APPENDIX B

GLOSSARY OF TERMS
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For purpose of this Policy the meanings to the following words or expressions shall apply:

In order to ensure that there is a clear interpretation of this Policy and any subsequent legislation in the form of by-laws, it is essential that there should be a concise and unambiguous definition of all words and expressions contained herein.

**Ambient sound level or ambient noise** means the totally encompassing sound in a given situation at a given time, and usually composed of sound from many sources, both near and far. Note that ambient noise includes the noise from the noise source under investigation. The use of the word *ambient* should however always be clearly defined (compare with *residual noise*).

**Animal** means all wild and domestic animals kept as pets, as well as farm animals and shall include birds and poultry;

**A-weighted sound pressure, in Pascals**: The root-mean-square sound pressure determined by use of frequency-weighting network A (see IEC 651).

**A-weighted sound pressure level (SPL) (noise level) (LpA), in decibels**: The sound pressure level of A-weighted sound pressure is given by the equation:

\[
L_{pA} = 10 \log \left( \frac{p_A}{p_o} \right)^2
\]

Where

- \( p_A \) is the A-weighted sound pressure, in Pascals; and
- \( p_o \) is the reference sound pressure (\( p_o = 20 \) micro Pascals (µPa))

**Note**: The internationally accepted symbol for sound pressure level, dBA, is used throughout this Policy.

**Controlled area** (also called a Noise Control Area and for this Policy called a *supplementary controlled area*) means a piece of land which is so designated by the Council:

- Where (for the Gauteng Province), in the case of road traffic noise such a piece of land is directly adjacent to a road and the reading on an integrating impulse sound level meter, taken outdoors at the end of a period of 24 hours while such meter was in operation, exceeds 60dBA; or the outdoor equivalent continuous A-weighted sound pressure level at a height of at least 1,2 metres, but not more than 1,4 metres, above the ground for a period of 24 hours as calculated in accordance with SANS 10210, and projected for a period of 15 years following the date on which the local authority has made such designation, exceeds 60dBA. Refer to Note in Table 3.8.3, Section 3.8.3 of the Policy.

- Where (for the North West Province), in the case of road traffic noise such a piece of land is
directly adjacent to a road and the reading on an integrating impulse sound level meter, taken outdoors at the end of a period from 06h00 to 24h00 hours while such meter was in operation, exceeds 65dBA; or the outdoor equivalent continuous A-weighted sound pressure level at a height of at least 1,2 metres, but not more than 1,4 metres, above the ground for a period from 06h00 to 24h00 as calculated in accordance with SANS 10210, and projected for a period of 15 years following the date on which the local authority has made such designation, exceeds 65dBA. Refer to Note in Table 3.8.3, Section 3.8.3 of the Policy.

- Where, in the case of air traffic noise such a piece of land is directly adjacent to an airfield and the calculated noisiness index, projected for a period of 15 years following the date on which the local authority made such designation, exceeds 65dBA.

- Where, in the case of industrial noise such a piece of land is directly adjacent to an industry and the reading on an integrating impulse sound level meter, taken outdoors at the end of a period of 24 hours while such meter was in operation, exceeds 60dBA; or the calculated outdoor equivalent continuous A-weighted sound pressure level at a height of at least 1,2 metres, but not more than 1,4 metres, above the ground for a period of 24 hours, exceeds 60dBA.

- Where, in the case of noise from any other source directly adjacent to such a piece of land, the reading on an integrating impulse sound level meter, taken outdoors at the end of a period extending from the time when such source of noise became active until the time when it was no longer active, while such meter was in operation, exceeds 65dBA; or the outdoor equivalent continuous A-weighted sound pressure level at a height of at least 1,2 metres, but not more than 1,4 metres, above the ground, as calculated in accordance with acceptable mathematical/acoustic methods for a period extending from the time when the source of noise became active until the time when it was no longer active, and projected for a period of 15 years following the date on which the local authority made such designation, exceeds 65dBA. The methods of calculation as described in SANS 0328:2000 should be used for this purpose.

This is one of the three possible regulating area definitions to be used by Council to define where specific noise standards are applicable.

**Council** means City of Tshwane Metropolitan Municipality Council.

**dBA** means the value of the sound pressure level in decibels, determined using a frequency weighting network A.

**Disturbing noise** means a noise level that exceeds the ambient sound level of the noise zone as measured continuously at the same measuring point according to SANS 10103:2003.

**Environment** means the external circumstances, conditions and objects the affect the existence and/or development of an individual, organism or group. These circumstances include biophysical, social, economic, historical, cultural and political aspects.

**Environmental impact assessment (EIA)** means a detailed study of the environmental consequences of a proposed course of action. An environmental assessment or evaluation is a study of the environmental
effects of a decision, project, undertaking or activity. It is often used within the Integrated Environmental Management (IEM) planning process as a decision support tool to compare different options.

Environmental impact means a change in the socio-economic and/or biophysical characteristics caused directly or indirectly by some human action whether adverse or beneficial.

Environmental management programme means documented description of the requirements and procedure for achieving environmental objectives and targets.

Environmental management system (EMS) means documented procedures drawn up as described in a South African Bureau of Standards (SABS) code of practice to implement the requirements of ISO 14000. Operating, emergency, data collection and documentation procedures are set out, along with procedures for training, the transfer of information and all the elements of a complete management and quality control system.

Environmentally sensitive area means any natural area having significant natural resource value, of and/or important ecological function, any agricultural land or any land uses in urban areas which are susceptible to disturbance from human activities, inclusive of areas of cultural/historical value.

Environmental sustainability means the ability of an activity to continue indefinitely, at current and projected levels, whilst maintaining or substituting for social, cultural and natural resources required to meet present and future needs.

Equivalent continuous sound level \( (L_{eq}) \) means that sound level which contains the same quantity of sound energy over a defined time period as the actual time varying sound level.

Erect also means alter, convert, extend or re-erect.

Exempted vehicle means a vehicle listed in Annex A to SANS 10281.

IEC 651 means International Electrotechnical Commission publication No 651 titled Sound Level Meters.

IEC 804 means international Electrotechnical Commission publication No 804 titled Integrating Averaging Sound Level Meters.

IEC 942 means International Electrotechnical Commission publication No 942 titled Sound Calibrators.

Integrating sound level meter means a device that integrates a function of the root means square value of sound pressure over a period of time and indicates the result in dBA.

Integrating impulse sound level meter means an integrating sound level meter set on I-time weighting.

Land-use zones shall mean the land uses as defined in the City of Tshwane Town Planning Scheme and as designated by Council.
**Measuring point**, related to-

- a piece of/and from which an alleged disturbing noise emanates, means a point outside the property projection plane where an alleged disturbing noise shall be measured in accordance with current standard practice;

- a building with more than one occupant, means a point in or outside the building where an alleged disturbing noise shall be measured in accordance with current standard practice, namely SANS 10103:2003;

- a stationary vehicle, means a point as described in SANS 10181 where a measuring microphone shall be placed.

**Noise** means any acoustic phenomenon producing any aural sensation perceived as disagreeable or disturbing by an individual or group. Noise may therefore be defined as any *unwanted* sound or sound that is *loud, unpleasant or unexpected*.

**Noise climate** is a term used to describe the general character of the environment with regard to sound. It includes the qualitative aspect as well as the ambient noise level and character of the fluctuating noise component.

**Noise control officer** means a person with a qualification equivalent to a senior certificate plus three years tertiary education in engineering, physical sciences or health sciences and who is registered with a professional council.

**Noise district** means a defined generalised land use area for which permissible maximum sound pressure level criteria are prescribed. It is one of the three possible regulating area definitions to be used by Council to define where specific noise standards are applicable.

**Noise level** means the reading on an integrating impulse sound level meter taken at a measuring point in the presence of any alleged disturbing noise at the end of a total period of at least 10 minutes after such meter was put into operation, and, if the alleged disturbing noise has a discernible pitch, for example, a whistle, buzz, drone or music, to which 5dBA has been added.

**Noise nuisance** means any sound which disturbs or impairs or may disturb or impair the convenience or peace of any reasonable person considering the location and time of day. This applies to a disturbance which is not quantitatively measurable such as barking dogs, etc. (compared with disturbing noise which is measurable).

**Noise sensitive area** means any area where a *disturbing noise or noise nuisance* will have a detrimental impact on the residents or users of facilities in that area and/or will have a detrimental impact on any fauna, either domestic or wild, in that area.

**Noisiness index** means a number value expressed in dBA as defined in SANS 10117.

**Noise zone** means a defined area based on specific land use types for which prescribed maximum sound
pressure level criteria are prescribed. It is one of the three possible regulating area definitions to be used by Council to define where specific noise standards are applicable.

**Non-exempted vehicle** means a vehicle not listed in Annexure A to SANS 10281.

**Plant** means electro-mechanical equipment such as a refrigeration machine, air-conditioner, fan system, compressor power generator, pumps, etc.

**Property projection plane** means a vertical plane on, and including, the boundary line of a piece of land defining the boundaries of such piece of land in space.

**Rating level (Lr)** means the equivalent continuous A-weighted sound pressure level during a specified time interval, plus specified adjustments for tonal character and impulsiveness of the sound.

**Recreational vehicle** means –

- an off-road vehicle, scrambler, dune buggy or ultra-light aircraft;
- a model aircraft, vessel or vehicle;
- any aircraft or helicopter used for sport or recreational purposes;
- a vessel used on water; or
- any other conveyance, vessel or model used for sport or recreational purposes.

**Residual sound level** means the ambient noise that remains at a position in a given situation when one or more specific noises are suppressed (compare with ambient noise).


**SANS 10117** means the South African National Standard titled *Determination and Limitation of Disturbance around an Aerodrome due to Noise from Aeroplanes*.

**SABS 0181** means South African Bureau of Standard titled *Measurement of Noise Emitted by Road Vehicles when Stationary*.

**SANS 10210** means the South African National Standard *Code of Practice for Calculating and Predicting Road Traffic Noise*.

**SANS 10281** means the South African National Standard titled *Engine Speed (S values), Reference Sound Levels and Permissible Sound Levels of Stationary Road Vehicles*.

**Sound (pressure) level** means the reading on a sound level meter taken at a measuring point.

**Sound level meter** means a device measuring sound pressure while it is set on F-time weighting and indicates the result in dB(A).

**Supplementary controlled area** see controlled area.
**Target area** means a demarcated area on which the noise impact is being assessed.


**Zone sound level** means a derived dBA value determined indirectly by means of a series of measurements, calculation or application of desirable standards and/or as designated by Council for an area.

Refer also to the various Glossary of Terms and Definitions in the Acts and Standards given in the references (Section 5 of the Policy) if more specific aspects are required.