December 15, 2020

NorthWest Healthcare Properties REIT
180 Dundas Street West, Suite 1100
Toronto, ON M5G 1Z8

Attn: Andrew Thompson
Executive Vice President, Development

Dear Mr. Thompson:

Re: Land Use Compatibility Study
20 Wynford Drive, Toronto
Gradient Wind File 20-284-AQ

1. INTRODUCTION AND TERMS OF REFERENCE

Gradient Wind Engineering Inc. (Gradient Wind) has been retained by NorthWest Healthcare Properties REIT to undertake a land use compatibility study, to support an Employment Land Conversion Request, for the property at 20 Wynford Drive in Toronto, Ontario. The complete scope of work within our mandate includes studies for air quality, odour, and noise impacts from surrounding industrial-use properties. The study is based on the Ontario Ministry of Environment, Conservation and Parks (MECP) Land Use Compatibility Guidelines (D-Series) and other relevant MECP guidelines.

The subject site is situated at the northeast corner of the intersection of Wynford Drive and Gervais Drive, and is surrounded by a mixture of low- and mid-rise commercial and office buildings in all directions, with residential areas to the north beyond the Canadian National rail line, to the south beyond Eglinton Avenue East, and to the west beyond the Don Valley Parkway. The relevant pollution sources surrounding the site include existing, nearby industrial and commercial facilities. Roadways and railways are not considered within the MECP D-Series guidelines.

2. STUDY METHODOLOGY

2.1 Identifying Critical Points of Impingement

The critical points of impingement for this study include fresh-air intakes, public sidewalks, walkways, building entrances, balconies, and terraces/green roofs devoted to common amenity space. Different receiver location types can have varying exposure times and sensitivities to pollutants. For instance, fresh-air intakes continuously provide air to the building's mechanical systems and can affect a large number of the building's occupants, making them the most sensitive. Main entrances operate intermittently, predominantly during daytime hours; therefore, the sensitivity of these locations is lower.

2.2 Identifying Emissions Sources

Following the definition of the critical points of impingement, a review of the study area was conducted to locate sources of airborne pollutants and odours. In general, emission sources that are considered as potentially influential to residential properties include nearby, existing industrial facilities.

Industrial processes are bound by the requirements of Section 9 of the Environmental Protection Act (EPA) R.S.O 1990 and Ontario Regulation (O. Reg.) 419/05 - Air Pollution and Local Air Quality. Section 9 of the Environmental Protection Act states that "*No person shall, except under and in accordance with an environmental compliance approval, use, operate, construct, alter, extend or replace any plant, structure, equipment, apparatus, mechanism or thing that may discharge or from which may be discharged a contaminant into any part of the natural environment other than water*". Despite compliance to Section 9 of the EPA, a facility may be liable under Section 14 of the EPA if they permit the discharge of a contaminant, including odour, which causes an adverse effect. Under O. Reg 419/05 "*a person shall not discharge a contaminant or cause or permit the discharge of a contaminant into the natural environment, if the discharge causes or may cause an adverse effect*".

In order to obtain and maintain an Environmental Compliance Approval (ECA) (formerly referred to as a Certificate of Approval (CoA)), the emitting source must show compliance with O. Reg. 419/05. Compliance with O. Reg. 419/05 for air emissions is shown through an Emissions Summary and Dispersion Modelling (ESDM) report. An ESDM report quantifies all emissions from a facility and must demonstrate, through air dispersion modelling, that contaminant concentrations are below standards prescribed in O.Reg 419/05 at all points of impingement.

To minimize the potential for adverse impacts of industrial activities on sensitive land uses the MECP has provided guidelines for adequate buffering of incompatible land uses under "Guideline D-6 Compatibility Between Industrial Facilities and Sensitive Land Uses". The minimum separation distances are based on both the size of a facility and the scope of industrial activities within the facility, classified as Class I, II, or III, for light, medium and heavy industrial uses, respectively. Table 1 summarizes the recommended separation distance and potential area of influence for each class. A sensitive development may be permitted within an industrial influence zone if appropriate air quality studies are undertaken and potential causes of adverse effects are mitigated.

TABLE 1: D-6 RECOMMENDED SEPERATION & INFLUENCE AREA

Class	Minimum Recommended Separation Distance (m)	Potential Influence Area (m)
I	20	70
II	70	300
III	300	1000

Based on a review of the surroundings via aerial imagery and a search of the MECP "Access Environment" database of registered ECA and EASR permit holders, the following industries have been identified. Two Class I facilities are located within the 70-metre influence zone, as detailed below.

39 Wynford Drive:

The property at 39 Wynford Drive, occupied by Royal LePage Real Estate Services Ltd., contains a standby diesel generator for use in emergency situations. This facility is classified as a Class I facility and is situated approximately 35 metres to the southeast of the subject site. As this facility has already completed the ECA process (ref. ECA number 9846-5DWUWQ) and is located beyond the minimum recommended separation distance for a Class I facility (20 metres), no air quality, odour, or noise impacts are expected.

825 Don Mills Road:

The property at 825 Don Mills Road, occupied by GC Project, Inc., as a general partner for an on behalf of GC Project L.P., contains a natural gas-fired reciprocating engine generator (model: CAT 3512) for use in emergency situations or during hours of peak demand (i.e., peak shaving). This facility is classified as a Class I facility and is situated approximately 60 metres to the southwest of the subject site. As this facility

has already completed the ECA process (ref. ECA number 4636-B32HS3), no air quality, odour, or noise impacts are expected.

Aside from the properties discussed above, no additional Class I industrial sources have been identified within the 70-metre zone of influence. There are no Class II or Class III industries within the 300-metre and 1000-metre influence zones, respectively. The surrounding properties with a valid ECA primarily comprise emergency generators, boilers, cooling towers, and water heaters, and are therefore classified as Class I facilities.

A waste disposal site, known as the Bermondsey Transfer Station with civic address 188 Bermondsey Road, is situated approximately 1.2 kilometers to the southeast of the subject site. As per "Guideline D-4 Land Use On or Near Landfills and Dumps", no land use is permitted within 30 metres of landfills or dumps and any significant impacts typically occur within 500 metres of the facility. As the transfer station is situated beyond 500 metres from the subject site, any air quality, odour, or noise impacts are anticipated to be trivial and in compliance with O. Reg 419 since the facility is currently operating with a valid ECA.

3. RESULTS AND CONCLUSIONS

In keeping with standard building construction and good engineering practice, as well as City of Toronto guidelines[1], the following comments and recommendations are provided to be incorporated into the design of the building to ensure indoor air quality is maintained for future developments:

(i) Sensitive land use is feasible.

(ii) In line with standard building practices, design, install, operate, and maintain air filtration at the fresh air intakes of the mechanical systems serving all habitable areas, including the addition of air conditioning. The areas that would not require filtered air would be parking garages and utility spaces. Minimum Efficiency Reporting Value (MERV) 8 certification filters should be used for this development. Details of the air filtration system will be designed by the mechanical engineers during the detailed design phase.

[1] City of Toronto – Application Support Material: Terms of Reference, Compatibility/Mitigation Study

This concludes our land use compatibility study and report. If you have any questions or wish to discuss our findings, please advise us. In the interim, we thank you for the opportunity to be of service.

Sincerely,

Gradient Wind Engineering Inc.

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