# Addressing Concerns in the Control of Noise Pollution under National Environmental (Noise and Control) Regulations 2009

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#### Abstract

Noise pollution has posed a great danger to the health and wellbeing of Nigerians for many years without adequate legal intervention. The introduction of the National Environmental (Noise and Control) Regulations, 2009 (hereafter called 'the Regulation) was therefore a welcome development. The Regulation is aimed at controlling noise pollution in Nigeria by setting maximum permissible noise levels that can be emitted from different sources and activities. However, this paper finds that certain provisions in the Regulation are capable of impeding the realisation of the objective of the Regulation. The paper finds that these provisions are included in the Regulation without the drafters taking into consideration, the peculiarity of the Nigerian situation. For instance, granting largely unqualified permit to noise emitters to emit noise beyond the level permitted by the Regulation in a country where getting citizens to comply with laws is already a difficult task, makes the Regulation self-defeatist. The time frame and use duration when noise can be emitted in the environment also does not take the peculiarity of the Nigerian environment into consideration. The way the language of some of the provisions is couched is vague and will make compliance and enforcement difficult. Consequently, the paper concludes that the National Environmental Standards Regulations and Enforcement Agency (NESREA) needs to review the Regulation in line with observations made therein, if the Regulation will achieve its goal.

### Introduction

Noise is one of the fastest growing environmental concerns.<sup>1</sup> In Nigeria, noise pollution is becoming an increasingly perceptible nuisance in the cities and towns. Residents of these cities suffer varying kind of noise disturbances: noise vibrated by music systems (a visit to the shop of an electronics dealer or record dealer will afford one a firsthand experience of this kind of noise), power generating plants, transportation (includes noise from aircrafts), construction, industrial and religious activities. There is also the indiscriminate and unduly prolonged blaring of horns by vehicle owners and motorcyclists. Dare we mention the ever mounting menace of howling siren vehicles belonging to government officials and police bullion vans? Recently, the Lagos State Environmental Protection Agency (LASEPA) shut down 30 churches and mosques; 10 clubs and hotels over air and noise pollution.<sup>2</sup>

The subjectivity of noise pollution makes it very difficult to tackle by traditional legal mechanisms, which usually set objective criteria as to when and at what level pollutants should be controlled. Some efforts have however been made both internationally and nationally. On the national level in Nigeria, there is no specific legislation on noise control as we have in other countries.<sup>3</sup> Some countries even have different legislation for

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<sup>&</sup>lt;sup>1</sup> Thornton, J. and Silas B. *Environmental Law* 2<sup>nd</sup> edn. (London: Sweet and Maxwell Limited, 2004) p.1 at 307.

<sup>&</sup>lt;sup>2</sup> 'Lagos State shuts down Kanu Nwankwo's hotel, Churches and Mosques', The Expressnews, 4<sup>th</sup> August, 2015 at <u>http://theexpressnews.com/lagos-shuts-down-kanu-nwankwos-hotelchurches-mosques/</u> accessed on 7<sup>th</sup> August, 2015.

<sup>&</sup>lt;sup>3</sup> The Noise Control Act, 1972 (USA), Environmental Protection Agency Act, 1992 (Noise) Regulations, 1994 (Ireland), Noise Act, 1996 (UK), Noise Pollution Control Rules, 2000 (India), Noise Abatement Act, 1997 (Jamaica) and many European countries emulated the Noise control Act of USA. See Ijaiya, H., 'The Legal Regime of Noise Pollution in Nigeria' Vol. 5 (1) (2014) *Beijing Law Review*, pp 1-6,.

different noise sources.<sup>4</sup>Although, a bill on noise control has been before the National Assembly since 2005, it is yet to be passed into law.<sup>5</sup> In the meantime, there is the National Policy on the Environment which makes a terse provision for noise pollution the National Environmental Protection (Pollution control. Abatement in Industries and Facilities Generating Wastes) Regulation, 1991, the National Guidelines and Standards for Environmental pollution Control and the most recent being the Environmental (Noise Standards and Control) National Regulations, 2009 (hereinafter referred to as 'the Regulation') aimed at regulating noise levels in Nigeria. The National Environmental Standards Regulations and Enforcement Agency (NESREA), developed the Regulation in accordance with s.22 of the NESREA Act, 2007 which mandated the Agency to make regulations to control noise levels. This Regulation is the most detailed of the lot and the expectation is that it will go some way in addressing the noise pollution problem confronting the nation. However, there are certain provisions in the Regulation that may make compliance and enforcement difficult if they are not reviewed. Therefore, this paper seeks to examine those provisions and bring to the fore the need for NESREA to review the Regulation.

<sup>&</sup>lt;sup>4</sup> An example is England, where noise is dealt with under pieces of legislation like Noise Insulation Regulations 1975, Noise Insulation Regulations 1996, The Control of Pollution Act 1974, The Health and Safety at Work Act 1974, The Environmental Protection Act 1990, Noise and Statutory Nuisance Act 1993, Anti-social Behaviour Act 2003, The Pollution Prevention and Control Act 1999, The Building Regulations 2010, The Housing Act 2004, The Clean Neighbourhoods and Environment Act 2005 etc. All of these is apart from Byelaws maintained by their local authorities to control noise.

<sup>&</sup>lt;sup>5</sup> The Bill was sponsored by Hon. Mercy Almona-Isei ( as she then was). It is a bill for an Act to make provision for the control of noise pollution in the country.

### 2.0 Nature of Noise and Noise Pollution

Noise is an unwanted or excessive non-harmonious sound that has undesired physiological and institutional effect on individuals.<sup>6</sup> It is also defined as any unwanted and annoying sound that is intrinsically objectionable to human beings or which can have or is likely to have an adverse effect on human health or the environment.<sup>7</sup> Technically, noise is also any disturbing sound that interferes with work, comfort or rest.<sup>8</sup> Unlike the tangible pollutants of the air, water and land, noise is a waste product in pure energy form. Whereas, in contrast with other pollutants, noise does not persist in the environment and seldom leaves physical scars, its consequences can be catastrophic.<sup>9</sup> Perhaps because noise is a transient phenomenon it is most often tolerated rather than regulated.<sup>10</sup>Added to its transient nature is the subjective character of human perception of noise. Sound with social value to one person may be noise – sound without value – to another.

Noise pollution, on the other hand, is the emission of uncontrolled noise that is likely to cause danger to human health or damage to the environment.<sup>11</sup> This suggests that it is not every noise that is harmful. Some level of noise must be tolerated in order to engender sustainable development. It is when noise is unusually loud and uncontrolled that it diminishes the quality of air and adversely affects public health and welfare.<sup>12</sup> Noise pollution may be distinguished from other forms of pollution, in that its effects relate primarily to human health and comfort, as opposed to

<sup>&</sup>lt;sup>6</sup> Amokaye, O., *Environmental Law and Practice* (Lagos: University of Lagos Press, 2004) p. 378 at 392.

<sup>&</sup>lt;sup>7</sup> Regulation 18 of the National Environmental (Noise Standards and Control) Regulations, 2009

<sup>&</sup>lt;sup>8</sup> Ibid.

<sup>&</sup>lt;sup>9</sup> Ibid.

<sup>&</sup>lt;sup>10</sup> Reitze, A.W., *Environmental Law* 2<sup>nd</sup> edn. (Washington D.C.: North American International, 1972) p. Three B-1

<sup>&</sup>lt;sup>11</sup> Regulation 2 of the Kenyan Environmental Management Coordination (Noise and Excessive Vibration Pollution) (Control) Regulations, 2009. The Nigerian Regulation did not define noise pollution.

<sup>&</sup>lt;sup>12</sup> Ijaiya, H., op.cit.

causing damage to the wider environment.<sup>13</sup> Sound intensity is measured in units called decibels.<sup>14</sup> An increase of about three decibels is a doubling of sound volume. In the wilderness, a typical sound level will be 35 decibels. Speech runs 65 to 70 decibels; heavy traffic generates 90 decibels. By 140 decibels, sound becomes painful to the human ear, but ill effects including hearing loss, set in at much lower levels.<sup>15</sup>

Noise can be classified into two: environmental noise and occupational noise. Environmental noise include noise we are surrounded by daily like neighbourhood noise (from traffic, private homes, motor parks, loud speakers, generators etc), commercial and industrial noise (from shops and retail premises, filling stations, restaurants, clubs, factories etc) and construction Site noise. Occupational noise however is that which a worker is exposed to as a result of the kind of work he does, for example, musicians, military personnel, factory workers, drivers etc.

### 2.1 Impact of Noise Pollution

Long exposure to noise of a high intensity may cause hearing impairment, decreased efficiency, emotional disturbances, psychological disorder and disturbance of sleep.<sup>16</sup> Nervousness and depression are common psychological reactions to noise. There is medical evidence that noises can cause heart attacks in individuals with existing cardiac injury and that continued exposure to loud noises could cause such chronic effects as hypertension or ulcers.<sup>17</sup>

<sup>&</sup>lt;sup>13</sup> Reitze, A.W., Op.Cit.

<sup>&</sup>lt;sup>14</sup> Decibels are weighted sound levels taken with a sound-level meter and expressed as decibels on the scale approximating the frequency response of the human ear.

<sup>&</sup>lt;sup>15</sup> According to Reitze Arnold, it is widely accepted that steady exposure to about 90 decibels can cause permanent hearing loss. See Reitze, A.W., Op.cit p. Three B-2

 <sup>&</sup>lt;sup>16</sup> Atsegbua, L. and Dimowo, F., *Environmental Law in Nigeria: Theory and Practice* (Lagos: Ababa Press Ltd, 2004) p. 63 at 74.

<sup>&</sup>lt;sup>7</sup> American Public Health Association, 'Environmental Noise Pollution Control' <u>https://www.apha.org/policies-and-advocacy/public-health-policystatements/policy-database/2014/07/16/12/50/environmental-noise-pollutioncontrol</u> accessed on 9th August, 2015.

A 79 year old woman instituted an action against her neighbour, a branch of the Redeemed Christian Church of God, in the Lagos High Court sometime in March 2013 over noise pollution.<sup>18</sup> She told the court that their noise prevents her from sleeping and triggers her hypertensive heart disease. Noise in big cities is considered by the World Health Organisation (WHO) to be the third most hazardous type of pollution after air and water pollution.<sup>19</sup> WHO further stated that noise pollution is responsible for tens of thousands of deaths a year.<sup>20</sup> WHO estimated that longterm exposure to traffic noise may account for 3 percent of deaths from ischemic heart disease among Europeans.<sup>21</sup> Noise can also cause annoyance and aggression.<sup>22</sup> In February 2013, two corporals were ejected from their apartments in Pedro Police barracks in Somolu, Lagos by an irritated Deputy Inspector-General of Police, Abdulrahman Akano, who could not bear the din from a music set and radio from their residences.<sup>23</sup>

A study by Kiernan of Cornell University shows that children brought up in noisy areas have poorer reading skills and find it more difficult to recognise and understand human speech than

<sup>&</sup>lt;sup>18</sup> Editorial, 'Controlling Noise in Lagos' Punch Newspaper, April 18, 2013

<sup>&</sup>lt;sup>19</sup> Oyedepo, S.O., 'Noise Pollution in Urban Areas: The Neglected Dimensions' Vol. 6 (2012) *Environmental Research Journal*, 259 – 271. Apart from the fact that noise is a stand-alone form of pollution, it is also recognised as one of the sources of air pollution. Consequently, when air pollution is being discussed, noise should be regarded as part of it. See Fadairo, G., 'Urban Centres Noise Pollution: Case Study of Akure, Nigeria Vol. 14 (2013) *British Journal of Arts and Social Sciences* p. 126.

 <sup>&</sup>lt;sup>20</sup> "Noise Pollution" at <u>www.salon.com/news/feature/2008</u> site visited on 24th Nov. 2008.

<sup>&</sup>lt;sup>21</sup> Hanninen, O, Knol, A., 'European Perspectives on Environmental Burden of Disease: Estimates for Noise Stressors in Six European Countries. Helsinki, Finland: World Health Organisation, 2011. See also Van Kempen, E., Babisch, W., 'The Quantitative Relationship between Road Traffic Noise and Hypertension: A Meta-analysis' Vol. 30 (6) (2012) *J. Hypertens* pp. 1075 – 1086.

<sup>&</sup>lt;sup>22</sup> Stansfeld, S., Haines, M., Brown, B., 'Noise and Health in the Urban Environment' Vol. 15 (2000) *Rev. Environ Health*, pp. 43 – 82.

<sup>&</sup>lt;sup>23</sup> 'Controlling Noise in Lagos', op.cit.

those brought up in quieter areas.<sup>24</sup> Consequently, children who attend noisy schools do not learn to read as well as those who attend quiet ones.<sup>25</sup> In addition, it has been observed that shrieks and roars of urban life are causing serious long term health effects on children. The situation is so dire that even children in the womb are said to suffer from high noise levels, and may develop high blood pressure and stiffening of nerves.<sup>26</sup> Noise can impair children's speech, perception, spelling ability, behaviour, attention and academic performance.<sup>27</sup> A study conducted by Elias<sup>28</sup> among school children aged between 16 yrs - 18yrs in six schools located at different places in a city in Iraq, revealed that there is a significant relation between the children's blood pressure and the noise level around their schools. It also revealed that the blood pressure of pupils in very noisy schools (near to the main road) were higher than that of pupils in quieter schools (far from the main road) but all the pupils had their blood pressure significantly raised by the noise levels.

Atsegbua and Dimowo raised the concern that occupational noise should be given serious and adequate consideration as workers in some industries are exposed to high levels of noise over a long period of time.<sup>29</sup> It has been observed that most hearing loss occurs in work places; factory workers, construction workers, farmers, military personnel, police officers, firefighters and

<sup>&</sup>lt;sup>24</sup> A Short Review of Jamaican and International Noise Standards at <u>http://nepa.gov.jm/policies/jamaica-international-noise-standards.pdf</u> accessed on 9th August, 2015.

<sup>&</sup>lt;sup>25</sup> Elias, B., Rhamadhan, S., Giliyana, D., 'The Effect of Noise Pollution on School Children at Duhok City, Iraq', Vol. 7 (2013), *Canadian Journal of Pure and Applied Sciences*, pp. 2655 – 2659.

<sup>&</sup>lt;sup>26</sup> Ohrstrom, E., Rylander, R., and Bjorkman, N., 'Effect of Nightime Road Traffic Noise – An Overview of Laboratory and Field Studies on Noise Dose and Subjective Noise Sensitivity' Vol. 127 (1988) J. Sound Vib. Pp. 441-448

 <sup>&</sup>lt;sup>27</sup> Rosenhall, U., Pedersen, k., and Svanborg, A., 'Presbycusis and Noise Induced Hearing Loss Vol. 11 (1990) *Ear Hear*, pp. 257 – 263 at <u>http://www.ncbi.nlm.nih.gov/pubmed/2210099</u> accessed on 9th August, 2015.

<sup>&</sup>lt;sup>28</sup> Elias, B., et.al, p. 2656.

<sup>&</sup>lt;sup>29</sup> Atsegbua, L. and Dimowo, F., Op.cit

musicians all have reason to be concerned about their occupational exposure to noise. In most cases, the workers are not provided with protective head-gear. The general manager of LASEPA, Rasheed Ashabi, stated that a survey was carried out by an international organisation and it was discovered that 60 percent of Nigerians have hearing problems.<sup>30</sup> During a report on NTA network news of 7<sup>th</sup> July, 2008, some welders were seen complaining of hearing impairment brought about by the noise of generators being used for their welding work as a result of constant power outage. They passionately pleaded that the President should come to their aid by addressing the power problem in the country in order to save them from permanent hearing loss. Noise-induced hearing loss is a major problem because people are unaware of its warning signs and effects until it is too late.<sup>31</sup> The response to noise may depend on characteristics of the sound including intensity, frequency, complexity of sound, duration and the meaning of the noise. In view of such serious impacts on human health, addressing noise pollution via legislation becomes imperative.

# 3.0 The National Environmental (Noise Standards and Control) Regulations, 2009

As earlier observed, there has been no specific law to control noise pollution prior to the coming into force of the National Environmental (Noise Standards and Control) Regulations, 2009. Though the legislature still needs to enact a specific law that will address noise pollution in more detail, the introduction of the Regulation is a laudable development. According to section 1 of the Regulation, its purpose is to ensure maintenance of a healthy environment for all people in Nigeria, the tranquillity of their surroundings and their psychological well-being by regulating noise levels and generally, to elevate the standard of living of the people by -

<sup>&</sup>lt;sup>30</sup> 'Lagos State Shuts down Kanu Nwankwo's Hotel', op.cit.

<sup>&</sup>lt;sup>31</sup>A Short Review of Jamaican and International Noise Standard at <u>http://nepa.gov.jm/policies/jamaica-international-noise-standards.pdf</u> accessed on 9th August, 2015.

- a) Prescribing the maximum permissible noise levels a facility or activity to which a person may be exposed;
- b) Providing for the control of noise and for mitigating measures for the reduction of noise; and
- c) Generally for giving effect to the provisions of section 22 of the Act.

Section 22 of the Act requires the Agency in consultation with appropriate authorities to identify major noise sources, noise criteria and noise control technology, establish noise abatement programmes and noise emission standards which it deems necessary to preserve and maintain public health and welfare and to make recommendations to control noise originating from industrial, commercial, domestic sport, recreational transportation or similar activities. The types of noise identified by the regulation 5 (2) are:

- a) Yelling, laughing, clapping, shouting, hooting, pounding, whistling and singing;
- b) Selling or advertising by shouting or outcry or amplified sound;
- c) Operating any equipment in connection with construction
- d) Detonating fireworks or explosive devices not used in construction;
- e) Operating any auditory signalling device, including to the ringing of bells or gongs and the blowing of horns or sirens or whistles or the production, reproduction or amplification of any similar sound by electronic means; and
- f) Operating or playing a radio or musical instrument or any electronic device or group of connected devices incorporating one or more loudspeakers, transducers or other electro-mechanism, which is intended for the production, reproduction or amplification of sound.

The Regulation provides that no person shall emit or cause to be emitted or permit the emission of noise resulting from any action or activity specified above if the noise is a disturbance to the receptor or in the neighbourhood for more than two minutes or is within the prohibited time in a residential area or Noise Control Zone.<sup>32</sup> This is a laudable provision if the Agency can ensure its enforcement. The maximum permissible noise levels are specified in the first schedule of the Regulation according to the sources that emit them. The sources are categorised as follows:

- a) a facility in the general environment
- b) continuous or intermittent noise from a factory or a workshop
- c) impulsive noise
- d) a construction site
- public announcement system or address system or device e)
- a place of entertainment f)
- a place or area of worship **g**)
- h) accelerating vehicles including two stroke engines
- i) a quarry or mine ..

For any of the activities above, no person is allowed to emit noise in excess of the maximum noise level authorized.<sup>33</sup> Below are some tables showing the noise levels indicated in the first schedule to the Regulation:

 <sup>&</sup>lt;sup>32</sup> Regulation 5 (1)
<sup>33</sup> Regulation 3

# SCHEDULES FIRST SCHEDULE MAXIMUM PERMISSIBLE NOISE LEVELS TABLE 1:

Regulation 2 (1)

# Maximum Permissible Noise Levels for General Environment

	COLUMN 1	COLUMN 2	
	FACILITY	Maximum Permissible	
		NOISE LIMITS dB (A) (Leq)	
		DAY	NIGHT
А	Any building used as	45	35
	hospital, convalescence		
	home, home for the aged,		
	sanatorium and institutes		
	of higher learning ,		
	conference rooms, public		
	library, environmental or		
	recreational sites		
В	Residential buildings	50	35
С	Mixed residential (with	55	45
	some commercial and		
	entertainment)		
D	Residential + industry or	60	50
	small-scale production +		
	commerce		
E	Industrial ( outside	70	60
	perimeter fence)		

Above noise levels are weighted average in the facility over the hours defined for night and day below. Time frame: use duration

Day	-	6.00 am- 10.00pm
Night	-	10.00p.m- 6.00a.m

The time frame takes into consideration human activity.

# TABLE IVRegulation 2(4)

## Maximum permissible Noise Levels from Construction site

Column 1	Column 2	
Facility	Maximum Noise permitted (Leq)	
	in dB (A)	
	DAY	NIGHT
Hospitals, schools,	60	50
institutions of higher		
learning, homes for the		
disabled, etc.		
Buildings other than those	75	65
prescribed above		

Note: Measurements to be made at the receptor sites.

### Table VII

*Regulation* 2 (7)

## Maximum Permissible Noise Levels for Places or Area of Worship

Column 1	Column 2		
Noise Control Zone/	Sound Level dB (A)	Sound Level dB (A)	
Location	(leq) Day	(leq) Night	
Residential	60	40	
Commercial	75	50	
Industrial	85	65	

Time frame: use duration

Day - 6.00 am- 10.00pm Night - 10.00p.m- 6.00a.m

The time frame takes into consideration human activity.

The tables<sup>34</sup> above show the permissible noise levels for the general environment, construction site and places of worship. In table 1, the maximum permissible noise levels from a facility in the general environment to which a person may be exposed shall not exceed the level specified for the time specified in the schedule.<sup>35</sup> Under category A of table 1, a facility near residential buildings must not emit noise levels beyond 50 decibels in the day and 35 decibels at night.<sup>36</sup> In table IV, noise levels from construction site near hospitals, schools, institutions of higher learning, homes for the disabled etc. must not exceed 60 decibels by day and 50 decibels by night. While in table VII, maximum permissible noise levels for places or areas of worship situated close to residential buildings must not exceed 60 decibels in the day and 40 decibels by night.<sup>37</sup> As laudable as the introduction of the Regulation is, there are issues that it has brought to the fore which we are of the opinion NESREA needs to address if the Regulation will achieve its goal.

### **3.1** Issues in the Regulation

### Permit for Noise Emissions

Regulation 7 allows noise emitters to apply for permit to emit noise in excess of permissible levels. It states that "an owner or occupier of premises whose *works or activities*<sup>38</sup> may likely emit noise in excess of the permissible levels shall apply to the Agency

<sup>&</sup>lt;sup>34</sup> 'A' in column 2 of all the tables refers to the idealised frequency response of the undamaged human ear. In other words, the use of the A-weighting is an attempt to mimic the response of the human ear. Since in a given time interval, the noise level can change over a significant range and it is common to describe the average sound level as the equivalent noise level denoted 'Leq'. See Vogiatzis, K. and Psychas, K., ' Legal Aspects on Environmental Noise and Urban Soundscape Rehabilitation in Mediterranean Countries: The Case of Greece' Vol. 7, No. 4 (2012) *Int. J. Sus. Dev. Plann.*, pp. 484 – 494.

<sup>&</sup>lt;sup>35</sup> Section 2 (1) of the Regulation, Table 1 of the first schedule.

 $<sup>^{36}</sup>$  Day is between 6.00am – 10.00pm. Night is between 10.00pm – 6.00am as seen in the first schedule.

<sup>&</sup>lt;sup>37</sup> Section 2 (7), Table VII of the first schedule.

<sup>&</sup>lt;sup>38</sup> Emphasis added.

for a permit to emit noise in excess of the permissible levels". Sub-regulations (2) - (9) state the procedure for the application. This provision implies that the Agency is creating some exceptions to regulation 2 by permitting some activities to exceed the permissible levels stated therein. We recognise that in order to encourage the integration of economic development and environmental protection, certain exemptions from the restriction of the law need to be allowed. However, the way the language of the provision is couched makes the permit too all encompassing. For instance, it does not state the category of activities to which the provision is applicable. We expect this to be the case since all the activities mentioned in the Regulation are prone to emit excess noise beyond the maximum permissible levels hence the need to regulate their noise. If every noise emitter is entitled to apply for permit, of what effect will be the permissible noise levels indicated in the first schedule to the Regulation?

Moreover, regulation 5 sub-regulations (3) and (4) have already exempted noise emitted by certain activities from the application of the Regulation. These include emission of noise for purposes of creating public awareness, demonstration, religious assembly, political debate, cinematography and musical or other theatrical entertainment, beauty competition, handicraft show, fair, circus, private dance, party, lecture or public hearing; noise caused by the operation of a loudspeaker or siren for fire brigade, ambulance or police purposes; noise caused by emergency measures undertaken to safeguard health, safety or welfare of the people; noise caused, or continuance of noise caused by a person as a result of temporary or accidental cause which could not have been prevented by the exercise of due diligence and care on the part of that person; noise caused by the horn of a vehicle for the purpose of giving sufficient warning of the approach or position of the vehicle; noise caused at or by an educational class or recreation in or around a school, college, university or other educational institutions; noise caused at or by athletics or sports; noise caused at a cultural activity or cultural show, funeral service or rite, marriage ceremony held between the hours of 10.00am and

8.00pm of the same day in any area; and noise caused during a period or by such a cause or for a purpose as the Agency may by notice, specify.

Considering the above list in conjunction with regulation 7 further explains our position. The question is whether issuing permits will not encourage the environmental problem the Regulation sets out to curtail, particularly that the scope of the permit is not clear. An example of what a provision such as the above should look like can be seen in regulation 16 (1) of the Kenyan Environmental Management and Coordination (Noise and Excessive Vibration Pollution) (Control) Regulation, 2009. It provides that a person can apply for a licence<sup>39</sup> to the authority "where a sound source is planned, installed, or intended to be installed or modified by any person in such a manner that such source shall create or is likely to emit noise or excessive vibrations, or otherwise fail to comply with the provisions of these Regulations.." This is one of the few instances given in the Kenyan Regulation when noise emitters can be permitted to emit noise beyond the level stated in the Regulation. We find that this provision is more specific in scope than the generalised provision of the Nigerian Regulation. We take the view that the way regulation 7 is couched coupled with the exemptions in regulation 5 may exempt majority of the sources of noise emission from complying with the provisions of this Regulation. This puts the Regulation at the risk of being made redundant and ineffective, invariably defeating its purpose.

### **3.2** The 'Reasonable Steps' provision

Regulation 10 sub-regulation (3) is another provision that needs close scrutiny. It states that, "On receiving a complaint under sub-regulation (1) of this regulation, the Agency shall after due investigation and substantiation, take all *reasonable steps*<sup>40</sup> to ensure that the noise is abated or controlled within permissible

<sup>&</sup>lt;sup>39</sup> A licence is the same as a permit.

<sup>&</sup>lt;sup>40</sup> Emphasis added.

levels under these Regulations". Sub-regulation 1 is to the effect that any person may complain in writing to the Agency if such a person considers that the noise levels being emitted or likely to be emitted may be higher than the permissible noise levels or reaching disturbing proportions. When such complaint has been received, the Agency is expected to investigate and take all 'reasonable steps' to abate or control the noise. The Regulation does not state what 'reasonable steps' mean. This suggests that the officials of the Agency are expected to exercise their discretion to abate the noise when such complaints are received. The problem with such discretion is that it is subject to bias since it is capable of being interpreted differently by whichever official is exercising it at a point in time. This was echoed by Babbitt, Cory and Kruchek<sup>41</sup> when they said that discretion allows room for judgment and wherever there is room for judgment, there is room for bias. They stated further that so much of the legal system is discretionary that some critics have concluded that "the law amounts to no more than a ritual dance, the performance of which may be manipulated by the prosecutors and courts to produce any substantive outcome they desire".<sup>42</sup>

While the critics may not be completely right, we agree with them to the extent that discretion will most likely subject the law to manipulation by its enforcers. This is what we fear may likely happen concerning this provision. It becomes difficult for a polluter to determine when an official is biased and acting beyond his scope of authority in his bid to enforce the Regulation. A provision similar to the one in the Regulation can be seen in regulation 7 of the Indian Noise Pollution (Regulation and Control) Rules 2000.<sup>43</sup> It demonstrates how such a provision can be more definite, as it provides that where a person considers that the noise

<sup>&</sup>lt;sup>41</sup> Babbitt, C., Cory, D. and Kruchek, B., 'Discretion and the Criminalization of Environmental Law' Vol. 15 (2004) *Duke Environmental Law and Policy Forum*, p. 2.

<sup>&</sup>lt;sup>42</sup> Ibid

<sup>&</sup>lt;sup>43</sup> This was further amended by the Noise Pollution (Regulation and Control) (Amendment) Rules 2010.

level being emitted exceeds the noise standard, he may make a complaint to the authority. On receiving such a complaint, sub-regulation 2 provides that "the authority shall act on the complaint and take action against the violator in accordance with the provisions of these rules and any other law in force". Even though, the provision does not specify steps per se, it makes it clear that the authority should can act on such complaint only within the confines of the rules. This further eliminates the element of bias.

However, when one reads regulation 11 sub-regulation (1) of the National Environmental (Noise Standards and Control) Regulations, 2009, one wonders whether that constitutes the reasonable step the Regulation referred to in regulation 10 sub-regulation (3). Though, a careful perusal seem to reveal otherwise. Regulation 11 sub-regulation (1) states that:

where the Agency has reasonable cause to believe that any person is emitting or is likely to emit noise in any area in excess of the maximum permissible levels, or is causing or likely to cause annoyance, the Agency may serve an improvement notice on that person on the form prescribed in the Second Schedule to these Regulations...

Considering the two provisions, there seems to be two situations the Regulation envisages – one in which the Agency receives a complaint about disturbing noise levels and the other is when the Agency itself has reasonable cause to believe that a person is emitting noise in excess of the maximum permissible levels. As observed above, for the former situation, the Agency is expected to take reasonable steps while for the latter, the Agency is expected to serve improvement notice. One wonders what the rationale is for the provision of two different enforcement procedures in relation to the same act. In regulation 11, the procedure is well outlined and quite specific; this will make for easier enforcement unlike what is obtainable in regulation 10 (3). It could be that the drafters intended that the measure outlined in regulation 11 constitutes the reasonable steps being alluded to in regulation 10 (3), but the manner in which the two provisions are couched makes it difficult to arrive at such a conclusion.

### 3.3 Time Frame and Use Duration

In Schedule 1 of the Regulation, at the end of each of the tables seen above, 'Day' is said to be the duration from 6.00am to 10.00pm while 'night' is said to be the duration from 10.00pm to 6.00am. The implication is that the higher permissible noise levels from any facility is to take place during the 'day' while the lower permissible noise levels will take place in the 'night'. In considering time frame and use duration, it must be borne in mind that Nigeria does not operate the shift system of work as is obtainable in some countries where there is activity in the environment throughout the day and night because people are commuting to and from their places of work. In such settings, noise from certain sources can be permitted for a longer duration of time because the environment generally is still producing some level of noise from vehicular movements, people discussing as they walk on the road, open cafes, restaurants and stores.

This is not the case in Nigeria where the period of work for most citizens is from 8am – 5pm except for the private sector where some workers resume work earlier and close by 6pm or later (in a few instances). Though the time people arrive home differs, generally, most families are home between 6pm to 7pm in the evening. After a hard day's work, it is normal for people to look forward to some peace and quiet; that is not the time they expect to hear noise from construction sites, places of entertainment, places of worship etc. They would usually want to rest, relax and eventually sleep. Most times children retire to bed from 8pm including some adults. We are therefore of the opinion that it is not rational for the Agency to permit noise till 10pm.<sup>44</sup> Little wonder, it has been suggested that there should be a complete ban of

<sup>&</sup>lt;sup>44</sup> Review of Jamaican and International Noise Standards, op.cit.

loudspeakers from 8pm -7am in Nigeria.<sup>45</sup> Similarly, the Control of Pollution Act,  $1974^{46}$  of the United Kingdom provides that a loudspeaker shall not be operated in the street between 9pm – 8am for any purpose and shall not be operated at any other time for the purpose of advertising any entertainment, trade or business.<sup>47</sup>

So it may suit the purpose of some countries to permit noise till 10pm but it is not necessarily suitable for Nigeria for the reasons given above. Besides, there are some other jurisdictions where 'day' ends much earlier than the Regulation provided for. For instance, still in the UK, the hours permitted for noisy construction works are:<sup>48</sup>

Monday – Friday 8.00am – 6.00pm Saturday 8.00am – 1.00pm Sundays and Bank Holidays NO WORKING

From the above, it can be seen that 'day' ends by 6.00pm under this legislation. Regarding the time frame of 'day' this way is more in consonance with the goal of the Regulation. The other aspect is that 6.00am is too early in the day for noise to be emitted. This is still to allow the public to enjoy some peace and quiet during that period. We are aware that in some cities like Abuja, Lagos, Port Harcourt etc, most workers and school children are out of their houses by that time but that is not the case with majority of the cities and towns in Nigeria. Anytime from 7.00am will be more generally applicable and acceptable.

In addition, we observe that all the sources of noise emission have the same time frame within which they are required to emit or control noise i.e. 6.00 am - 10.00 pm and 10.00 pm - 6.00 am. So regardless of the location of the receptors of the noise and the noise

<sup>&</sup>lt;sup>45</sup> Oyedepo, S.O., ' Effective Noise Control Measures and Sustainable Development in Nigeria' Vol.1 (2013) World Journal of Environmental Engineering pp. 5-15.

<sup>&</sup>lt;sup>46</sup> S.62 91)(a)

<sup>&</sup>lt;sup>47</sup> S.2 of the Act outlines a few exceptions in emergencies generally.

<sup>&</sup>lt;sup>48</sup> The Noise and Statutory Nuisances Act, 1993; The Control of Pollution Act, 1974; The Noise Act, 1996; The Environmental Protection Act, 1990.

levels emitted by the sources, the duration of exposure to noise is the same for everyone. We are of the opinion that this provision should be revisited. Since the noise levels emitted by the sources vary, the time frame should also vary based on those noise levels and their location. For instance, residential areas, hospitals, convalescent homes and schools are places that require peace and quiet but sometimes you find music stores or places of worship located close to them. This writer had a personal experience of this kind of situation while she was a care giver to an ailing relative who was admitted in a hospital in Lagos. The hospital was located close to a place of worship and a small workshop where iron products were being fabricated. It was difficult for patients and their care givers to rest peacefully in the day while the activities in the workshop went on and it was difficult to sleep in the nights when the church held its programs.<sup>49</sup> We all know that the time of rest or sleep for a sick person is not the same with that of healthy individual, so allowing noise near hospitals till 10.00pm without having consideration for these peculiarities will not meet the needs of the Nigerians the Regulation is meant to benefit.

The Agency needs to realise that the differential impact of noise upon humans varies with the time of day and the susceptibility of the individual.<sup>50</sup> Besides, there are different noise levels emitted by the various sources and activities. So the duration of time in which humans should be exposed to them should also differ. It is probably due to this subjective nature of noise that the drafters of Kenya's Noise Regulation<sup>51</sup> prescribed the time between 6.01am – 8.00pm for a category of noise while they prescribed 6.01 – 6.00pm for others. The Environmental Protection Authority, Tasmania in Australia also prescribes different duration

<sup>&</sup>lt;sup>49</sup> The noise (clapping, singing and prayer) from the church was being heard very clearly in the hospital wards.

<sup>&</sup>lt;sup>50</sup> Wolf, S., White, A.,and Stanley, N., *Principles of Environmental Law* 3<sup>rd</sup> ed., (London: Cavendish Publishing Limited, 2002), p.293.

<sup>&</sup>lt;sup>51</sup> The Environmnetal Management and Coordination (Noise and Excessive Vibration Pollution) (Control) Regulations, 2009.

for varying sources of noise emission.<sup>52</sup> The duration varies from 7am - 8pm, 7am - 6pm, 7am - 10pm, depending on the activity emitting the noise. The duration varies further on weekends and holidays - 10am -6pm, 9am - 6pm.

### 4.0 Conclusion

We cannot overemphasize the need for the control of noise in Nigerian cities and this is the reason the Regulation is a welcome development. However, for Nigerians to benefit from its existence, the observations made in this paper must be addressed through a review of the Regulations. To engender an effective review, the Agency needs to take the peculiarity of the Nigerian society into consideration. For instance, it is common knowledge that obtaining compliance with the law from majority of Nigerians is a herculean task unlike what obtains in other countries. Therefore, the language of any national legislation/Regulation must be as clear and specific as possible in order to make compliance and enforcement easier to achieve. Additionally, considering this peculiarity should also cause the Agency to be selective in the provisions they adopt from other jurisdictions. So noise control Regulations which most nearly fit Nigeria's needs should be adopted from other jurisdictions or formulated. It is with this in mind that we make the following recommendations.

On the issue of permits, we recommend that the activities that will be eligible for permits to emit noise beyond the permissible level need to be greatly narrowed down and clearly spelt out, even if it will result in a departure from commonly accepted or adopted norms in other climes. Nigerians must not be given the opportunity to circumvent the provisions. As environmental awareness improves and as the Agency succeeds in enforcing the regulation

<sup>&</sup>lt;sup>52</sup>See Schedule 7 of the Environmental Management and Pollution Control (Miscellaneous Noise) Regulations, 2014. Environmental Protection Authority in Tasmania, 'Residential Noise and Hours of Use' at <u>http://epa.tas.gov.au/epa/residential-noise-and-hours-of-use</u> accessed on 14th August, 2015

more rigidly, then more exceptions and special provisions can be considered in subsequent reviews.

The provision on 'reasonable steps' need to be clearer, more specific and unambiguous. The Agency can take a cue from the Indian Noise Pollution Rules as observed in this discourse. Besides, we do not see the reason why the Agency cannot apply the procedure outlined in regulation 11 to the situation in Regulation 10 (3).

The time duration indicated in the first schedule should be adjusted to 7am - 8pm for daytime and 8pm - 7am for night time as long as the noise emitting source or activity is within a residential area or around hospitals. Since places of entertainment and places of worship would normally engage in night time activities like parties and vigils, they can be allowed a day time duration up to 12am on the condition that they are not located within the vicinity of residential areas or hospitals. If they are located within these areas, they must be bound by the time we earlier suggested. If they are to engage in their night time activities, then they must consult with the Agency in accordance with regulation 14 of the Regulation, on how they can reduce the excessive noise their equipment is likely to produce after 8pm.<sup>53</sup> This staggered approach is imperative in view of the serious challenge noise pollution poses to the health and welfare of Nigerians.

Finally, we urge the National Assembly to pass the bill on Noise Pollution Control urgently and enact it into law because the National Environmental (Noise and Control) Regulations, 2009 is inadequate to address noise pollution in Nigeria.

<sup>&</sup>lt;sup>33</sup> The provision states that 'the Agency may, in consultation with other relevant organisations, issue guidelines requiring the use of any plant or machinery or devices or arrangements for purposes of reducing excessive noise'. It is thought that 'devices or arrangement' includes musical equipment, microphones, public address system etc.