



February 20, 2024

To: Sergio Campoli
Toronto District School Board

Via e-mail:
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Re: Comments on Metrolinx January 2024 Health and Safety Plan for Pape Avenue Junior Public School
ECOH Project No. 27704

1. INTRODUCTION

The Toronto District School Board (TDSB) has asked ECOH Management Inc. (ECOH) to comment on the revised Health and Safety Plan prepared by Metrolinx addressing control of health and safety hazards associated with construction of the Ontario Line near Pape Avenue Junior Public School (PAJPS). This version of the plan is identified as Version 1.0, Revision 000B, dated January 2024.

ECOH previously reviewed the draft March 2023 version of the plan (Revision 000A) in a report to TDSB dated May 18, 2023. ECOH's comments in that report pertained to the following topics in the plan: noise, vibration, air quality and traffic/pedestrian safety. In subsequent comments on Metrolinx communications, ECOH also commented on matters related to excavation and environmental air monitoring, as well as on Metrolinx' response to ECOH's comments. Most recently, ECOH commented on Metrolinx' memo dated January 24, 2024, which responded to previous ECOH comments.

ECOH has reviewed the January 2024 version of the Plan and identified areas where it differs from the March 2023 draft.

ECOH's position on issues related to noise, vibration and air quality have been expressed in previous reports. Our positions have not changed and therefore will not be repeated here. Our comments below address significant changes between the 2023 draft Plan and the 2024 revision.

2. INTRODUCTION AND SITE-SPECIFIC OPERATIONS (Sections 1 and 2 of the Plan)

In the introduction to the Plan, Metrolinx has added installation of a new watermain/sanitary sewer to the work to be performed, in addition to the directionally drilled micro-tunnel. This is also referred to in Section 7 of the Plan. There is no indication that this entails or warrants other changes in the Plan. It is advised that Metrolinx comment on whether this change has health and safety implications.

In Section 2 of the Plan, Metrolinx has added means by which the community can communicate with Metrolinx about concerns: "...community concerns can be emailed directly to Metrolinx at OntarioLine@metrolinx.com as this email account is monitored during regular business hours." Providing this specific channel through which the community can communicate concerns to Metrolinx is a positive step.

It is also noted that the footer of the Plan document has not been changed to conform to the current version, as it continues to read "Date: March 2023, Revision 000A".

3. NOISE (Section 4.1 of the Plan)

3.1 Noise targets and action levels

In Table 4-1, Metrolinx has instituted a new 10 minute Leq limit of 80 dBA for outdoor noise, replacing the Lmax of 85 dBA in the 2023 draft Plan. It has also set a 10 minute Leq of 78 dBA as a warning level. The Plan states that "The 10min Leq noise levels will also be collectively reviewed during each day, and before the daily 69dBA Leq 07:00-18:00 limit is reached the construction activity will be addressed and noise impacts investigated". The term "collectively" is ambiguous and should be clarified,

This revision addresses ECOH's concern about the need for a warning or action level below the limit. Although Metrolinx has not changed its adoption of a 69 dBA as an 11-hour standard, the setting of a 10-minute warning level is a good addition as it should enable prompt triggering of remedial action when noise levels are high.

3.2 Noise control measures

In the 2024 Plan, Section 4.1.3.1, Metrolinx provides more details than in the 2023 draft Plan about the long-term noise barrier, specifying that the height of the barrier will be six meters. It states that more details are provided in Appendix A, although that Appendix was not attached to the document.

4. VIBRATION (Section 4.2 of the Plan)

Metrolinx has not changed this section. It provides the same Table 4-2 as in the 2023 draft Plan, which lists two columns of vibration limits, one for standard construction and one for built heritage resources. The Plan notes that "The Pape Avenue Junior Public School, given its age and construction, would apply the 'Built Heritage Resources' limits."

The 2024 Plan, as in the 2023 draft version, states that "Warning/review levels [for vibration] will be set lower than those noted in Table 4-2." We presume this to mean those in the "Built Heritage" column, as it has been stated that these are applicable to PAJPS. However, in its memo of January 24, 2024, Metrolinx implied that it would not set warning/review levels for vibration lower than the built heritage limit because "The Heritage Vibration limits are below the standard building construction vibration limits (Toronto Bylaw 514)." As ECOH has noted in its comments on

Metrolinx' January 24 memo, this is contradictory, because Metrolinx has stated that it will adhere to the lower (Built Heritage) limits but does not set a warning level for these limits.

5. AIR QUALITY (Section 5 of the Plan)

In the first paragraph of Section 5 of the Plan, Metrolinx has added "polycyclic aromatic hydrocarbons (PAHs), including benzo(a)pyrene" to the substances considered in the Plan. It has not added air quality limits for these substances to the Plan. Presumably they will be addressed under the statement "other air pollutants (VOCs, metals) will be based on the Ontario Ambient Air Quality Criteria (AAQC)." However, they have not been added to the examples mentioned in this sentence, even though the AAQC has a limit for Benzo(a)pyrene [as a surrogate of total Polycyclic Aromatic Hydrocarbons (PAHs)]. For greater clarity, Metrolinx should specify the limits it will apply to PAHs including benzo(a)pyrene.

The limits for indoor and outdoor pollutant levels have not changed from the 2023 draft Plan. Standards are set for indoor and outdoor PM2.5 and PM10, and for indoor PM10. In its previous review ECOH recommended that a standard also be applied for indoor PM2.5. In Metrolinx' memo of January 24, it stated reasons why it was not doing so. ECOH addressed this in its reply to that memo.

In Table 5-3 (Construction Activities and Control Measures), Metrolinx has changed its statement regarding suspension of activities during high wind levels. The 2023 draft Plan stated:

"Adjust construction activities or suspend work under unfavourable conditions (sustained wind speed greater than 30 km/hr)."

The 2024 Plan has removed reference to 30 km/hr and states:

"Adjust construction activities or suspend dust generating work under unfavourable or extreme wind conditions resulting in levels of ambient PM2.5 or PM10 above the ambient air quality limits or action levels listed in Table 5-1 (i.e. alerts, warnings, visible dust.)"

This is a less stringent control than in the 2023 draft Plan, as it implies that work will only be suspended if unfavourable or extreme wind conditions result in levels of ambient PM2.5 or PM10 above the levels indicated in Table 5-1 (which we assume will mean the 15 minute, not the 24-hour limits). It is therefore possible that work will continue under high wind conditions. This is inadvisable, for reasons both of safety and dust control.

Table 5.3 in the 2023 draft Plan also listed a control measure as "Limiting on-site vehicle speeds to 15 kilometers per hour". The 2024 Plan removed the reference to 15 km/hr and states "Limiting on-site vehicle speeds to posted construction signs or posted speed limits in public road allowance." It is not known what the posted signs or speed limits are; if they are higher than 15 km/hr, this represents another loosening of controls, both for dust and safety.

Another change in Table 5.3 is the removal of details from the following statement in the draft:

"Cleaning of all visible loose soil and dust from all trucks and vans leaving the site including washing of tires and sweeping or washing of exteriors and tailgates." The 2024 Plan removes the

last phrase and only states “Cleaning of all visible loose soil and dust from all trucks and vans leaving the site.” This also potentially represents a reduction in control measures.

6. TRAFFIC AND PEDESTRIAN MANAGEMENT (SECTION 6 OF PLAN)

This section contains a few changes from the March 2023 draft Plan:

- The 2023 draft Plan stated “No construction vehicles will be permitted during school children drop-off and pick-up times” while in the 2024 version, this has been changed to “No haul trucks will be permitted during school children drop-off and pick-up times”. This implies that some construction vehicles will be permitted during these times. This seems to contradict the bullet later in this section which repeats the following statement from the draft, i.e. not limiting this monitoring to haul trucks only: “City and Metrolinx will monitor and enforce time or route restrictions on construction vehicle movements, including the requirement for no construction vehicle movements during school drop-off and pick-up times.”
- The following statement in the 2023 draft Plan has been removed from the 2024 version: “In the event the contractor violates the terms and conditions of the permit, Metrolinx site staff will stop work and the issued permit may be cancelled by the City.” The revised Plan retains requirements for permits and statements that Metrolinx will monitor compliance, and it is not clear why this statement of the consequences of permit violation has been removed. It would appear to be another loosening of control measures.

As noted above, the changes in Table 5.3 discussed in the previous section with regard to activities during high wind speeds and speed limits for construction vehicles also have safety implications for individuals in the school yard and other adjacent areas.

7. SECTIONS 7 THROUGH 10 OF PLAN

Sections 7 through 10 of the Plan address the following topics:

- Ground Movement and Settlement Monitoring for Sewer Replacement Works
- Ground Movement and Settlement Monitoring for Portal and Tunneling Works
- Soil Management
- Groundwater Management

ECOH did not comment on these sections of the 2023 draft Plan in its previous review. We reviewed the 2024 revision only to identify changes from the 2023 draft Plan and identified a few notable changes:

- In Section 8, the appointed contractor for the Gerrard Portal and the tunnels under Pape Avenue has been named as Pape North Connect.
- A change was made to the following activity of the contractor (Pape North Connect): “Through the above process establish and maintain communication with the school on the

impacts of the works through the Construction Liaison Committee meetings and other submissions and engagements with the school.”

The comparable provision in the 2023 draft Plan read as follows (italics added to significant phrase removed in the 2024 version):

“Through the above process establish and maintain communication with, *and gain acceptance of any required impact analysis plans by*, the School through the Construction Liaison Committee meetings and other submissions and engagements with the school,

This change suggests that acceptance of plans by the School is no longer required.

- Section 9 contains the following change:
 - 2023 draft Plan: “Excavated soils shall be reused on-site to the extent feasible.”
 - 2024 Plan: “Excavated soils may be reused on-site to the extent feasible when there is no evidence of contamination based on previous testing results or visual and olfactory observations.”
 - Both versions retain the statement “Soils excavated from known contaminated areas or exhibiting staining or olfactory evidence of contamination shall not be reused on-site.”

The change in the 2024 version would seem to clarify conditions under which soils can be re-used on site and add to the stringency of control measures by introducing testing results. However, the 2023 draft Plan provides for testing/screening of soils with a Photoionization Detector (PID), whereas these requirements have been removed from the 2024 version. Thus it is not clear when or how testing will be done.

- Section 9 of the 2023 draft Plan states “Soils shall be stockpiled in a clearly designated storage area pending disposal. Signage for stockpiles indicating material quality, soil type, destination site, etc. will be posted as indicated once the stockpiling area is established.” The 2024 Plan removes the sentence about signage. This would seem to be a loosening of control measures.
- A bullet was added to Section 9 providing results of soil sampling for benzo(a)pyrene conducted in November 2023, indicating that results meet the standard set by the Ministry of the Environment, Conservation and Parks (MECP).

8. CONCLUSION

Several changes have been made to the January 2024 version of the Health and Safety Plan (Revision 000B) compared to the March 2023 draft (Revision 000A). A number of these may possibly entail a loosening of control measures. These include:

- Removal of wind speed of 30 km/hr as a criterion for suspending work.
- Removal of the limit of 15 km/hr for on-site vehicles (speed limits will conform to posted signs).

- Removal of details about cleaning soil and dust from vehicles leaving the site.
- Change in provisions about construction vehicles permitted during children's drop-off and pick-up times (the current Plan provides for "haul trucks" only.)
- Removal of the statement about consequences for permit violation by contractors.
- Removal of requirements that the Gerrard Portal contractor (Pape North Connect) gain School acceptance of required impact analysis plans.
- Removal of details about soil testing.
- Removal of requirements for signage on stockpiled soil.

No changes were made regarding a number of measures previously recommended by ECOH, in particular:

- Use of a 1-hour Leq for noise instead of the 11-hour Leq of 69 dBA. ECOH also recommended a warning/action level lower than this.
- Use of warning levels for vibration that are lower than the applicable Built Heritage limits.
- A limit on indoor PM2.5.

Clarification of several statements in the 2024 Plan is recommended:

- Does the addition to the scope of work to be done (addition of "installation of a new watermain/sanitary sewer" have any implications for health and safety?
- What is meant by the term "collectively" in the statement that "The 10min Leq noise levels will also be collectively reviewed during each day..."
- What standards will be applied for PAHs including benzo(a)pyrene?
- Metrolinx should provide the referenced Appendix A, dealing with details of the noise barrier.

Positive changes in the 2024 Plan are

- Provision of an email address through which community members can communicate with Metrolinx.
- The adoption of a 10 minute Leq limit of 80 dBA for outdoor construction noise, along with a 10 minute Leq warning level of 78 dBA.
- Addition of polycyclic aromatic hydrocarbons (PAHs), including benzo(a)pyrene to the substances considered with regard to air quality.

9. CLOSURE

ECOH would be pleased to provide TDSB with any clarification related to these comments. Should you have any questions, please do not hesitate to contact the undersigned.

ECOH

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