journals.unizik.edu.ng/index-php/jcpl
ISSN: 2736-0342
NNAMDI AZIKIWE UNIVERSITY, AWKA
JOURNAL OF COMMERCIAL AND PROPERTY LAW

Legal Framework for the Regulation of Abandonment and Decommissioning in Nigeria

Ikechukwu Chime*

Akachi Lynda Nwogu-Ikojo**

Chukwu Michael Ike***

Abstract

The global recognition of the importance of decommissioning and restoring abandoned oil and gas installations is driven by the need to return ecosystems to their original state. Two factors in Nigeria make it essential to consider the nation's abandonment and decommissioning provisions. First, several onshore oil fields are maturing. Secondly, many international oil companies (IOCs) are transferring their assets to indigenous companies with little proven competence in decommissioning and abandonment. Before the Petroleum Industry Act 2021 (PIA), Nigeria did not have a comprehensive legal framework for regulating abandonment and decommissioning of oil and gas operations. However, the PIA has addressed this lacuna, along with accompanying regulations. This has necessitated research to assess the adequacy and effectiveness of the laws regulating decommissioning oil and gas installations in Nigeria and their impact on mitigating environmental degradation risks. This study adopts an analytical approach using current literature to apply the doctrinal library-based legal technique. The study reveals that the primary legal frameworks have improved environmental protection, addressed concerns of host communities, and regulated post-exploration and exploitation activities in oil and gas fields in Nigeria. However, it also highlights the lack of enforcement and implementation structure. The paper concludes by recommending that the enforcement arm takes up the responsibility to implement the legal provisions on abandonment and decommissioning to address abandonment and decommissioning effectively.

Keywords: decommissioning, abandonment, sustainable development, oil and gas, Petroleum Industry Act 2021, environment.

1. Introduction

The first commercial discovery of crude oil in Nigeria in 1956[1] marked the emergence of an industry that would transform the nation and serve as the bedrock of her economy.[2] Consequently, the need to regulate this fairly young industry became inevitable; culminating in the enactment of several regulatory frameworks for the ownership, exploration, production, and transportation of the famous black liquid, but little or no effort was geared towards regulating the harmful environmental impact of oil exploration.[3] The consequence of this oversight is that Nigeria faces immense environmental degradation, especially in the Niger Delta, resulting from oil-related

* **Ikechukwu Chime,** Lecturer, Faculty of Law, University of Nigeria, Enugu Campus, ike.chime@unn.edu.ng.

** **Akachi Lynda Nwogu-Ikojo,** Lecturer, Faculty of Law, University of Nigeria, Enugu Campus, akachi.nwogu-ikojo@unn.edu.ng.

*** **Chukwu Michael Ike,** Law Graduate, Faculty of Law, University of Nigeria, Enugu Campus

[1] G Etikerentse, *Nigerian Petroleum Law* (2nd edn, Dredew Publishers 2004) 9.

[2] The Oil sector provides 95% of Nigeria's foreign exchange earnings, 80% of its budgetary revenues and contributed 5.48% to the total real GDP in Q3 2023. See NBS, 'Nigeria Gross Domestic Product Report Q3 2023', Iss 39: Qtr 3, 2023. <www.nigerianstat.gov.ng.> See also AS Abubakar, 'An Analysis of Impact of Oil Revenue on the Economic Growth in Nigeria', <https://portal.bazeuniversity.edu.ng/student/assets/thesis/20210218153354128046330 3.pdf> accessed 19 November 2023

[3] G Ogbodo & AC Umadia, 'A Case for the Application of Strict Liability in Oil and Gas Pollution Cases in Nigeria' in E Duruigbo, R Chibueze, S G Ogbodo, (eds) *International Law and Development in the Global South* (Palgrave Macmillan, Cham, 2023).< https://doi.org/10.1007/978-3-031-13741-9_16> accessed 19 November 2023.

activities.[4] Roughly 13 million barrels have been spilled, adversely impacting coastal wetlands, mangroves, and agricultural lands.[5]

In response to growing environmental concerns and the need for sustainable management, many countries and international organizations have seen the need to create a regulatory landscape to govern decommissioning and/or abandonment[6] to combat adverse environmental risks on the environment, aquatic lives, and human health and prevent public nuisance, thereby making decommissioning not merely an engineering task but also a highly regulated endeavour that involves legal and environmental considerations. [7] During hydrocarbon exploration and development, numerous installations are constructed, equipment specific to these operations is utilized and diverse wellbores may be drilled. It becomes necessary to either remove the oil and gas platforms or evacuate the field entirely when the oilfield reaches the end of its exploitation; to make the site safe and minimize potential residual environmental impacts and permit possible return of other activities. To achieve this requires strong and comprehensive regulatory framework on decommissioning of petroleum assets.

Over the years, Nigeria has created laws governing the process of oil and gas extraction, such as the Petroleum Act of 1969, enacted about ten years after oil was first produced in the country. This law contained seven subsidiary sets of regulations, only one pertained directly to decommissioning, which was the petroleum (Drilling and Production Regulation (L.N 69 of 1969), which Regulation 32 thereof made provisions for the removal of oil equipment and plugging of oil wells.[8] Also, Environmental Guidelines and Standards for the Petroleum Industry in Nigeria (EGASPIN) of 1991 was established. However, these laws did not contemplate rules of procedures or liability due to defaults of such companies in satisfying their decommissioning obligations. It did not demand any specific decommissioning plan, or detail requirements of the conditions for the process, as the priority concern at the time was the prevention of premature abandonment of wells and not the impact of the activity on the environment.

This situation has improved with the arrival of the Petroleum Industry Act (PIA) 2021 and a couple of other regulations such as the EGASPIN 2018. The PIA for the first time in the Nigerian oil and gas regime, provided for specific regulatory bodies governing decommissioning and abandonment in Nigeria. For proper implementation of the provisions and to establish clear cut procedures, the Nigerian Upstream Petroleum Regulatory Commission (NUPRC) and the Nigerian Midstream and Downstream Petroleum Regulatory Agency (NMDPRA) were established to regulate amongst others, the decommissioning and abandonment of the upstream and downstream sector respectively and also provides specific provisions for decommissioning and abandonments.[9]

---

[4] G O Omokaro, V Idama, E O Airueghian, & I Michael. 'Water Resources, Pollution, Integrated Management and Practices in Nigeria – An Overview' (2024) 3 (1) *American Journal of Environmental Economics*, 5–18. <https://doi.org/10.54536/ajee.v3i1.2593>

[5] Ibid.

[6] PR Baker, 'Decommissioning Coal in an Extraction Culture: Aftermath and Lessons Learnt' (2018) *Journal of World, Energy Law and Business* 237.

[7] Stakeholder Democracy Network,' Sustainable Closure and Decommissioning of Onshore and Offshore Oil and Gas Assets in Nigeria' (White Paper, April 2015) <https://www.stakeholderdemocracy.org> accessed 19 November 2023.

[8] Ibid, 2.

[9] S Dunmade and I Adeyemo and J Ukafor', 'Decommisioning and Abandonment: Nigeria's Experience in Global Context' (2023) *SSRN* <https://papers.ssrn.com/sol3/papers.cfm?abstract> accessed 2 February 2024.

Recently, international oil companies operating in Nigeria have been divesting from their petroleum installation assets and one of the biggest concerns industry about the divestment strategy being executed by these companies is the question of responsibility.[10] For example, Shell is set to exit from Nigeria's onshore oil and gas operations after agreeing in January to sell the business to a consortium of five mostly local companies for $2.4 billion. However, according to the report by the not for profit Centre for Research on Multinational Corporations (SOMO), the cost of dismantling old assets could leave the country with environmental degradation. There is a massive bill for (clean up) and communities in the delta are also demanding environmental restoration or compensation from Shell for land damaged by historical oil spills.[11]

With this development and a quick look at the state of the environment, this research finds it pertinent to conduct an evaluation of the regulatory frameworks for decommissioning installations.

2. Conceptual Framework

This provides clarification of some key words pertaining to the research topic:

2.1 Abandonment

Nigerian law[12] does not define the term 'abandonment' alone but defines the term together with 'decommissioning'. Therefore, recourse must be sought from other relevant sources for a proper and sufficient understanding of the term. The Black's Law Dictionary defines abandonment as the 'voluntary relinquishment of all rights, title, or claim to property that rightfully belongs to the owner of the property.'[13] Technically speaking, abandonment is followed by well plugging and entails the removal of fixed platform well or deep hole equipment (packers, Pumps, tubing), subsea wells with wellheads buried in the ocean floor, crude oil to a hovering ship or attached support to oil rig infrastructure, as well as floating exploration and appraisal wells.

When referring to an oil well, abandonment refers to the act of sealing the well to make it permanently inoperable.[14] Rule 400-1-4-.18 of the Alabama Administration Code 1975 provides that: 'a well is considered abandoned when it has not been used for six (6) consecutive months and has not been classified as temporarily abandoned or shut in under Rule 400-1-4-.17 (Request to Classify Wells as Temporarily Abandoned or Shut-in)…' Abandonment means leaving behind materials in situ after the expiration of the life of the asset.[15] But abandoning has many more aspects. Following the asset's useful life, the facilities must be recycled, moved, or securely stored in an area that respects the environment using legal ways, by best practices for the sector.

[10] **D Ade-Odiachi**, 'Responsible Oil Production and Decommissioning' (This day live, 28 March, 2022) <https://www.thisdaylive.com/index.php/2022/03/28/responsible-oil-production-and-decommissioning> accessed 2 February 2024.

[11] S Sanni, 'Shell faces calls to safely decommission old assets before Nigeria Exit'<https://www.reuters.com/business/energy/shell-faces-calls-safely-decommission-old-assets-before-nigeria-exit-2024-03-06/ >accessed 2 May 2024.

[12] Petroeum Industry Act (PIA) 2021, s 318

[13] Black's Law Dictionary, 'Abandonment' <https://thelawdictionary.org/abandonment> accessed 4 May 2024.

[14] IADC, 'Abandonment' <iadclexicon.org/abandonment/> accessed 6 May 2024.

[15] SC Dike, 'Decommissioning and Abandonment of Oil and Gas Facilities Legal Regime in Nigeria: Any Lesson from Norway, the UK and Brazilian Legal framework' (2017) 9(1) *JPLCI*, 169.

Since abandonment is the commencement phase of decommissioning, some writers such as Paterson[16] have attempted to use abandonment and decommissioning interchangeably. However, according to Dike, the terms Abandonment and Decommissioning are not the same and cannot be used interchangeably.[17] Dike explains that the reason why they are not the same is because decommissioning activities for facilities permanently shut down and or abandoned shall commence at least one year after the oil well is abandoned and completed within six months after the commencement of decommissioning. From the foregoing, this research adopts the submission of Dike. Decommissioning only happens after a facility has been abandoned.

2.2 Decommissioning

Decommissioning has various definitions depending on the context/usage. Simply put, it means to remove (something, such as a ship or a nuclear power plant) from service.[18] Technically, in the oil and gas industry, decommissioning is the process where offshore oil and gas infrastructure is no longer needed and is either removed or left in place but repurposed.[19] Similarly, Decommissioning is 'the final phase in the life cycle of an energy installation covering all activities from shutdown and removal of equipment and material to environmental restoration of the site.'[20] The removal, disposal, or reuse of the platform structure, equipment, connected pipelines, and wells is accomplished through the decommissioning process, which is carried out by the owner/operator of an offshore oil and/or gas facility after planning for it, obtaining approval, and putting it into action.[21] Decommissioning is 'essentially a set of activities undertaken to manage or dispose of aged and worn-out oil and gas facilities.'[22]Hence, it is the last phase in the life span of oil and gas project.[23]

It is pertinent to state that in section 318 of the Petroleum Industry Act 2021, decommissioning and abandonment were defined together to mean 'the approved process of cessation of operations of crude oil and natural gas wells, installations, plants and structures, including shutting down an installation's operations and production, total or partial removal of installations and structures where applicable, chemicals and all such other materials handling, removal and disposal of debris and removed items, environmental restoration of the area after removal of installations, plants and structures… ' Section 318 also defines 'decommissioning and abandonment plan' as the plan to be submitted in the field development plan under section 79(2) for upstream petroleum operations and under section 111(3) of the Act for midstream petroleum operations.

Decommissioning can be classified into two types and they are; onshore and offshore decommissioning.[24] Decommissioning an onshore well involves removing all surface equipment,

[16] J Paterson, *Decommissioning of Offshore Oil and Gas Installations* in Greg Gordon, John Paterson, Emre Usenmez (eds) (2nd edn, Dundee University Press 2011) 286.
[17] Ibid.
[18]Merriam Webster Dictionary, 'Decommissioning' <https://www.merriam-webster.com/dictionary/deco> accessed 6 May 2023.
[19] Ibid.
[20]LexisNexis, 'Decommissioning' <https://www.lexisnexis.co.uk> accessed 6 May 2024.
[21] IADC (n 14).
[22] R Abubakar and S Ogiriki, 'Decommissioning of Oil and Gas facilities in Nigeria: Challenges and Opportunities.' Paper presented at the SPE Nigeria Annual International Conference and Exhibition, Lagos, Nigeria, August 2022. <doi:https://doi.org/10.2118/211920-MS>.
[23]K G Kingston and Z Adangor, 'The Vacuum in Nigeria's Crude Oil Law: an Inquiry in Decommissioning of Onshore and Offshore Facilities' (2018) 8 (1) *Cranbook Law Review* 5
[24] Dike (n 15) 174.

production tubing and uncemented casing. To plug the well, sections of the wellbore are filled with concrete to isolate the flow of reservoir fluids from each other and to the surface.[25]

For decommissioning purposes, offshore production facilities consist of two parts. First is the topside or platform, which is the structure visible above the waterline. This component is generally taken to shore for recycling or reuse. Second is the substructure that includes the parts below the water's surface and equipment on the seabed. The seabed is also referred to as the mud line. The substructure is generally severed 15 feet below the mud line, removed and brought to shore for recycling or refurbished for use in another location. The well is plugged using cement as described previously for onshore wells. Subsea pipelines or power cables often remain in place. Their removal may be required if they pose an environmental hazard or interfere with navigation or commercial fishing operations.[26] Communities where such decommissioning activities will be carried out must be consulted, and the decommissioning strategy must consider their impact.[27] After oil and gas installations and facilities have been decommissioned and abandoned, a lessee or licensee is required to properly clean, disassemble, and remove any structures from those installations and facilities. This can entail recycling safely used components from decommissioned facilities in a designated location, and the price of the aforementioned decommissioning must be made explicit.[28]

3. The Need for Abandonment and Decommissioning Vis-à-vis the Challenges

Statistics show that there are about 480 oil and gas installations located off the coast of Africa, to which Nigeria hosts over 170 of these installations.[29] Therefore, operations and associated installations will require complex and costly dismantling, technical and environmental restoration as well as rehabilitations methods at the end of the projects productive life.[30]

Invernizzi and others[31] explained that decommissioning of existing energy infrastructures is constrained by technical, legal, economic, financial, social and environmental challenges that must be considered and addressed for such infrastructures to make a positive impact over their whole life. The writers explain that these various challenges affect the system in various magnitudes and they are necessary to raise awareness on the development of policies for decommissioning projects. To the authors, technical challenges of decommissioning involve the management of radioactive, toxic and hazardous materials that arise from decommissioning activities, handling, transportation, reuse, recycling and disposal of components.[32]

These bottlenecks are made worse by a general absence of coordinated recycling policies and end-of-life waste management legislation. These regulations and legislations are evolving to place a

[25] EKT Interactive, 'Upstream Oil and Gas Production Decommissioning' (2023) <https://ektinteractive.com> accessed 6 May 2024.
[26] Ibid.
[27] Dike (n 15) 175.
[28] Ibid.
[29] L Atsegbua, *Oil and Gas Law in Nigeria: Theory and Practice* (3rd edn, Nigeria: Fifers Lane Publishers 2012) 290. These number must have increased if not doubled 12 years after
[30] World Bank, *Towards Sustainable Decommissioning and Closure of Oil Fields and Mines* <https://www.go.worldbank.org> accessed 15 August 2020
[31] D Invernizzi and others, 'Developing Policies for the end-of-life of energy infrastructure: Coming to terms with the Challenges of Decommissioning' (2020) 144 (21) *Energy Policy* 1.
[32] Ibid.

greater emphasis on the producer's and/or operator's duty to manage decommissioning.[33] As more assets reach the end of their useful lives, the economic costs of decommissioning will undoubtedly rise, yet few operators have set aside enough money to adequately decommission their assets.

The high cost of decommissioning has been traced to the absence of consideration for a facility's end-of-life during the development of oil fields.[34] It is essential to plan for decommissioning and to have a design for decommissioning to reduce the high cost of decommissioning activities. Addressing the social challenges of decommissioning, Invernizzi and others explain that in managing the removal of facilities after use, the workers often take part in uninstalling their source of livelihood. Also, public controversy surrounding the decommissioning of facilities tends to forestall the progress of decommissioning.[35] The environmental challenges arise during the restoration of decommissioned infrastructure to its original state or preparation of such for subsequent use.[36]

4. International Legal Regimes that Regulate Abandonment/Decommissioning

The international legal regimes that regulate abandonment/decommissioning globally are:

a. The Geneva Convention on the Continental Shelf, 1958. The Convention on the Continental Shelf (CCS) was adopted in Geneva, Switzerland on the 29th day of April, 1958, and came into force on the 10th of June 1964. (The Geneva Convention) which commenced in 1964 and was ratified by Nigeria on April 28, 1971.[37]

b. United Nations Convention on Law of the Sea (UNCLOS) 1982, adopted at Montego Bay, Cuba on 10th December, 1982, and came into force on 16th November, 1994. Nigeria, on December 10, 1982, ratified the provisions of the United Nations Convention on the Law of the Sea 1982 (UNCLOS).[38]

c. The Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matters, 1972 and its Protocol of 1996. The Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matters, also known as the London Dumping Convention of 1972 applies to all marine waters worldwide. It was adopted in London on 29th December, 1972 and came into force on 30th August, 1975.

d. The International Maritime Organization (IMO)'s Offshore Removal Guidelines, 1989 fills in the gap created by Article 60(3) of the United Nations Convention on the Law of the Sea that oblige states to comply with the International Standards Organization and its Maritime Safety Committee. It provides the standard and guidelines for the removal of disused or abandoned offshore oil installations. Although IMO Standards are mere recommendations which are not

[33] Ibid.

[34] A Adedayo, 'Disused Offshore Installations and Pipelines: Towards Sustainable Decommissioning' (2003) *Kluwer International* 197. Fortunately, the PIA contains provisions that considers decommissioning and Decommissioning immediately upon the commencement of petroleum activities. See Section 233(9) of the PIA which requires a lessee/licensee to set a up an Abandonment and Decommissioning Fund within 3 months of commencement of production and furnish details of the account of the D&A account to the Commission.

[35] John (n 5).

[36] Ibid.

[37] C O Ngozi and I G Okpara, 'Decommissioning and the Petroleum Industry Act 2021' [2023] 11(1) *Journal of Environmental and Natural Resources Law* 101.

[38] 'The United Nations Convention on the Law of the Sea' <https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf> accessed 12 April 2024.

generally binding on the member-States who are parties to the UNCLOS, yet, there have been instances where such soft laws develop into hard laws as they are adopted and used by member-States.[39] However, it fails to provide for what should happen afterwards especially where there is non-compliance with the provisions of the Convention.[40]

5. Assessment of the Laws and Regulations on Abandonment and Decommissioning in Nigeria

5.1 The Petroleum Industry Act 2021

The Petroleum Industry Act 2021[41] is currently the primary legislation in Nigeria regulating abandonment and decommissioning for oil and gas companies operating in the country. The Act is a panacea to most of the challenges that have affected the oil and gas industry regarding decommissioning for years. It subscribes to international best practice regarding to decommissioning and abandonment. It seeks to match the standards set internationally by the United Nations Convention of the Laws of the Sea, 1982 (UNCLOS III) and the International Maritime Organization's Guidelines and Standards for the Removal of Offshore Installations and Structures on the Continental Shelf and Exclusive Economic Zones, 1989 by providing that decommissioning and abandonment shall be conducted in accordance with good international petroleum industry practice'.[42]

For example, the Act creates two new regulatory bodies to monitor decommissioning in Nigeria: the Nigerian Upstream Petroleum Regulatory Commission (the Commission) for D&A in the upstream sector and the Nigerian Midstream and Downstream Petroleum Regulatory Authority (the Authority) for D&A in the midstream and downstream sectors. Also to ensure compliance with the specific standards and regulations of the Act and best practices, the Commission performs an oversight and supervisory function in the upstream sector of the Petroleum Industry, including decommissioning, by encouraging innovation and setting guidelines that will incentivize companies to develop safer and more efficient environmentally friendly practices and technologies in their operations.[43]

The Nigerian Midstream and Downstream Petroleum Regulatory Authority is responsible for regulating the technical and commercial aspects of midstream and downstream operations, including decommissioning. While it is within the power of the Minister for Petroleum Resources to grant petroleum prospecting licenses and petroleum mining leases to potential licensees or lessees, it is the responsibility of the Commission/ authority to enforce compliance with the terms and conditions of the leases and licenses granted, as well as the terms of permits and authorizations issued to a company in respect of upstream petroleum operations including decommissioning provisions.[44] .

---

[39] B E Kooffreh and F I Brian, 'Abandonment/Decommissioning under Nigeria Legal Regimes: A Comparative Analysis' [2020] *PBR* 70.

[40] O J Olujobi, 'The Legal Regime on Oil and Gas Wastes: Can Decommissioning Of Petroleum Assets under the Petroleum Industry Act 2021 Combat Environmental Degradation Risk in Nigeria's Upstream Petroleum Sector?' (2023) 8(1) *Journal of International Law and Jurisprudence, Faculty of Law, University of Jos* 397, 405.

[41] Hereinafter referred to as 'PIA'

[42] S Dunmade and I Adeyemo and J Uka-Ofor 'Decommissioning and Abandonment: Nigeria's Experience in a Global Context'(2023)<https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4649437>accessed 12 April 2024.

[43] Ibid, s 6(f) PIA for the Commission

[44] Ibid, s 7(d) for the Commission; s 32(j) for the Authority.

The procedure for decommissioning is contained in Sections 232 and 233 of the Petroleum Industry Act (PIA), which require:

Specific to abandonment and decommissioning: the Act provides for the grant of petroleum exploration licenses, exploration licenses, prospecting licenses and mining leases to enable qualified applicants to carry out petroleum exploration operations including the drilling of exploration and appraisal walls.[45] However, the Act requires a complete removal of such onshore oil and gas installations and structures at the end of their life, and the restoration of the environment to its original condition, except for buried transportation pipelines and gathering lines.[46] Also petroleum leases and licenses must contain special clauses which would include details of obligations regarding relinquishment, decommissioning and abandonment.[47]

Licensees who operate in the midstream sector are not absolved from the same responsibility as section 111(3) (c) PIA 2021 provides that the Authority shall only grant licenses for midstream petroleum operations where it includes a decommissioning and abandonment plan and corresponding fund.

Any decommissioning is to be conducted with the written approval of the Commission/Authority, which is required to notify a licensee or lessee or permit holder in writing of the need to commence abandonment and decommissioning of a structure, where such decommissioning and abandonment is required under good international petroleum industry practices.[48] A licensee or lessee does not need to be prompted to begin decommissioning or abandonment though. The licensee or lessee may, by written notice, inform the Commission/Authority of its intention to decommission or abandon a facility.[49]

When such notice of decommissioning and abandonment has been given, the licensee or lessee is required to submit to the Commission/Authority details of the decommissioning and abandonment program to enable the Commission to determine whether the program will be done in line with good international petroleum industry practices and environmental development.[50] The Act requires relevant licensees or lessees to engage in consultations with interested parties and other stakeholders before the commencement of the decommissioning program, except in the case of abandonment of wells.[51] This is in line with the global agitation for increased stakeholder engagement in environmental matters.[52]

A decommissioning and abandonment plan shall establish a yearly contributory amount to the relevant decommissioning and abandonment fund, with the amount based on a reasonable estimate of the applicable decommissioning and abandonment costs and the estimated life of the facilities.[53] This makes it possible to prevent a situation where there are inadequate funds at the end of petroleum operations. The fund is funded by the relevant licensees or lessees based on the approved

[45] Ibid, s 70(1).
[46] PIA, s 232(7).
[47] Ibid, s 76(e).
[48] Ibid, s 232(2) & (3).
[49] Ibid, s 232(5).
[50] Ibid, s 232(6).
[51] Ibid, s 232(8).
[52] A Tung, 'A Comparison of Stakeholder Engagement Strategies for Offshore Decommissioning Projects in the United Kingdom and Australian Landscape' [2020] 3(1) *PJH* 3.
[53] PIA, s 233(5)

amount in the decommissioning and abandonment plan and such fund must be exclusively used to pay for the decommissioning and abandonment costs.[54] When the decommissioning and abandonment have already taken place and there is an excess in the fund, the excess shall be considered income for production sharing or tax purposes and the amount after the withholding of profit oil and any other tax shall be returned to the licensee.[55] Finally, the estimated contribution to the fund is to be reviewed every ten years from the first submission to the Commission/Authority[56] and makes contributions to the fund eligible for cost recovery and tax deductions,[57] all in a bid to incentivize companies.

5.2 Upstream Decommissioning and Abandonment Regulations 2021

In accordance with Section 232(1) (b) of the Petroleum Industry Act 2021,[58] which mandates the Commission and the Authority to establish guidelines for the decommissioning of oil and gas infrastructure, the Nigeria Upstream Petroleum Regulatory Commission initiated the development of the Upstream Decommissioning and Abandonment Regulations in 2021. These regulations are currently undergoing review processes. Upon enforcement, the Commission will oversee the administration of these regulations, which will govern the decommissioning and abandonment procedures of facilities utilized in upstream petroleum operations.

The regulations prioritize adherence to internationally recognized best practices[59] and compliance with the guidelines set forth by the International Maritime Organization (IMO). This alignment with global standards offers several potential benefits like enhanced environmental protection, elevated safety standards, strengthened regulatory oversight and transparency through stakeholder engagement.

Each decommissioning plan will undergo periodic updates, with each revision requiring approval from the Commission, thus ensuring continued compliance and adaptation to evolving industry standards.[60] The draft regulations stipulate that any operator seeking to suspend, abandon, or decommission any well, installation, structure, or utility, or intending to decommission or abandon all or part of a field, must first obtain approval from the Commission through a formal application process.[61] Additionally, the program must provide a summary highlighting the proposed method, key decisions, risk management considerations, schedule details, and schematic diagrams illustrating the location of the main infrastructure and facilities.

The regulations further mandate that the application must outline the method chosen for the removal and disposal of decommissioned materials. This removal plan must detail options for removal and disposal, methods of removal, waste hierarchy plans encompassing reuse, recycling, and scrapping, as well as procedures for cleaning and removing waste materials.[62]

[54] Ibid, s 233(2), (4) and (8).
[55] Ibid, s 233 (12).
[56] Ibid, s 233(7).
[57] Ibid, s 233(11).
[58]Ibid, s 232(1)(b).
[59] Upstream Decommissioning and Abandonment Regulations, 2021, Art 10
[60] Ibid art 14.
[61] Ibid art 3.
[62] Ibid art 15(3)(f-h).

Additionally, operators are required to submit an environmental evaluation study and a post-assessment remediation and restoration plan, among other documentation.[63] For decommissioning activities involving infrastructure on offshore fields, Article 16 of the draft regulations mandates the operators to provide a 36-month notice of intention to decommission to the Commission.[64] In cases where an entire field is to be decommissioned or abandoned, a 48-month notice is required.[65] The application accompanying this notice must include detailed information and diagrams about the fields, installations, facilities, marine environment, decommissioning plans, equipment, disposal plans, and other relevant details.[66]

The regulation stipulates that the Commission must issue written approval or denial of the application, and failure to do so within the prescribed time frame results in the application being deemed approved.[67] It further stipulates that the Commission cannot reject an application to decommission or abandon a well without first providing the applicant with a reasonable opportunity to modify or amend the application.[68] In the event of rejection, the Commission is obligated to oversee the abandonment or decommissioning through a third party, funded by the decommissioning and abandonment Fund.[69]

Additionally, the regulations introduce the concept of public consultation, as detailed in Article 24. Licensees are required to engage with stakeholders, including communities affected by decommissioning activities, through a transparent and inclusive consultation process.[70] This process involves announcing the decommissioning program through public notice and conducting consultations that consider the nature and location of the project.[71] Stakeholders are provided with relevant information and risks promptly and engagements are facilitated to explain the impacts of the decommissioning program and the mitigation measures implemented by the operator.[72] The regulations mandate that all concerns raised by stakeholders must be duly considered, ensuring that community perspectives are taken into account in the decision-making process.[73]

5.3 Midstream and Downstream Decommissioning and Abandonment Regulations, 2022

These regulations, released in 2022, apply to decommissioning and abandonment of facilities used in midstream and downstream petroleum operations in Nigeria. This includes pipelines, storage tanks, processing facilities, and more. According to the Regulations, licensees must have a decommissioning and abandonment plan approved by the Authority.[74] This plan will outline how the facilities will be decommissioned and abandoned, and how much it will cost. Existing licensees, as of 2022, were given one year to submit a plan under these regulations.[75] From there, new licensees were required to submit a plan as part of their application for a license.[76] The plan

[63] Ibid art 15(3)(g).
[64] Ibid art 16.
[65] Ibid art 16(2).
[66] Ibid art 16(3)
[67] Ibid art 17(3).
[68] Ibid art 20(1).
[69] Ibid art 20(3).
[70] Ibid art 24(1).
[71] Ibid art 24(2)(b).
[72] Ibid art 24(2)(d).
[73] Ibid art 25.
[74] Midstream and Downstream Decommissioning and Abandonment Regulations 2022, art 3
[75] Ibid art 6.
[76] Ibid art 7.

must be based on good international petroleum industry practice and meet the Authority's guidelines.[77]

The Regulations also set out the approval process for the plan. The Authority reviews and approves decommissioning and abandonment plans. Existing licensees' plans are automatically approved upon grant of approval for the decommissioning and abandonment program if they meet the requirements that they confirm to good international petroleum industry practices. [78] New licensees' plans are deemed approved upon the grant of a license to construct the facility. [79] However, licensees are allowed to update their plans but with Authority approval.[80]

The Regulations also provide that licensees must submit a program for decommissioning and abandonment for approval by the Authority at least 24-36 months before the proposed start date, depending on whether the facilities are onshore or offshore.[81] The program must include detailed information about the decommissioning methods, environmental impact assessment, and public consultation. The Authority has 180 days to approve or reject the program.[82]

To conform to international standards, the Regulations provide that licensees must consult with stakeholders, including the public, before submitting a decommissioning and abandonment program.[83] The consultations must be announced publicly and follow specific requirements to ensure effective stakeholder engagement.[84]

As also required by the principal act, the Regulations provide that licensees must establish a decommissioning and abandonment fund to cover the costs of decommissioning.[85] The fund must be in an escrow account with a reputable bank not affiliated with the licensee[86] and the Authority shall be a party to the account.[87] Licensees will contribute annually to the fund based on estimated decommissioning costs[88] and the fund can only be used for decommissioning and abandonment activities.[89] Any excess funds after decommissioning may be returned to the licensee,[90] while any shortfall must be covered by the licensee.[91] The Authority can choose to access the fund to pay for decommissioning if a licensee fails to comply with the decommissioning plan or program provided that it has provided written notice to the licensee of the noncompliance and the licensee has been given a reasonable period to rectify the non-compliance.[92]

It is important to note that when a license is transferred (assigned), the obligation to contribute to the D&A fund also transfers to the new licensee (assignee). If the existing fund isn't enough to

[77] Ibid art 10.
[78] Midstream and Downstream Decommissioning and Abandonment Regulations 2022, art 11(1).
[79] Ibid, art 11(2).
[80] Ibid, art 12.
[81] Ibid, art 13.
[82] Ibid, art 14.
[83] Ibid, art 16.
[84] Ibid, art 17(g).
[85] Ibid, art 25(1).
[86] Ibid, art 25(4) and (7).
[87] Ibid, art 25(5).
[88] Ibid, art 26(1).
[89] Ibid, art 27(1).
[90] Ibid, art 27(3).
[91] Ibid, art 27(4).
[92] Ibid art 28.

cover future D&A costs, the seller (assignor) must provide additional security (bank guarantee or cash deposit) to cover the shortfall.[93] This means that both the seller and buyer (assignor and assignee) are jointly responsible for meeting D&A obligations.

While the principal Act was silent on penalties accruing to a person who defaults on the provisions guiding decommissioning and abandonment in the industry, the Regulations come down with a heavy hammer on defaulters. Firstly, failing to submit a D&A plan on time incurs a $100,000 annual penalty.[94] Furthermore, not setting up the D&A fund on time incurs a $100,000 annual penalty.[95] Moreover, delaying contributions to the D&A fund by more than 3 months after they have been due results in a penalty of one year's contribution amount on top of the missed payment[96] and starting D&A activities without approval leads to a $200,000 penalty.[97]

While the financial penalties in the Regulations are in dollars, it provides further that penalties can be paid in Naira at the Central Bank of Nigeria's exchange rate.[98] Where a licensee is guilty of repeated non-compliance of failing to submit a plan, set up the fund, or contribute for more than a year, the Authority is empowered to cancel the license of such repeated defaulter.[99]

Obviously, the Regulations were issued to enable the Authority to effectively perform its duty as the regulator of decommissioning and abandonment in the midstream and downstream sectors. It elaborates on vague provisions in the PIA and shores up the gap in the PIA by exclusively providing penalties for defaulters. . Article 32 provides that the Authority has the power to exclude certain licensees from these regulations. Disappointedly, the Regulations did not provide the yardstick(s) for the exclusion. This appears to be a gap which may produce counterproductive results as it may be subject to abuse and foster corrupt practices.

5.4 Environmental Impact Assessment Act 1992

The Environmental Impact Assessment Act of 1992[100] addresses the importance of assessing environmental impacts before and during projects, including decommissioning and abandonment activities. However, the Act does not provide a distinct framework or categorical provisions specifically tailored to decommissioning and abandonment processes. Instead, it briefly mentions decommissioning and abandonment within the broader context of 'projects'.[101] Section 1(a) of the Act aims to establish the objective of any EIA to consider environmental effects before authorizing activities likely to impact the environment,[102] including decommissioning.

While the Act acknowledges the potential environmental effects of decommissioning and abandonment, its primary focus is on assessing environmental conditions before project commencement. This may result in limited guidance and regulatory oversight for decommissioning activities, which are primarily concerned with the environmental state after

[93] Ibid art 30.
[94] Ibid art 31(1).
[95] Ibid art 31(2).
[96] Ibid art 31(3).
[97] Ibid art 31(4).
[98] Ibid art 31 (5).
[99] Ibid art 31(6).
[100] Hereinafter referred to as 'EIA'.
[101] EIA, s 63(1).
[102] EIA 1992 s 1(a).

project completion. The Act therefore lacks specific regulations or guidelines tailored to decommissioning processes.

5.5 National Oil Spill Detection and Response Agency (Establishment) Act 2006

The National Oil Spill Detection and Response Agency (NOSDRA), established by the NOSDRA Act 2006, plays a crucial role in environmental protection within the petroleum sector. It is tasked with providing surveillance and ensuring compliance with existing environmental legislation, particularly in detecting and responding to oil spills.[103] The NOSDRA Act outlines important responsibilities for the agency, including cooperation with international maritime organizations and other national, regional and international organizations in the promotion and exchange of results of research and development programmes relating among others things to technologies, pollution preparedness and response surveillance, containment, disposal and clean up to best practical extent,[104] and duties such as coordinating the implementation of the plan for the removal of hazardous substances and other plans as may be formulated or issued by the government of Nigeria.[105]

The NOSDRA Act, established to oversee environmental protection in the petroleum sector, presents a critical framework for addressing oil spills, including those that may occur during decommissioning activities. However, the Act's focus on detecting and responding to spills may not adequately address the broader environmental risks associated with decommissioning, such as the management of decommissioning waste and non-spill-related hazards. While the Act outlines NOSDRA's responsibilities in coordinating hazardous substance removal plans, it may lack specific provisions for managing decommissioning waste and ensuring comprehensive environmental protection measures during decommissioning projects. Therefore, while the Act provides a foundation for addressing oil spills during decommissioning, there may be a need for additional regulations or amendments to enhance its effectiveness in managing broader decommissioning-related environmental concerns.

In conclusion, the NOSDRA Act is crucial for dealing with oil spills, including those that happen during decommissioning in Nigeria's oil industry. But it mainly focuses on detecting and responding to spills and doesn't cover all the environmental risks linked to decommissioning. While it does mention NOSDRA's role in coordinating plans to remove hazardous substances, it does not contain specific provisions on handling decommissioning waste or ensuring overall environmental protection.

5.6 Harmful Waste (Special Criminal Provisions, etc) Act 1988

This Act criminalizes the discharge or dumping of waste and hazardous materials into Nigerian waters. [106] The Federal Environmental Protection Agency Act 1988 [107] further extends the applicability of the Harmful Waste Act to hazardous substances constituting harmful waste. The Harmful Waste addresses the need to prevent the unlawful disposal of harmful waste into Nigerian waters.

[103] National Oil Spil Detection and Response Agency (Establishment) Act, s 6. Hereinafter referred to as 'NOSDRA Act'.
[104] Ibid s 5(g).
[105] Ibid s 6(c-d).
[106] Harmful Wastes (Special Criminal Provisions etc) Act 1988, s 15.
[107] Federal Environment Protection Agency Act 1988, s 20.

Instructively, section 15 of the Act prohibits operators from engaging in illegal disposal practices of operation structures during decommissioning. This is particularly crucial given the potential presence of toxic chemicals and materials within such installations, posing significant environmental and societal risks, especially in the event of leaks. The Act's emphasis on preventing the dumping of harmful waste into Nigerian waters, whether solid, semi-solid, or liquid, deserves commendation for its role in deterring irresponsible waste disposal practices that could jeopardize marine ecosystems and human well-being. However, there exists a necessity for potential amendments tailored to address the unique challenges associated with decommissioning activities and in the case of upstream petroleum activities, disused offshore installations. Such revisions could bolster the clarity and enforceability of the law, ensuring more robust protection of the environment against hazardous waste.

6. Way Forward and Conclusion

Nigeria has had troubles with decommissioning and abandonment since the beginning of petroleum activities. While the Harmful Waste (Special Criminal Provisions, etc) Act 1988 and the Environmental Impact Assessment Act 1992 address some environmental concerns, they lack specific provisions tailored to the unique challenges of D&A activities. The National Oil Spill Detection and Response Agency (NOSDRA) Act 2006, while crucial for spill response, may also benefit from broader environmental considerations during D&A projects.

However, the enactment of the Petroleum Industry Act (PIA) of 2021 marks a significant improvement in regulating abandonment and decommissioning (D&A) activities in Nigeria's oil and gas sector. The PIA established regulatory bodies, mandates D&A plans and funding, prioritizes good international practices and encourages stakeholder engagement in D&A programs. However, with the Act lacking explicit penalties for non-compliance, which could potentially weaken its effectiveness, the regulatory bodies created by the PIA enacted Regulations to cover that gap and more effectively govern D&A programs in Nigeria.

One problem with the Regulations is the Authority's discretionary power to exclude certain licensees from the regulations which creates a potential loophole for non-compliance. This is a loophole that should be addressed immediately. On the whole, however, the PIA and the accompanying Regulations should be implemented by the Nigerian executive to the letters in order to make the most of the excellent provisions and facilitate safe and functional D&A practices in the petroleum industry, protecting the environment and safeguarding the interest stakeholders.

Finally, although the Petroleum Industry Act provides for abandonment and decommissioning in line with international best practices, it fails to mention recycling. Given the awareness of the environmental damage caused by these installations' chemicals and metals, there is need for stakeholders to incorporate recycling into decommissioning practices in Nigeria.