Reply to the Attention of: Mary Flynn-Guglietti Direct Line: 416.865.7256 Email Address: mary.flynn@mcmillan.ca Our File No.: 283643 Date: June 28, 2022

### **DELIVERED VIA EMAIL TO: TEYCC@TORONTO.CA**

Toronto and East York Community Council Toronto City Hall 100 Queen St. West Toronto, ON M5H 2N2

#### Attention: Ms. Ellen Devlin, Secrétariat

Dear Chair Perks and Members of the Toronto East York Community Council:

#### Re: TEYCC Meeting of June 29, 2022 – Item No. TE 34.19 Letter of Concern to Application for Zoning By-law Amendment Final Report re: 640 Lansdowne Avenue, Application No. 21 196612 STE 09 OZ

We are the solicitors retained on behalf of Nitta Gelatin Canada, Inc. ("**Nitta**"), owner of the 3.05-acre (1.23 ha) lands municipally known as 60 Paton Road (the "**Nitta Property**"), located west of Lansdowne Avenue, north of Bloor Street West and south of Wallace Avenue in the City of Toronto (the "**City**"). The Nitta Property immediately abuts the lands subject to the above-noted application, known municipally as 640 Lansdowne Avenue (the "**TTC Lands**") to its east. The Nitta factory is best categorized as a "Class III Heavy Industry".

On April 7, 2022 we filed a letter outlining our client's concerns regarding the proposal for a 7-storey building containing 57 affordable housing rental units for seniors and 256 long term care beds (the **"Proposal**") in close proximity to our client's industrial operation.

While our client believes that providing more affordable housing and long term care beds is a worthy objective and laudable goal for the City, it has serious concerns respecting compatibility of such a sensitive land use as the Proposal within metres of lands designated pursuant to the City's Official Plan as *Core Employment*. Subsequent to filing our April 7<sup>th</sup> letter, we have met with City staff and the Ward Councillor and also Messrs. Cameron McKeich and Jason Davidson of the City's legal department to outline our concerns.

#### **Background and Context**

The Nitta Property is currently designated as *Core Employment* in the City's Official Plan ("**City OP**"), and is surrounded by lands with the same designation to the immediate north and south, with lands to the east designated *General Employment* and the lands to the north-east, south-east and west designated *Neighbourhoods*.

The TTC Lands are located to the immediate east of the Nitta Property, and have a split designation under the City's OP of *General Employment Areas* on the western portion of the site, and *Mixed Use Areas* along Lansdowne Avenue. It is understood that the portion of the TTC Lands designated *Mixed Use Areas* has been leased to Magaellan Community Charities to facilitate the Proposal, with the part of the site designated *General Employment Area* to be used as a park.

With its *Core Employment* designation, the Nitta Property is effectively an isolated industrial use in an area with a mix of uses and land use designations including *Mixed Use Areas* and *Neighbourhoods*. The proposed change in uses around the Nitta Property towards more sensitive uses has resulted in land use compatibility conflicts.

The Nitta Property currently contains a factory used for gelatin production, which is a permitted industrial use, and while within the Province's set limits, the close proximity of existing residential sensitive land uses has resulted in numerous and frequent nuisance complaints by nearby and adjacent residents related to noise and odour emitted by the factory. For these reasons and others, on July 30, 2021, Nitta made a conversion request to the City as part of the City's Municipal Comprehensive Review process to convert the Nitta Lands from the existing *Core Employment* designation to a *Mixed Use* designation (the "**Nitta Request**", being Conversion Request No. 111). Should the Nitta conversion request be granted it would mitigate existing and potential land use compatibility conflicts in the long term. However, Nitta's current and near future concerns would not be resolved and in fact will be negatively impacted should the Proposal be approved without proper environmental reports and mitigation measures being undertaken.

In reviewing the materials filed in support of the Proposal we raised concerns related to the lack of a necessary environmental report related to odours and the shortcomings of the Noise Report. On June 8<sup>th</sup>, 2022 City legal staff provided us with two (2) follow up reports as follows:

- Noise Impact Feasibility Study Revision #1 by J.E. Coulter Associates Limited dated May 3, 2022 ("Coulter Report")
- A two page letter from G2S Consulting Inc. dated July 19 2021 dealing with the MECP D-6 Guideline ("GS2 Report")

We requested our environmental consultant SLR Consulting (Canada) Ltd. ("**SLR**") to review the materials provided. Attached for your review is a copy of the June 27<sup>th</sup> Report from SLR. SLR concludes that it has significant issues with the analyses and conclusions of the GS2 Report and the Coulter Report as follows:

1. Neither the GS2 Report nor the Coulter Report, alone or in combination, meet the requirements of a Compatibility/Mitigation Study as required by the City of Toronto for new sensitive developments in or near Employment Areas and Major Facilities;

- 2. The requirements of Guideline D-6 for detailed assessments <u>are not met.</u> A detailed air quality study has not been completed, and significant issues and shortcomings have been identified with the noise report provided.
- 3. Absent source-based and/or receptor based mitigation measures, rezoning of the property will<u>immediately place Nitta out of compliance with its MECP permit</u> requirements for noise.
- 4. In the absence of a detailed study and the specification and installation of mitigation measures, odour complaints at the proposed development are likely, and Nitta's compliance with applicable environment policy, regulations, approvals, authorizations and guidelines will be jeopardized.

#### Specific Concerns with the Proposal

Based on the foregoing, Nitta submits that the Proposal is, at minimum, premature and should not be decided until after appropriate environmental reports have been completed. Without appropriate environmental reports that meet the City's requirements we respectfully submit that the Proposal does not constitute good land use planning and fails to comply with the City of Toronto Official Plan as follows:

- The Nitta Property is subject to frequent noise and odour complaints from neighbouring residents. Per Policy 2.2.4.5 of the City of Toronto Official Plan, sensitive land uses including the Proposal, should be planned to ensure they are appropriately designed, buffered and/or separated from *Employment Areas* and/or major facilities, such as the Nitta Property. This is to ensure that:
  - adverse effects from noise, vibration and emissions, including dust and odour can be prevented or mitigated (Policy 2.2.4.5a));
  - risk to public health and safety can be minimized (Policy 2.2.4.5b)); and
  - negative impacts can be prevented or mitigated and risk of complaints can be minimized (Policy 2.2.4.5c)).

We also note that the City should at minimum, pursue a "Class 4" designation for the Proposal's lands prior to passing the zoning by-law. A Class 4 Area designation is intended for new infill-type development in or near Employment Areas and in the opinion of SLR would be appropriate in this case. However, a Class 4 designation would need to be specifically provided by the City in their role as the land use planning authority for the Proposal. With a Class 4 designation in place, the applicable NPC-300 noise guidelines are increased by 5 to 10 db and would be met at the Proposal. Additional source-based or receptor-based mitigation would not be required for noise however, all units would require mandatory air condition and a Type "F" Noise Warning clause. The mitigation required with respect to the

odour issues cannot be determined until such time as an appropriate study has been undertaken.

Accordingly, we respectfully submit that the application should be adjourned until such time that the appropriate and fulsome environmental review and potential mitigation required for the Proposal is accomplished.

Yours truly,

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Mary Flynn-Guglietti\* \*A Professional Corporation

Encl.

Cc. J. Gallert, Nitta Gelatin M. Goldberg, Goldberg Group V. Chu, Goldberg Group Jason Davidson, City Legal Cameron McKeich, City Legal



# APPENDIX "A" -

SRL Consulting (Canada) Ltd. Peer Review of Noise Study and D-6 Study for 640 Lansdowne Avenue Development on behalf of Nitta Gelatin Facility

Dated June 27<sup>th</sup>, 2022



June 23, 2022

Ms. Mary Flynn-Guglietti MacMillan LLP Brookfield Place, Suite 4400 181 Bay Street Toronto, Ontario Canada M5J 2T3

SLR Project No.: 241.30293.00000

## RE: Peer Review of Noise Study and D-6 Study for 640 Lansdowne Ave Development On Behalf of Nitta Gelatin Facility

SLR Consulting (Canada) Ltd. ("SLR") was retained by Nitta Gelatin NA Inc. ("Nitta") to conduct a peer review of the air quality and compatibility studies conducted in support of the proposed Senior's Apartments and Long Term Care facility, to be located at 640 Lansdowne Avenue, in Toronto, Ontario ("the LTC"). The proposed LTC is located near Nitta's facility at 60 Paton Road in Toronto. The following compatibility studies were prepared for the LTC:

- "Review of MECP D-6 Guidelines, Proposed Residential/Commercial Development, 640 Lansdowne Avenue, Toronto, Ontario", prepared by G2S Consulting Inc. ("G2S"), dated July 19, 2021 ("The D-6 Report"); and
- "Noise Impact Feasibility Study Revision #1, 640 Lansdowne Avenue, City Of Toronto", prepared by J.E. Coulter Associates Ltd. ("Coulter"), dated May 3, 2022 ("the Coulter Report").

The following documents and guidelines have been considered in our review:

- Environmental Commissioner of Ontario (ECO, 2010), *Review of Posted Decision: Developing an Odour Policy Framework*, April 2010.
- City of Toronto Noise By-law, Municipal Code Chapter 591
- Ontario Ministry of the Environment, Conservation & Parks (MECP, 1995), Guideline D-1: Land Use Compatibility
- Ontario Ministry of the Environment, Conservation & Parks (MECP, 1995), Guideline D-6: *Compatibility Between Industrial Facilities and Sensitive Land Uses*
- Ontario Ministry of the Environment, Conservation & Parks (MECP, 2008), *Technical Bulletin, Standards Development Branch, Methodology For Modelling Assessments Of Contaminants With 10-Minute Average Standards And Guidelines Under O. Reg. 419/05*, April 2008.
- Ontario Ministry of the Environment, Conservation & Parks (MECP), 2013, Publication NPC-300: Environmental Noise Guideline: Stationary and Transportation Sources – Approval and Planning
- Ontario Ministry of Municipal Affairs and Housing (MMAH, 2020). *Provincial Policy Statement*.
- Ontario Regulation 419/01 Local Air Quality.
- City of Toronto *Terms of Reference for Compatibility/ Mitigation Studies*
- City of Toronto Terms of Reference for Noise Impact Studies

### **KEY FINDINGS**

The following are the key findings of out review:

- Neither the GS2 Report nor the Coulter Report, alone or in combination, meet the requirements of a Compatibility/ Mitigation Study as required by the City for new sensitive developments in or near Employment Areas and Major Facilities;
- The requirements of Guideline D-6 for detailed assessments are not met. A detailed air quality study has not been completed, and significant issues have been identified with the noise study.
- Absent source-based and/or receptor based mitigation measures, rezoning of the property will immediately place Nitta Gelatin out of compliance with its MECP permit requirements for noise.
- In the absence of a detailed study and the specification and installation of mitigation measures, odour complaints at the proposed LTC are likely, and Nitta's compliance with applicable environmental policy, regulations, approvals, authorizations and guidelines will be jeopardized.

#### THE NITTA GELATIN FACILITY

The Nitta Gelatin facility is located at 60 Paton Road, in Toronto, approximately 70 m to the west of the proposed development, as shown in **Figure 1**. The facility has been operating in this location for nearly 50 years (32 years as Nitta Gelatin), and currently operates under Ministry of the Environment, Conservation & Parks ("MECP") Environmental Activity and Sector Registration ("EASR") No. R-010-1113159456, dated April 2021.

The Nitta facility produces unflavoured gelatin from pork skins. Despite the inclusion of significant odour treatment equipment, and their following of an MECP-approved best management practices plan for odour reduction, the Nitta facility typically receives 38 to 81 odour complaints and 1 to 4 noise complaints per year, from existing sensitive residences in the area.

#### THE PROPOSED LTC FACILITY

The proposed LTC facility will consist of a seven-storey mixed-use building comprised of 57 affordable housing units, 256 long-term care beds, and non-residential uses on the ground floor fronting Lansdowne Avenue. The building will have elevated balconies and outdoor amenity terraces. At 7-storeys, the proposed LTC will, become the highest building in the area, creating a new elevated point of reception taller than the Nitta facility. The facility location is shown in **Figure 1**.



#### Figure 1 – Nitta Facility and Surroundings

# CITY REQUIREMENTS FOR STUDIES

The City of Toronto requires that a "Compatibility/ Mitigation Study" be completed for new sensitive developments "outside of and adjacent to or near to Employment Areas or within the influence area of major facilities" which is the case here.

Neither the GS2 D-6 Study, nor the Coulter Study separately or together, meet the requirements of the City's Terms of Reference ("ToR") for a Compatibility/ Mitigation Study. The reports do <u>not</u>:

- Properly identify the applicable MECP approvals;
- Identify and analyse any complaints received by the City and/or the MOECC concerning nearby Employment Areas and/or major facilities.
- Identify whether the development will have a negative impact on major facilities and on the integrity of the Employment Area based on potential:
  - effects on major facilities' compliance with applicable environmental policy, regulations, approvals, authorizations and guidelines, including the noise provisions of the City's Municipal Code;
  - o increased risk of complaint and nuisance claims;
  - o operational constraints for major facilities;

- o constraints on major facilities to reasonably expand, intensify or introduce changes to their operations;
- o constraints for new major facilities to reasonably be established in the Employment Area;
- the extent of non-compliance with land use separation requirements for existing employment uses in the vicinity, including propane storage and distribution facilities, if applicable; and,
- Provide any discussions on buffers, at-source mitigation, or receptor-based mitigation, required to ensure that the proposed development does not affect the major facility or Employment Area.

#### REVIEW OF G2S D-6 STUDY

The 2-page long G2S Study discusses MECP Guideline D-6 which addresses compatibility between industrial facilities and sensitive land uses, from the perspective of air quality, dust, odour, noise, and vibration. Within Compatibility/ Mitigation Studies, Guideline D-6 is used to:

- a) Classify industries based on their size and nature of operations;
- b) Provide "Recommended Minimum Separation Distances" between industries and sensitive uses;
- c) Identify "Areas of Influence" within which detailed air quality (including dust and odour), noise, and vibration studies should be completed.
- d) Outline the requirements for studies, especially in the case where in-fill development is planned within the Recommended Minimum Separation Distance.

The MECP requires that all air quality, dust, odour, noise, and vibration studies be conducted by or overseen by Licensed Engineering Professionals with experience in the field of study. We note that neither author of the G2S letter is a professional engineer, and that neither has experience with air quality, noise or vibration studies. One author is a Risk Assessor for Phase I/II Ground Contamination Assessments, and the other author is a Geologist focusing on soil remediation.

The G2S letter does not discuss noise or vibration (it is assumed that is left to the Coulter Report) but focuses only on air quality issues.

We understand that G2S did not approach Nitta Gelatin to discuss their current or future operations or the history of complaints.

The G2S report fails to identify the current MECP permit for Nitta operations, namely the EASR Registration R-010-1113159456, which was in place when the G2S Report was written. Instead it refers to previous 2014 and 2015 ECAs.

G2S classifies Nitta Gelatin as a Class II Medium scale facility under Guideline D-6 but does not provide a rationale for such a classification. The industrial classification criteria from the guideline are provided in the Table below:

| Category                       | Outputs   | Scale   | Process   | Operations /<br>Intensity   | Possible<br>Examples  |
|--------------------------------|---|---|---|---|---|
| Class I<br>Light<br>Industry   | <ul> <li>Noise: Sound not<br/>audible off-property</li> <li>Dust: Infrequent<br/>and not intense</li> <li>Odour: Infrequent<br/>and not intense</li> <li>Vibration: No<br/>ground-borne<br/>vibration on plant<br/>property</li> </ul>  | <ul> <li>No outside<br/>storage</li> <li>Small-scale plant<br/>or scale is<br/>irrelevant in<br/>relation to all<br/>other criteria for<br/>this Class</li> </ul> | <ul> <li>Self-contained<br/>plant or building<br/>which<br/>produces/<br/>stores a<br/>packaged<br/>product</li> <li>Low probability<br/>of fugitive<br/>emissions</li> </ul> | <ul> <li>Daytime<br/>operations only</li> <li>Infrequent<br/>movement of<br/>products and/ or<br/>heavy trucks</li> </ul>   | <ul> <li>Electronics<br/>manufacturing and<br/>repair</li> <li>Furniture repair and<br/>refinishing</li> <li>Beverage bottling</li> <li>Auto parts supply</li> <li>Packaging and<br/>crafting services</li> <li>Distribution of dairy<br/>products</li> <li>Laundry and linen<br/>supply</li> </ul> |
| Class II<br>Medium<br>Industry | <ul> <li>Noise: Sound<br/>occasionally heard<br/>off-property</li> <li>Dust: Frequent and<br/>occasionally intense</li> <li>Odour: Frequent<br/>and occasionally<br/>intense</li> <li>Vibration: Possible<br/>ground-borne<br/>vibration, but<br/>cannot be perceived<br/>off-property</li> </ul> | <ul> <li>Outside storage<br/>permitted</li> <li>Medium level of<br/>production<br/>allowed</li> </ul>   | <ul> <li>Open process</li> <li>Periodic outputs<br/>of minor<br/>annoyance</li> <li>Low probability<br/>of fugitive<br/>emissions</li> </ul>                                  | <ul> <li>Shift operations<br/>permitted</li> <li>Frequent<br/>movements of<br/>products and/ or<br/>heavy trucks<br/>with the<br/>majority of<br/>movements<br/>during daytime<br/>hours</li> </ul> | <ul> <li>Magazine printing</li> <li>Paint spray booths</li> <li>Metal command</li> <li>Electrical<br/>production</li> <li>Manufacturing of<br/>dairy products</li> <li>Dry cleaning<br/>services</li> <li>Feed packing plants</li> </ul>  |
| Class III<br>Heavy<br>Industry | <ul> <li>Noise: Sound<br/>frequently audible<br/>off property</li> <li>Dust: Persistent<br/>and/ or intense</li> <li>Odour: Persistent<br/>and/ or intense</li> <li>Vibration: Ground-<br/>borne vibration can<br/>frequently be<br/>perceived off-<br/>property</li> </ul>                       | <ul> <li>Outside storage<br/>of raw and<br/>finished products</li> <li>Large production<br/>levels</li> </ul>   | <ul> <li>Open process</li> <li>Frequent<br/>outputs of<br/>major<br/>annoyances</li> <li>High probability<br/>of fugitive<br/>emissions</li> </ul>                            | <ul> <li>Continuous<br/>movement of<br/>products and<br/>employees</li> <li>Daily shift<br/>operations<br/>permitted</li> </ul>   | <ul> <li>Paint and varnish<br/>manufacturing</li> <li>Organic chemical<br/>manufacturing</li> <li>Breweries</li> <li>Solvent recovery<br/>plants</li> <li>Soaps and<br/>detergent<br/>manufacturing</li> <li>Metal refining and<br/>manufacturing</li> </ul>  |

## Table 1: Guideline D-6 - Industrial Categorization Criteria

From the above, and given the history of odour complaints and the high probability of fugitive odour emissions, Nitta Gelatin is best categorized as a "Class III Heavy Industry", rather than Class II Medium.

Regardless, The G2S study then fails to discuss the purpose of the industrial classification, namely the corresponding applicable Recommended Minimum Separation Distances and Areas of Influence, which are shown below:

| Table 2: Guideline D-6 - Potential Influence Areas and Recommended Minimum Setback Distances for |
|--|
| Industrial Land Uses   |

| Industry Classification      | Area of Influence | Recommended Minimum<br>Separation Distance |
|------------------------------|-------------------|--|
| Class I – Light Industrial   | 70 m              | 20 m                                       |
| Class II – Medium Industrial | 300 m             | 70 m                                       |
| Class III – Heavy Industrial | 1000 m            | 300 m                                      |

As a Class III Heavy Industry, the proposed LTC would be within the Recommended Minimum Separation Distance to Nitta Gelatin. But Regardless of the classification, Guideline D-6 requires that a detailed assessment of potential air quality impacts be completed in this case, as the proposed LTC is within the Area of Influence. Such a study has <u>not</u> been conducted. Instead, G2S has relied on the Nitta facility possessing an ECA as indicating there are no potential air quality issues with the proposed LTC development. However, this is not actually the case.

As previously discussed, based on the nature of the Nitta Gelatin facility, fugitive odours are difficult to control, and despite the use of odour control equipment and meeting MECP permit obligations, odour complaints still occur.

Also, at 7-storeys, the proposed LTC is a fundamentally different type of receptor than the existing 2- to 3storey residences in the area. As an elevated point of reception, odorous exhaust plumes which would have passed over the top of existing residences before dispersing may now strike the side of the proposed LTC building, as shown in the schematic in **Figure 2**.



Figure 2 – Effect of Elevated Points of Reception on Dispersion

Furthermore, the majority of existing sensitive residential uses in the area are located to the west of Nitta Gelatin, effectively "upwind" of the facility, while the proposed LTC is located downwind for the majority of the time. A wind frequency distribution diagram is provided in **Figure 3**.



#### Figure 3 – Wind Frequency Distribution Diagram (Wind Rose) Toronto Pearson International Airport

Thus, the potential air quality and odour impacts on the proposed LTC can only be adequately determined by a detailed air quality modelling study, which has not been conducted.

Such a study is necessary to understand the potential scale of odour impacts on the proposed LTC, and the need for additional source-based and receptor-based air quality mitigation measures.

At a minimum, receptor-based mitigation measures at the proposed LTC should include:

- Positive pressurization The building mechanical systems, make-up air units, HVAC units, central air conditioning units and heat recovery units should be designed to maintain positive pressurization under normal weather conditions of all occupied areas, in accordance with current ASHRAE recommendations.
- The use of a central AC system All units should have central air conditioning systems to allow windows and exterior doors to remain closed, with all air intakes for building mechanical systems, central air conditioning units and heat recovery units located in areas of least impact, on the east side of the building, facing away from Nitta, or behind a significant intervening building or structure.
- Mandatory carbon filters All air intakes for building mechanical systems, make-up air units, HVAC units, central air conditioning units and heat recovery units should carbon odour filters. The filtration system should be designed to supply the space with 100% odour filtered air drawn from outside the building envelope.
- A noise and odour warning clause, and other legal protections for Nitta operations.

Depending on the result of the detailed odour study, the above by itself may not be sufficient, and additional source-based (such as increased stack height and additional odour scrubbers) and receptor-based controls (such as sealed windows and removal/relocation of outdoor amenity areas) may be required.

In the absence of a detailed study and the specification and installation of mitigation measures, odour complaints at the proposed LTC are likely, and Nitta's compliance with applicable environmental policy, regulations, approvals, authorizations and guidelines will be jeopardized.

### REVIEW OF COULTER NOISE STUDY

The Coulter Noise Study does include an assessment of potential noise impacts from Nitta; however, there are major issues with the noise guideline limits and facility sound levels used in the study.

#### CURRENTLY APPLICABLE GUIDELINE LIMITS

Coulter approached Nitta, and through them their noise consultant HGC Engineering Ltd. ("HGC"), who prepared the current noise assessment for MECP permitting, to discuss potential noise levels at the proposed LTC. Based on the architectural plans submitted as part of the 640 Lansdowne development application, there will be windows facing the Nitta Gelatin facility leading to noise-sensitive spaces on all seven floors of the building. HGC's analysis considered the entire west façade of the proposed LTC building (facing toward Nitta Gelatin) to be noise sensitive.

The MECP Publication NPC-300 "Class 1 Area" limits currently apply to the proposed LTC site. The applicable Class 1 noise guideline limits are:

- Facades:
  - $\circ~$  The higher of 50 dBA (Leq (1-hr) values) or the existing background ambient sound level, during the daytime (7am to 11pm)
  - The higher of 45 dBA (L<sub>eq</sub> (1-hr) values) or the existing background ambient sound level, during the night-time (11pm to 7am)
- Outdoor Amenity Areas
  - The higher of 50 dBA (L<sub>eq</sub> (1-hr) values) or the existing background ambient sound level, during the daytime (7am to 11pm)

HGC indicated in their memorandum (a copy of which is included as Attachment 1) that:

"The sound level limits applicable at existing points of reception surrounding Nitta Gelatin were established in the Acoustic Assessment Report ("AAR") maintained by HGC Engineering. Those limits are 53 dBA during daytime/evening hours (07:00 to 23:00) and 47 dBA during nighttime hours (23:00 to 07:00) and have been adopted at the proposed residential site for the purpose of this exercise." (emphasis added).

Thus, the applicable noise guideline limits at the proposed LTC are assumed to be:

- 53 dBA during the daytime; at facades and outdoor amenity areas; and
- 47 dBA during the night-time, at facades.

#### NITTA FACILITY SOUND LEVELS

The HGC memorandum further states that:

"The proposed residential building was added to our existing acoustical model of Nitta Gelatin and the surrounding area, and the sound levels of the facility were predicted at the west façade of the proposed building on all seven floors. The results of the predictions indicate that the sound levels of the Nitta Gelatin

facility would comply with the applicable MECP limit during daytime/evening hours (07:00 to 23:00). However, during nighttime hours, the sound levels of the facility would exceed the applicable limit by up to 2 dBA at the most impacted points on the west façade of the proposed building." (emphasis added).

Thus, from the HGC memorandum, the Nitta facility sound levels would appear to be:

- $\leq$  53 dBA during the daytime; at facades and outdoor amenity areas; and
- 49 dBA during the night-time (47 dBA + 2), at facades.

However, the Coulter Report states the following:

"Nitta Gelatin was contacted to obtain access to any sound assessments prepared for the facility. HGC Engineering has been working on the acoustic details for this plant since 2009 and responded on behalf of Nitta Gelatin in a letter dated November 24, 2021 (attached). Their correspondence states that the equipment at the plant will produce sound levels of 53dBA during the daytime and 47dBA nighttime at the west façade of the project." (emphasis added).

From the HGC correspondence, this is not the case. The values quoted are the guideline limits, not the facility sound level. The worst-case night-time sound level due to the Nitta facility is 49 dBA, 2 dBA higher than what the Coulter Report assumes. *Thus, any further discussion of guideline compliance in the Coulter report is based on incorrect values for the facility contribution.* 

#### COULTER ASSESSMENT OF NIGHT-TIME GUIDELINE LIMITS

Coulter provides their own assessment of potential noise guideline limits, based on potential future rail traffic volumes. MECP Publication NPC-300 allows for rail traffic to be included as an ambient noise source in determining applicable guideline limits, provided there are more than 40 trains during the daytime period (7am to 11pm) and 20 trains at night

Rail traffic on the nearby Metrolinx Newmarket Line does not currently meet that threshold, as there are only 23 trains during the day, and 1 train at night. However, Metrolinx has indicated that future line expansions may have up to 196 trains during the day and 36 trains at night. No time frame is provided by Metrolinx as to when these train volumes would be achieved. See **Attachment 2**.

Coulter has used these values to estimate future ambient sound levels/ guideline limits. It was assumed that the rail volumes would be achieved by 2035, and these values were then extrapolated "backwards" to determine a year when the guidelines would be met. The Coulter Report determines the guidelines would be met by 2025, and therefore, no additional noise mitigation is required.

There are several major issues of concern with this approach:

- 1) As discussed previously, the Coulter Report underestimates sound levels from the facility;
- 2) Under Publication NPC-300 noise guidelines, as a vacant lot the property becomes noise sensitive as soon as it is <u>zoned</u> for sensitive purposes. So, absent a hold zoning which would prevent the development from proceeding, the zoning would *immediately* place Nitta out of compliance with its MECP requirements, not at some future date. This was also noted in the HGC memorandum.
- 3) The assessment relies on future Metrolinx rail traffic volumes for which a date is not provided; and which are not written in stone. Any delay or changes in Metrolinx expansion plans in response to economic changes would make the Coulter analysis moot.
- 4) Coulter's assessment of rail traffic sound levels is based on diesel locomotives, rather than the planned quieter electric locomotives. Metrolinx requests that this approach be taken to determine façade design requirements for transportation noise, since electrification of the line may be delayed,

but it is not appropriate for determining stationary noise guideline limits, as once the line is electrified, the sound levels would drop. Therefore, the Coulter report over-estimates ambient sound levels and the corresponding guideline limits.

5) The façade locations at the corners of the development, which are most-exposed to rail traffic noise appears to have been used in the assessment (although this is unclear, as no figure clearly showing the assessment location is provided). While this is appropriate for determining façade design requirements for transportation noise, it is not appropriate for determining stationary noise guideline limits, as the location of worst-impact and lowest guideline limits will likely be at the shielded mid-point of the building. Therefore, the Coulter report over-estimates ambient sound levels and the corresponding guideline limits.

Considering the above, the conclusion in the Coulter Report that the guideline limits will be met by 2025 is not supportable. The Class 1 limits are not met. Absent noise mitigation or a hold zoning which would prevent the development from proceeding, approving the re-zoning for the LTC would *immediately* place Nitta out of compliance with its MECP requirements.

#### NOISE WARNING CLAUSES

The Coulter Report does not identify that Publication NPC-300 "Type E" Noise Warning Clause for stationary noise sources is required.

#### NOISE MITIGATION MEASURES

The HGC Memorandum identifies the most significant sources at Nitta and provides an initial discussion on noise mitigation measures which could be used to ensure compliance with the currently applicable Class 1 noise guideline limits. Such mitigation would be at the cost of the developer and determining specifics would require additional study.

Alternatively, a "Class 4" Area designation for the development lands could be sought from the City. A Class 4 Area designation is intended for new infill-type development in or near Employment Areas, and in our opinion would be appropriate in this case. However, a Class 4 designation would need to be specifically provided by the City in their role as the land use planning authority for the LTC development. With a Class 4 designation in place, the applicable NPC-300 noise guidelines are increased by 5 to 10 dB, and would be met at the development. Additional source-based or receptor-based mitigation would not be required. However, all units would require mandatory air conditioning and a Type F Noise Warning Clause

#### CONCLUSIONS AND RECOMMENDATIONS

There are significant issues with the analyses and conclusions of the GS2 D-6 Report and the Coulter Noise Report.

- Neither the GS2 Report nor the Coulter Report, alone or in combination, meet the requirements of a Compatibility/ Mitigation Study as required by the City for new sensitive developments in or near Employment Areas and Major Facilities;
- The requirements of Guideline D-6 for detailed assessments are not met. A detailed air quality study has not been completed, and significant issues have been identified with the noise study.
- Absent source-based and/or receptor based mitigation measures, rezoning of the property will immediately place Nitta Gelatin out of compliance with its MECP permit requirements for noise.

• In the absence of a detailed study and the specification and installation of mitigation measures, odour complaints at the proposed LTC are likely, and Nitta's compliance with applicable environmental policy, regulations, approvals, authorizations and guidelines will be jeopardized.

Should you have any questions or concerns, please do not hesitate to contact me.

Yours sincerely, SLR Consulting (Canada) Ltd.



**R. L. Scott Penton** Principal 519.363.3538

Attach



**ATTACHMENT 1** 

Howe Gastmeier Chapnik Limited 2000 Argentia Road, Plaza One, Suite 203 Mississauga, Ontario, Canada L5N 1P7 t: 905.826.4044

| Email Memorandum |   |                      |                   |  |  |
|------------------|---|----------------------|-------------------|--|--|
| То:              | John Romero (j.romero@nitta-gelatin.com)  | From :               | Corey Kinart      |  |  |
| Cc :             | Randy Robinson ( <u>r.robinson@nitta-gelatin.com</u> )  | Date :               | November 24, 2021 |  |  |
| <b>Company :</b> | Nitta Gelatin Canada Inc.   | <b>Total Pages :</b> | 3+1               |  |  |
| Re :             | <b>Re :</b> Preliminary Noise Assessment of a Proposed Residential Development 640 Lansdowne Avenue, Toronto, Ontario |                      |                   |  |  |

#### John,

As requested, HGC Engineering has undertaken preliminary analyses to assess the acoustical implications of a proposed residential development at 640 Lansdowne Avenue, approximately 90 metres east of the Nitta Gelatin facility, as summarized below.

#### Context

As you are aware, HGC Engineering has been assisting with the assessment and control of environmental noise emissions from the Nitta Gelatin facility since 2009. To date, those efforts have been focused on achieving compliance with the applicable sound level limits of the Ontario Ministry of the Environment, Conservation and Parks ("MECP") at existing homes neighbouring the facility to the southeast, west, north and northwest. The most recent assessment indicates that compliance with the MECP limits has been achieved at all existing receptors with the exception of a minor exceedance to the northeast, attributable to two compressor/room exhausts that were recently remeasured. This minor excess could be addressed with installation of a modest degree of acoustical silencing.

We understand Nitta Gelatin recently learned of a proposed residential development at 640 Lansdowne Avenue, on vacant lands approximately 90 metres east of Nitta Gelatin. The <u>development application</u> proposes to rezone the lands to permit a 7-storey building hosting 57 residential units and 256 long-term care beds. The development property and outline of the proposed building is shown in Figure 1.

# **Potential New Points of Reception & Sound Level Limits**

Based on the architectural plans submitted as part of the development application, there will be windows facing the Nitta Gelatin facility leading to noise-sensitive spaces on all seven floors of the building. Therefore, the preliminary analysis presented herein considers the entire west façade of the proposed building (facing toward Nitta Gelatin) to be noise sensitive.

The sound level limits applicable at existing points of reception surrounding Nitta Gelatin were established in the Acoustic Assessment Report ("AAR") maintained by HGC Engineering. Those limits are 53 dBA during daytime/evening hours (07:00 to 23:00) and 47 dBA during nighttime hours (23:00 to 07:00) and have been adopted at the proposed residential site for the purpose of this exercise.







# **Acoustical Modelling & Results**

The proposed residential building was added to our existing acoustical model of Nitta Gelatin and the surrounding area, and the sound levels of the facility were predicted at the west facade of the proposed building on all seven floors. The results of the predictions indicate that the sound levels of the Nitta Gelatin facility would comply with the applicable MECP limit during daytime/evening hours (07:00 to 23:00). However, during nighttime hours, the sound levels of the facility would exceed the applicable limit by up to 2 dBA at the most impacted points on the west facade of the proposed building.

- 2 -

Toward assessing the significance of this potential excess, the acoustical model was used to rank (in descending order) the contribution of individual noise sources at Nitta Gelatin to the total sound level of the facility predicted at the proposed development. The top contributing sources were identified as follows (the approximate location of each is indicated in Figure 1):

| Rank | Source ID  | Source Name                  |
|------|------------|------------------------------|
| 1    | CT3-Outlet | Cooling Tower 3 Outlet       |
| 2    | ME1        | Mushroom Cap Exhaust Fan     |
| 3    | NS-15      | Compressor Enclosure Exhaust |
| 4    | CT1-Outlet | Cooling Tower 1 Outlet       |
| 5    | COND1-1    | Chiller Unit 1 (Fans)        |

# Table 1: Top Sound Contributors at Proposed Residential Development

In order for the sound levels of the Nitta Gelatin facility to comply with the nighttime MECP limit, it is likely that the top three sources tabulated above would each require 5-10 dBA of attenuation. While this degree of noise control is not insignificant, in the context of the noise control implemented at the facility to date, it is likely quite feasible. If requested, we would be pleased to explore more specific noise control scenarios and measures that would be likely to attenuate the sound levels of the facility to within MECP limits at the proposed development site.

#### Discussion

Because the lands at 640 Lansdowne Avenue are not currently zoned to permit a noise-sensitive use, Nitta Gelatin is not obligated to comply with MECP limits on those lands. It is incumbent on the developer, as part of the planning process, to provide the City with a technical study demonstrating that the MECP limits will be met at the proposed development (i.e. the development will not put Nitta Gelatin out of compliance).

The development application was accompanied by a Noise Impact Feasibility Study prepared by J.E. Coulter Associates Limited (dated August 12, 2021). The study acknowledges the Nitta Gelatin facility, stating "This source is being investigated and the acoustic report will be updated with the conclusions from the investigation." We understand that Coulter has contacted Nitta Gelatin and requested access to the facility for acoustical measurements and for a copy of the latest AAR. Unless Nitta Gelatin intends to unilaterally oppose the development, it is in the company's interest to engage with Coulter to ensure that their study appropriately characterizes the sound emissions of Nitta Gelatin. The potential sound level excess discussed above is the responsibility of the developer to mitigate -i.e. talks with the developer may result in their agreeing to assume the cost of noise control required to mitigate facility sound levels to within MECP limits on their lands. Were the City to approve the development despite mischaracterization of sound emissions from Nitta Gelatin, it could become the sole responsibility of Nitta Gelatin to bear the cost of any noise control triggered by the presence of the development.







VIBRATION

In developing a response to the development application, it is important for Nitta Gelatin to consider the following:

- The MECP limits are based on one-hour average sound levels. However, normal operation of the Nitta Gelatin facility could result in brief, transient sounds (such as onsite movements of tractor trailers) that, while meeting the MECP limits, could have increased audibility and potential for disturbance to offsite residents, particularly those who are not accustomed to the sounds of the facility.
- Compliance with MECP limits does not guarantee that future occupants of the proposed development will not submit noise complaints to the City or the MECP. Were that to occur, either the City or MECP could compel Nitta Gelatin (at its own cost) to demonstrate compliance with the limits or to undertake additional measures to address complaints as their respective authority may permit.
- There may be other important factors for Nitta Gelatin to consider in the context of a proposed development that would introduce hundreds of new residents relatively close-by. Such factors may include dust/odour/light emissions from Nitta Gelatin, visual overlook of the development on Nitta Gelatin, potential concerns regarding truck traffic to/from the facility on Paton Road, etc.

If not already, it is recommended that Nitta Gelatin retain a professional planner and other technical consultants to provide advice on this matter, toward developing a response to the proposed development.

Upon considering the above information, we would be pleased to participate in a teleconference to discuss next steps. If, in the meantime, you have any questions or require any clarification, please don't hesitate to give me a call.

Best Regards, Howe Gastmeier Chapnik Limited

Corey Kinart, MBA, PEng

Any conclusions or recommendations provided by HGC Engineering in this letter/memo have limitations as detailed on our website: https://acoustical-consultants.com/limitations/.









Figure 1: Satellite Image Showing Proposed Development Site, Nitta Gelatin and Locations of Top Sound Contributors







# **ATTACHMENT 2**

Subject: RE: Rail data request for 640 Lansdowne From: Rail Data Requests <RailDataRequests@metrolinx.com> Date: 2022-04-21, 3:49 p.m. To: Tobin Cooper <tcooper@jecoulterassoc.com>

Good afternoon Tobin,

Further to your request dated March 18, 2022, the subject lands (640 Lansdowne Avenue, Toronto) are located within 300 metres of the Metrolinx Newmarket Subdivision (which carries Barrie GO rail service).

The current GO Rail traffic count is the following:

|                 | Diesel Locomotive |                   | Diesel Locomotive |
|-----------------|-------------------|-------------------|-------------------|
| Day (0700-2300) | 23                | Night (2300-0700) | 1                 |

It's anticipated that GO rail service on this Subdivision will be comprised of electric trains. The GO rail fleet combination on this Subdivision will consist of up to 2 locomotives and 12 passenger cars. The typical GO rail weekday train volume forecast near the subject lands, including both revenue and equipment trips is in the order of 232 trains. The planned detailed trip breakdown is listed below:

|                 | 1 Electric Locomotive | 2 Electric Locomotives |                   | 1 Electric Locomotive | 2 Electric Locomotives |
|-----------------|-----------------------|------------------------|-------------------|-----------------------|------------------------|
| Day (0700-2300) | 172                   | 24                     | Night (2300-0700) | 36                    | 0                      |

The current track design speed near the subject lands is 60 mph (97 km/h) with a permanent slow order of 30 mph (48 km/h).

There is an anti-whistling by-law in affect near the Wallace Avenue at grade crossing.

With respect to future electrified rail service, Metrolinx is committed to finding the most sustainable solution for electrifying the GO rail network and we are currently working towards the next phase.

Options have been studied as part of the Transit Project Assessment Process (TPAP) for the GO Expansion program, currently in the procurement phase. The successful proponent team will be responsible for selecting and delivering the right trains and infrastructure to unlock the benefits of GO Expansion. The contract is in a multi-year procurement process and teams have submitted their bids to Infrastructure Ontario and Metrolinx for evaluation and contract award. GO Expansion construction will get underway in late 2022 or 2023

However, we can advise that train noise is dominated by the powertrain at lower speeds and by the wheel- track interaction at higher speeds. Hence, the noise level and spectrum of electric trains is expected to be very similar at higher speeds, if not identical, to those of equivalent diesel trains.

Given the above considerations, it would be prudent at this time, for the purposes of acoustical analyses for development in proximity to Metrolinx corridors, to assume that the acoustical characteristics of electrified and diesel trains are equivalent. In light of the aforementioned information, acoustical models should employ diesel train parameters as the basis for analyses. We anticipate that additional information regarding specific operational parameters for electrified trains will become available in the future once the proponent team is selected.

Operational information is subject to change and may be influenced by, among other factors, service planning priorities, operational considerations, funding availability and passenger demand.

It should be noted that this information only pertains to Metrolinx rail service. It would be prudent to contact other rail operators in the area directly for rail traffic information pertaining to non-Metrolinx rail service.

I trust this information is useful. Should you have any questions or concerns, please do not hesitate to contact me.