

NOISE

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Purpose

The purpose of this presentation is to further clarify noise assessment procedures and to answer common questions received from the regulated community

Vacant Lots

An Acoustic Assessment Report (AAR) must assess any vacant property/lot where zoning permits a construction of a building(s) with noise sensitive space including vacant lots that can accommodate either residential, institutional or commercial zoned lots

Definition of a vacant lot is referenced in the Point of Reception (POR) and Noise Sensitive Land Use definitions in the NPC-300

Noise control measures required to meet ministry's noise limits at a vacant lot (if warranted) can be deferred to the future, but normally to be installed not later than 12 months after the issuing of the building permit

Property/lot that would normally be considered noise sensitive, such as a dwelling, that is located within the property boundaries of the stationary source is not considered a noise sensitive point of reception in the assessment

Property/lot that is owned by an applicant and is adjacent to or located in proximity to the property boundaries of the stationary source is considered a noise sensitive land use in the assessment

Startup/Shutdown Operation

Startup/shutdown and stepup/stepdown operations of the facility/equipment need to be included in the “predictable worst case” noise impact assessment

Infrequent Operation

Definition of infrequent operation as included in the NPC-300 (Page 16)

- *Operations of equipment (stationary sources) that occur at least twice a month and emit noise for at least one half hour on each occasion are considered planned and predictable even if they are not occurring at precisely the same time on each occurrence, and are included in the predictable worst case scenario*

The ministry may require more information and possibly require assessment for some noise sources, which may appear to be infrequent, due to significance of their noise emissions and proximity to the POR

Same approach may be used for some sources/operation which may not even occur every month, but when they occur they may last longer and have significant noise impact

Institutional/Commercial Points of Reception

Definition of institutional and commercial POR as per NPC-300 (Page 16)

- *Noise sensitive commercial purpose building means a building used for a commercial purpose that includes one or more habitable rooms used as sleeping facilities such as a hotel and a motel*
- *Noise sensitive institutional purpose building means a building used for an institutional purpose, including an educational facility, a day nursery, a hospital, a health care facility, a shelter for emergency housing, a community centre, a place of worship and a detention centre. A place of worship located in commercially or industrially zoned lands is not considered a noise sensitive institutional purpose building*

If the institutional/commercial purpose building have operable windows, the plane of the window (associated with noise sensitive spaces) with the highest predictable worst case noise impact should be considered as the PORs for the purpose of the acoustic assessment

Outdoor locations associated with a noise sensitive institutional or a noise sensitive commercial purposes are not considered to be the Points of Reception

Institutional/Commercial Points of Reception

The fixed/inoperable windows that are associated with a noise sensitive commercial purpose building or a noise sensitive institutional purpose building may not be considered to be the Points of Reception

- The use of inoperable windows generally requires acoustical assessment and enhanced window design to ensure the indoor acoustical environment will be suitable
- Assurance will need to be provided to the facility/stationary source that the fixed/inoperable windows are present and permanent for as long as the stationary source continues to operate

Noise Abatement Action Plan

If the detailed Acoustic Assessment Report shows that the noise impact from the facility is not in compliance with the applicable sound level limits at all receptors, then the company shall develop a detailed Noise Abatement Action Plan (NAAP)

The NAAP shall include:

- Detailed description of the proposed Noise Control Measures (NCMs) such as the silencers, enclosures, acoustical louvers (including individual acoustical performance specifications such as the octave band insertion losses, transmission losses) and barriers/berm (include figures showing the barriers/berms locations, shapes, dimensions - lengths, heights)
- Detailed timetable for implementing the proposed NCM, with the objective to ensure that the noise emissions from the facility comply with the sound level limits in Publication NPC-300
- It is very important to ensure that the proposed NCMs are feasible/available and that proponent clearly understands what and how they should be implemented in order to ensure desired noise attenuation levels
- Proposed time periods for implementation of the proposed NAAP should be discussed and be supported by the local Ministry's District Office

Noise Abatement Action Plan

Approval services team reviews the technical part of the NAAP

NAAP is only applicable to the existing facilities.

New proposed facilities are expected to show the compliance with the applicable sound level limits at all receptors from the start of their operations