

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 controlled³. 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 countries⁴. Some countries even have different legislation for different noise sources⁵. Although, a bill on noise control has been before the National Assembly since 2005, it is yet to be passed into law⁶. In the meantime, there is the National Policy on the Environment which makes a terse provision for noise pollution control, the National Environmental Protection (Pollution Abatement in Industries and Facilities Generating Wastes) Regulation, 1991, the National Guidelines and Standards for Environmental pollution Control and the most recent being the National Environmental (Noise Standards and Control) 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.

2. Nature of Noise and Noise Pollution

Noise is an unwanted or excessive non-harmonious sound that has undesired physiological and institutional effect on individuals⁷. 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 environment⁸. Technically, noise is also any disturbing sound that interferes with work, comfort or rest⁹. 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 catastrophic¹⁰. Perhaps because noise is a transient phenomenon it is most often tolerated rather than regulated¹¹. 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 environment¹². 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

3. J Thornton and B Stias (n 1) 308.

4. The Noise Control Act, 1972 (USA), Environmental Protection Agency Act, 1992 (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 H Ijaiya, 'The Legal Regime of Noise Pollution in Nigeria'(2014) 5 (1) *Herring Law Review* 1-6.

5. 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.

6. The Bill was sponsored by Hon. Mercy Almona-Iseit as she then was. It is a bill for an Act to make provision for the control of noise pollution in the country.

7. O.Amoskaye, *Environmental Law and Practice* (Lagos: University of Lagos Press, 2004) 378, 392.

8. National Environmental (Noise Standards and Control) Regulations, 2009, reg. 18.

9. *Ibid.* 10. *Ibid.*

11. Reitze, A.W., *Environmental Law* 2nd edn (Washington D.C.: North American International, 1972) p. Three B-1.

12. Kenyan Environmental Management (Coordination (Noise and Excessive Vibration Pollution) (Control) Regulations, 2009, reg. 2. The Nigerian Regulation did not define noise pollution.

uncontrolled that it diminishes the quality of air and adversely affects public health and welfare¹³. Noise pollution may be distinguished from other forms of pollution, in that its effects relate primarily to human health and comfort, as opposed to causing damage to the wider environment¹⁴. Sound intensity is measured in units called decibels¹⁵. 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 levels¹⁶. The use of decibels was affirmed in *Halsey v Esso Petroleum Co. Ltd*¹⁷ where the court stated that “Between 40 and 60 decibels the noise is moderate, and between 60 and 80 it is loud. Between 80 and 100 it is very loud and from 100 to 120 it is deafening”.

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, generator 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.

3. 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 sleep¹⁸. Nervousness and depression are common psychological reactions to noise. In *Hatton v United Kingdom*¹⁹, Judge da Costa noted “Anyone who has suffered for a long period from noise disturbance... is well aware that the effects of this on the nerves and on one's physical and mental well-being are extremely unpleasant and even harmful”. In the case of *Middlesborough County Council v Stevens*²⁰, the continuous playing of a particular song was enough to cause the neighbour to suffer psychological torture. 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 ulcers²¹. 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.²² 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.²³ WHO further stated that noise pollution is responsible for tens of thousands of deaths a year.²⁴ WHO estimated that long-term exposure to traffic noise may account for 3 percent of deaths from ischemic heart disease among Europeans²⁵. Noise can

13. *H Ijaiya* (n 4)

14. *A W Reitze* (n 11)

15. 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.

16. According to *Reitze Arnold*, it is widely accepted that steady exposure to about 90 decibels can cause permanent hearing loss. See *A W Reitze*(n 4) p. Three B-2

17. (1961) 1 W.L.R 683

18. *L Aisegbua and F Dimowo*, *Environmental Law in Nigeria: Theory and Practice* (Lagos: Ababa Press Ltd, 2004) 63, 74.

19. (2002) 34 EHRR 1.

20. *The Times*, (7 September, 1993).

21. American Public Health Association, 'Environmental Noise Pollution Control' <<https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2014/07/16/12/50/environmental-noise-pollution-control>> accessed 9 August 2015.

22. Editorial, 'Controlling Noise in Lagos' *Punch Newspaper* (18 April 2013).

23. *S O Oyedepo* 'Noise Pollution in Urban Areas: The Neglected Dimensions' (2012) 6 *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 *G. Fadairo, G., 'Urban Centres Noise Pollution: Case Study of Akure, Nigeria* (2013) 14 *British Journal of Arts and Social Sciences* 126.

24. "Noise Pollution" <www.salon.com/news/feature/2008/> accessed 24 November 2008.

25. *O Hanninen, A Knol*, 'European Perspectives on Environmental Burden of Disease: Estimates for Noise Stressors in Six European Countries. Helsinki, Finland: World Health Organisation, 2011. See also *E Van Kempen, W Babisch*, 'The Quantitative Relationship between Road Traffic Noise and Hypertension: A Meta-analysis' (2012)

30(6) *J. Hypertens* 1075 – 1086.

also cause annoyance and aggression²⁶. 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 residences²⁷.

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 those brought up in quieter areas²⁸. Consequently, children who attend noisy schools do not learn to read as well as those who attend quiet ones²⁹. 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. According³⁰ to the Royal Commission on Environmental Pollution³¹, studies conducted in Germany, Japan and the Netherlands suggest that the growth of the foetus may be inhibited, the birth weight of babies reduced by exposure to high levels of aircraft noise during pregnancy. Noise can impair children's speech, perception, spelling ability, behaviour, attention and academic performance³². A study conducted by Elias³³ 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 time³⁴. It has been observed that most hearing loss occurs in work places; factory workers, construction workers, farmers, military personnel, police officers, firefighters and 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 problems³⁵. During a report on NTA network news of 7th 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 late³⁶.

Apart from the damage to health that noise can cause, it can also deprive a house

26. S Stansfeld, M Haines, B Brown, 'Noise and Health in the Urban Environment' (2000)15 Rev. Environ Health 43 - 82

27. 'Controlling Noise in Lagos' (n 22)

28. A Short Review of Jamaican and International Noise Standards at <<http://nepa.gov.jm/policies/jamaica-international-noise-standards.pdf>> accessed 9 August 2015

29. B Elias, S Rhamadhan, D Gilyana. 'The Effect of Noise Pollution on School Children at Duhok City, Iraq'. (2013)7Canadian Journal of Pure and Applied Sciences 2655 - 2659

30. E Ohlstrom, R Rylander and N Bjorkman, 'Effect of Nighttime Road Traffic Noise - An Overview of Laboratory and Field Studies on Noise Dose and Subjective Noise Sensitivity' (1988)127 J. Sound Vib. 441-448.

31. Royal Commission on Environmental Pollution, Eighteenth Report: Transport and the Environment, 1994. Cm. 2674, p. 48 cited in J Thornton, and B Silas (n 11)3[3]

32. U Rosenhall, K Pedersen and A Svanborg, 'Presbycusis and Noise Induced Hearing Loss(1990)11 Ear Hear 257 -

263- <http://www.ncbi.nlm.nih.gov/pubmed/2210099> -accessed on 9th August, 2015.

33. B Elias, et al. (n 29) 2656

34. I. Atsegbua and F Dimowo (n 18)

35. 'Lagos State Shuts down KanuNwankwo's Hotel' (n 2)

36. A Short Review of Jamaican and International Noise Standard <<http://nepa.gov.jm/policies/jamaica-international-noise-standards.pdf>> accessed 9 August 2015

owner of the quiet enjoyment and comfort of his home. The court in *Moreno Gomez v Spain*³⁷, held that a violation of the right to quiet enjoyment “include... those that are not concrete or physical, such as noise, emissions, smells or other forms of interference.” It also affects the private life of an individual. These constitute substantial interference even where it does not cause damage to the individual's health. In the case of *Powell & Rayner v The United Kingdom*³⁸, the European Court of Human Rights opined that noise generated by aircraft using Heathrow Airport has adversely affected the quality of the applicant's private life and the scope for enjoying the amenities of his home. It can also affect the value of property and the use to which a land owner can put his property. In the case of *Dennis v Ministry of Defence*³⁹, the court accepted that “noise blight could constitute a partial expropriation of the property (which became unusable or unsaleable) and was not merely an interference with the enjoyment of the property”. In that case, the claimants complained about the noise usually emitted by jet fighter aircrafts being used by the defendants for the training of fighter pilots near claimants' property. The property was described as an outstanding international property⁴⁰. The court agreed with the claimants' averment that earlier plans to use the property for corporate entertaining had been shelved because of the noise nuisance. Furthermore, it accepted evidence that the financial impact of the blight caused by the noise resulted in a loss of £4million on the purchase price of the property as potential purchasers refused to buy at the real value.

From the above discourse, 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, addressing noise pollution via legislation becomes imperative.

4. 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 -

- 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

37. (2005) 41 EHRR 40. Moreno Gomez's flat was in a noisy area of Valencia. The Valencia City Council had licences 127 bars, clubs and discotheques to operate in the area. This resulted in serious night-time disturbance for the residents. See also the case of *Dees v Hungary* (2010). Application no. 2345/06 where the court stated that an individual has a right to respect for his home. Not just the right to the physical area, but also to the quiet enjoyment of that area within reasonable limits. It stated further that breaches of this right are not confined to concrete breaches like unauthorised entry into a person's home, it includes those that are diffuse such as noise, emissions, smells or other similar forms of interference.

38. Application no. 9310/81, Strasbourg 21 February, 1990

39. [2003] EWHC 793 (QB).

40. The property known as Walcot Hall is a traditional residential, sporting and agricultural estate, which includes a grade 1 Carolcan mansion.

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 Zone⁴¹. 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 e.g. noise produced by firecrackers
- d) a construction site
- e) public announcement system or address system or device
- f) a place of entertainment
- g) a place or area of worship
- 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 authorized⁴². Below are some tables showing the noise levels indicated in the first schedule to the Regulation:

41. Regulation 5 (1)

42. Regulation 3

SCHEDULES
FIRST SCHEDULE
MAXIMUM PERMISSIBLE NOISE LEVELS

TABLE 1:

Regulation 2 (1)

Maximum Permissible Noise Levels for General Environment

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

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 IV

Regulation 2(4)

Maximum permissible Noise Levels from Construction site

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

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/ Location	Sound Level dB (A) (leq) Day	Sound Level dB (A) (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 tables⁴³ 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 schedule⁴⁴. 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 night⁴⁵. 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 night⁴⁶. 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.

43. '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 K Vogiatzis and K Psychas, 'Legal Aspects on Environmental Noise and Urban Soundscape Rehabilitation in Mediterranean Countries: The Case of Greece' (2012) 7(4)Int. J. Sus. Dev. Plann. 484 - 494.

44. S. 2 (1) Noise Regulation, 2009 Table 1 of the first schedule.

45. Day is between 6.00am - 10.00pm. Night is between 10.00pm - 6.00am as seen in the first schedule.

46. Section 2 (7), Table VII of the first schedule.

5. Issues in the Regulation

5.1 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*⁴⁷ may likely emit noise in excess of the permissible levels shall apply to the Agency 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

47. Emphasis added.

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 licence⁴⁸ 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.

5.2 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*⁴⁹ to ensure that the noise is abated or controlled within permissible 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 Kruchek⁵⁰ 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 desire⁵¹”.

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

48. A licence is the same as a permit.

49. Emphasis added.

50. C' Babbitt, D Cory and B Kruchek, 'Discretion and the Criminalization of Environmental Law'(2004)15Duke Environmental Law and Policy Forum 2.

51. Ibid

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 2000⁵². It demonstrates how such a provision can be more definite, as it provides that where a person considers that the noise 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 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.

5.3 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

52. This was further amended by the Noise Pollution (Regulation and Control) (Amendment) Rules 2010.

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's discussion 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 10pm⁵³. Little wonder, it has been suggested that there should be a complete ban of loudspeakers from 8pm - 7am in Nigeria⁵⁴. Similarly, the Control of Pollution Act, 1974⁵⁵ 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 business⁵⁶.

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 are⁵⁷:

Monday – Friday 8.00am – 6.00pm

Saturday 8.00am – 1.00pm

Sundays and Bank Holidays NO WORKING

This was further demonstrated in the case of *Penwith District Council v Secretary of State for the Environment*⁵⁸, where the planning authority in granting an application for the extension of a factory stated that the grant does not permit the operation of machinery at the extension and existing factory between the hours of 6pm – 6am on weekdays or between 1pm to 8am on Monday or statutory holidays. The court held that the planning authority could impose such conditions. 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

53. Review of Jamaican and International Noise Standards (n 36).

54. Oyedepo, S.O., 'Effective Noise Control Measures and Sustainable Development in Nigeria' (2013) 1 World Journal of Environmental Engineering 5-15.

55. S.62 91(a).

56. S.2 of the Act outlines a few exceptions in emergencies generally.

67. The Noise and Statutory Nuisances Act, 1993; The Control of Pollution Act, 1974; The Noise Act, 1996; The Environmental Protection Act, 1990.

58. [1977] JPL 371

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. 6.00am – 10.00pm and 10.00pm – 6.00am. So regardless of the location of the receptors of the noise and the noise 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 programs⁵⁹. It is common knowledge that the time of rest or sleep for a sick person is not the same with that of a healthy individual, so allowing noise near hospitals till 10.00pm without having consideration for this 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 individual⁶⁰. 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 Regulation⁶¹ 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 for varying sources of noise emission⁶². 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.

5.4. The Human Right Angle

Besides the foregoing issues, noise is progressively being considered as raising human rights matters. From the discourse so far, the Regulation does not seem to take this fact into contemplation, otherwise so much latitude would not have been given to emitters of noise, lacunas in provisions would have been filled appropriately and the responsibility of the officials of the Agency would have been clearly delineated. Human rights as enshrined in the different constitutions of countries globally and in some international human rights Conventions are increasingly being applied to noise pollution like other

59. The noise (clapping, singing and prayer) from the church was being heard very clearly in the hospital wards.

60. S Wolf, A White and N Stanley, *Principles of Environmental Law* 3rd ed., (London: Cavendish Publishing Limited, 2002) 293.

61. The Environmental Management and Coordination (Noise and Excessive Vibration Pollution) (Control) Regulations, 2009.

62. 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 <<http://epa.tas.gov.au/epa/residential-noise-and-hours-of-use>> accessed 14 August 2015

environmental concerns. Clearly, there is no separate right not to be exposed to noise but the right can be developed from guaranteed and established rights like freedom from torture, freedom of expression, the right to life and the right to respect for private life and home. Courts have decided cases on these various aspects of human rights in different jurisdictions. The Supreme Court of India in the case of International Marwari Association and Ors Vs West Bengal Pollution Control and Ors⁶³ cited with approval the following decision in an earlier case⁶⁴:

Freedom of speech and expression guaranteed under Article 19(1)(a)⁶⁵ of the Constitution of India, 1949 includes, by necessary implication, freedom not to listen and/or to remain silent. A citizen has a right to leisure, right to sleep, right not to hear and right to remain silent. He also has the right to read and speak with others

According to the court, as a result of the tremendous sound and noise of firecrackers, the citizens of Bengal cannot exercise all these fundamental rights.⁶⁶ It stated further that nobody can be deprived of the right to expect reasonable silence surrounding him. The dimension from which the Supreme Court of India interpreted freedom of speech and expression is a novel one. It means that when noise is emitted, an individual is forced to listen to it or hear it and this violates his freedom of speech or expression. So an individual can exercise his freedom of speech and expression by remaining silent. Any unwanted sound that erodes that silence is regarded as an infringement of the individual's fundamental right. This is an interpretation of freedom of speech and expression that some scholars may consider farfetched but that is not the focus of this discourse. We only seek to bring to the fore the fact of the relationship between noise pollution and human rights which the courts have noted and accepted.

In *Moreno Gomez v Spain*,⁶⁷ the applicant complained of noise and of being disturbed at night by nightclubs near her home. Her complaint was actually against the Valencia City Council for their inaction in putting a stop to the night time noise. She alleged that the effect of the noise constituted a violation of her right to respect for her home as guaranteed by article 8 of the Convention for the Protection of Human Rights and Fundamental Freedoms ('the Convention')⁶⁸. The court noted that the area in which the applicant lived was prone to noise disturbances at night and especially at weekends. Consequently, the court agreed with the applicant's submission that the noise unsettled her and infringed on her guaranteed right. Consequently, any legislation addressing noise pollution, as the Regulation seeks to do, must protect these rights through its provisions. In *Lopez Ostra v Spain*⁶⁹, there had been a violation of the applicant's right to the inviolability of her home because her home environment had been rendered unfit for ordinary everyday living. This was a case of noise, smell and fumes being emitted by a waste treatment plant. It was in this case that the European Court for Human Rights ruled for the first time that freedom from environmental pollution was included in article 8 of the Convention.

A further implication is that, should there be need for the courts to adjudicate on a noise pollution matter, the Regulation will be called into question and where a victim canvasses human right issues in relation to application of the Regulation, the courts will be more inclined to consider those human right matters in keeping with the current jurisprudential leanings. Filling the gaps and lacunas in the Regulation therefore, cannot be overemphasised.

63. Appeal No. 53 (THC) 2013 (W.P. No. 20645-2010 of Calcutta HC).

64. Appeal No. 53 (THC) 2013 (W.P. No. 20645-2010 of Calcutta HC).

65. This is similar to s.39 of the 1999 Constitution of the Federal Republic of Nigeria.

66. The appeal was filed by groups that celebrate various festivals using firecrackers, association of traders and some manufacturers dealing in firecrackers against the Pollution Control board, the State and officials attached to the Department of Environment. The applicants prayed the court to increase the maximum permissible level of noise from firecrackers from 90 db set by the regulatory agency to 125 db – 145 db. The Court noted that among other festivals, Diwali is the most important festival of India and that the bursting of firecrackers during this period is a widespread practice. The Court stated further that the unpredictable, intermittent and impulsive noise produced by bursting of crackers all around, turns the festival of lights into a cacophony of noise. It stated that the bursting of a firecracker near the ear can lead sometimes to non-recoverable hearing loss. An analysis of the reports prepared over a period of 4yrs (1999 – 2002) revealed that the ambient noise level on 'Diwali' day exceeded the limit at almost all the places where the festival was celebrated during these years. See also the case of *Burrahazar Fire Works Dealers Assn. Vs. Commr. of Police* (AIR pp. 121-22).

67. *Supra*.

68. Article 8 provides that everyone has the right to respect for his private and family life, his home and his correspondence. This is similar to s.37 of the 1999 Constitution of the Federal Republic of Nigeria which states that "The privacy of citizens, their homes, correspondence, telephone conversations and telegraphic communications is hereby guaranteed and protected". In *Hutton's case*, Judge Greve observed that though the major consideration of article 8 (and by implication, s.37 of the 1999 Constitution) is to stop the police raiding your house without a warrant, the provision has gradually been interpreted to entail environmental rights.

69. (1994) 20 EHRR 277.

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.

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 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 respectively, 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 8pm⁷⁰. This staggered approach is imperative in view of the serious challenge noise pollution poses to the health and welfare of Nigerians.

It is also pertinent that the Agency, in reviewing the Regulation, takes into consideration the protection of the rights of Nigerian citizens as guaranteed by the Constitution.

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 comprehensively address noise pollution in Nigeria.