system for the onsite storage area and underground tunnels. Describe how water will be collected, treated and disposed of. Does Hydro One contemplate re-cycling of the water?
- h) Provide an overview of how water will be collected, treated and disposed of on an ongoing basis. Where will the treatment facilities be located? Who is responsible for monitoring the system from the water quality standpoint.

- i) Please specify which equipment will be electric powered and which be powered by internal combustion engines [diesel power].
- j) Please confirm that access opening contemplated at the north end of Astley Street is no longer required.
- k) Please provide copies of hydrology studies completed to date and supporting analysis.
- l) Please provide geo-technical studies completed to date including the seven boreholes that were recently drilled.
- m) Outline the safety procedures contemplated in the event of flooding or a collapse of the tunnel. Hydro One has advised that access openings other than the opening at the construction staging site will no longer be required.

***Response to Comment c) – Comment m):*** At this point, the project is still at EA and OEB approval Stage. Therefore, information related to detailed engineering is not available. We can provide more details once we have received EA and OEB approvals.