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# Analysis of Some Statutory Framework on Environmental Pollution in Nigeria

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## Abstract

The need to conserve, promote, protect and improve human environment interrelations through ensuring pollution free terrestrial, marine, aquatic, and aerial environments in both rural and urban environments is fundamental to sustainable growth of any society in modern times. Every person or body must ensure it does not contribute to the pollution of the environment beyond what the ecosystem can absorb. Pollution is the alteration of the natural use of environmental resources as to make it lose or change its natural, biological, chemical and physical essence beyond the capacity of the environment to absorb. There are activities which are contrary to natural existence of the environment but which does not distort the composition or nature of environmental resources. To prevent destruction of environmental resources through pollution, regulation and statutes have enacted for what should be done. Statute like the Petroleum Industry Act 2021, National Environmental Standards and Regulations Enforcement Agency Act 2007 as amended and regulations made thereto would be the focus of this article. It was found that environmental pollution cannot be overcome by the agencies under the extant Acts and regulations because scientific processes, techniques and equipment required to tackle pollution is yet to be made available to the Agencies responsible for environmental pollution control and abatement. It was recommended that Agencies like Nigerian Midstream and Downstream Petroleum Regulatory Authority and NESREA should synergise in areas of technical assistance and pollution remediation equipment acquisition and utilisation.

## Keywords

NESREA, climate-change, harmful-waste, environment, pollution

## Introduction

It is on the background of pollution and deleterious activities against the environment that environmental protection conversations are held. Environmental protection refers to those activities geared at maintaining or sustaining or restoring the quality of the environment through preventing the emission of pollutants or reducing the presence of polluting substances in an environment (Kjellstrom et al., 2006). Marine pollution is the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects such as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities (Odeku & Paulos, 2017). The International Law Association conference in 1924 defined pollution at the sea to mean “an act whereby the inoffensive use of the water becomes impossible either for animal life or human use, or create a danger to such life or such use” (Heijnsbergen, 1979). Pollution is a man made or man aided alteration of chemical, physical or biological quality of the environment to the extent that is detrimental to that environment beyond acceptable limits (section 34, NESREA Act 2007). This article will define pollution in relation to land, air, water and noise with particular attention on regulations which addresses these categories of pollution.

## Literature Review

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The environment is “the system of abiotic, biotic and socio-economic components with which man interacts and simultaneous to which he adapts and transforms and uses in order to satisfy his needs” (Atsegbua et al., 2004). The environment under section 37 of the NESREA 2007 as amended, to include; “water, air, land and all plants and human beings or animals living therein and the inter-relationships, which exist among these or any of them.” Environment is the natural state of existence where human, animals and plant take their habitation from and the relationships between them. Section 61 of the Environmental Impact Assessment Act 2010, defines ‘Environment’ to mean the components of the earth and includes; (a) land, water and air, including all layers of the atmosphere; (b) all organic and inorganic matters and living organisms; and (c)

the interacting natural systems that include components referred to in paragraphs (a) and (b). The environment is the whole atmosphere and their inhabitants both biotic and non-biotic; and inter/intra relationships that exist between and or among them.

Pollution is a man made or “man aided alteration of chemical, physical or biological quality of the environment to the extent that is detrimental to that environment beyond acceptable limits” (section 34, NESREA Act 2007). In the Stockholm Conference of 1972, pollution was defined as “The discharge of toxic substances and the release of heat, in such quantities or concentrations as to exceed the capacity of the environment to render them harmless”. Air pollution is the upsetting of the natural arrangement of different gases in air. It includes the accumulating of substances in the air, in sufficient concentrations to produce measurable effects on man, plants and animals. It involves the emission of harmful substances or chemicals into the atmosphere which will cause danger to any living thing. The effects of air pollution are likely to be exacerbated by changing meteorological conditions of temperature humidity, wind and precipitation, among others, particularly in this era of increasing variability in climate. The country needs not only to commence on serious research work in estimating the effects of air pollution and contamination on agriculture, forestry, ornamental horticulture, health, but must also put in place means for standardization, effective monitoring and enforcement of standards against atmospheric pollution.

The International Law Association conference in 1924 defined pollution at the sea to mean “an act whereby the inoffensive use of the water becomes impossible either for animal life or human use, or create a danger to such life or such use” (Heijnsbergen, 1979). At the Stockholm Conference of 1972, pollution was defined as “The discharge of toxic substances and the release of heat, in such quantities or concentrations as to exceed the capacity of the environment to render them harmless”. Similarly, for the WHO, marine pollution is

“the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects such as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities” (Odeku & Paulos, 2017).

Water pollution occur in oceans, lakes, rivers and streams and affects life directly through toxicity, killing of most water plants and animals, and causing reproductive failure in others. It is now known that technological advancement and urbanization are twin challenges to environmental pollution around the world; the crucial issue is not whether we should halt all commercial and industrial activities in order to sustain the quality of the environment. The real issue at stake is the role which law must play in striking an equilibrium between the forces of degradation and

the environmental protectionists (Michlak & Schucht, 2004). Toxic materials and solid and liquid waste causes water pollution; fertilizers and de-oxygenating materials can also cause pollution of water. Olufunke (2022) had been quoted to have said:

“As a result of oil loses, vast tracks of agricultural land have been laid waste, thus becoming unproductive, surface water and river courses are invariably contaminated and polluted, rendering the water undrinkable, and the aquatic life is destroyed. The result is great hardship for the inhabitants who become impoverished and deprived. These unfortunate citizens are therefore compelled to migrate to other towns and villages in search of decent life” (Olufunke, 2022).

The Anthropocentric theory is based on the assertion that man is the alter ego of everything. In the hierarchy of nature and ontologically, man is placed at the hem of affairs; therefore, the satisfaction of man is deemed the fulfillment of the essence of natural environmental resources. Keller (2010) in the work “Environmental Ethics: The Big Questions” opined that everything was made for the enjoyment of man; so, once man is satisfied, it does not matter what happened to the environment. Kortetmäki (2013) explained that nature exist for the benefit of mankind. Mankind should have priority in every environmental regime. Passmore, in the work “Man’s Responsibility for Nature: Ecological Problems and Western Traditions” opined what was later surmised as ‘an ethic dealing with man’s relations to land and to the plants and animals growing on it ... would have to be justifies by reference to human interest’ (Passmore, 1974). For Passmore, adjudging ecological activities has to be in relation to satisfaction of man’s interest irrespective of whether it affects animals, plants and other facets of the environment negatively. Anthropocentrism prioritized humans over and above other existences in the environment to the extent of not recognizing any benefit the other existence in environment should have if man has not been satisfied. Norton et al. (2003) is of the view that “environmental ethics cannot be derived from the interest of nonhumans or the interests of future human generations.” The author furthered that nonhumans and future generations of humans should be part of considerations in utilization of environmental resources. For that author, what mattered was the immediate satisfaction of those human who currently exist, fulfilling their needs and development and nothing more. After all, the author argued, whatever satisfied humans would eventually be for the good of the environment.

The theory posits that mankind is stewards of the environment for the benefit of future generations. It contends that mankind should be responsible for the environment they share with plants, animals and other creatures as individuals, communities, company or government. If any of the persons or body aforementioned does anything that is deemed deleterious to the environment, such a person or body should pay for the remediation without having need for compulsive

reminder to do so. In stewardship for the environment, it is contemplated that the wellbeing of the ecosystems would influence choices of materials used for development, the how and to what quantity environmental resources are utilized and compliance with environmental regulations. Here, it is believed that polluter should pay and that environmental pollution should be discouraged by legislations – national, regional and international. In the case of *Cambridge Water Co v Eastern Countries Leather Plc* (1994) it was held that the protection and preservation of the environment is now perceived as being of crucial importance to the future of mankind; and public bodies, both national and international are taking significant steps towards the establishment of legislation which will promote the protection of the environment, and make the polluter pay for damage to the environment for which he is responsible.

Environmental stewardship theory advocates sustainable utilization of resources, protection and sustainable exploration/ exploitation of environmental resources, sustainable land, air, water and plant and animal lives. It covers consumption of goods produced from environmentally less-dangerous materials, educating persons on need to maintain the environment, restore and rehabilitate natural resources to their natural status whenever mankind has the opportunity to do so (James Madison University on environmental stewardship). Environmental stewardship according to Worrell and Appleby (2000) is “the responsible use (including conservation) of natural resources in a way that takes full and balanced account of the interests of society, future generations, and other species, as well as of private needs, and accepts significant answerability to society”. Environmental stewardship is conversation oriented, environmental management and policy direction intended, and holistic in conceptualizing animal and human importance in the utilization of environmental resources (Bennett et al., 2018). According to Bennett et al, local environmental stewardship is “the actions taken by individuals, groups or networks of actors, with various motivations and levels of capacity, to protect, care for or responsibly use the environment in pursuit of environmental and/or social outcomes in diverse social–ecological contexts.” Some of the activities which indicates environmental stewardship includes creating protected areas, replanting trees, limiting harvests, reducing harmful activities or pollution, creating community gardens, restoring degraded areas, or purchasing more sustainable products (Bennett et al., 2018). Stewardship of the environment implied that remediation of polluted areas of an environment will be actively done; conservation of plants and animal species will be a deliberate act of individuals and groups in a given society, and to encourage the use of materials and equipment made from environmentally friendly resources (Davy et al., 2017).

## **Methodology**

The sources for data used in this paper are from legislations and policy documents which established institutions for pollution control and abatement in the country. Therefore, the doctrinal method was used and analysis resulted in recommendation for possible improvements on the institutions and collaborations with other agencies to achieve reduced pollution of the Nigerian environment.

## **Results and Discussion**

### **National Environmental Standards and Regulations Enforcement Agency (NESREA) Act 2007 as amended**

The Agency NESREA was established under section 1 of the National Environmental Standards and Regulations Enforcement Agency Act 2007 as amended. It is established under the Ministry of Environment to enforce environmental standards and regulations for the general protection of the human environment in Nigeria. The Functions of NESREA were already cut out for it in the areas of protection of the Nigerian environment; enforcement of Laws and Regulations on the environment (Suleiman et al., 2019); maintaining environmental standards; create environmental awareness; engage in partnership in the protection of the environment; utilize international laws and conventions on environmental protection and conservation provided Nigeria was a signatory to such Convention or International Treaty/Agreement.

NESREA grants permits as a mechanism for pollution prevention and remediation. Permit is an authorization before the doing of a thing by a body or person which the doing of it would be illegal or continuation of the doing after the expiration of the permit would be illegal. This is a veritable tool for environmental sustainability as the Minister or Agency in consideration of environment impacts of the act applied may refuse such application for the sustenance of the environmental resources. Licence is authorization to do for government that which is its right or within its powers to do. This too, is another tool for protection of the environment from actions that are unsustainable to it. It required good will and public conscience for the Agency or Minister to commit to safe, protected and unpolluted environment. Certificate on itself authorizes its bearer to limit or confine itself to that which are expressly provided in the certificate. In the oil and gas industry for instance, it is required that the Commission or Authority issue a certificate after some conditions precedent had been satisfactorily documented by the corporation which applied or paid to be so certified. As argued by Ikoni et al. (2013) environmental statutes and regulations provide for issuing permit, licence or certificates etc., upon application and satisfaction of laid down conditions prior to the issue of the permit, licence or certificate. The importance of these

devices is to assist the Agency in monitoring and regulation of activities which are potential sources of environmental degradation. Such permits, licence or certificate when issued is subject to revocation upon a breach of the regulations, statute or any of the laid down conditions specified on such permit, licence or certificate.

The powers to revoke certificate, permit or licence are provided for the Agency or Authority to regulate the activities authorized under each instrument for the protection of the environment; not for economic or personal considerations. It further argued that the conditions precedent should be religiously satisfied and chronologically followed by the Applicant through the time or period authorized. Where during the subsistence of the authorization there appear to the Agency or Authority that the conditions had been or is likely to be violated, it should proactively protect the environment by requesting the corporation of body to do or undo such inimical acts or omission within the precinct of the authorization earlier given.

The provision of air resources is settled under section 20(1) of the NESREA Act. The section provides that the Agency may make regulations setting specifications and standards to protect and enhance the quality of Nigeria's air resources, so as to promote the public health or welfare and the natural development and productive capacity of the nation's human, animal, marine or plant life including, in particular, minimum essential air quality standards. The Agency may proceed against individual or corporate violators under section 20 of the Act for an infringement of section 20(1). So that a person who violates the regulations made pursuant to subsection (1) of section 20 above, commits an offence and shall on conviction, be liable to a fine not exceeding N200,000 or to imprisonment for a term not exceeding one year or to both such fine and imprisonment and an additional fine of N20,000 for every day the offence subsists. Where the offence is committed by a body corporate, it shall on conviction be liable to a fine not exceeding N2,000,000 and an additional fine of N50,000 for every day the offence subsists under subsection 4 of section 20 of the Act (Orji, 2012).

It is argued that these regulatory provisions are not known for its enforcement by NESREA either for the failure or for lack of competent expertise know-how or for share negligence of duty. It is the position of this article that the Agency could arise to its functions under the Act and save places like the Port Harcourt City of Rivers State from soot fumes from burnt crude refined around residential areas of Port Harcourt. It is further argued here that if the provisions of the NESREA Act are or seemed unenforceable by the private citizens, they can find succour under section 33 of the Constitution to insist on their right to life as breathing polluted air is tantamount to deprivation of life contrary to the constitution (Agboola et al., 2011). NESREA Act under section 21 (1) empowered the Agency to, in collaboration with other relevant Agencies, undertake

to study data and recognize developments in force in other countries, regarding the cumulative effects of all substances, practices, processes and activities which may affect the stratosphere. In collaboration with other agencies it shall embark on programmers for the control of any substance, practice, process or activity which may reasonably be anticipated to affect the stratosphere, especially ozone in the stratosphere, when such effects may reasonably be anticipated to endanger public health or welfare. This article deployed some library information mechanism available to it but could not find any collaboration (Schmitz et al., 2010) for the study required under this Act (NESREA Regulations on ozone layer protection 2009). It could have been as a result of lack of funding by the government or lack of considerations for ozone as a peculiar challenge facing Nigeria. If the later holds, it is further argued that the devastating environmental impact of ozone depletion is felt in the Northern part of this country with fast encroaching desert and corrosion of farmlands by heat of sun. The other challenge with this approach for environmental protection and sustainability is the requisite scientific competence necessary for the activation of this particular section of the Act. Given Nigeria's scientific status in the comity of nations, it is doubtful if the country can really deploy this provision (which for now is a future expectation) for the sustenance of her environment (Babatzia et al., 2020).

The power of inspection and search as protection approach for the environment are recognized under the Nigerian *corpus juris*. One of the unique features of this approach from other strategies relates to the time of its application. While most other strategies are invariably embarked upon after the legislation or regulation concerned has been infringed upon and possible damage occasioned, the power of inspection and searches are applied before the contravention occurred or on the suspicion of such contravention. It is preventively enacted to stop the incidence from happening if due diligence and proactively initiated. The powers relating to inspection and search is provided for in section 30 (1) of the NESREA Act, 2007 which states that an officer of the Agency may, in the course of his duty, at any reasonable time and on production of his certificate of designation if so required: (a) enter and search with a warrant issued by a court, any premises including land, vehicle, tent, vessel, floating craft at all times for the purpose of conducting inspection, searching and taking samples for analysis which he reasonably believes carried out activities or stores goods which contravene environmental standards or legislation.

### **Harmful Waste Decree No 42 of 1988**

The Harmful Waste (Special Criminal Provisions, etc.) Act, 2004 pursuant to section 21 empowered the Agency to seal up any area or site which has been, or is being or will or might be used directly or indirectly for the purpose of depositing or dumping any harmful waste. The

power to seal-up the dumpsite is a temporary measure yet it can be useful for as long as the deemed it necessary for the protection and sustenance of the environmental resources that would be affected if nothing is done. It may last for three months in the first instance and may be further extended for a period not exceeding twelve months. In addition, the Agency may direct that any substance found therein which in its opinion is of a harmful nature be destroyed or disposed of at such time and in such manner which it deems fit and may take necessary measures to safeguard lives or property found within the sealed premises. The NESREA, Act 2007, under section 30 (1) paragraph (g) is empowered to obtain an order of a court to suspend activities, seal and close down premises including land, vehicle, tent, vessel, floating craft or any inland water and other structure whatsoever. Similar provision is found under section 10 of the Harmful Waste (special criminal Provisions, etc) Act, 2004, which authorized any police officer, without warrant to enter and search any land, building or carrier, including aircraft, vehicle, container or any other thing whatsoever which he has reason to believe is related to the commission of a crime under the Act. It is argued that where a body or person has requested the necessary authority to carry out these preventive environmental protection measure and they seemed to delay, he or they, can by mandamus issued by a Court of competent jurisdiction enter into such premises to do all that which the Agency or officer ought to do within the confines of the law.

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### **Environmental Impact Assessment Act**

The Environmental Impact Assessment (EIA) Act, in the opinion of this article, was a direct response to the outcome of the United Nations Conference on Environment and Development

(UNCED) held in Rio de Janeiro in 1992. The Act outlines the goals and objectives of an EIA, the minimum content of an EIA and a list of activities that are not permitted to go ahead until the Agency has been consulted and has given its approval (section 2, EIA Act 1992). The main aim of the Act is to ensure environmentally sound and sustainable development projects and to nip in the bud every attempt through projects at pollution or other forms of depletion of the environment. This is to be achieved through ensuring that the possible negative impacts of development projects are predicted and addressed prior to project takeoff (section 5, EIA Act 1992). The EIA has the following objectives; to: establish the likely environmental effects of proposed activities before a decision is taken to implement them; promote the implementation, in all federal lands, state and local government areas, of appropriate policies consistent with all laws and decision-making processes through which the above goals may be reached; and encourage the development of procedures of information exchange, notification and consultation between institutions and people when proposed activities are likely to have a significant effect on boundary or trans-state or on the environment bordering towns and villages (section 1, EIA Act 1992). The Act has made mandatory for an EIA to be carried out for certain types of projects comprising various industrial, mining and petroleum activities whether the undertaking is done by public or private sector.

### **Climate Change Act 2021**

The Climate Change Act (CCA) 2021 is in response to Nigeria's commitment to complying with the minimum required of the country in anti-climate change efforts of the international community. The CCA is to achieve low greenhouse gas emission (GHG), green growth and sustainable development (section 1, CCA 2021). Ensuring that Nigeria formulates programmes for achieving its long-term goals on climate change mitigation and adaptation is part of the objects the legislature had in mind on enacting the CCA (section 1(a), CCA). Long-term climate objective needed to be part of what the country would be doing from 2021 in reducing GHG (section 1(b), CCA). Climate change action plans are to be subject to national priorities; where the national priorities are over and above climate change issues, such national priorities would prevail (section 1(c), CCA). Monies needed to combat climate change would be provided by the government (section 1(d), CCA). Environmental integrity and socio-economic development will be product of policy and actions integration by the office charged with complying with Nigeria's GHG requirement (section 1(e), CCA). Nigeria has set year 2050-2070 as its net-zero GHG emission target in line with Nigeria's international climate change obligation (section 1(f), CCA).

Climate change is not an occurrence from natural phenomenon but an aggression on nature by human activities which tend to pollute the environment beyond what the natural existences can accommodate. Therefore, nations are supposed and expected to identify risks and vulnerable factors that encourages GHG emissions, build resilience against such weaknesses identified and strengthen existing adaptive capacities in curtailing climate change (section 1(g), CCA). Building resilience and risks ascertainment are actions based; a country must show in real time what it has done, from which what it can do, will be verifiable and detailed information of what it needs to accomplish resistance to climate change challenges in its immediate environment. Then, the country should implement mitigation measures that promote low carbon economy and sustainable livelihood (section 1(h), CCA) as well as ensure that private and public entities comply with stated climate change strategies, targets and National Climate Change Action Plan (section 1(i), CCA). The CCA applies to everyone for the purposes of the development and implementation of mechanisms geared towards fostering low carbon emission, environmentally sustainable and climate resilient society (section 2, CCA).

The CCA established a National Council on Climate Change (section 3, CCA) with the powers to make policies decisions on matters of climate change in Nigeria. They are to coordinate implementation of sectoral targets and guidelines for reduction of GHG and other human activities which affect the climate (section 4(a), CCA). The Council approve and implement Climate Change Action Plan (section 4(b), CCA); administer the Climate Change Fund (section 4(c), CCA); formulate guidelines for determining vulnerability to climate change impact and adaptation assessment, and facilitate the provision of technical assistance for their implementation and monitoring (section 4(f), CCA); they recommend to the legislature and executive actions for adaptation and mitigation of climate change impact; collaborate with federal inland revenue service to develop carbon tax mechanism in Nigeria (section 4(i), CCA); make collaborations for carbon trading (section 4(j), CCA); advice government on climate change international agreements (section 4(k), CCA); and among others, disseminate information on climate change, local vulnerabilities and risk, relevant laws and protocols, and adaptation and mitigation measures (section 4(l), CCA).

## **Conclusion**

The Legislature have made frantic efforts at ensuring laws were enacted for the prevention of pollution and punishment of those who engage in such deleterious activity against the environment. Expectedly, agencies of government saddled with the responsibility of implementing these laws have their jobs cutout to embarking on environmental enforcement with the aid of the

extant laws for pollution free environment suitable for our individual and collective development. Promoting the laws in the way of this article is crucial for the requisite awareness needed to move ideas on benefits of pollution free environment to all who may be involved indirectly or directly in activities which may be lawful yet consequential to unpolluted environment.

## References

- Agboola, O. M., Nwulu, N. I., Egelioglu, F., & ... (2011). Gas flaring in Nigeria: opportunity for household cooking utilization. *International Journal of ...* [https://www.researchgate.net/profile/Oluwatoyin-Agboola-3/publication/267560061\\_Gas\\_Flaring\\_in\\_Nigeria\\_Opportunity\\_for\\_Household\\_Cooking\\_Utilization/links/57a0a89808aeb1604832746c/Gas-Flaring-in-Nigeria-Opportunity-for-Household-Cooking-Utilization.pdf](https://www.researchgate.net/profile/Oluwatoyin-Agboola-3/publication/267560061_Gas_Flaring_in_Nigeria_Opportunity_for_Household_Cooking_Utilization/links/57a0a89808aeb1604832746c/Gas-Flaring-in-Nigeria-Opportunity-for-Household-Cooking-Utilization.pdf)
- Atsegbua, L. A., Akpotaire, V., & Dimowo, F. (2004). *Environmental law in Nigeria: Theory and practice*. Ababa Press.
- Babatzia, A., Papaioannou, W., Stavropoulou, A., & ... (2020). Clinical and microbial oral health status in children and adolescents with type 1 diabetes mellitus. *International Dental ...* <https://www.sciencedirect.com/science/article/pii/S0020653920313757>
- Bennett, N. J., Whitty, T. S., Finkbeiner, E., Pittman, J., & ... (2018). Environmental stewardship: A conceptual review and analytical framework. *Environmental ...* <https://doi.org/10.1007/s00267-017-0993-2>
- Climate Change Act 2021
- Davy, C. M., Ford, A. T., & Fraser, K. C. (2017). Aeroconservation for the fragmented skies. *Conservation Letters*. <https://doi.org/10.1111/conl.12347>
- Environmental Impact Assessment Act 1992
- Fahs, J. J. (1995). Cambridge Water Co. v. Eastern Counties Leather PLC: The End of Common Law Strict Liability or the Beginning of Unified EC Strict Liability for Toxic Chemical ... *NY Int'l L. Rev.* [https://heinonline.org/hol-cgi-bin/get\\_pdf.cgi?handle=hein.journals/nwykinllw8&section=8](https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/nwykinllw8&section=8)
- Heijnsbergen, P. Van. (1979). The " Pollution" Concept in International Law. *Envtl. Pol'y &L.* [https://heinonline.org/hol-cgi-bin/get\\_pdf.cgi?handle=hein.journals/envpola5&section=14](https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/envpola5&section=14)
- Ikoni, U. D. (2013). THE APPLICATION OF THE PRECAUTIONARY PRINCIPLES IN THE PROOF OF ENVIRONMENTAL OFFENCES UNDER THE NIGERIAN LAW .... *Journal of Environmental Research ...*
- James Madison University. "Environmental Stewardship and Sustainability" <https://www.jmu.edu/stewardship/what-is-environmental-stewardship.shtml>.
- Keller, D. R. (2010). *Environmental ethics: The big questions*. books.google.com. <https://books.google.com/books?hl=en&lr=&id=YKQmqFfrT5EC&oi=fnd&pg=PR11&dq=environmental+ethics+the+big+questions&ots=kjrGFp gmBw&sig=WDCjWygaCjF60f-HBqceux5zSE0>

- Kjellstrom, T., Lodh, M., McMichael, T., & ... (2006). Air and water pollution: burden and strategies for control. ... *Control Priorities in ...* <https://www.ncbi.nlm.nih.gov/books/NBK11769/>
- Kortetmäki, T. (2013). Anthropocentrism versus ecocentrism revisited: Theoretical confusions and practical conclusions. *SATS*. <https://doi.org/10.1515/sats-2013-0002>
- Michlak, K., & Schucht, S. (2004). Economic aspects of environmental compliance assurance. *OECD Proceedings, Global Forum on ...* [https://www.researchgate.net/profile/Simone-Schucht-2/publication/275885954\\_ECONOMIC\\_ASPECTS\\_OF\\_ENVIRONMENTAL\\_COMPLIANCE\\_ASSURANCE/links/554885710cf2b0cf7acecaac/ECONOMIC-ASPECTS-OF-ENVIRONMENTAL-COMPLIANCE-ASSURANCE.pdf](https://www.researchgate.net/profile/Simone-Schucht-2/publication/275885954_ECONOMIC_ASPECTS_OF_ENVIRONMENTAL_COMPLIANCE_ASSURANCE/links/554885710cf2b0cf7acecaac/ECONOMIC-ASPECTS-OF-ENVIRONMENTAL-COMPLIANCE-ASSURANCE.pdf)
- National Environmental Standards and Regulations Enforcement Agency Act 2007 as amended
- Norton, B. G., Light, A., & Rolston, H. (2003). *Environmental ethics and weak anthropocentrism*. books.google.com. <https://books.google.com/books?hl=en&lr=&id=gOUTdFT46QYC&oi=fnd&pg=PA159&dq=environmental+ethics+and+weak+anthropocentrism+in&ots=eFcrXWiPYO&sig=WY-bLY0mbaqqCvfTbzzcqKUle03M>
- Odeku, K. O., & Paulos, B. M. (2017a). Prohibition of pollution of marine environments: challenges and prospects. *Environmental Economics*. [http://www.irbis-nbu.gov.ua/cgi-bin/irbis\\_nbu/cgiir-bis\\_64.exe?C21COM=2&I21DBN=UJRN&P21DBN=UJRN&IMAGE\\_FILE\\_DOWNLOAD=1&Image\\_file\\_name=PDF/envirecon\\_2017\\_8\\_3\(contin.\)\\_7.pdf](http://www.irbis-nbu.gov.ua/cgi-bin/irbis_nbu/cgiir-bis_64.exe?C21COM=2&I21DBN=UJRN&P21DBN=UJRN&IMAGE_FILE_DOWNLOAD=1&Image_file_name=PDF/envirecon_2017_8_3(contin.)_7.pdf)
- Odeku, K. O., & Paulos, B. M. (2017b). Prohibition of pollution of marine environments: challenges and prospects. *Environmental Economics*. [http://www.irbis-nbu.gov.ua/cgi-bin/irbis\\_nbu/cgiir-bis\\_64.exe?C21COM=2&I21DBN=UJRN&P21DBN=UJRN&IMAGE\\_FILE\\_DOWNLOAD=1&Image\\_file\\_name=PDF/envirecon\\_2017\\_8\\_3\(contin.\)\\_7.pdf](http://www.irbis-nbu.gov.ua/cgi-bin/irbis_nbu/cgiir-bis_64.exe?C21COM=2&I21DBN=UJRN&P21DBN=UJRN&IMAGE_FILE_DOWNLOAD=1&Image_file_name=PDF/envirecon_2017_8_3(contin.)_7.pdf)
- Olufunke, K. A. (2022). Water Pollution in Nigeria and Its Effect on Agriculture: A Case Study of Niger Delta. *Res. & Sci. Today*. [https://heinonline.org/hol-cgi-bin/get\\_pdf.cgi?handle=hein.journals/rescito23&section=4](https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/rescito23&section=4)
- Orji, U. J. (2012). An appraisal of the legal frameworks for the control of environmental pollution in Nigeria. *Commonwealth Law Bulletin*. <https://doi.org/10.1080/03050718.2012.674735>
- Passmore, J. A. (1974). *Man's responsibility for nature: Ecological problems and western traditions*. philarchive.org. <https://philarchive.org/rec/PASMRF>
- Schmitz, C. L., Stinson, C. H., & James, C. D. (2010). Community and environmental sustainability: Collaboration and interdisciplinary education. *Critical Social Work*. <https://ojs.uwind-sor.ca/index.php/csw/article/view/5834>
- Suleiman, R. M., Raimi, M. O., & ... (2019). A deep dive into the review of national environmental standards and regulations enforcement agency (NESREA) act. ... 2019) *A Deep Dive into the ...* [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3498797](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3498797)

Worrell, R., & Appleby, M. C. (2000). Stewardship of natural resources: definition, ethical and practical aspects. *Journal of Agricultural and Environmental Ethics*. <https://doi.org/10.1023/A:1009534214698>