

**1. RWDI Summary of Comments from Dec. 8, '09 Meeting**

| <b>Comment</b>  | <b>Addressed / Response</b>   |
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| In S. 1, need to modify last bullet of monitoring objectives to say "verify and support dispersion modelling"   | Done  |
| Need to add wording on how the monitoring plan dovetails with Federal requirements.   | Done, at beginning of S. 1  |
| S. 2, last paragraph, revise meteorological tower height to 10m, as per MOE request. Also, add "selection of monitoring site where meteorological tower will be located will be made in consultation with the MOE." | Done  |
| S. 2, add a statement at the end indicating that noise levels from the monitoring equipment must comply with City of Toronto noise by-laws.   | Done  |
| In S. 1 and S. 2.2.3, references to TO 14/15 should be TO 15  | Done  |
| S. 2.3, paragraph before Table 2.3.1, replace location 2 with location 1 as the preferred location in Weston, with location 3 as a back-up.   | Done  |
| S. 2.3, MCR-MMM to review possibility of replacing location 10 with a location east of Strachan and west of Bathurst.   | Locations near Bathurst were examined, but on further consideration, they are too unrepresentative of the Georgetown Corridor that is the subject of the Notice to Proceed. Location 10 is much more representative of the typical alignment of the Corridor where it passes near existing residential areas. |
| S. 2.4.1, add reference to detailed contaminant screening and append the detailed screening to the plan, as requested by TPH during the Nov. 27 meeting   | Done  |
| S. 2.4.1, mention that screened contaminants will be modelled for all relevant averaging times for which applicable criteria exist.   | Done  |
| S. 2.4.1, mention that selection of receptors will be done in consultation with the MOE and the Medical Officer of Health.  | Done  |
| S. 3, bullets at the end, 75% data recovery applies to discrete monitoring as well as the continuous analyzers  | Done  |
| S. 4, add a bullet requiring the annual report to include an assessment of missing data and whether significant stagnant or other key weather conditions have been missed.  | Done  |
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**2. 2<sup>nd</sup> Environment Canada Comments (E-mail from Dave Broadhurst)**

| Comment   | Addressed / Response  |
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| <p>Environment Canada recommends that the final objective be adjusted to read, "air pollutant concentration and meteorological data to <b>verify and support</b> dispersion modeling calculations..."</p>   | <p>Done (modified the bullets at the end of S. 1)</p>   |
| <p>Environment Canada recommends that the anemometer on meteorological tower be installed at the standard height of 10m.</p>  | <p>Done</p>   |
| <p>It would not be good value for money to run a monitoring program year after year as corridor emissions gradually build. There is a need to find a balance between the achievement of the goals of monitoring/follow-up and the important desire to operate a cost-effective program.</p> <p>Environment Canada recommends that the working group develop a proposal as to what constitutes a sufficient percentage of the long-term corridor emissions for extrapolation out to the full impact of the project. This is an open question and any figure selected will be somewhat arbitrary. EC suggests that a monitoring program capturing 75% of projected long-term corridor emissions of key pollutants (NO<sub>2</sub>, PM<sub>2.5</sub>, benzene and B(a)P) would provide sufficient confidence in the assessment of peak corridor impacts.</p> <p>If the 75% corridor emissions figure was not achieved in the first 12 months (or expected to be achieved shortly thereafter), then Environment Canada suggests that the monitoring program be paused for a period of time. The monitoring program would be brought back on-line for at least one additional year at the time when 75% of projected peak corridor emissions were expected to be produced.</p> | <p>As per conditions of approval, the ambient measurement program will encompass a time frame that is deemed appropriate by the Regional Director, Central Region and Transport Canada, in consultation with Environment Canada.</p> <p>On an annual basis, Metrolinx will review the findings with the MOE and Transport Canada in consultation with Environment Canada and discuss whether or not to continue with the monitoring in whole or part.</p> |
| <p>Mike Lepage discussed the addition of a table presenting the ratio between pollutant emission rates and ambient criteria/standards. This table would provide additional help in identifying potentially problematic pollutants. Environment Canada recommends that table 2.4.1.1 be maintained within the main plan since it succinctly illustrates potential AQ challenges and is based on the detailed dispersion modeling in the original environmental assessment.</p>   | <p>Done</p>   |
| <p>Environment Canada requests that the monitoring reports identify the specific days with missing data. If key episodes of light winds, stagnant air masses and/or high ambient concentrations are missed then the reliability of the peak reported concentrations could be affected.</p>  | <p>Done (modified the bullets in the reporting section)</p>   |

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| <p>As discussed during the meeting December 8, the draft Plan should indicate that the high resolution data will be incorporated into the MOE database.</p>   | <p>Done (modified discussion of quarterly reports in the Reporting section)</p>  |
| <p>Environment Canada suggests that the final Mitigation Plan include:</p> <ul style="list-style-type: none"> <li>• the intention to consider the future results of the Ambient Air Monitoring and Reporting program; and</li> <li>• any additional mitigation measures that would be considered in the event that the Ambient Air Monitoring Program reported exceedances of air quality criteria or standards.</li> </ul> | <p>This is a suggested for the required mitigation plan to be submitted to MOE at a later date. No change to monitoring plan required.</p> |
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3. 2<sup>nd</sup> MOE Comments (E-mail from Dan Orr)

| <b>Comment</b>   | <b>Addressed / Response</b>            |
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| <p>O. Reg. 419/05 does not have the ability to deal with issues of non-compliance with mobile sources. As it is stated in the draft plan, all the Ministry can do is assess how the ambient data compares in relation to standards, etc. However, once any possible exceedances are identified, the Ministry can engage affected parties and any possible source contributors to develop a mitigation plan aimed at reducing emissions in the impacted area.</p> <p>As approver of the monitoring and modelling plan, the Ministry cannot require Metrolinx to develop a mitigation plan as part of the monitoring and modelling plan.</p> | <p>No changes to the plan required</p> |

**4. 2<sup>nd</sup> Toronto Public Health Comments (E-mail from Suzanne Goldacker)**

| Comment   | Addressed / Response  |
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| The new objectives address the monitoring but not the source apportionment modelling portion of the work plan. What is the purpose of the modelling?  | Done. Purpose is already described at the beginning of Section 2.4  |
| The response from Metrolinx to TPH's request for PM0.1 monitoring is very brief. I'm not clear what possibilities for creative solutions are still open. At the first meeting there was some discussion of partnering with academics. Could Metrolinx elaborate on what they might be willing to explore?   | <p>Not addressed as no standard ambient testing method or applicable criteria exist (MOE, EC, NIOSH, US EPA, etc.)</p> <p>Data will be available for incorporation and public review in the MOE database.</p>   |
| In Sec. 2.3, p.9, new text states that monitoring stations should be sited where future ambient air concentrations of contaminants are likely to be highest. I agree with this intention, and it should be reflected in the objectives.   | Done. Modified objectives bullets at end of S. 1  |
| I agree that from the perspective of wishing to understand the public health impacts of increased train service, it would be reasonable to pause the monitoring program once ambient levels have been established at a given service level. This strategy could reduce the cost and effort required for the program, while still providing the necessary data to understand health impacts. If Metrolinx has reached a decision as to their preference, it should be expressed in the objectives. | <p>As per conditions of approval, the ambient measurement program will encompass a time frame that is deemed appropriate by the Regional Director, Central Region and Transport Canada, in consultation with Environment Canada.</p> <p>On an annual basis, Metrolinx will review the findings with the MOE and Transport Canada in consultation with Environment Canada and discuss whether or not to continue with the monitoring in whole or part.</p> |
| I recommend that the results of the source apportionment model be presented in some fashion other than or in addition to the receptor locations used for the previous study... I believe that there are many graphical options for presenting the results in addition to data tables based on receptor location.  | Done. Added new bullet 6(g) to S. 2.4.2 indicating that contour plots will be produced.   |

**5. 2<sup>nd</sup> John Sheldon Comments**

| <b>Comment</b>  | <b>Addressed / Response</b> |
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| There is no need to increase the number of monitoring stations to four. Very little would be gained from doing so and would be a waste of public funds.   | Done                        |
| With regards to the location of the monitoring stations, I defer to the expert opinion of the committee members from the Ontario Ministry of the Environment, Environment Canada, and of the Environmental Engineers that are working on the project. | Done                        |
| I would like to compliment the staff of Metrolinx and of RWDI for the quality of the work that has gone into this project, as I believe that this monitoring program will generate useful, high-quality data.   | Done.                       |
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**6. 2<sup>nd</sup> Mike Sullivan Comments**

| <b>Comment</b>   | <b>Addressed / Response</b>   |
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| As previously conveyed, the conditions apparently placed by the 'Federal Review Team' on Metrolinx include creating and designing appropriate mitigation strategies for certain pollutants which will be monitored by this plan. My suggestion is that this needs to be part of the 'purpose' statement for the plan.  | The MOE has indicated that it cannot require Metrolinx to develop a mitigation plan as part of the monitoring and modelling plan. Environment Canada has requested that the required mitigation plan to be submitted to MOE at a later date include the intention to consider the results of the monitoring program in developing mitigation. |
| I have looked again this morning at the land next to the CP rail corridor south of John Street. It is actually quite a bit wider than I previously thought, approximately 20 feet. There is a trailer and a parking lot and a roadway within that piece of land. It would seem to be a simple matter to fence off a small section at Lawrence, and seek access from one of the businesses on that corner of Rosemount with a door in the wall, to avoid the flagman issue. That said, I did agree that if Site 1 was suitable in terms of distance from residential properties and agreement from the city, that was acceptable. | Site 1 has been adopted   |
| Finally I thought you were not looking merely at location 12, but at whether a location near Bathurst was available, given the concatenation of the two sets of tracks at that location.   | Locations near Bathurst were examined, but on further consideration, they are too unrepresentative of the Georgetown Corridor that is the subject of the Notice to Proceed. Location 10 is much more representative of the typical alignment of the Corridor where it passes near existing residential areas.                                 |

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| <p>You were also going to determine whether sound insulation could be placed on and around the monitor to allow it to be less intrusive on residences, particularly in light of the recent CTA decision.</p>  | <p>Sound insulation can be done. Plan requires compliance with City of Toronto noise by-law.</p>  |
| <p>I have written twice now concerning the benefits of Location 2, and am now getting feedback from residents near Location 1 who will not be happy with the noise. There is no way to locate the noise 60 metres from sensitive receptors at Location 1, as the noise contours suggest is necessary.</p>   | <p>Sound insulation can be done. Plan requires compliance with City of Toronto noise by-law.</p>  |
| <p>I have examined location 2 more closely. There is 45 feet between the outside of the CP track corridor and the fence line where the sound barrier will be, at the Lawrence end. The trains will be at grade at that point, access could be had from Lawrence, and the station could be fenced in to avoid a flagman being necessary. It would also pick up the road-borne pollution from Weston Rd and Lawrence</p>  | <p>Location 2 is not a suitable location as it is in the railway right-of-way (ROW). To meet operating and safety regulations, any access to the ROW must be by an employee, a qualified railway representative, and accompanied by a flag person. It should also be noted that trespassing on railway right of way is illegal and prohibited. For these reasons, and because GO Transit is concerned with the safety of the public as well as our passengers and employees, GO will not put a monitoring station within the ROW.</p> |
| <p>I have now done a site visit to location 1, and believe it to be unsuitable for the purposes. Site 1 consists of a 10 foot earth berm with a steep slope into a park. There is no 'sound barrier' on this site save for the berm. According to the plans for sound mitigation put forward by the consultant, they have not recommended a wall at this point because their drawings indicated a sound barrier was already erected. That is not the case. Therefore a sound barrier will need to be erected on this site, rendering it useless for a monitoring station.</p> <p>Even if it were not to have a wall, it is unsuitable because of its proximity to sensitive receptors. In order to function, it would have to be on the top of the berm, which will increase the visual and aural pollution. It would be impossible to move it to the lee of the berm, and the berm is too close to the tracks to allow it to be on the same level as the tracks but adjacent.</p> <p>Please note for the record that the Weston Community Coalition does not agree with location 1, or any location in close proximity (less than 100 metres) from residences.</p> | <p>Location 1 has been adopted because trains are at grade, accessibility and exposure are good, and there is no interference due to existing or proposed noise walls.</p>  |

**7. Mount Dennis Community Association**

| <b>Comment</b>   | <b>Addressed / Response</b>  |
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| <p>The MDCA Executive, following consultation, strongly supports Mike Sullivan and the Weston Coalition's request for the Weston monitoring station to be placed at Location 2 between John and Lawrence. That was initially our preferred site during the meeting discussions and, as Mike has researched, there is room for the station there and it can be accessed without a flag person for safety. We have serious concerns about Location 1 as it is too near to residential homes, causing further noise pollution, and would be a real eyesore built up on the top of the berm. We hope that you will give this urgent consideration given the site visits now completed to assess the two sites more accurately.</p> | <p>Location 1 has been adopted because trains are at grade, accessibility and exposure are good, and there is no interference due to existing or proposed noise walls.</p> <p>Location 2 is not a suitable location as it is in the railway right-of-way (ROW). To meet operating and safety regulations, any access to the ROW must be by an employee, a qualified railway representative, and accompanied by a flag person. It should also be noted that trespassing on railway right of way is illegal and prohibited. For these reasons, and because GO Transit is concerned with the safety of the public as well as our passengers and employees, GO will not put a monitoring station within the ROW.</p> |