

Billy Bishop Toronto City Airport

Noise Management Sub Committee Meeting 5 –Summary

March 27th, 2019

7 pm-10 pm

Billy Bishop Airport Boardroom
(Mainland Passenger Transfer Facility, above Aroma Café)

PARTICIPANTS

Hal Beck – Co-Chair (York Quay Neighbourhood Association)

Angela Homewood – Co-Chair (PortsToronto)

Gary Colwell (PortsToronto – Noise Management Office)

Bryan Bowen (City of Toronto, City Planning - Waterfront Secretariat)

Wayne Christian (York Quay Neighbourhood Association)

Lesley Monette (Bathurst Quay Neighbourhood Association)

Max Moore (Bathurst Quay Neighbourhood Association)

Alex Lavasidis (Lura Consulting - Notetaker)

Michael David (PortsToronto- Project Manager for Noise Study)

SUMMARY OF DISCUSSION

The following section provides a summary of discussion at Noise Management Sub Committee (NMSC) Meeting 5. This is not a verbatim account of the discussion. This summary is organized by discussion topic. The agenda for NMSC Meeting 5 is available in **Appendix A**.

Welcome and Agenda Review (All)

The NMSC discussed the need to finalize the Terms of Reference (TOR) and previous meeting minutes.

- NMSC members noted they would like the meeting minutes and presentations to be available in one location, to make them easily accessible.
 - Angela Homewood, PortsToronto, noted that the final copies of all meeting minutes and presentations will be posted onto the PortsToronto website.
- The NMSC agreed that the most recent version of the Terms of Reference could be finalized.
- Bryan Bowen, City of Toronto, and Angela agreed to provide any additional edits to meeting 1 and 2 minutes by April 29.
- The NMSC agreed that “final drafts” of all meeting minutes would be provided to NMSC members by Friday April 5 in a single email. NMSC members would have 1 month to provide any final comments or edits, after which the minutes will be finalized.
- Moving forward, NMSC members will have 1 month to provide final comments or edits on draft minutes before they are published online.
- Alex Lavasidis, LURA Consulting, will start a tracking log for meeting minutes that will include: the release date of draft summaries; when comments or edits were received; who provided comments or edits; how comments or edits were incorporated into the summary; when edits were made; and when the final draft was posted online.

Input on Presentation of Annual Noise Management Report (ANMR) (Angela Homewood)

Angela explained that for the past 6 years, BBTCA's Annual Noise Management Report has been presented to the Community Liaison Committee. Mike Karsseboom, PortsToronto, is available to deliver the same Annual Noise Management Report presentation to the NMSC at a future meeting or, to provide a new presentation with additional Noise Management information. Angela asked the committee members which they would prefer. This section provides a summary of the discussion that followed.

- Hal Beck, York Quay Neighbourhood Association, noted that the 2018 ANMR looks different from the 2017 ANMR. He would like the 2017 ANMR appended to the 2018 ANMR.
- Hal stated that he believed Gene Cabral was meant to attend a NMSC meeting to discuss the ANMR. Hal noted that he has a long list of concerns with the 2017 ANMR. He provided these concerns in writing through an 11-page email.
- Angela confirmed that PortsToronto received Hal's 11 pages of feedback and concerns regarding the ANMR. She noted that this is why Mike Karsseboom will be attending a future meeting to discuss the ANMR, and how it can be improved in the future.
- Hal shared his concern that there will not be enough time to discuss the ANMR over the next three NMSC meetings, as the agendas are already full. Hal explained that his community wants to see the reports transformed into action and used for learning purposes by PortsToronto. He would like to see the data presented in a manner that showcases how things have changed over the past 10 years. He would also like to see the raw data appended to the end of the report, noting that the data is available online, but is difficult to find.
 - Hal noted that it is important to have the data available for members of the public to view, because there are spikes and drops in complaints that may not actually reflect the level of noise experienced in the community. For example, following Porter's jet proposal there was a spike in complaints; this was likely due to the politics of the proposal and the increased focus on the airport, rather than an actual difference in noise experienced.
- Gary Colwell, PortsToronto, explained that the data for the 2019 ANMR will be collected in February, and the report is anticipated to be posted to the website in February.
- Angela suggested that given the timeframe for the next report, the NMSC meet with Mike Karsseboom to discuss the ANMR in September.
- Hal noted that the September NMSC meeting is meant to focus on a discussion with guests from Transport Canada. He also suggested that the 2017 and 2018 ANMRs are pulled down, made more fulsome, and then reposted. Hal explained that at his York Quay Neighbourhood Association (YQNA) meetings there are over 20 members who are unhappy with the existing Annual Noise Management Reports.
- Lesley Monette, Bathurst Quay Neighbourhood Association, suggested the NMSC have a separate meeting to address concerns around the ANMR.
 - The NMSC confirmed that a separate evening meeting to address concerns around the ANMR would be required. Alex will send a follow-up email to confirm the date of that meeting for the evening of April 8, 9, 10, or 11.

- Lesley noted that she would like to discuss the noise complaint form, specifically how the data is gathered to reflect the location of the complaint, and the noise source of the complaint.
 - Gary responded that this can be a point of discussion at the future ANMR meeting, as the form is easy for him to change and adjust based on NMSC feedback.
- Wayne suggested that the online complaint form provide a map which visually highlights the different areas, so that people who submit complaints accurately share their location.
- Hal suggested collecting postal codes could also help address any confusion around what area a complaint is made from. Hal would like the data on where noise reports are made to be shared.
 - Angela suggested that privacy restrictions may prevent PortsToronto from collecting postal codes and then creating a map of where people who make noise complaints are located.
 - Hal responded that this should not be an issue as the data would be displayed as an aggregate, not pinpointing a specific address.
 - Bryan noted that asking for a postal code may exclude visitors from reporting noise complaints.
 - Gary noted that these ideas can be further discussed at the future ANMR meeting. He reinforced that changes to the online complaint form could be made easily.

Develop Questions for Future Ministry Visit (All)

Hal noted that the NMSC will likely not have time during this meeting to fully discuss and develop questions for the Ministry of Environment, Conservation, and Parks (MECP) visit. Instead, the NMSC will flag key issues and themes that they would like the MECP to address, and email those to Alex. Alex will send a full list of these key issues and themes to Hal, who will then develop key questions. Angela and Bryan will review this list of questions and then submit them to the MECP. This will ensure the MECP representative is prepared for the NMSC meeting.

The following summarizes the discussion around the development of questions for the future Ministry visit.

- Lesley inquired what types of questions the NMSC can pose to the Ministry.
- Hal explained that questions should not include NEF Contours as those are not set by the Ministry, nor would they have expertise on that topic.
- Angela noted that the Ministry is a regulatory body, so questions should be regulation focused, or include questions about what is required of a Noise Impact Assessment.
- Max Moore, Bathurst Quay Neighbourhood Association, suggested the Ministry provide an organizational chart to outline who provides what types of approvals.
- Bryan noted that he would like more clarity around the definition of stationary source noise, and would like to ask the Ministry in advance, to present examples of where airport facilities have been classified as stationary source noise. This will help the NMSC understand the concept and definition of stationary source noise more clearly.
- Hal noted that he had some questions around the issue of towers, as well as impulsive sounds. He noted that the impulsive sound chart says there can be a single blast at 75 decibels, per hour, from 11:00 pm to 7:00 am, while still meeting requirements. Hal would like to know the intention behind that standard and other standards.
 - Lesley would like that question included.

- Bryan noted that it would make sense to create a list of questions of clarification for the meeting, and then create a list of follow-up questions to send to the Ministry after they attend a NMSC meeting.
 - Hal agreed that the meeting should focus on questions of clarification around NPC 300.
- Angela added that the meeting is also a good opportunity for clarification on topics like the difference between outdoor and indoor noise standards.

Provincial Noise Guidelines Presentation (Angela Homewood)

Angela Homewood, PortsToronto, provided a presentation on Provincial Noise Guidelines. A summary of the discussion relating to this presentation follows. The guidelines are available in Appendix B.

- Angela noted that the presentation was meant to provide a high-level overview of the planning and regulatory framework that was applied to the development of the GRE facility.
- Hal inquired where the D Series Land Use Compatibility Guidelines (D-1 to D-6) could be found.
 - Angela responded that she has a hardcopy binder version, but will locate the online and share them with the NMSC.
- Wayne asked for clarity on slide 4, bullet 2, specifically, what is the difference between major facilities and sensitive uses. He would like to know if this refers to sensitive uses at the airport.
 - Angela noted that “sensitive uses” refers to adjacent uses, not uses at the airport. For example, if a county wants to develop a quarry into a landfill, there is a guideline that states the quarry should be 1 km away from any adjacent residential uses. Though this is a guideline (not a requirement), the Ministry tends to use those guidelines as a regulatory tool so that if a case goes to the LPAT, the Ministry’s decision is clearly justifiable.
- Wayne inquired if PortsToronto have a statement from the Federal government that the airport is appropriately designed.
 - Angela responded that she did not have a statement to that effect. Angela explained that she was a compliance officer for 23 years at the provincial government; this presentation is specific to the provincial policy and approvals process and does not address federal policies.
- Wayne further inquired who decides whether major facilities and sensitive uses have been properly designed, and if there is any formal written acknowledgement provided to reflect that a major facility and sensitive uses are appropriately designed, buffered, or separated from each other to prevent adverse effects (as noted in slide 4, bullet 2).
 - Angela responded that the prevention of adverse effects is addressed under the provincial Environmental Protection Act, which identified what an adverse effect is. That is why the requirement is to submit an approval under that regulatory framework. Although a Provincial Policy Statement or guideline identifies best practice, it is the approval agency that has the regulatory capacity to issue the approval, which identifies what should be included in that approval to mitigate any adverse effects.
- Wayne inquired what the province considers an adverse effect.
 - Angela responded that adverse effects are determined by whether any discharge released exceeds set allowable levels (applied to air, noise, and land) and therefore affect adjacent land users.

- Bryan added that part of that discussion around adverse effects needs to include NEF Contours. Bryan noted that the NMSC generally understands that the NEF Contour as a planning tool that has not been well or appropriately utilized at Billy Bishop Airport. He noted that the NEF Contour was meant to respect the Provincial Policy Statement (PPS), because the PPS directs municipalities to prohibit sensitive land uses inside the NEF 30 Contour. So, it is the responsibility of the municipality when it sets out its Official Plan, that residential not be permitted within the NEF 30 contour. The Tripartite Agreement does respect that NEF 30 contour, however, the caveat is that the assumption is that the NEF Contour has been appropriately designed. Officially, the NEF 30 Contour is followed in Toronto, as there are no residential uses allowed within the NEF 30 Contour.
- Bryan continued that the Mississauga Official Plan is interesting to review because the airport is larger and there is more emphasis and clarity on the role of the airport and how it has shaped land use planning in Mississauga. The NEF Contour is mapped onto Mississauga's Official Plan map. Anytime a residential use is found within the NEF 30 Contour, it is noted that the development was approved by special policy. There is a very deliberate and clear link between the Provincial Policy Statement and the NEF Contours. Comparatively in Toronto, we rely on the Tripartite Agreement. At the City we know that we are too reliant on the agreement, and that it has proved ineffective.
- Hal confirmed that the City uses the NEF 25 Control Contour, not the NEF 30 Control Contour.
- Bryan confirmed that this is true and clarified that this is why the Official Plan more than adequately meets the spirit of the PPS, because the NEF 30 doesn't even cross the channel between the island and the mainland.
- Angela noted that NPC 300 identifies the NEF 25 Contour as the contour that limits where residential uses can be located.
- Hal noted that TP 1247 sets the national standard. Older airports (e.g. Pearson and Winnipeg) have older standards, and old contours that are larger and result in greater adverse effects to those living close to those airports.
- Bryan noted that there is nothing limiting municipalities from using more rigorous standards than what is required. For example, Hamilton uses NEF 28 Contours as a standard in its Official Plan.
- Hal inquired if this would apply to other Toronto Airports.
- Bryan noted that NEF Contours do not appear in the City of Toronto Official Plan.
- Angela noted that Billy Bishop Airport is identified as "Parks and Open Space" in the City's Official Plan.
- Bryan explained that although that designation seems counterintuitive, Toronto's Official Plan only has 10 categories (for comparison, the City of Mississauga's Official Plan has twice as many), therefore the categories used in Toronto must remain relatively broad. In Toronto, the "Parks and Open Space" designation is used as a catchall for land uses that don't fit into the other designations. The Official Plan doesn't guarantee that if one day, the airport does not occupy its current area, that the land would become a park or open space (proper). There is no certainty to any future land use if the airport ever closes.
- Hal noted that an issue with Toronto's interpretation of the NEF Contours is that the NEF Contours were plotted on water. Hal identified that another problem is that the adverse impacts

have not been added together cumulatively, as they should be under NPC 300 (they are only noted individually).

- Angela responded that there was no need to do a noise impact assessment for the GRE because it wasn't a facility that was going to generate noise, and that there was no new noise source created through the existence of the GRE (e.g. the planes were already completing run-ups so this was meant to address existing noise). Therefore, MOECC identified there was no approval required.
- Hal inquired if BDI's contours materialized.
 - Angela responded that the benefits to noise reduction from the GRE were higher than anticipated. She noted that PortsToronto submitted the GRE performance measures to the City, and that it met and exceeded expectations.
 - Hal noted that this meant all signatories agreed that 70 decibels would be hitting the existing towers, and that all were ok with this fact.
 - Angela said that she was not certain what Hal was talking about.
 - Hal noted that this is part of NPC 300. He noted that BDI showed that 70 decibels would be hitting the residential tower corridor as a sustained noise that might last 5-10 minutes or longer.
 - Angela noted that NPC 300 applies to new proposals and developments, not existing structures.
 - Hal responded that they will get into that later on.
- Hal inquired what relevance the noise exposure forecast has to a stationary source (slide 6).
- Bryan noted that at the CLC meeting the reference was meant to be removed because it was confusing.
- Hal noted that the NEF Contours do not have anything to do with stationary source noise.
- Angela agreed and noted that it would be removed.
- Bryan requested PortsToronto provide the written correspondence from the Ministry that explained and confirmed the Ministry's decision to allow the GRE's development.
- Angela noted that she will confirm from the Ministry what communication she received from them indicating that there would be no approval required for the GRE Facility.
- Max inquired what slide 6 bullet 3 means practically.
 - Angela explained that in the Tripartite Agreement, the City requires Transport Canada to hire a consultant to confirm that the airport is operating within the 25 NEF Contour
- Max inquired what that means in terms of how much noise can be made?
 - Lesley explained that the NEF Contours look only at peak noise at take off and landing, not at any other time. At those peaks, the noise can spread to a certain intensity and area (these are the NEF Contours). As long as noise exists within the correct contour, it is considered acceptable.
 - Hal further explained that the NEF 25 Contour is not random, it is representative of an actual amount of noise energy. It is calculated on an average hour basis. The formula takes the summation of the energy created by flyby noise, and is weighted differently depending on whether the flight occurs in the day or night. The NEF formula is a

logarithmic formula. The NEF formula is:

$$EPNL = PNL T_{\max} + 10 \cdot \log(t/10)$$

$$N_d = n_d \cdot 15 \quad (07:00-23:00 \text{ hours})$$

$$N_n = n_n \cdot 9 \quad (23:00-07:00 \text{ hours})$$

$$NEF = 10 \cdot \log(N_d \cdot 10^{(EPNL/10)} + 16.67 \cdot N_n \cdot 10^{(EPNL/10)}) - 88$$

- The formula has no relationship to temperature, water, land formation, or environmental variables. The formula only reflects flyby noise.
 - NEF 25 control contour converts to approximately 50 dBA.
- Hal explained that the NEF 25 control contour applies throughout the life of the airport, not only when it is at its maximum capacity. Overall the NEF Contours determine the geographic location beyond which cities can begin zoning for residential and other sensitive uses. It is a legally defined line on land and in space. Every airport is growing up to this maximum noise allowance. Hal provided the NEF formula on the whiteboard in the room.
- Lesley inquired if the numbers used for the formula include real-time numbers on the noise levels, or if they are based on standard numbers for a particular plane, engine, etc.
 - Hal responded that the numbers are flows for hours in testing facilities to establish noise levels for a particular model. This all feeds into a database of EPNL values (see the formula above). That is applied at every airport across Canada, and it is sunk for any given location, and then the contours are created.
- Max noted that as Hal implied, he thinks these numbers are populated in the formula by the Aircraft Certification Numbers. When an aircraft is certified there are standard values attributed to each aircraft. The problem is that the number are not real numbers; they are statistically manipulated to provide standardization between planes. When the theoretical numbers are added up, it essentially tells you how many planes can fly at once. Max noted that the problem with this is that the ICAO's Aircraft Certification Numbers are based on dBA decibels, which is not a real measure of noise.
 - Hal stated that in fact the Aircraft Certification Numbers are based on PNDB: Perceived Noise Decibels. They apply loudness factors using a detailed calculation involving all frequency ranges. These are not recorded in dBAs. The NEF is therefore a weighted PNDB.
- Max noted that his point is that the number is not a real number as it is based on the Aircraft Certification Numbers instead of real measured noise. He noted that this should therefore not be used to set a limit on the number of planes that should be flown at once (based on noise limits) as it does not accurately reflect the real noise experienced in the communities around an airport.
- Hal noted that ICAO certifies planes for different airports around the world. As each airport wants to fly more planes (making more noise), ICAO is an industry lobby organization that sets out a methodology for landing, takeoff, and flight. Airport authorities use that to justify the number of planes that can fly. Reference to ICAO should be discussed separate from NEF.
- Bryan noted that those limits are also set out in the Tripartite Agreement, which relies on the NEF control contours, and the additional layer that each of those 3 measurements are kept.

When Porter was proposing to introduce jets at Billy Bishop it was under the notion that the CS 100, once certified, would pass each of those 3 measurements (not exceeding the Tripartite Agreement). Subsequent to the cancellation of the proposal, the CS 100 was certified, and it did not meet the requirements of the Tripartite Agreement.

- Hal noted that the NEF measures are calculated for flat table land, and that background noise is excluded so that the measures can be applied at airports around the world.
- Bryan explained that land use planning documents treat the cap between each NEF Contour as a zone. With each passing zone there is a larger chance that there will be noise complaints registered in a 24 hr period. Planners derived NEF 30 as the key threshold for an “acceptable” risk of or amount of complaints in a 24-hr period.
- Hal noted that when this threshold was set, it was developed based off of the experience of suburban communities in parts of the USA.
 - Max noted that there is a large difference between a suburban community and the communities around Billy Bishop, which have large towers. He noted that this location is unique.
- Bryan noted that the City of Toronto doesn’t defend the current approach being applied. The framework that council adopted for review of the jet proposal laid out a more sophisticated approach to managing growth at the airport that had nothing to do with NEF standards and was instead, far more tied to local issues around air quality, congestion, the capacity of the neighbourhood, and other local experiences.
- Max inquired if Billy Bishop is the only airport experiencing a pushback against the use of NEF Contours are acceptable noise guidelines.
- Hal noted that there are communities around many other airports asking the same questions (e.g. Montreal). Hal also noted that the NEF doesn’t apply here because it is reflective of continuous flyby noise, which isn’t applicable in the Billy Bishop setting because there is only one plane taking off and landing at once.
- Lesley noted that all the stationary noise is not addressed through the NEF measure, nor is the continuity of noise of a period of time, or related health issues.
- Hal noted that he was neutral on City’s approach to the review of jets at the airport. He liked the nuanced approach to understanding the actual capacity of the airport.
- Bryan noted that if the airport were to hit the peaks associated, the next tier of growth was not permitted.
- Max noted that during the jets proposal the Airport continued to reference the NEF Contours to suggest that noise was not a concern; this ignored the real noise being experienced in communities around the airport.
- Lesley noted that there is a new condominium tower being proposed on Lakeshore. She noted that because the building was outside of the NEF 25 Contour, the developers aren’t looking to put in place any additional noise reduction standards, and state that noise is not a concern for the development. Lesley noted that noise would likely be a problem for people in that building.
 - Bryan noted that he had flagged this issue with community planning and will raise the issue again.
- Hal noted that there should be a requirement for tower balconies to have noise feasibility studies completed before development. Hal stated that to his knowledge, the local planning

team was only receiving a short lunch and learn on NPC 300, illustrating there is little understanding of noise standards and issues amongst City planning staff.

- Bryan stated that the planning department does not have in-house expertise on noise impacts.
- Lesley noted that the noise in the neighbourhood is especially a problem for young families and seniors in the neighbourhood.
- Hal agreed that this is a problem for neighbourhood residents. He noted that at one point the airport was attempting to have a restrictive covenant placed on title noting that the airport was nearby and that there would be noise experienced in these units.
- Hal noted that the last bullet on slide 7 mixes flyby and stationary source ground noise, noting that NEF has nothing to do with ground-based noise. Hal asked Angela to correct this point and clarify for CLC, as this error was included in the CLC presentation. Hal also asked that the last bullet on slide 6 be removed.
 - Angela noted that the points are not clear. Angela will remove the last bullet from slide 6 and the last half of the last bullet of slide 7.
 - An update of this clarification will be brought to the CLC by the NMSC representatives at a future CLC meeting.
- Hal noted that NPC 300 is a useful reference in building a set of definitions or a glossary around noise terms, as requested during a previous meeting by Wayne. Noise impacts terminology is also present in the NPC 300 glossary. The downside to NPC 300 is that of the 3 parts, A, B, and C, part B deals with stationary sources only, part C deals with transportation sources and some stationary sources, repeating verbatim portions of B. However, compared to LU131, NPC 300 is a huge improvement. With LU131, one would have to read three documents prior to that, two NPCs and a supplementary technical document. The NPC 300 compiles it all together. Hal noted that there is a typo in one of the formulas provided in NPC 300, as the hard copy and online copy differ. He will raise this issue when the Ministry visits the NMSC.
- Wayne noted that once the NMSC have both the noise definitions and meteorological definitions required, these should be combined to understand the maximum meteorological effects that impact noise.
 - Hal inquired if Wayne could forward information to the NMSC on meteorology and its impacts on noise.
 - Wayne responded that he would send this information out to the NMSC, once the terms that are required to be defined are established.
 - Hal noted that this would help clarify what the NMSC concerns are. All noise studies are done under calm conditions, for standardization.
- Wayne noted that over the last few years he has been talking to Gary Colwell and Mike Karsseboom and has been keeping statistics on noise, engine run-ups, arrival passengers, departing passengers, passengers that pass through the airport, etc. this is very basic but I would like to work with PortsToronto to use my statistics in the form of an easy to understand spreadsheet to make some pie graphs to add to the noise report. Without the graphics it is difficult for other people to understand the data.
- Angela noted that these are good points that should be discussed at the next meeting with Mike Karsseboom, especially any graphics changes or details that the NMSC would like to see included in the report.

- Hal and Wayne noted that trends over time should be apparent through the report.
- Hal noted that he would like to see the report showcase trends starting in 2007, including the number of complaints and what was being complained about each year. He stated that the format of the report needs to be standardized every year, and that recommendations for improvement should be included in each report. Hal would like the report to be actionable.
- Angela noted that outcomes should be key in annual reporting. There may be a better way to show the accounting of all the work PortsToronto are doing, the work they have done, and the work they have yet to do. PortsToronto is trying to be very transparent with the Master Plan process to ensure there is value to the community.
- Gary Colwell excused himself from the remainder of the meeting and thanked NMSC members for their time.

Review Noise Study Scope of Work Feedback (Angela Homewood)

Lesley inquired about the future Noise Study, noting that the NMSC has yet to address where the future noise study stands. The following provides a summary of the discussion surrounding the Noise Study Scope of Work.

- Angela responded that PortsToronto have tracked all comments provided by NMSC members regarding the Noise Study Scope of Work. PortsToronto is drafting revisions. The majority of the suggested revisions are easy to accept and include, and there are other suggestions on which PortsToronto is trying to get confirmation and clarity around from WSP (WSP are writing the Study Scope).
- Hal inquired if WSP had drafted the document that was circulated to NMSC members. Hal was not pleased with the quality of the draft and questioned whether it should even have been circulated. Hal noted it was difficult to comment on the document because it was too high-level.
- Angela responded that PortsToronto had pulled out points from a draft WSP had provided and circulated those points to the NMSC. She noted that PortsToronto will share with everyone's comments and how they have been incorporated into the scope of work. The feedback is great. I think we've included 70-80% of the feedback we received.
- Hal inquired what the scope of the study is.
- Angela responded that the study is a noise assessment. When PortsToronto met with the King's Landing group, at the time there was a commitment (5 years ago) to build a noise reduction structure on the east side. PortsToronto wanted to determine if that location would mitigate noise impacts, hence the need for the noise study. The goal is to determine noise sources and identify recommendations for noise reduction structures. This would ensure that any efforts put in place are reflective of today's noise sources, not noise sources from the past (as existing reports are dated).
- Hal inquired if this is therefore a noise impact assessment on stationary source noise.
- Angela noted that the assessment is on ground noise.
- Hal insisted that the contents of the report should meet Ministry of Environment, Conservation, and Parks (MECP) requirements.
- Bryan noted that there can't be further judgements until the next scope of work is shared.
- Hal noted that he thought the next iteration was being sent to MERX.

- Angela clarified that the NMSC will see the scope of work again before the scope of work is posted to MERX. She explained that the version that was circulated to the NMSC was not meant to be restrictive or prescriptive, so it was more high level.
- Hal stated that the scope of work he was provided was not detailed enough for an engineer to be able to understand what work needed to be done. For a noise impact assessment there must be a fulsome Terms of Reference, as it is a major assessment. They should be listing out all the components of the noise that they would like assessed (e.g. which sources).
- Angela suggested that she share all NMSC comments and return to the NMSC with a new draft of the scope of work, showing how comments were incorporated.
- Hal stated that there should be a 2-hour meeting to discuss the noise study scope of work.
- Angela asked Hal how he would feel if all of his comments were accepted.
- Hal responded that he would be concerned if all of his comments had been accepted, as he felt he had very little to comment on.
- Angela noted that they had received comments from Hal on the noise study.
- Max noted that he felt Hal was looking for a study design, which is the next step.
- Hal stated that no, he was looking for a Terms of Reference that consultants could accurately bid on. Hal suggested the committee do a comparison between the 2010 RWDI RFP (November 2010 Noise Impact Assessment Study by RWDI) and product to reflect upon the importance of providing a thorough and detailed Terms of Reference for a project. Hal explained that this had been a point of discussion in CLC 18, 19, and 20, where Hal noted that the 2010 noise impact assessment has not been certified, sealed, or signed, even though 202 slots were approved based on that.
- Lesley confirmed that the document being discussed is not the Jacobs report.
- Hal confirmed and added that the Jacobs report was also abbreviated. The Jacobs study was cut off when Geoff Wilson was hired by PortsToronto, therefore the Jacobs study is also incomplete. They were planning on doing modeling of the urban environment. However, that summer was the garbage strike and they couldn't access municipal records, so the consultant was delayed for months. Then Geoff Wilson entered, Jacobs report was closed. Meanwhile, Jacobs completed a slot capacity report, which was not released to the community.
- Bryan suggested the next draft be called "2.0", to say there will still be concerns that will then be addressed. Bryan noted that he does not see the harm in reviewing a new draft.
- Hal noted that he is concerned if WSP is drafting the document and that he would like to see the entire Terms of Reference.
- Angela explained that the Terms of Reference is based on the schedule. Proponents will have to provide PortsToronto with a proposal for what their program is going to entail. The intention is to have proponents outline what they need to do to meet our RFP goals and to meet any additional regulatory requirements. PortsToronto, through the RFP, are telling them to design a study that addresses a list of items, which is what we have asked the NMSC to provide input on. This approach is typical of government postings on MERX RFPs.
- Hal said that this is untrue and that he looks at RFPs on MERX.
- Angela replied that overall PortsToronto wants each proponent to describe what they think would be an effective program for this project. PortsToronto will review the proposals they receive. The City may be asked to sit on the RFP review because PortsToronto are uncertain how many submissions they will receive.

- Hal suggested that for 10 minutes during the Ministry visit, they share the components of a stationary source noise impact assessment report. To walk us through the NPC program. That will help us look at the detailed components which is what we will focus on for this.
- Angela noted that Hal's suggestion is great and that the assessment needs to include the ground based noise sources as the focus of the assessment.
- Hal confirmed that the goal is to have a stationary source noise assessment, however from what he has seen so far, he is quite alarmed.
- Bryan suggested that the conversation be parked until after PortsToronto provide another version of the scope of work.

Additional Discussions

The following provides a summary of additional discussions that occurred outside of the topics listed in the original agenda.

- Lesley noted that her ears hurt when leaving the NMSC meetings, due to the low droning sound in the room. She stated that there are different tonalities in noise that determine how a particular noise impacts people, with some noises, including low but sustained noises, making people ill.
 - Bryan noted that the noise Lesley was hearing in the meeting room was likely caused by the elevators.
- Hal noted that he thinks it is strange that standards are provided in dBA, which is a weighting applied to noise to approximate what humans are hearing. However, it is counterintuitive because people hear base frequencies better, not of equal loudness.
- Wayne noted that this may be a way for the aviation industry to get away with excessive noise.
- Hal continued it is built into the standards for all residences and businesses of any nature. There is a 1 hour dBA design parameter, not a limit. Hal inquired how one would design for something that is supposed to be measured in dBA because you design in bBZ and how one can design so that the result creates a noise profile such that the base frequencies are a step down in line with the dBA curve.
- Max noted that dBA was the only measure in use in the 1930s and 1940s. As a unit of measure, dBZ is new. The history of decibels goes back to 1928. Scientists were trying to measure the drop in volume of the human voice over distance, to understand how long distance telephone lines would be set up and how many amplifiers were needed over set distances. dBA was a convenient measure for the human voice because it doesn't measure base; if base was included in the measurement, the numbers would be skewed. Instead the calculation includes a drop off on the base end and measures the mid-range and high frequencies, because that would provide the drop in volume of the human voice over long distance telephone lines.
- Hal presented a graph to the NMSC from NPC 300. He inquired why there was a reference to "gain" in the graph.
 - Max responded that audio engineers like to use the term, but that the main point of the graph is that the base spectrum drops off for dBA and dBZ, and that dBZ is right on the zero.
- Hal inquired if his understanding, that dBZ applies 20 hertz to 2000 hertz.
- Max confirmed this and noted that it is the whole range of human hearing.

- Hal questioned if unweighted applied to everything, even subsonic.
- Max responded that this was true, but that to answer Hal's earlier question, people don't hear base as clearly as people hear the mid-range or the treble. If a person is hearing something with the full spectrum of sound, they are hearing the mid-range and treble, and there is a bit of drop off in the ears for the base. However, it is not that people aren't hearing the base as much, but that they aren't hearing it as clearly.
- Hal noted that this aligns with the Equal Loudness Contours. Hal explained that there was an experiment where people with pure tones, relative to 100 hertz were subjects. Through the experiment, they identified that our ears cannot hear base frequencies less.
 - Max noted that this is true to a small degree, but as Lesley pointed out earlier, you may not hear the base frequencies as well, but they are still heard and are therefore still impactful.
 - Lesley agreed noting that it is possible to hardly hear a sound but for long term exposure to still impact a body.
 - Wayne noted that there is a subjective nature to it as well, as some people are more sensitive to base than others.
 - Lesley agreed that some people are more sensitive to certain tones and frequencies than others.
- Hal suggested that the ferry noises that wake him in the morning are impactful because of the base frequencies produced by the ferry.
- Hal inquired if there is anything related to noise, or any additional regulation, that would not be covered by Section 16 of the Tripartite Agreement.
- Bryan responded that he was in a meeting with the City's legal department recently, inquiring about the Tripartite Agreement, particularly how it will be applied with the new RESA regulation. Specifically, he is waiting for direction on how municipal bylaws would be applied around the airport if there is proposal under new RESA regulations for any infill to extend the runway.
- Hal noted that this signals to him, that all signatories are required to meet NPC 300 requirements. He wanted to make sure Angela and Bryan agree with that assessment.
- Bryan replied that is partly why they are going to ask the Ministry to bring in examples of where airports have triggered NPC 300.
- Hal noted that aside from the Tripartite Agreement not having the same status as an act or regulation, the Tripartite Agreement is made between three parties which does not have the same standards as overriding requirements.
- Angela notes that NPC 300 is a guideline, not a regulation, so it doesn't have associated statutes (it is not a law). It can be enforced through acts, but this is a guideline, which means it is not a regulation because it is not statutory law.
- Hal inquired if that means that municipalities are not required to follow NPC 300 when they are issuing bylaws that deal with sensitive uses that are noise related.
- Bryan responded that if the City of Toronto had adopted a statutory requirement to adhere to that guideline, then it is reasonable to assume that the City would have relied on that. This would be similar to how local zoning bylaws aren't necessarily tied to a provincial guideline, but once they are adopted they are statutory.

- Angela noted that the only problem would be that a Ministry of Environment, Conservation, and Parks (MECP) officer could not enforce NPC 300, because they don't have the powers under the Provincial Offenses Act.
- Bryan noted that this would then become a question of compliance with the Tripartite Agreement, more so than the Environmental Protection Act.
- Max noted that based on the discussion, a good question for the Ministry visit could be whether or not NPC 300 is mandatory.
- Angela noted that NPC 300 is a guideline because it is based on years of best practices and work that Ministry staff have completed. There are updates every 7-10 years based on what is occurring in the real world. It is a guideline that is enforced through acts and legislation. For example, if a landfill was desired, there would need to be an environmental compliance approval or a certificate of approval; those were granted based on what was to be discharged into water, the air, on land, etc. There are different approvals that would be needed based on the specific regulatory requirements that apply to a situation.
- Hal inquired if a municipality could approve a development without getting a noise feasibility study, which is certified in compliance with NPC 300.
- Max noted that there is no certification because NPC 300 is only a guideline. Angela agreed.
- Hal inquired if historically, it is possible for the City to approve a development without an engineering certification of something meeting the standard, whether it is NPC 205, LU 131, or NPC 300, even though it is a requirement of the developer to produce this report. NPC 233 actually states that as a developer requirement.
- Bryan responded that municipalities would need to identify when those studies are required. Not every planning application necessarily requires those studies. The municipality would also need to identify when the study would be required. This would likely be identified during pre-submission consultation between the municipality and the developer. There may even be special policy areas within the Official Plan which outline when these are required.
- Angela noted that when a development is proposed adjacent to a highway, developers are required to do certain studies.
- Hal inquired who forces the developers to do those studies, and if it is the municipality, is the municipality obligated to force those studies, and why. It seems the intentions of the Tripartite Agreement were that all three parties are agreeing that every requirement would be met when the airport was being developed. He inquired if Section 16 of the Tripartite Agreement is inconclusive.
- Bryan noted that he doesn't think Section 16 is inconclusive, but rather that the application of NPC 300 remains inconclusive.
- Angela noted that this could relate to a grandfathering condition, which was implemented often in the 1980s and 1990s.
- Wayne noted that a key word in Section 16 of the Tripartite Agreement is "shall". He noted that when "shall" is used, it means "you must"; it is extremely definite.
- Bryan noted that the other key word is statutory.
- Hal inquired if rules can be statutory.
- Angela responded that previously, statutory rules were made more permanent through Orders-In-Council at the provincial and federal level. These usually came into effect in emergency situations.

- Max noted that it is important to recognise that the Tripartite Agreement is not between municipal, provincial and federal governments. Instead, it is an Agreement between the municipal government, the federal government and the Toronto Port Authority, with the federal government being represented by Transport Canada, which is a strange party to the Agreement as they are not a regulator.
- Hal noted that at the time, Transport Canada were generating the noise contours, which defined NEF 25 and determined the zone where residential buildings would be permitted around the airport. Transport Canada was the active proponent trying to get the City to sign on.
- Hal continued that he would have liked to walk out of the NMSC meeting knowing that PortsToronto and the City are required to meet NPC 300.
- Bryan noted that he can't get there yet. He would like the meeting with the Ministry to inform his understanding of that issue. He would need to consult with legal before making any statement representing the City.
- Hal noted that this issue has to do with the airport site rather than what he is focused on, the surrounding noise sensitive uses. If the municipality is in fact required to get certifications for noise according to any standards or regulations, then they would have had to do a fulsome noise report, a noise feasibility study. Then those uses would be in compliance with NPC 205 and LU 131. Additionally, it may be possible that the City didn't flag the airport as a stationary source, and therefore didn't study it. Maybe today the municipality would be required to do those studies. But now, all those buildings exist.
- Bryan noted that this would be a very worthwhile research project for a summer student; to dig through the old approvals and identify what was considered at the time.

Adjourn

The meeting adjourned at 10:00 pm.

Action Items

This list summarises the action items from the meeting discussion:

1. The NMSC agreed that the most recent version of the Terms of Reference could be finalized.
2. Bryan Bowen, City of Toronto, and Angela agreed to provide any additional edits to meeting 1 and 2 minutes by April 29.
3. The NMSC agreed that "final drafts" of all meeting minutes would be provided to NMSC members by Friday April 5 in a single email. NMSC members would have 1 month to provide any final comments or edits, after which the minutes will be finalized.
4. Moving forward, NMSC members will have 1 month to provide final comments or edits on draft minutes before they are published online.
5. Alex Lavasidis, LURA Consulting, will start a tracking log for meeting minutes that will include: the release date of draft summaries; when comments or edits were received; who provided comments or edits; how comments or edits were incorporated into the summary; when edits were made; and when the final draft was posted online.

6. Alex will send a follow-up email to confirm a date for an ANMR meeting with NMSC members and Mike Karsseboom.
7. NMSC members will email Alex key issues and themes that they would like the MECP to address, during their visit.
 - a. Alex will send a full list of these key issues and themes to Hal, who will then develop key questions.
 - b. Angela and Bryan will review this list of questions and then submit them to the MECP to ensure the MECP representative is prepared for the NMSC meeting.
8. Angela will locate and share online D Series Land Use Compatibility Guidelines (D-1 to D-6) with the NMSC.
9. Angela will edit the Provincial Noise Guidelines Presentation:
 - a. Remove the reference to stationary source noise in slide 6.
 - b. Remove the last bullet from slide 6 and the last half of the last bullet of slide 7.
 - c. An update of this clarification will be brought to the CLC by the NMSC representatives at a future CLC meeting.
10. Angela will confirm and share (if possible) written correspondence from the Ministry provided to PortsToronto regarding the decision to allow the GRE's development.
11. Bryan will flag noise concerns around proposed developments on Lakeshore Ave. with community planning.
12. Wayne will provide information to the NMSC on meteorology and its impacts on noise once the terms that are required to be defined are established.