

PN. 242

7 November 1997

## **ENVIRONMENT CONSERVATION ACT, 1989 (ACT NO. 73 OF 1989) NOISE CONTROL REGULATIONS FOR THE FREE STATE PROVINCE**

Under the powers vested in me by section 25 of the Environment Conservation Act, 1989 (Act No. 73 of 1989), I, P.H.I. Makgoe, Member of the Executive Council of the Province responsible for Environmental Affairs and Tourism, hereby declare the noise control regulations for execution by the Local Authorities.

P.H.I. MAKGOE

Member of the Executive Council: Environmental Affairs and Tourism.

### **SCHEDULE**

#### **Definitions**

1. In these regulations any word or expression to which a meaning has been assigned in the Act, shall have the meaning so assigned to it and, unless the context otherwise indicates -

**ambient sound level** means the reading on an integrating impulse sound level meter taken at a measuring point in the absence of any alleged disturbing noise at the end of a total period of at least 10 minutes after such meter was put into operation;

**animal** also means birds and poultry;

**controlled area** means a piece of land designated by a local authority where, in the case of -

- (a) road traffic noise directly adjacently to a road -
  - (i) the reading on an integrating impulse sound level meter, taken outdoors at the end of a period extending from 06:00 to 24:00 while such meter was in operation, exceeds 65 dBA; or
  - (ii) 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 extending from 06:00 to 24:00 as calculated in accordance with SABS 0210, and projected for a period of 15 years following the date on which the local authority has made such designation, exceeds 65 dBA;
- (b) air traffic noise directly adjacently to an airfield, the calculated noisiness index, projected for a period of 15 years following the date on which the local authority made such designation, exceeds 65 dBA;
- (c) industrial noise directly adjacently to an industry -
  - (i) 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 61 dBA; or
  - (ii) 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 61 dBA; or

- (d) noise from any other source directly adjacently to that source -
- (i) 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 65 dBA; or
- (ii) the outdoor equivalent continuous "X" 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 65 dBA: Provided that methods of calculation as described in SABS ARP 020 may be used for this purpose;

**dBA** means the value of the sound pressure level in decibels, determined using a frequency weighting network A, and derived from the following equation:

$$L_{p_A} = 10 \log_{10} \left[ \frac{p_A}{p_o} \right]^2$$

where-

$p_A$  = the "A"-weighted sound pressure; and

$p_o$  = the reference sound pressure ( $p_o = 20 \mu\text{Pa}$ );

**disturbing noise** means a noise level that exceeds the ambient sound level measured continuously at the same measuring point by 7 dBA or more;

**erect** also means alter, convert, extend or re-erect;

**exempted vehicle** means a vehicle listed in Annex A to SABS 2081;

**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 mean 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;

**measuring point**, relating to -

- (a) a piece of land 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 the provisions of regulation 6;

- (b) 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 the provisions of regulation 6; and
- (c) a stationary vehicle, means a point as described in SABS 0181 where a measuring microphone shall be placed;

**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 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 5 dBA has been added;

**noise nuisance** means any sound which disturbs or impairs or may disturb or impair the convenience or peace of any person;

**noisiness index** means a number expressed in dBA as defined in SABS 0117;

**non-exempted vehicle** means a vehicle not listed in Annex A to SABS 0281;

**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;

**recreational vehicle** means -

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

**SABS ARP 020** means South African Bureau of Standards publication No. 020 titled: "Sound impact investigations for integrated environmental management";

**SABS 0117** means South African Bureau of Standards publication No. 0117 titled: "Code of Practice for the determination and limitation of disturbance around an aerodrome due to noise from aeroplanes";

**SABS 0181** means South African Bureau of Standards publication No. 0181 titled: "Code of Practice for the measurement of noise emitted by road vehicles when stationary";

**SABS 0210** means South African Bureau of Standards publication No. 0210 titled: "Code of Practice for calculating and predicting road traffic noise";

**SABS 0281** means South African Bureau of Standards publication No. 0281 titled: "Engine speed (S values), reference sound levels and permissible sound levels of stationary road vehicles";

**sound level** means the reading on a sound level meter taken at a measuring point;

**the Act** means the Environment Conservation Act, 1989 (Act No. 73 of 1989).

### **Powers of a Local Authority**

2. A local authority may -

- (a) for the purposes of applying these regulations, at any reasonable time enter a premises without prior notice -
  - (i) to conduct thereon any appropriate examination, enquiry or inspection as it may deem expedient; and
  - (ii) to take any steps it may deem necessary;
- (b) in order to determine whether a vehicle using any road in the area of jurisdiction of that local authority, including a private, provincial or national road crossing its area of jurisdiction, complies with the provisions of these regulations, instruct the owner or person in control of the vehicle -
  - (i) to have any appropriate inspection or test as such authority may deem necessary conducted on the vehicle on a date and at a time and place determined by the local authority in writing;
  - (ii) to stop the vehicle or cause it to be stopped;
- (c) if a noise emanating from a building, premises, vehicle, recreational vehicle or street is a disturbing noise or noise nuisance instruct in writing the person causing such noise or who is responsible therefor, or the owner or occupant of such building, premises, vehicle, recreational vehicle or street from which or from where such noise emanates or may emanate, or all such persons, to discontinue or cause to be discontinued such noise within the period stipulated in the instruction: Provided that the provisions of this paragraph shall not apply in respect of a disturbing noise or noise nuisance caused by rail vehicles or air traffic or by vehicles that are not used as recreational vehicles on a public road;
- (d) before changes are made to existing facilities or existing uses of land or buildings, or before new buildings are erected, in writing require that noise impact assessments or tests be conducted to the satisfaction of that local authority by the owner, developer, tenant or occupant of the facilities, land or buildings and that reports or certificates relating to the noise impact to the satisfaction of that local authority be submitted by the owner, developer, tenant or occupant to the local authority;
- (e) if excavation work, earthmoving work, pumping work, drilling work, construction work or demolition work or any similar activity, power generation or music causes or may cause a noise nuisance or a disturbing noise, instruct in writing that such work, activity, generation or music be forthwith discontinued until such conditions as the local authority may deem necessary have been complying with;
- (f) designate a controlled area in its area of jurisdiction or amend or cancel an existing controlled area by notice in the Official Gazette concerned;

- (g) if the owner or person in charge of an animal fails to comply with an instruction referred to in paragraph (c), subject to the applicable provisions of any other law, impound or cause to be impounded such animal;
- (h) subject to the provisions of regulation 8 and the applicable provisions of any other law, attaches a vehicle if the sound level of such vehicle exceeds the sound level referred to in regulation 3(h) by more than 5 dBA;
- (i) impose such appropriate conditions as it deems fit when granting any permission or exemption in terms of these regulations;
- (j) set conditions relating to noise control to be included in the conditions of the establishment of a new township, in order to achieve the objectives of the Act;
- (k) subject to the applicable provisions of any other law, place or cause to be placed measuring instruments or similar devices, road traffic signs or notices at any place within its area of jurisdiction for the enforcement of the provisions of these regulations: Provided that road traffic signs and notices shall be placed on private property only with the permission of the owner.

### **General prohibition**

#### **3. No person shall -**

- (a) establish a new township unless the lay out plans concerned, if required by the local authority, indicated in accordance with the specifications of the local authority the existing and future sources of noise, with concomitant dBA values, which are foreseen in the township for a period of 15 years following the date on which the erection of the buildings in and around the township commences;
- (b) erect educational, residential, flat, hospital, church or office buildings in an existing township in a controlled area, unless acoustic screening measures have been provided in the building to limit the reading on an integrating impulse sound level meter, measured inside the building after completion, to 40 dBA: Provided that any air-conditioning or ventilating system shall be switched off during the course of such noise measurements;
- (c) make changes to existing facilities or existing uses of land or buildings or erect new buildings, if these will house or cause activities, that will, after such changes or erection, cause a disturbing noise, unless precautionary measures to prevent the disturbing noise has been taken to the satisfaction of the local authority;
- (d) build a road or change an existing road, or later the speed limit on a road, if this will cause an increase in noise in or near residential areas, or office, church, hospital or educational buildings, unless the need for noise control measures has been properly determined by the local authority in consultation with the road authority concerned to ensure that the land in the vicinity of such roads will not be designated as a controlled area;
- (e) situate educational, residential, hospital or church erven within a controlled area in a new township or an area which has been rezoned: Provided that such situations may be allowed by the local authority concerned in accordance with the acoustic screening measures mentioned by that local authority in the approved building plans;
- (f) fail to comply with a written condition, written instruction, written notice, a written requirement or written demand issued by a local authority in terms of these regulations;

- (g) stage an open-air music festival or similar gathering without the prior consent in writing of a local authority;
- (h) drive a vehicle, or allow it to be driven, on a public road, if the sound level at the measuring point measured in accordance with the procedure prescribed in SABS 0181 exceeds:
- (i) in the case of a non-exempted vehicle, the sound level specified in Table 1 of SABS 0281 for that type of vehicle;
- (ii) in the case of an exempted vehicle, the applicable reference sound level indicated in the tables of Annex A to SABS 0281, for that type of vehicle, by more than 5 dBA;
- (i) tamper with, remove, put out of action, damage or impair the functioning of a noise monitoring system, noise limiter, noise measuring instrument, acoustic devices, road traffic sign or notice placed in a position by or on the behalf of a local authority;
- (j) for the purpose of these regulations, in respect of a duly authorised employee of a local authority -
  - (i) fail or refuse to grant admission to such employees to enter and to inspect a premise;
  - (ii) fail or refuse to give information which may lawfully be required to him or her to such employees;
  - (iii) hinder or obstruct such employees in the execution of his or her duties; or
  - (iv) give false or misleading information to such employees.

#### **Prohibition of disturbing noise**

4. No person shall make, produce or cause a disturbing noise, or allow it to be made, produced or caused by any person, animal, machine, device or apparatus or any combination thereof.

#### **Prohibition of noise nuisance**

5. No person shall -
- (a) operate or play, or allow to be operated or played, a radio, television set, drums, musical instrument, sound amplifier, loudspeaker system or similar device producing, reproducing or amplifying sound so as to cause a noise nuisance;
  - (b) offer any article for sale by shouting, ringing a bell or making other sounds or by allowing shouting, the ringing of a bell or the making of other sounds in a manner which may cause a noise nuisance;
  - (c) allow an animal owned or controlled by him or her to cause a noise nuisance;
  - (d) build, makes, constructs, repairs, rebuilds, modifies, operates or test a vehicle, vessel, aircraft or object on or near residential premises, or allow it to be built, made, constructed, repaired, rebuilt, modified, operated or tested, if this may cause a noise nuisance;
  - (e) erect a building or structure on residential premises or allow it to be erected if this may cause a noise nuisance;
  - (f) use or discharge any explosive, firearm or similar device that emits impulsive sound and may cause a noise nuisance, or allow it to be used or discharged, except with the prior

consent in writing of the local authority concerned and subject to such conditions as the local authority may deem necessary;

- (g) on a piece of land or in water or in airspace above that piece of land designated by a local authority by means of a notice in the press -
- (i) move about on or in a recreational vehicle;
- (ii) exercise control over a recreational vehicle; or
- (iii) as the owner or person in control of the piece of land, water or airspace, allow such activity to take place;

if this may cause a noise nuisance;

- (h) except in an emergency, emits a sound, or allow a sound to be emitted by means of a bell, carillon, siren, hooter, static alarm, whistle, loudspeaker or similar device, if it may cause a noise nuisance;
- (i) operate any machinery, saw, sander, drill, grinder, lawnmower, power garden tool or similar device or allow it to be operated, if it may cause a noise nuisance;
- (j) load, unloads, opens, shut or in any other way handle a create, box, container, building material, rubbish container or any other article, or allow it to be loaded, unloaded, opened, shut or handled, if this may cause a noise nuisance;
- (k) drive a vehicle on a public road in such a manner that it may cause a noise nuisance;
- (l) use any power tool or power equipment used for construction work, drilling work or demolition work, or allow it to be used, in or near a residential area if it may cause a noise nuisance.

### **Use of measuring instruments**

6.(1) Any person taking readings shall ensure that -

- (a) sound measuring instruments comply with the requirements for type 1 instruments in accordance with IEC 651, IEC 804 and IEC 942 as the case may be;
  - (b) the acoustic sensitivity of sound level meters is checked before and after every series of measurements by using a sound calibrator, and shall reject the result if the before and after calibration values differ by more than 1 dBA;
  - (c) the microphones of sound measuring instruments are at all times provided with a windshield;
  - (d) the sound measuring instruments are operated strictly in accordance with the manufacturer's instructions; and
  - (e) sound measuring instruments are verified annually by a calibration laboratory for compliance with the specifications for accuracy of national codes of practice for acoustics, to comply with the Measuring Units and National Measuring Standards Act, 1973 (Act No. 76 of 1973).
- (2) The measurement of dBA values in respect of controlled areas, ambient sound levels or noise levels in terms of these regulations shall be done as follows:

- (a) Outdoor measurements on a piece of land: By placing the microphone of an integrating impulse sound level meter at least 1,2 metres, but not more than 1,4 metres, above the ground and at least 3,5 metres away from walls, buildings or other sound-reflecting surfaces.
- (b) Indoor measurements in a room or enclosed space: By placing the microphone of an integrating impulse sound level meter at least 1,2 metres, but not more than 1,4 metres, above the floor and at least 1,2 metres away from the wall.
- (3) Any deviation from heights and distances referred to in subregulation (2) shall be reported with the furnishing of reasons.

### **Exemptions**

- 7.(1) The provisions of these regulations shall not apply, if -
  - (a) the emission of sound is necessary for the purpose of warning people of a dangerous situation; or
  - (b) the emission of sound takes place during an emergency.
- (2) Any person may by means of a written application, in which the reasons are given in full, apply to the local authority concerned for exemption from any provision of these regulations.
- (3) An exemption shall be granted by a local authority in writing, and the conditions under which and the period for which such exemption is granted shall be stipulated in such exemption.
- (4) An exemption shall not take effect before the applicant has undertaken in writing to comply with all conditions imposed by a local authority under subregulation (3): Provided that if activities are commenced before such undertaking has been submitted to the local authority concerned, the exemption shall lapse.
- (5) If any condition of exemption is not complying with, the exemption shall lapse forthwith.

### **Attachment**

- 8.(1) A vehicle attached under regulation 2(h) shall be kept in safe custody by a local authority.
- (2) A local authority may lift the attachment contemplated in regulation 2(h) if the owner or person in control of the vehicle concerned has been instructed in writing by such authority -
  - (a) to repair or to modify the vehicle concerned or to cause it to be repaired or to be modified; and
  - (b) to have any inspection or test as such authority may deem necessary conducted on the vehicle on a date and at a time and place mentioned in the instruction.

### **Penalties**

- 9. Any person who contravenes or fails to comply with a provision of regulation 3, 4 or 5 shall be guilty of an offense and liable on conviction to a fine not exceeding R20 000 or to imprisonment for a period not exceeding two years, or to both such fine and such



imprisonment, and, in the event of a continuing contravention, to a fine not exceeding R250 or to imprisonment for a period not exceeding twenty days, or to both such fine and such imprisonment, for each day on which such contravention continues.

### **Application of regulations**

- 10.(1) All local authorities shall apply all these regulations, with the exception of regulation 3(a), (b), (c), (d) and (e): Provided that if a local authority has a noise control officer at its disposal, all these regulations shall be applied.
- (2) A local authority may in terms of section 28A of the Act apply in writing with the furnishing of reasons, for exemption from the application of any provision of these regulations.
- (3) Exemption from the application of all these regulations shall be considered in accordance with policy determined under section 2 of the Act.

### **Repeal of existing regulations**

11. The regulations published under Government Notice No. R.154 of 10 January 1992 are hereby repealed.