OCCUPATIONAL HEALTH AND SAFETY LEGISLATIONS AND MANAGEMENT IN SELECTED OIL AND GAS COMPANIES IN NIGERIA

Written by Austen Aletor Odion-Obomhense* & Ugwoha Ejikeme**

* 2nd year M.SC. LLM Student University of Port Harcourt, Port Harcourt, Rivers State, Nigeria

** Ph.D, lecturer, IPSS, University of Port Harcourt, Port Harcourt, Rivers State, Nigeria

ABSTRACT

This work examined the impact of occupational Health and safety (OHS) regulations and management of occupational health and safety in selected oil and Gas companies in Nigeria. This work verified the state of enforcement of OHS regulations by extracting the striking issues that influences enforcement of OHS regulations in Nigeria. This was done by adopting descriptive and analytical approach which enabled this researcher to administered questionnaire to many respondents at the same time in other to sample their independent opinions as regards to occupational health and safety legislations and their management in selected oil and Gas companies in Nigeria. It’s worthy of note here, to state that our findings revealed amongst other things that the inspectorate Division of the Federal Ministry of Labour and Productivity is responsible for the enforcement of the Factories Act of 1990, while the National Council for Occupational Health and Safety of Nigeria is empowered to administer the proceeding regulations on its behalf by the Labour, Safety, Health and Welfare Bill of 2012. Unfortunately, we observed that the impact of the enforcement authority of the OHS legislation is ineffective, as the key stakeholders pay less attention to OHS regulations; thus, rendering the OHS scheme dysfunctional and unenforceable, at the same time impeding OHS development. For optimum success of OHS in Nigeria, maximum enforcement and compliance with the regulations must be in place and adhered to. This research work, which is based on theoretical analysis, reviewed literatures gathered through desk literature search, google web search and related books on OHS legislations. We found that there is significant impact, negatively or positively, the implementation of the OHS regulations on the management of occupational Health and safety in Nigeria. We also found that, the issues with enforcement of OHS
legislation includes but not limited to political influence or interference, bribery and corruption, insecurity, lack of governmental commitment, inadequate manpower and legislation among others. We, therefore, recommends that self-regulatory style of enforcing OHS regulations be adopted by the organizations. We also recommend that more OHS inspectors be recruited; local government authorities empowered to facilitate the enforcement of OHS regulations. Moreover, the study encourages organizations to champion OHS enforcement, as it is beneficial to them.

INTRODUCTION

Background to the study

The frequency of industrial accidents and the general lassitude of the employers in addressing the health and safety issues at workplace has become a great concern to the government all over the world and Nigeria in particular. Coupled with this, is inadequate knowledge and information and by limited capacity to design and implement effective policies and programmes. Health and safety at work constitutes one of the basic rights of the workers and reduction of the rate of industrial accidents through preventive measures as well as to create awareness on the rights of victims of industrial accidents. Health and safety at work are inseparable in practice, while security is an important component of safety because workplace cannot be healthy if it is not secured.

It is a common knowledge that organization is made up of group of people who come together to achieve a common goal Ogundele, (2012). As seen in related literatures (Ezekiel, Nandi, Thuo & Wanyonyi, 2012, Agbola, 2012), wherever there are people or group of people working or staying together, the health and safety of people will naturally be of a concern, although the degree may vary due to the level of risk exposure that are peculiar to some organizations.

Therefore, the challenges before Occupational health and safety leaders, government and workers’ representatives, are how they can give to workers, protection against unsafe, unhealthy and unsecured workplace. When commenting on the alarming fatal accident and disease figures, Onuegbu, (2011), ILO (1999), suggested for a review of investment decisions which disregards health, safety and environmental considerations. According to International Labour Conference ILO (1999), Safe work should be designed in such a way that it responds
to the need to protect the vulnerable workers who are at the risk of exposure of various occupational hazards. The main objectives of safety and health should be to (a) create worldwide awareness of the dimensions and consequences of work-related accidents, injuries and diseases, (b) promote the goal of basic protection for all workers in conformity with international labour standards; and (c) enhance the capacity of member states and industry to design and implement effective preventive and protective policies and programmes.

The conceptual approaches in the definition and interpretation of safety and health at work have been viewed by various scholars and institutions. WHO, (2009) defines healthy workplace as: “A state of complete physical, mental and social wellbeing, and not merely the absence of disease?” (www.wpro.who.int). This definitions of a healthy workplace is centered on the physical work environment (the realm of traditional occupational health and safety, dealing with physical, chemical, biological and ergonomic hazards), the scope includes health practice factors (lifestyle); psychosocial factors (work organization and workplace culture); and a link to the community; all of which can have a profound effect on employee health”.

A safe workplace could also be defined and interpreted as” a workplace where everyone works together to achieve an agreed vision for the health and well-being of workers and the surrounding community. It provides all the members of the workforce with physical, psychological, social and organizational conditions that protect and promote health and safety. It enables managers and workers to increase control over their own health and to improve it, and to become more energetic, positive and contented”. (WHO), 1999). Lowe, (2004) pointed out those workplaces that are free of recognized hazards, with health-promoting and sustaining policies, programmes, and practices; and employees with ready access to effective programmes and services that protect their health, safety, and well-being. However, Lowe differentiated between the concepts of a “healthy workplace” and a “healthy organization.” The term healthy workplace was emphasizing more on the physical and mental well-being of employees, whereas a healthy organization has “…embedded employee health and well-being into how the organization operates and goes about achieving its strategic goals. Grawitch et al., (2009) opined that the definition of a healthy workplace depends on the messenger. A healthy workplace is that which will not adversely affect physical, mental and social wellbeing of the worker, while a safe workplace is one where harm, damage, or loss to the workers and visitors are unlikely, Onuegbu, (2010). “A safe and healthy workplace is one, which will ensure that a
worker returns home at least the way he left his home in terms of his physical, mental and social conditions. It also does not matter whether the factory or platform he works was attacked by gun men or whether an equipment failure led to the loss/injury or whether it was caused by the carelessness of his employer or even a co-worker or whether the clinic at the worksite lacked the necessary drugs, equipment or doctor. All that matters are that the man or woman did not return home at least the way he/she left and/or that the workplace cannot reasonably be expected to guarantee that the man or woman return home the way she or he left”. Onuegbu, (2010). According to the Journal of Economics and Sustainable Development, a healthy and safe environment is among the most valuable assets of workers, communities and countries. This means that a healthy worker is an asset to the organization.

In world all Over, the introduction of specific legislation, shows the importance of the role of Occupational Health and Safety (OHS) professionals in occupational risk management in the workplace. Occupational Health and Safety (OHS) management policy and regulations in business requires the mobilisation of key internal actors, namely OHS professionals.

Reviewing similar literature in a research work by Nnedinma Umeokafor et al., this researcher observed that, it was stated there that, enforcement of regulations is very vital in ensuring the efficacy of regulations. We also observed where researchers like Anderson 2007, Idubor & Osiamoje (2013) opine that regulations without proper enforcement are tantamount to no laws. In a similar vail, Idubor & Osiamoje (2013) hypothesized that lack of strict enforcement of Occupational Health and Safety regulations enables non-compliance to Occupational Health and Safety regulations. Whereas non-compliance to OHS regulations is a major contributor to the poor state of OHS in Nigeria, Diugwu et al. (2012) maintain that the failed OHS management system in Nigeria is due to the non-functional OHS regulations and provisions. On the other hand, it is argued that enforcement and compliance with OHS regulations are not the standalone steps for improving OHS, as improving organisational culture can also improve OHS. However, a European Scientific Journal, (2014) reported that the benefits of proper enforcement of OHS regulations are evident in countries with remarkable health and safety records like the UK, USA, Germany, and many other developed countries. This, in the opinion of this researcher, support the position of Anderson, (2007); Diugwu et al., (2012); Idubor & Osiamoje, (2013) arguments substantially.
In Nigeria, energy generation is largely dependent on petroleum products (Iwayemi, 2008), although there is some contribution from hydropower, biomass and coal. According to Agusto (2008), petroleum consumption has been on the increase in Nigeria since the early 1980s. This upward trend is evidenced in the energy consumption data of 2006, 2007 and 2011 where petroleum products represent 53, 67.3, and 68.5 percent respectively of the total energy consumed in the country (Energy Information Administration, 2012).


The National Policy on Labour is based on the provisions of Section 17 of the 1999 Constitution of the Federal Republic of Nigeria stating that “the State social order is founded on the ideals of Freedom, Equality and Justice”. It is clearly stated in Section 17 subsection 3, that the State shall direct its policy towards ensuring that:

a) All citizens without discrimination on any group whatsoever have the opportunity for securing adequate means of livelihood as well as adequate opportunity to secure suitable employment.

b) Conditions of work are just and humane and that there are adequate facilities for leisure and for social, religious and cultural life.

c) The health, safety and welfare of all persons in employment are safeguarded and not endangered or abused.

d) There are adequate medical and health facilities for all persons.

e) There is equal pay for equal work without discrimination on account of sex, or on any other ground whatsoever.

During the commence, the Factories Act of 1987 (was known as Factories Act of 1990), now Factories Act, CAP F1, Law of Federation of Nigeria (LFN) 2004 which Kalejaiye (2013) reports as a substantial revision of the Factories Act of 1958 (i.e. our colonial legislation), the Workman’s Compensation Act of 1987, the Labour Act of 1990, the Workman’s Compensation Act of 2004, the Employee’s Compensation Act of 2011 (which repeals the Workman’s Compensation Act of 2004) were all introduced.
From history, Occupational Health and Safety (OHS) in Nigeria can actually be traced back to the slave trade period, records show that the medical examination board of the Liverpool infantry introduced occupational health in Nigeria in 1789. This was further corroborated by Kalejaiye (2013) who reported that this board was saddled with the responsibility of promoting the health of the British slave dealer in Africa.

This was the period of increased activities especially the petroleum prospecting and exploration. The first successful drilled Oil in Nigeria was discovered in 1956 at a place called Oloibiri in the Niger Delta after half a century of exploration. Shell British Petroleum, (Shell-BP) now the Shell Petroleum Development Company of Nigeria (SPDC) made this first discovery at the time they were the sole concessionaire. In the year 1958, Nigeria joined the ranks of oil producers when its first oil field came on stream producing 5,100 bpd. After 1960, exploration rights in onshore and offshore areas adjoining the Niger Delta were extended to other foreign companies. In 1965 the EA field was discovered by Shell in shallow water southeast of Warri. The end of the Biafran war coincided with the rise in the world price of crude the world oil market in the year 1970 and Nigeria was able to reap instant riches from its oil production. Nigeria joined the Organisation of Petroleum Exporting Countries (OPEC) in 1971 and established the Nigerian National Petroleum Company (NNPC) in 1977, a state owned and controlled company which is a major player in both the upstream and downstream sectors. There was total rejuvenation of oil production to a record level of 2.5 million barrels per day in 2004 as against the drop in Production figure in the eighties due to economic.

From the technological and economic viewpoint, the downstream and upstream activities are interconnected and interdependent. The various and actual activities undertaken in either of these sectors and their specific safety and environmental concerns differ. The upstream petroleum sector involves the search for and production of crude oil and gas. It comprises such activities as; exploration, evaluation and appraisals, development, production and decommissioning API, (1983); and Charles (1999). On the other hand, the downstream sector involves refining, product storage, transportation, distribution, and retailing OPEC, (2012). Potentially, any of the activities in either the upstream or downstream sectors pose human health, safety, and environmental risks; and the challenge for any government is balancing these concerns with national economic development and energy security goals. This is done through the establishment of an adequate regulatory framework consisting of laws and regulations setting out rights, obligations, procedures and standards, and regulatory institutions.
charged with responsibility for monitoring compliance (Principle 11, Rio Declaration, 1992). It is against this backdrop that this research work analyses the safety and environmental regulatory frameworks applicable to the Nigerian petroleum industry.

Statement of the Problem

The recurrence of fatal petroleum pipeline accidents in Nigeria have gained a global attention as a result of loss of life, water pollution, soil contamination, air pollution, destruction of the ecosystem (flora and fauna), destruction of property and infrastructures, and loss of crude oil and refined products. The lack of robust safety management systems is one of the major reasons behind the high rate of recurring petroleum pipeline incidents which constitute a serious threat to the petroleum industry and the Nigerian economy. Pipeline ruptures and vandalism are the most common incidents that cause oil spillages, fires and explosions in Nigeria. Corrosion, lack of regular inspection, lack of proper maintenance, operational failures and natural disasters are among the contributory factors to pipeline ruptures. Pipelines vandalism through the deliberate use of explosives or machines to cut or drill pipelines is motivated by greed for personal gain, scarcity of petroleum products, protest against neglect from government, and protest against environmental degradation resulting from oil companies’ activities. Oil companies need to carryout proper hazard identification of the operation they perform whether these are man-made or natural, and manage their risks using appropriate technology in order to ensure safe working practices, the safety of their personnel and the protection of the public and the environment.

The roles and responsibilities of personnel involved in the management of major hazards at all levels in the organisation’s safety culture. The involvement of employees and subcontractors in the safety policy and its implementation. Some of the results of failure in the above can be seen in the following:

The entire Oloma Community in Bonny Local Government Area of Rivers State was thrown into mourning as four workers carrying out repair work in a facility owned by the Shell Petroleum Development Company (SPDC), died in a gas explosion at Oloma flow station. The sad incident caused commotion and panic at the flow station as the remains of three (3) staff of contracting company working for SPDC were recovered. Information had it that the ugly incident occurred as a result of leakage of the gas pipeline with high pressure, which claimed
the lives of the oil workers when they ignorantly inhaled poisonous gas. Investigations show that the accident occurred during the shutdown maintenance.


What are the impacts, whether positive or Negative, of legislations on the management of occupational Health and Safety in Nigeria especially the Petroleum sector of the economy? What factors are responsible for the increase in incidences in Nigeria and what are the challenges faced in dealing with the problem of hazard in the petroleum industries? The questions above are condensed into the research questions that the study intends to provide answers to.

**Aim and Objectives of the Study**

The main aim of this study is to examine the impact of occupational health and safety legislations and management of occupational health and safety of selected oil and Gas companies in Nigeria:

The specific objectives are to:

i determine the compliance level of the petroleum industries with occupational health and safety regulations.
ii. assess whether there are deterrent for non-compliance with the regulations

iii. evaluate the adequacy of the measures / policies of the petroleum industries in addressing the hazards and risks or concerns from this petroleum sector.

iv. determine the awareness of the workers on Occupational Health and safety regulations.

**Research Hypotheses**

From the objectives stated above, the study therefore aimed at testing the following hypotheses:

- \( H_{01} \) There is no significant impact of the implementation of the regulations on the management of occupational Health and safety in selected oil and Gas companies in Nigeria

- \( H_{02} \) There is no significant compliance by the petroleum industries with the occupational health and safety regulations / laws.

- \( H_{03} \) There is no significant effect of major incidents in the economic development of Nigeria in general due to lack of will power to sanction erring OICs and indigenous oil companies.

**Significance of the Study**

This research work is important as it seek to review the necessary first step towards examining the Occupational Health and Safety regulations in Nigeria and to unearth the issues hampering its enforcement as well as to demonstrates the ineffective nature of the enforcement of Occupational Health and Safety regulatory protocols in Nigeria.

Secondly, it is important because it will help to evaluate the synergy between the various pieces of legislation and institutional framework governing upstream and downstream facilities, activities and stakeholders within them, with regard to environment, health and safety. This is particularly so as it is in this sector that ordinary individuals who may have little or no industry expertise and training on handling products come into contact with volatile petroleum products, thereby increasing the health, environmental and safety risks.

Thirdly, it appears that there is already some awareness of the need for a more focused regulation of the downstream sector of the petroleum industries in Nigeria. In the new Petroleum Industry Bill (PIB-Draft) which the National Assembly segmented for ease of passage on the restructuring of the Nigerian petroleum industry, there is a proposal for complete deregulation of the downstream sector and the creation of a separate downstream regulatory body while the federal government on its own wisdom, has already commenced the
deregulation of the sector. The question to ask is whether the new framework offers any real advantage in managing downstream safety and environmental issues. This can only be achieved by evaluating in light of the present issues, the existing framework and to what extent to which these are addressed in the new proposals.

**Scope of the Study**

The study is made of five chapters. This chapters covered and confirmed the state of enforcement of OHS regulations by hauling out the striking issues that influences enforcement of OHS regulations in selected oil and Gas companies in Nigeria. This was done by adopting descriptive and analytical approach which enabled this researcher to administered questionnaire to many respondents at the same time in other to sample their independent opinions as regards to occupational health and safety legislations and management in selected oil and Gas companies in Nigeria. The work also covered the findings in relation to OHS and their management in selected oil and Gas companies in Nigeria, interpretation of the result from sample questionnaire and explores the institutional arrangements for monitoring and enforcement of the laws, identifying key enforcement challenges and then provides summary and conclusions which include policy implications drawn from the findings.

**LITERATURE REVIEW**

This Chapter provides an overview of the literature reviewed on the most important issues relating to occupational Health and safety (OSH) legislation and their management in selected oil and Gas companies in Nigeria

**Overview of the Petroleum Industry**

The petroleum industry began with the successful drilling of the first commercial oil well in 1859, and the opening of the first refinery two years later to process the crude into kerosene. The evolution of petroleum refining from simple distillation to today's sophisticated processes has created a need for health and safety management procedures and safe work practices. To those unfamiliar with the industry, petroleum refineries may appear to be complex and confusing places. Refining is the processing of one complex mixture of hydrocarbons into a number of other complex mixtures of hydrocarbons. The safe and
orderly processing of crude oil into flammable gases and liquids at high temperatures and pressures using vessels, equipment, and piping subjected to stress and corrosion requires considerable knowledge, control, and expertise. Safety and health professionals, working with process, chemical, instrumentation, and metallurgical engineers, assure that potential physical, mechanical, chemical, and health hazards are recognized and provisions are made for safe operating practices and appropriate protective measures. These measures may include hard hats, safety glasses and goggles, safety shoes, hearing protection, respiratory protection, and protective clothing such as fire resistant clothing where required. In addition, procedures should be established to assure compliance with applicable regulations and standards such as hazard communications, confined space entry, and process safety management.

Petroleum refining has evolved continuously in response to changing consumer demand for better and different products. The original requirement was to produce kerosene as a cheaper and better source of light than whale oil. The development of the internal combustion engine led to the production of gasoline and diesel fuels.

The evolution of the airplane created a need first for high-octane aviation gasoline and then for jet fuel, a sophisticated form of the original product, kerosene. Present-day refineries produce a variety of products including many required as feedstock for the petrochemical industry. Distillation Processes. The first refinery, opened in 1861, produced kerosene by simple atmospheric distillation. Its by-products included tar and naphtha. It was soon discovered that high-quality lubricating oils could be produced by distilling petroleum under vacuum. However, for the next 30 years kerosene was the product consumers wanted. Two significant events changed this situation:

1. Invention of the electric light decreased the demand for kerosene, and
2. Invention of the internal combustion engine created a demand for diesel fuel and gasoline (naphtha).

Thermal Cracking Processes. With the advent of mass production and World War I, the number of gasoline-powered vehicles increased dramatically and the demand for gasoline grew accordingly.
However, distillation processes produced only a certain amount of gasoline from crude oil. In 1913, the thermal cracking process was developed, which subjected heavy fuels to both pressure and intense heat, physically breaking the large molecules into smaller ones to produce additional gasoline and distillate fuels. Vis breaking, another form of thermal cracking, was developed in the late 1930's to produce more desirable and valuable products.

Catalytic Processes. Higher-compression gasoline engines required higher-octane gasoline with better antiknock characteristics. The introduction of catalytic cracking and polymerization processes in the mid-to late 1930's met the demand by providing improved gasoline yields and higher octane numbers.

Alkylation, another catalytic process developed in the early 1940's, produced more high-octane aviation gasoline and petrochemical feedstock for explosives and synthetic rubber. Subsequently, catalytic isomerization was developed to convert hydrocarbons to produce increased quantities of alkylation feedstock. Improved catalysts and process methods such as hydrocracking and reforming were developed throughout the 1960's to increase gasoline yields and improve antiknock characteristics. These catalytic processes also produced hydrocarbon molecules with a double bond (alkenes) and formed the basis of the modern petrochemical industry. Treatment Processes. Throughout the history of refining, various treatment methods have been used to remove non-hydrocarbons, impurities, and other constituents that adversely affect the properties of finished products or reduce the efficiency of the conversion processes. Treating can involve chemical reaction and/or physical separation. Typical examples of treating are chemical sweetening, acid treating, clay contacting, caustic washing, hydro treating, drying, solvent extraction, and solvent dewaxing. Sweetening compounds and acids desulfurize crude oil before processing and treat products during and after processing.

Following the Second World War, various reforming processes improved gasoline quality and yield and produced higher-quality products. Some of these involved the use of catalysts and/or hydrogen to change molecules and remove sulfur.

In reviewing occupational Health and Safety Legislation in Nigeria, Idoro [2001] opines that occupational Health and Safety Legislation is targeted at ensuring the Health and Safety of lives and property of each citizen within the country. Looking critically at occupational Health
and Safety Legislation in Nigeria, almost all the legislation concerning occupational Health and Safety originated from developed countries, and hence the argument that Nigeria depends on recognition from its colonial master even after independence Galbraith,(1989); E. Fellows, A. Duff, & M. Well, (2004). Despite this, two notable regulations that relate to occupational Health and Safety in Nigeria are the Factory Act, 1990, and Employees Compensation Act, 2010. The Nigerian Factory Act 1990 is the localized version of the UK Factory Act of 1961, which was adopted to address Health and Safety in the Nigerian context. To prevent workers from health hazards, Parts II, III, and IV are concerned with the Health and Safety as well as the welfare of the workers. The act deals with offences, penalties, and legal proceedings, and empowers the inspector even in cases where a person is not a legal practitioner to present and defend any offence arising from the provision of the Act. However, the reality relative to this act is that very few cases are prosecuted, as almost all the cases that exist in relation to the Factory Act are English laws R. Williams (2005). Furthermore, Idoro [2001] argues that the Act is limited by its definition of factory, which excludes all the activities and operations of construction sites. Thus, authors such as Idoro [2001] and Galbraith [1989] state that there is no Health and Safety legislation regulating construction practices in Nigeria, which contractors can adopt, and which could promote Health and Safety practices, and thus they commit little or no resources in terms of sustaining a healthy and safe work environment. The Employees’ Compensation Act (ECA) 2010 is targeted towards the payment of compensation to workers that sustain injuries or suffer from occupational diseases or death at their workplace in the process of carrying out their duties J. Keith, D. Issac, N. Umeokafor [2014]. The law provides speedy and adequate means of compensation without recourse to the court of law; it accommodates workers with mental stress, and the funds are managed by the National Social Insurance Trust (NSIT) and are made regardless of the organisation’s financial position and most importantly, the scheme covers employees, part-time, temporary, or casual, both in the public and private sector, which also extends to the dependent(s) of the Omobolanle Adeyemo and John Smallwood / Procedia Engineering 196 ( 2017 ) 785 – 791 787 deceased; Idoro [2001]. Although this Act was promulgated to ensure a better quality of life for the citizens of Nigeria working in various capacities, it is very reactive, as it is aimed at remedying harm, injury or death after occurrence, whereas, the focus as a country according to Tanko & Anigbogu [2012] should be on proactive preventative measures, which should be channeled towards abating or minimizing ill-health, deaths, and injuries.
Occupational Health and Safety Legislation in Nigeria

Nigeria is a member of the United Nations. As a member, she adopted several of the conventions and recommendations of the International Labor Organization, an arm of the United Nations. Some of these conventions include:

**Convention 155 (Occupational Safety and Health) 1981**

Nigeria ratified this convention in 1994. It covers for the provision of appropriate national occupational safety and health structures that will help ensure implementation across board of sound occupational safety and health practices in the country. Its intention is to help facilitate consultation with tripartite partners in the formulation, implementation and periodic review of a comprehensible national policy on occupational safety, health and the working environment. Its aims to prevent accidents and injury to health arising out of, linked with or occurring during work, by lessening, so far as is reasonably practicable, the causes of hazards inherent in the working environment.

In addition to Nigerian ratified conventions, she has her own labour laws. This laws comprehensively deal with occupational Health, safety and welfare of its citizenry. The right and obligations of all is spelt out in the Constitution of the federal republic of Nigeria and the laws of the Federation of Nigeria 1990 and 2004.

In discussing the Occupational Health and Safety laws / regulations in Nigeria, this researcher would like to begin with the Nigerian Constitution of 1999 as amended.

**The Nigerian 1999 Constitution**

The Federal Republic of Nigeria 1999 Constitution, stated clearly and specifically in Section 17 subsection 3, (s17: ss3) that the State shall direct its policy towards ensuring that the health, safety and welfare of all persons in employment in Nigeria are safeguarded and not endangered or harmed.

Aside the Nigerian constitution, there are other major legislations that have been enacted to provide for the safety and health of Nigeria workforce. These enactments include the following:
The Factories Act, LFN 2004

The Nigerian factories Act is quoted as Factories Act, CAP F1, Laws of the Federation of Nigeria (L.F.N) 2004. The act is one of the laws governing the occupational health and Safety in Nigeria. This act is in various parts and they are:

- Part I which deal with Registration of Factories;
- Part II which deal with Health (General provisions);
- Part III which deal with Safety (General provisions);
- Part IV which deal with Welfare (General provisions);
- Part V which deal with Health, Safety and Welfare;
- Part VI which deal with Notifications and investigation of accidents and industrial diseases;
- Part VII which deal with Special applications and miscellaneous provisions;
- Part VIII which deal with General Registers;
- Part IX which deal with Administration;
- Part X which deal with Offences, penalties and legal proceedings; and
- Part XI which deal with General.

Historical Development of the Factories Act in Nigeria

According to the Nigeria Country Profile on Occupational Safety and Health 2016, the journey of the development and transformation of the Factories Act is as summarized below:

(a) Before 1955, there was British Factories Act of 1937. This Act was amended in 1948

(b) On the 1st of September 1956, the Factories Ordinance of 1955 came into force
(c) On the 1st of April 1959, there came the Factories (Amendment) Ordinance of 1958

(d) Legal Notice No. 57 of 1961 – Factories Act, 1958


Main Regulations under the Factories Act

The factories act also has subsidiary legislations. The main Regulation under the Factories Act Subsidiary Legislations (Regulations) and what the Regulations Provide for are summarized below:

i. Factories (Wood working Machinery) Regulations, LN 189 1958. This Provides guidance for the conduct of any factory or parts thereof and to any place to which Section 46 of the Act applies in which woodwork occurs. It speaks to the provision of equipment and machinery fencing and guards in such establishments.

ii. Factories (Notification of Dangerous Occurrences) Regulations LN 105 of 1961 Provides guidance for the notification of accidents and dangerous occurrences in accordance with Section 51-52 of the Act, whether or not death or disablement occurs.

iii. Docks (Safety of Labour) Regulations, LN 42 OF 1958 Provides guidance for the process of loading, unloading or bunkering any vessel in any dock in a Port and to all machinery or plant used in those processes.

iv. Regulation 2007 provides for the fees payable for the certification and appointment of “approved Persons” for the purpose of lifting equipment inspection. Certification, registration. And renewal of certificate of registration of factory premises’ Docks (Sanitary Accommodation)

v. Regulations, 1958 provides for the provision of sanitary conveniences to all docks under the jurisdiction of the Docks (Safety of Labour) Regulations.

vi. Declaration of Industrial Diseases Notice. LN. 114 of 1956 Provides for the identification of diseases or illnesses that might be contracted by an employed person by reason of the nature of his employment.
vii. First Aid Boxes (Prescribed Standards) Order. LN 188 of 1958 gives specifications for the provision of first aid boxes to be Nigeria Country Profile on Occupational Safety and Health 2016 Page 15 1958 provided at factories in line with the number of employees present. Several other Orders such as the Factories Act Exemption Order LN 82 of 1967 and guidelines dealing with various issues including prescribed forms, particulars and other documents exist under the Factories Act. 1.2.3.

**Employees’ Compensation Act, 2010**

This Act repeals the old workman’s compensation Act Cap W6 laws of the federation Nigeria, (LFN), 2004 and makes comprehensive provisions for payment of compensation to employees who suffer from occupational diseases or sustain injuries arising from accident at workplace or in the course of employment.

The objectives of the Act are to:

(a). Provide for an open and fair system of guaranteed and adequate compensation for all employees or their dependents for any death, injury, disease or disability arising out of or in the course of employment.

(b) Provide rehabilitation to employees with work-related disabilities as provided in the Act

(c) Establish and maintain a solvent compensation fund managed in the interest of employees and employers

(d) Provide for fair and adequate assessments for employers

(e) Provide an appeal procedure that is simple, fair and accessible with minimal delays

(f) Combine efforts and resources of relevant stakeholders for the prevention of workplace disabilities, including the enforcement of occupational safety and health standards.

The Act has nine (9) Parts and them as follows:

Part I. This is Preliminary provisions;
Part II. This deal with the Procedure for making claims;

Part III. This part deal with the procedure for handling Compensation for death, injury or disease;

Part IV. This is the Scale of compensation;

Part V. This deal with the Powers and functions of the Board;

Part VI. Part VI deal with the Employer’s assessment and contributions;

Part VII. This is the financial provisions;

Part VIII. The Establishment of the investment committee; and

Part IX. This part is the miscellaneous provision.

The First Schedule of the Act contains the lists of the schedule of occupational health diseases in the country, with the Second Schedule detailing the percentage disability caused by various types of occupational health diseases or trauma.

**Mineral Oils (Safety) Regulations, 1962**

This is a Regulation that provides guidance for the conduct of work operations in a drilling site for the purposes of crude oil exploration. Nigeria Country Profile on Occupational Safety and Health 2016 Page 18 the Regulations has five (5) Parts.

While part I of the Act is the short title, part II of the act is the interpretation. Part III looks at the responsibilities of Managers while Part IV highlights the duties of employees while part V deal with the appointment of persons.

Regulations Provide For two (2) clearly defined approaches on every derrick floor.

Regulation 9 provide for the Fencing off of every dangerous part of any machinery

Regulation 11 Provide for lifelines for the use of employees working on derricks. Regulations 12, 13, 14 and 16 Provide for appropriate and safe use of boilers and oil treaters, internal
combustion engines, electrical installation and positioning of tanks and their maintenance respectively.

Regulations 20 and 21 Ensure the provision of restricted areas and institution of adequate fire precautions. Regulation 24 warrants the reporting of accidents in connection with any operations under a license or lease resulting in the death of or serious injury to any person. Regulation 31 States the duties of employees to wear the provided Personal Protective Equipment (PPEs) as requested.

**Petroleum (Drilling and Production) Regulations, 1969**

This is a Regulation that also guides the conduct of crude oil exploration and drilling operations in the oil and gas sector in Nigeria. The only aspect of this law pertaining to occupational health and safety can be found in Regulation 45, which requires that the licensee or lessee shall comply with all existing safety regulations and all such instructions as may, from time to time be given in writing by the Director of Petroleum Resources for securing the health and safety of persons engaged on or in connection with operations under his license or lease.

It’s worthy to note that the Federal Ministry of Labor and Productivity and the Nigerian Institute of Safety Professionals also have oversight functions. Employers’ Duties and Responsibilities As an indication of the seriousness that the Nigerian government now attaches to the need to hold employers of labor responsible for their lapses in respect of health and safety issues, a new Labor Bill was passed in 2012. Pedro, (2012) reports that the passage of the bill was a consequence of the report of the Joint Committee on Employment, Labor and Productivity, Health and Establishment and Public Service presented to the Nigerian Senate. This bill, the Labor, Safety, Health and Welfare Bill (2012) has stricter sanctions for offenders. This bill enables the State to charge corporate organizations and the firm’s directors of criminal offenses where the organizations actions or inactions result in loss of lives and properties.

**Nigerian Oil and Gas Industry Content Development Act, 2010**

This act among other things and specifically in session 35, stated that “All operators and companies operating in the Nigerian oil and gas industry shall employ only Nigerians in their
junior and intermediate cadre or any other corresponding grades designated by the operator or company. And in session 43, stated that Each operator shall carry out a programme in accordance with the country's own plans and priorities, to the satisfaction of the Board, for the promotion of technology transfer to Nigeria in relation to its oil and gas activities.

In session 44, the operator shall submit to the Board annually a plan, satisfactory to the Board, setting out a programme of planned initiatives aimed at promoting the effective transfer of technologies from the operator and alliance partners to Nigerian individuals and companies.

Session 45, the operator shall give full and effective support to technology transfer by encouraging and facilitating the formation of joint ventures, partnering and the development of licensing agreements between Nigerian and foreign contractors and service or supplier companies agreements for all such joint ventures or alliances shall meet the requirements of Nigerian content development to the satisfaction of the Board. In other to actualized the technology transfer, in session 46, stated that, the operator or project promoter shall submit a report to the Board annually describing its technology transfer initiatives and their results and the Minister shall make regulations setting targets on the number and type of such joint venture or alliances to be achieved for each project.

*Some Health and Safety requirements of employer Explained*

The **Occupational Health and Safety (OHS)** Act seeks to protect the health, safety and welfare of employees and other people at work. It also aims to ensure that the health and safety of the public is not put at risk by work activities. OHS regulations in Nigeria requires Employers in Nigeria are required to take responsibility while employee are vested with some obligation OHS regulations. Some of these responsibilities are enumerated below.

**Employer Commitments**

Every employer is required health and safety regulation law to protect the health and safety of all workers at the workplace in accordance with the provisions of Part V of the Nigerian Factories Act and Labour Law.
It is obligatory for the employer, under employment contract to provide safe system and place of work and to take measures to ensure the safety of the worker. Generally, these health and safety laws are applicable only to factories.

It is the duty of the employer to ensure cleanliness in the factory, factories must not be overcrowded during the work. There must be proper ventilation, lighting, drainage of floors and sanitary conveniences.

Employer must ensure safety of worker from injury to their health and dangers of work and machinery by providing safe workplace and work equipment; by complying with the conditions of health, safety and occupational health; and ensuring that machines and work equipment are installed and kept in safe conditions.

Workers must not get involved in tasks that can cause injury or that are hazardous such as dangerous liquids and fumes, explosives, and inflammable dusts, gases, vapours and other substances. Workers must receive proper training and work under the supervisor who has thorough knowledge and experience of the machine.

Employer must also provide and maintain an adequate supply of drinking water, washing facilities, first aid and a place for the workers to store their clothing. It is the duty of the employer to keep health and safety records and make them available to the inspector, when required.

Employees must also not wilfully and without reasonable cause do anything likely to endanger themselves or any other person. They should use any means or appliance for securing health or safety provided for their use; and should not wilfully interfere with or misuse any means, appliance, convenience or other item provided to secure health, safety or welfare in the factory.

**Fire Protection**

Section 47 & 48 of the Factories Act Cap F1 LFN (2004) made it is obligatory for the employer to provide free personal protective equipment to the workers. According to the Factories Act, if workers are employed in any process involving excessive exposure to wet or to injurious or offensive substance, suitable protective clothing and appliances, including, where necessary,
suitable gloves, footwear, goggles and head coverings, are provided and maintained for the use of such workers.

Effective screens are provided to avoid exposure to the electric arc flash if a worker is involved in electric arc welding.

**Training of Employees**

In section 23 of the Factories Act Cap F1 LFN (2004) the employer must acquaint the employees with work environment and equipment before commencement of work. The employer must also acquaint the employee about the hazards they might be exposed to in their occupation and train them about the preventive measures that must be taken to ensure health and safety at workplace. A worker is required to abide the instructions to maintain health and safety at the workplace.

Inexperienced worker is not employed at any machine or in any process, being a machine or process that can lead to cause bodily injury, unless he has been fully instructed as to the dangers related to it and the precautions that should be taken into account. Workers receive a sufficient training to work at the machine or in the process; or they work under adequate supervision by a person who has a thorough knowledge and experience of the machine or process.

**Labour Inspection System**

Labour inspection is one of the main responsibilities of the Federal Ministry of Labour and Productivity. Ministry inspectors conduct routine inspections and inspections based on complaints. Source of the complaint is kept confidential.

An inspector may enter, inspect and examine factories at any time; require the production of relevant records, certificates, notices and documents, and inspect, examine and copy any of them; conduct such enquiries as are necessary to ascertain whether or not the statutory provisions are being complied with; conduct examinations, tests and analyses, and take photographs and samples; question any person about relevant matters, and require any such person to sign a "declaration of the truth" of these matters, although no one may be required to answer any question or give any evidence tending to incriminate himself/herself; and carry out such medical examinations as may be necessary.
Employer and its representatives must facilitate the inspector. Any kind of hurdle in his work is an offence, punishable by fine or imprisonment or both.

An inspector may issue an improvement notice if he finds that the equipment/machinery used in the factory are not in good condition and they can cause bodily injury.

An inspector may issue a prohibition notice if he finds that the factory or a part of it is in such a condition that it can risk the health and safety of the workers. Use of factory or its part is prohibited until the risk is rectified. After taking the specified steps, the notice can be revoked on application by the employer.

**Trade Union - Freedom to join and form a union**

Constitution of Nigeria provides freedom to join and form unions. Every person is entitled to assemble freely and form association with political party, trade union or any other association for the protection of their rights. Exception includes workers of armed forces; police; customs, Immigration and the prison service; the Nigerian Security Printing and Minting Company Limited; the Central Bank of Nigeria; the Nigerian Telecommunications Limited; and certain other government organisations. Young workers under the age of sixteen may not join a union.

Labour law states that the contract of employment must not make it a condition of employment to join or leave the trade union. An employer must not dismiss any worker due to his association with the trade union and the activities of the union.

Trade union is any combination of workers or employers, whether temporary or permanent, the purpose of which is to regulate the terms and conditions of employment of workers. Trade unions may not operate without being registered with the official registrar of trade unions, provided that the application of registration is supported by at least fifty members of the union. This registration must be approved by the government. Trade union may not be registered if a properly functional union is already operating in the organisation.

Trade unions must also have registered rules that includes provisions dealing with matters such as the union's purpose, funds, accounts, membership dues, officers and discipline. The mandatory rule is that no member of the union may take part in a strike unless a majority of members have voted in favour of the strike in a secret.
Freedom of Collective Bargaining

Labour Law defines collective bargaining as the process of arriving at, or attempting to arrive at, a collective agreement. Collective agreement is an agreement in writing regarding working conditions and terms of employment concluded between one or more trade unions or other organisations of, or representing, workers (or an association of such organisations); and an employer, a group of employers, or an organisation of, or representing, employers (or an association of such organisations). A collective agreement is interpreted by a National Industrial Court.

Collective bargaining takes place when a trade dispute arises. Trade unions elect a representative to negotiate with the employer. Both parties must try to settle the dispute by any agreed dispute resolution mechanism. In absence or failure of it, parties must appoint a mediator (mutually agreed on and appointed by the parties), within seven days to settle the dispute.

If the mediator fails to settle the dispute within seven days, it is then reported to the Government within three days. Government appoints a mediator to bring about a settlement within seven days, otherwise the Government refers it to the Industrial Arbitration Panel. The panel establishes an arbitration tribunal to make an award within twenty-one days. Government can refer back an award for reconsideration. Once the award is accepted the parties have seven days to object to the award. In case of no objection, the award is published and becomes binding in the employers and workers to whom it relates.

In case of objection, the dispute is referred to the national Industrial Court for the final decision. The Government can refer directly to the court without going through arbitration tribunal stage.

The National Labour Advisory Council (NLAC) is the national tripartite consultative mechanism that provides consultation and co-operation between the government and the organizations of workers and employers at the national level on matters relating to social and labour policies and international labour standards. The Council was reconstituted in 2009 in line with the provisions of Convention 144.
Right to Strike

Strike is the cessation of work by a body of employed persons acting in combination, or a concerted refusal or a refusal under a common understanding of any number of persons employed to continue to work for an employer in consequence of a dispute, done as a means of compelling their employer, or to aid other workers in compelling their employer or any persons or, to accept or not to accept terms of employment and physical conditions of work.

No individual, trade union or employer may take part in a strike or lockout if that person, trade union or employer is engaged in the provision of essential services; the strike or lockout concerns a labour dispute that constitutes a dispute of right (rights already specified in law, collective agreement or employment contract); the strike or lockout concerns a dispute arising from a collective and fundamental breach of contract of employment or collective agreement on the part of the employee, trade union or employer; and a ballot has been conducted in accordance with the rules and constitution of the trade union at which a simple majority of all registered members voted to go on strike.

Any person, trade union or employer who are found guilty of offence, are liable to a fine of N1,000 or to imprisonment for a term of six months or to both.

Workers, who take part in strike are not entitled to any wages or other remuneration during this period and this period is also not considered as the period of continuous employment and all rights dependent on continuity of employment shall be prejudicially affected accordingly.

Sexual Harassment

There is no provision in Labour Act that prohibits sexual harassment or any other kind of harassment during employment. If an employee consider that the employer is harassing him/her, the employee can terminate the employment contract by providing the giving an appropriate notice. However, if an employer terminates the employment contract, it is not considered as harassment because the Nigerian law clearly states that the employer can terminate the employment contract for any reason or may be for no reason at all. A Labour Standards Bill, submitted in the National Assembly in 2008, had provision on sexual harassment however the said bill has not been passed yet.
The Criminal Law of Lagos State prohibits harassment and describes harassment as unwelcome sexual advances, request for sexual favours, and other visual, verbal or physical conduct of a sexual nature which when submitted to or rejected - (a) implicitly or explicitly affects a person’s employment or educational opportunity or unreasonably interferes with the person’s work or educational performance; (b) implicitly or explicitly suggests that submission to or rejection of the conduct will be a factor in academic or employment decisions; or (c) creates an intimidating, hostile or offensive learning or working environment. Any person who sexually harasses another is guilty of a felony and is liable to imprisonment for three years.

Employee Compensation Act provides for compensation in the case of mental stress to a worker if the mental stress is an acute reaction to a sudden and unexpected traumatic event arising out of or in the course of the employee's employment; or (b) diagnosed by an accredited medical practitioner as a mental or physical condition amounting to mental stress arising out of the nature of work or the occurrence of any event in the course of the employee's employment. If the mental stress is caused as a result of the decision of the employer to change the work, the working conditions of work organization in such a way as to unfairly exceed the work ability and capacity of the employee thereby leading to mental stress, such situation is liable to compensation to the degree as may be determined under any regulation made by the Board. Thus, a victim of workplace harassment may be able to claim compensation under this provision.

**Maternity and work - Maternity leave**

Female workers are entitled to twelve (12) weeks of maternity leave, to cover pre and post maternity period. Out of this twelve-week period, six-week leave is taken after delivery. Maternity leave may begin six weeks before delivery after providing medical certificate from registered practitioner, confirming that the confinement may takes place within six weeks. Maternity leave can be extended in case of illness, certified by the registered medical practitioner, that arise out of pregnancy or confinement and make her unfit for work.

**Employees’ Income**

Workers on maternity leave with at least six months of continuous service with the employer, are entitled to receive at least 50% of their normal
Free Medical Care of Employee

The employer is not obliged to provide medical care for pregnant workers. It is not the duty of an employer to pay any expenses related to pregnancy and confinement of the worker. Prior to recruitment, every worker must be medically examined by a registered medical practitioner at the expense of the employer.

The maternity care is provided to insured worker employed continuously for at least six months by the same employer on provision of a medical certificate. Maternity care is provided for up to four live births. The scheme is managed by the National Health Insurance Scheme.

Implementation of Health and Safety Legislation

The implementation of Health & Safety legislation requires issuing of warnings or notices to offenders, and thereafter, the sealing of defaulting sites, and the penalization of defaulters Okojie (2010). Regrettably, this is not practicable in Nigeria in that the resources required for enforcement are inadequate and not available. In affirmation, Okojie, (2010) confirms that the sealing of premises is a rare form of forceful Health and safety implementation in Nigeria. Furthermore, Adeogun & Okafor, (2013) noted that unhealthy exposures to risks of workers in organisations make it evident that Health and Safety legislation is not enforced in Nigeria. The argument, therefore, is that there should be daily inspection of workplaces by factory inspectors and monthly reports to the Federal Ministry of Labour and Productivity, Okojie [2010], but this is often farfetched. Moreover, authors such as Ezenwa (2001), Idubor and Oisamoje (2013) record that the number of enforcement officers in Nigeria is insignificant compared to the number of factories in Nigeria. Keith et al. [2012] believe that lack of personnel and lack of commitment to ensuring better enforcement on the part of the enforcement authorities, hinders the optimum enforcement of Health and safety regulations. Then, a study conducted by Diugwu et al. (2012) determined that the majority of company workers in Nigeria are unaware of the body responsible for enforcing Health and safety regulations in the industry.

Occupational Safety and Health Enforcement Bodies in Nigeria

As mentioned earlier in this work, that the Federal Ministry of Labour and Employment is the government ministry responsible for the implementation and enforcement of occupational health and safety in Nigeria. The Department under the ministry responsible for this actual
control and implementation is the Occupational Safety and Health Department which is one of the seven (7) professional departments in the Federal Ministry of Labour and Employment.

This Occupational Safety and Health Department has the responsibility for safeguarding and promoting the Safety, health and wellbeing of workers in their various workplaces, with a view to preventing the occurrence of work-related illnesses, injuries and/or death and the reduction of damage to property, thereby improving productivity.

The Department was established as Factory Inspectorate Division in 1955 for regulating the work practices, work conditions, work materials/ substances used, as well as the work environment by way of implementing and enforcing the safety, health and welfare provisions of the Factories Act 2004 and its subsidiary legislations, National Workplace Policy on HIV and AIDS and National Policy on Occupational Safety and Health.

The head of OSH Department of the federal Ministry of labour is the Director of Factories of the Federation who is based at the headquarters in the Federal Capital Territory, Abuja. The OSH Department has other units which are known as follows:

- Occupational Safety and Health Field Services;
- Policies and Regulations;
- Occupational Health and Industrial Hygiene and Laboratory Services;
- National Programmes.

All these units are headed by Deputy Directors. The Department has a presence at the Federal Secretariat in the Federal Capital Territory and thirty-two state offices nationwide including the FCT. Its Occupational Hygiene Laboratory is situated in Lagos State.

**Department of Petroleum Resources (DPR)**

Another agency of the government that has regulatory oversight on Occupational Health and safety but this time, the petroleum industries is the Department of Petroleum Resources (DPR). It has regulatory oversight on the Oil Industry in health, safety and environment (HSE) issues. The petroleum activities typically comprise a wide range of engineering specializations with each having its own risks.
The DPR over the years has developed substantive capacity in areas of HSE administration which now constitutes a significant part of oil industry operations with a philosophy based on risk/hazard management. It derives its powers from the Minerals Oils (Safety) Regulations and the Petroleum (Drilling and Production) Regulations, 1997.

The DPR has over twenty field offices throughout the nation and employs over one thousand employees in several oil and gas specializations.

It has HSE division which establishes many safety guidelines based on the petroleum industries laws. The Department of Petroleum Resources maintains a close relationship with the major stakeholders in the oil industry in other to keep abreast with the latest in cutting edge technology and methodologies aimed at HSE promotion.

The Department of Petroleum Resources activities helps to drive adherence to guidelines vis-à-vis occupational safety and health. These activities are:

(i) Institutionalisation and promotion of the safety case regime for all oil and gas facilities
(ii) Institutionalisation and promotion of the risk-based inspection methodology for facilities
(iii) Development of the offshore safety permit – Record of offshore traffic and deployment
(iv) Safety training centres accreditation
(v) Regular facility inspections and operation monitoring (including offshore facilities)
(vi) Development of HSE related guidelines covering lifting equipment, Risk-Based inspections, etc.

Barriers to the Implementation of Health and Safety Legislation

Nigeria as the largest country in African country is fraught with corruption. This was the accession of Transparency International Corruption Perceptions Index (2012). The transparent organization (TICPI) ranked Nigeria 139th out of 176. Regulatory institutions and the police force, according to Onyeozili, (2005), have been proven to be corrupt, which prevents effective implementation of legislation in the country as the activities of authorities responsible for enforcing the laws are seen as questionable. As an illustration, Langford et al. (2000) refer to
situations where firms with poor Health and safety practices achieve pass marks after inspection because they have bribed the enforcement officers. Keith et al., (2012) confirm that enforcement officers do this due to their selfish financial reasons, thereby disregarding the aims of the regulations, and promoting non-compliance.

Another major issue militating against the effective implementation of occupational Health and safety in Nigeria is the lack of skilled personnel. Keith et al., (2012) is further buttressed by Omojokun, (2013) in his work when identifies insufficient enforcement officers among the challenges to effective food regulation and enforcement in Nigeria.

In a related development, Rantanen, [2005] states that an insufficient number of competent occupational health services experts hinders the development of occupational health services worldwide. Thus, the implementation of Health and safety legislation requires funds to be available for effective provision of adequate facilities and recruitment of training officers who enforces the occupational Health and safety regulations / laws.

Ezenwa, (2013) however argued that the number of technical and transport equipment is insufficient, as such hinders the implementation of Health and safety legislation in Nigeria. The argument here is that if the ministry experiences insufficient funding, adequate enforcement will be farfetched; it may also contribute to corruption. Cheung et al., (2004) agree with the postulation that inadequate funding being viewed as a barrier to the implementation of Health and safety legislation. This was however in agreement with Rantanen, (2005) assumption of financial constraints as one of the factors that hinder the development of health services.

**Occupational Health and Safety Violations in Nigeria**

As earlier stated in this work that there are legislations and laws which regulates the occupational health and safety in Nigeria but sadly enough the level of compliance to these laws or rules is abysmal in some quarters especially the non-oil sector of the economy which Transport, Store and uses these products from the petroleum / oil sector of the Nigerian economy. While it is expedient, well and good to make laws, but these laws are or will be useless if they are not complied with, enforced or are enforced only in certain circumstances or for certain people.
METHODOLOGY

Research Design

This study used cross-sectional research design. This method was used here because it enables the investigator to use the draw sample to represent the various elements of the population under study. It is essential that a research of this nature is carried out using appropriate method of design if the objective is to be achieved. This study therefore adopts descriptive and analytical approach which enables the researcher to administer questionnaire to many respondents at the same time to sample their independent opinions as regards to the impact of occupational health and safety legislations on the management of occupational health and safety in the Nigerian oil and gas industry.

Relevant data were collected from primary and secondary sources. The primary data were obtained through questionnaire and interview with persons from oil and Gas (Petroleum) industries. Some of the respondents were contactors and contractor staff (CN), the Oil companies Permanent closed pensionable staff (SN); Expatriate contract staff (CE); and Expatriate company staff (SE) staff. Others were knowledgeable professionals especially in the area of HSE and officials of different government and non-government agencies, especially security agencies; enforcement agencies from Department of Occupational Safety and Health (OSH) of the Federal ministries of labour and the Department of Petroleum Resources (DPR). The secondary data sources included textbooks, position papers, electronics media and internet.

Population of Study

The population considered in this research were mainly oil and Gas workers/stakeholders in the Nigerian Petroleum industry especially those that are directly involved with the implementation of Health and safety legislation and company’s policies. These includes contractors, subcontractors, and clients of public projects as well as consultants in the form of HSES officers. The population also includes Health and safety managers, Emergency Response personnel, site engineers, project managers, and site operatives who are often experience Maintenance, construction or production engineers. The questionnaire that was administered was designed to investigate the impact of occupational health and safety legislations on the management of occupational health and safety in the Nigerian oil and gas industry.
This study population was selected based on the relationship of the subject matter with these various organizations and individuals. However, 200 respondents were selected from the different organizations.

**Sample Size and Sampling Technique**

The sample size of this study was 200 persons. The reasons for this sample size was because of time factor, cost factor and the need for representativeness of population of the study. The sampling technique used for this study was judgmental sampling which is also known as purposive sampling. In this technique the researcher picks or select members of its sample purposively depending on the quality or characteristics that he or she is looking for in the sampling units. The judgmental sampling is a non-probability sampling method which is usually subjective. Therefore, the population of this study was selected according to the quality or characteristics decided which was based on the opinions as regards to occupational health and safety legislations and their management in selected oil and Gas companies in Nigeria.

**Inclusion and Exclusion Criteria**

The inclusion of the respondents in this research is dependent on the factors that help this researcher to meet the goals of the study which is the occupational health and safety legislations and their management in selected oil and Gas companies in Nigeria. Respondent whose demographic and geographic location met the requirement of the study were included in this study. Exclusion criteria of the study was dependent on any external characteristics of the respondents that can impact the study and make it incorrect or biased.

**Inclusion criteria**

The inclusion criteria for the above example was be adult male and female contract and staff of the selected oil and Gas companies in Nigeria and above 19 years of age. Their geographical location should be Nigeria.

**Exclusion criteria**

The exclusion criteria include all the participants that meet all the requirements of the study but still the researcher cannot include them in the study. Why? Because these respondents have other emotional, medical, or psychological conditions that can influence the results of the
study; or these respondents have lack of willingness and interest that can make the study biased and incorrect. It is very important that the researcher clearly define what the inclusion criteria are and what are the exclusion criteria. These criteria should be mutually exclusive so that the right respondents are selected. By clearly defining the criteria the researcher avoids any confusion as well as bias in the study. The external validity of the research is improved with the right selection and exclusion of the respondents.

**Instrument of Data Collection**

The instrument used for data collection was the Questionnaire. The Questionnaire was Close-ended and presented alternative responses for the respondent to choose or tick spontaneously that which is most appropriate with respect to disposition. The questionnaire contained questions that are relevant to the study. The questionnaire was divided into two (2) sections A and B. Section A contains information on the biographical data of the respondents. This information includes Name or Position, Sex, Department or Occupation. Section B consists of information that are in line with the objectives of the study.

**Validity and Reliability of Research Instrument**

The validity of this research instrument was done to ensure that the data collected are relevant to the problem of the study. The type of validity used was the face validity which has to do with the confidence gain from careful inspection of the measuring instrument to see whether it is appropriate at the face value while Reliability is the consistency in scores of a repeated test. The method of reliability used by the researcher was the Test-Retest method which is test by comparing result at one time with results of a later time using the same subject. The principle of validity and reliability is to test for accuracy of the research instrument before administering it.

The face and content validity of the instruments was determined by critical observation by experts.

**Procedure of Data Collection**

The procedure used in this study to collect data was through the questionnaire. A total of 200 copies questionnaire were administered to selected respondents. The questionnaire was administered in person and through google online questionnaire to the respondent and also waited for them to fill the questionnaire.
The process entailed a brief introduction and the procedures for filling responses in the questionnaire. In a situation when the respondents does not understand a sample question, he or she was aided by the researcher who translated question to interview.

**Method of Data Analysis**

The collected data were presented using tables and analyses on the trend and frequency of variables. The Biodata of the respondents was analyzed using simple percentage. This led to logical deductions and findings from which recommendations were made.

**RESULTS AND DISCUSSION**

**Presentation of Data**

This chapter seeks to analyze the various data collated with regards to the research methodology and establish some findings based on Occupational Health and Safety Legislations and Management in selected oil and gas companies in Nigeria. For easy comprehension and interpretation, frequency tables and charts were used for data presentation. Data were obtained from respondents’ answers to questionnaire, interview and existing data on Occupational Health and Safety Legislations on the Management of Occupational Health and Safety in the setting of present-day Nigeria.

Data from the respondents were expressed in form of percentage and results were rounded up to the nearest whole number to simplify calculations. The research hypothesis was retested, and further analysis of the result was done to determine the impact of Nigerian legislations on occupational Health and safety.

**Presentation of Result**

Out of the 200 questionnaires administered to the selected respondent, to elicit information through data collection, only 200 or 96 percent were returned and find useful for the purpose of this study. All respondents were between 20 years and above and are also knowledgeable on the subject matter. The breakdown of the respondents who returned the questionnaire is presented in table 4.1.
Table 4.1: Age of respondents

<table>
<thead>
<tr>
<th>Age (Years)</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 -29</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>30 -39</td>
<td>65</td>
<td>32.5</td>
</tr>
<tr>
<td>40 -49</td>
<td>39</td>
<td>29.5</td>
</tr>
<tr>
<td>50 and above</td>
<td>26</td>
<td>13</td>
</tr>
<tr>
<td>TOTAL</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

The frequency distribution table above shows the age bracket of respondents. However, 50 respondents representing 25 percent of the study population fall between the ages of 20-29 years, 65 respondents representing 32.5 percent of the study population fall between the ages of 30-39 years. 59 respondents representing 29.5 percent of the study population fall between the ages of 40-49 years, 26 respondents representing 13 percent of the study population fall between the ages of 50 and above.

Table 4.2 shows the sex distribution of respondents. From the table, 88 respondents representing 44 percent of the study population are male while 112 respondent representing 56 percent are female.

**Table 4.2 Sex Distribution of the Respondents**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>88</td>
<td>44</td>
</tr>
<tr>
<td>Female</td>
<td>112</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>

Table 4.3 shows the various occupations / sections of respondents in the petroleum industries. From the analysis, 50 respondents representing 15 percent of the study population are Production Operations Team, 65 respondents representing 55 percent of the study population are Maintenance team, and 59 respondents representing 25 percent of the study population are Health safety and environment (HSE) Team while 26 respondents representing 5 percent of the study population are other department in the petroleum industries.
Table 4.3  Occupation of the Respondents

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Operations Team</td>
<td>50</td>
<td>15</td>
</tr>
<tr>
<td>Maintenance Team</td>
<td>65</td>
<td>55</td>
</tr>
<tr>
<td>Health, Safety and Environment (HSE)</td>
<td>59</td>
<td>25</td>
</tr>
<tr>
<td>Others</td>
<td>26</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 4.4 shows the Religious status of respondents. From the analysis, 160 respondents representing 80 percent were Christians, 10 respondents representing 5 percent of the population were Muslims (Islam); 14 respondents representing 7 percent were traditional religious worshippers as they stated in their response answers to the questionnaire, while 16 respondents representing 8 percent did not specify their religion.

Table 4.4: Religious background of respondents

<table>
<thead>
<tr>
<th>Religion</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christianity</td>
<td>160</td>
<td>80</td>
</tr>
<tr>
<td>Muslim (Islam)</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Traditional religious worshipper</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>Not specified</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 4.5 shows the marital status of respondents. From the analysis, 115 respondents representing 65 percent of the study population are married, 65 respondents representing 25 percent of the study population are unmarried while 20 respondents representing 10 percent of the study population are divorced.

Table 4.5  Marital Status of the Respondents

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>115</td>
<td>65</td>
</tr>
<tr>
<td>Unmarried</td>
<td>65</td>
<td>25</td>
</tr>
</tbody>
</table>
Table 4.6 showed the educational status of respondents where 10 respondents representing 5 percent have either first leaving school certificate or Trade test qualification, 70 respondents representing 35 percent of the study population has West Africa School Certificate, 50 respondents representing 25 percent has Diploma / Higher National Diploma and 60 respondents representing 30 percent has Bachelor of Science degree in various disciplines of study and finally, 10 respondent represent 5 percent of the study population has Master degree / PhD.

Table 4.6  Educational Status of the Respondents

<table>
<thead>
<tr>
<th>Educational Status</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Leaving School Cert. (FLSC) / NAPTEC / Artisan</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>WASC</td>
<td>70</td>
<td>35</td>
</tr>
<tr>
<td>OND / HND</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>B.Sc.</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>Masters / PhD</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Test of Hypotheses

Hypothesis 1:

Impact of the implementation of the regulations on the management of occupational Health and safety in Nigeria

Table: 4.7: Responses on the impact of the implementation of the regulations on the management of occupational Health and safety in Nigeria

<table>
<thead>
<tr>
<th>Responses</th>
<th>No of Respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>133</td>
<td>66.5</td>
</tr>
<tr>
<td>No</td>
<td>67</td>
<td>33.5</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4.7 showed that 66.5 percent of the respondents is of the opinion that there is a significant impact of the implementation of the regulations on the management of occupational Health and safety in Nigeria.

Also, 33.5 percent said that there is no significant impact of the implementation of the regulations on the management of occupational Health and safety in Nigeria.

H₀: There is no significant impact of the implementation of the regulations on the management of occupational Health and safety in Nigeria.

H₁: There is a significant impact of the implementation of the regulations on the management of occupational Health and safety in Nigeria.

Therefore, H₀ is rejected. This means that there is a significant impact of the implementation of the regulations on the management of occupational Health and safety in Nigeria.
Hypothesis 2:

Compliance by selected oil and Gas companies with the occupational health and safety regulations / laws.

Table 4.8: Responses on compliance by the petroleum industries with the occupational health and safety regulations / laws.

<table>
<thead>
<tr>
<th>Responses</th>
<th>No of Respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>135</td>
<td>67.5</td>
</tr>
<tr>
<td>No</td>
<td>65</td>
<td>32.5</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4.8 shows that 135 respondents representing 67.5 percent of the research population said, there is a significant compliance by the petroleum industries with the occupational health and safety regulations / laws, while 65 respondents representing 32.5 percent said there is no significant compliance by the petroleum industries with the occupational health and safety regulations / laws.

H0: There is no significant compliance by the petroleum industries with the occupational health and safety regulations / laws.

H1: There is a significant compliance by the oil and Gas companies with the occupational health and safety regulations / laws.

Therefore, H0 is rejected. This means that, there is significant compliance by the oil and Gas companies with the occupational Health and Safety regulations / laws.

Hypothesis 3:

The effect of incidents / fatal incidents on the economic development of Nigeria in general due to lack of political / will power to sanction erring OICs / indigenous oil companies by the successive governments in power.

Table 4.9 Responses on the effect of Major Incidents / fatal accidents on the economic development of Nigeria in general due to lack of will power to sanction erring OICs / indigenous oil companies.
Table 4.9 show that 123 respondent representing 61.5 percent of the respondents is of the view that there is a significant effect of incidents / fatal incidents on the economic development of Nigeria in general due to lack of will power of the government to sanction erring IOCs / indigenous oil companies. While 77 respondents representing 38.5 respondents said, there is no significant effect of incidents / fatal incidents on the economic development of Nigeria in general due to lack of political / will power to sanction erring OICs / Indigenous oil companies.

**H₀**: There is no significant effect of fatal incidents on the economic development of Nigeria in general due to lack of will power to sanction erring OICs.

**H₁**: There is a significant effect of major incidents / fatal accidents on the economic development of Nigeria in general due to lack of will power to sanction erring OICs.

**H₀** is rejected. This means that there is a significant effect of major incidents / fatal accidents on the economic development of Nigeria in general due to lack of political / will power to sanction erring IOCs / indigenous oil companies.

**Discussion of Findings**

Based on the results of data collected from the questionnaire, and from the analysis and of responses, the researcher therefore, came up with the following findings:

The results revealed that there is significant impact of the implementation of the regulations on the management of occupational Health and safety in Nigeria. This is because sincerity in the implementation of OHS regulations will positively impact / reduce, if not out rightly eliminate incidents / accident in the workplace and Nigeria in general. Also, the study revealed that there is a significant compliance by the petroleum industries with the occupational health and safety regulations / laws.

This motion was captured on the compliance by the petroleum industries with the occupational health and safety regulations / laws in Nigeria. This is because compliance with Health and safety regulations and the policies / guidelines of the petroleum industries brings about
economic development as production figure will rise and more profit for the investors and
government to fund the economy. Remember, no investor in his or her right senses / frame of
mind will like to invest in a place where substantial part of its profit is used for compensation
and fine.

Lastly, this study according to the findings from hypothesis 3 revealed that the effect of major
incidents / fatal incidents on the economic development of Nigeria is due to the lack of will /
political power of the government in power to sanction erring OICs and indigenous oil
companies.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

This research revealed that there is a substantial impact on the implementation of the
regulations on the management of occupational Health and safety in Nigeria. It also revealed
that the selected oil and Gas companies in Nigeria are in substantial compliance with the
occupational Health and Safety regulations / laws of Nigeria. It, however, shows that there are
significant effects of major or fatal accidents on the economic development of Nigeria due to
the lack of political / will power to sanction erring International oil majors and the indigenous
oil companies.

To sustain and improve on the success and achievement of the Occupational Health and Safety
(OHS) regulations and its enforcement framework, the ability of regulatory bodies or
responsible agencies and personnel to reduce human vulnerability in terms of fatalities, injuries
& Loss Time Injuries (LTIs, the following key drivers may aid in such success:

Adequacy of the OSH Law(s) and Consequences Management: The legal framework should
be straightened and appropriate penalties to defaulters should be spelt out and inspectors should
be granted adequate but controlled powers to enforce its provisions. Efficiency of the judicial
system: In practice, citation contests and disputes between OSH Regulatory Authorities and
the duty holders are not completely avoidable; hence efficient system must be put in place to
address those issues. The degree of independence of the OSH regulatory agency: The
regulatory and enforcement agency must be shielded from unnecessary political interferences.
This can be achieved by designating the enforcement agency as a Non-Departmental or Non-Ministerial body.

**Conclusion**

Conclusively, although the laws and legislations / Regulation on Occupational Health and Safety can be said to be relatively new amongst enactments by the committee of nations especially the advanced / developed ones, it has however, started gaining ground in Africa. It will be of immense value to the people of Nigeria and the Nigerian economy if, when and where all parties to petroleum exploration and resourcing including the government are committed to the success of the implementation of the various enactments in Nigeria. Incidents / incidences and fatal accidents resulting from petroleum exploration, transportation and consumption of petroleum product has caused unimaginable damage not only to the image of Nigeria but also a threat to her population. Although the prominence of Petroleum incidents started in the Niger Delta region, it has however spread throughout the different regions of the country. The dimension its taking in Lagos in the western part of Nigeria and of course, the various gas explosion in various part of Eastern part of Nigeria is disheartening with the involvement of youths and illiterates young and the society whose primary aim is to amass wealth by scooping fuel at the expense of their life.

The Middle belt states and some Northern parts of the country have also not been totally free from this menace of gas explosions with attendant deaths. This, the researcher, believes is a result of government’s ineptitude or lackadaisical attitude towards absolute enforcement / implementation of the various legislation as enacted by the legislative arm of the government. Fire incidents resulting from the cooking of crude oil otherwise known as “Gbo Fire”, especially in the Niger Delta region of the country is now a norm. Illegal Bunkering menace has been perpetrated not only for financial gains but also on political grounds. The politicians who are the people’s representative sees this as ways to compensate their followers while the ignorant followers see it as their fair share of the National cake. The dimension the pipeline vandalization menace is taken in Nigeria particularly the Niger Delta States of Abia, Bayelsa, Delta, Edo and Rivers and to lesser extent, other state of the federation is however disheartening which could lead to a worst scenario if nothing is done about it. It is therefore necessary to access the causes of the ineptitude on the part of the government to completely ensure compliance with occupational Health and Safety (OHS) legislation, the impact (positive or negative) of these legislations on the management of occupational Health and Safety, and
causes of these vandalism / illegal bunkering and the ways by which it can be curb to prevent its effect not only in the social life of these states but also on the Nigerian State Security.

With reference to the questionnaires issued to respondent on the way to evaluate the impact of occupational Health and safety (OHS) legislation on the management of occupational Health and safety; several factors were considered which was prominent. The need to check Fire and gas incidents / explosions by equipping OHS enforcement / security agencies to curb the overflow of the menace of petroleum scooping, vandalism and illegal bunkering. The impact and breaches of Occupational Health and Safety regulations / laws especially by the indigenous oil companies cannot be overemphasized as various literatures and the responses of respondents on the issue have proven so. This is because these companies are owned and managed in one way or the other by those in power / government. It has not only led to the dwindling economic activities in the Niger Delta region, but has also created a fear amongst genuine Niger Deltas and Nigerians in general.

**Recommendations**

Occupational Health and Safety (OHS) is frequently defined as the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in every aspect of work. Based on theses, the following are some recommendations that can be used to tackle the problems efficient compliance with OHS regulation in Nigeria.

The researcher therefore recommends:

i. Though the result of this research shows that the selected oil and Gas companies in Nigeria are in substantial compliance with the occupational Health and Safety regulations / laws of Nigeria, it will be of greater benefit the oil and Gas companies if they ups the enforcement and implementation of it through the adoption of self-regulatory style of enforcement, as good and quality occupational Health and Safety records improve the images of the organizations, and enable the organizations to maximize profit.

ii. Since the research shows that there are significant effects of major or fatal accidents on the economic development of Nigeria due to the lack of political / will power to sanction erring International oil majors and the indigenous oil companies, the enforcement of OHS regulations through local level will surely improve the Occupational Health and Safety (OHS) in Nigeria. Local government authorities should be involved in the
enforcement of OSH regulations as done in the advanced nations like the UK. This reduce the influence from the international community.

iii. As the research revealed that there is a substantial impact on the implementation of the regulations on the management of occupational Health and safety in Nigeria, the Petroleum industries should set up joint safety monitoring committees which will ensure regulatory compliance by oil and Gas industries of all the OHS legislations and laws. This joint committee should include health and safety experts from the joint venture partners (JVP) and Joint Industries Companies (JIC). Their job should include regulatory compliance; risk assessments; safety audits; advice on health and safety policies and fashion ways of improving health and safety management.

iv. Finally, proactive efforts should be made to eradicate the major problems faced by Occupational Health and Safety (OHS) professionals, which is raising the awareness of the workforce, management of regulatory compliance and implementation of an appropriate risk analysis.

**Contribution to Knowledge**

This research work illustrate how knowledge of Occupational Health and Safety (OHS) legislation may be identified and assimilated, but not yield performance improvement until it is transformed and exploited. The work clearly enumerate the benefits derivable from the knowledge of occupational and Safety legislation which provides guidance in the prevention of occupational injuries and illnesses, affords workers the right to refuse to work in unsafe settings, as well as the right to free medical surveillance. Occupational legislation ensures safety at the workplace in that it compels safety training of employees and supervision on compliance in relation to PPE usage, facilitates compensation of workers for occupational injuries and diseases, and ensures prevention of exploitation by employers in line with the Nigerian constitution other related legislation such as Factory Act LFN, (2004).

The result, conclusion drawn and recommendations from this research, contribute immensely to the existing body of literatures while covering the areas that hitherto, has not been torched by other researchers. The goal of an occupational Health and safety program is to foster a safe and healthy occupational environment. Occupational Health and (OHS) protects the general public who may be affected by the occupational environment. The purpose of health and safety is to protect your workers, sub-contractors, customers and members of the public.
when they are involved with your business. The knowledge of the regulation / legislations guiding occupational Health and safety breeds consciousness. Everyone, the employers and employees alike, have a duty of care under the labour law and Factory Act LFN, (2004) but more than that, its good business practice to adhere to health and safety law Legislation, that is, laws are made so that everyone in the society knows which behaviours are acceptable and which are not. Laws cover all aspects of our lives including protecting the health and safety of people at work and those affected by work activities including those who receive care and support.
REFERENCES


Engineering Research,


APPENDICES

APPENDIX A: Introductory letter

Centre for Occupational Health, Safety and Environment (COHSE),
Institute of Petroleum Study,
University of Port Harcourt,
10th November 2020

Dear Respondent,

I am a final year student of the above-named institution, carrying out a research work on the impact of Occupational Health and Safety legislation and management of occupational Health and safety in selected oil and Gas companies in Nigeria: A case study of the petroleum Industries. I hereby solicit for your honest answers to the questions contained in the questionnaire which is designed for the completion of this research work. All information provided will be treated with utmost confidentiality.

Thank you for your understanding and anticipated cooperation.

Yours faithfully,

Odion-Obomhense, Austen Aletor
(Researcher)

APPENDIX B Sample Questionnaire

SECTION A (BIO DATA)

Instruction: Please tick [✓] in the appropriate boxes as it relates to your answers.

1. Age
   (a) 20 – 29 [✓ ]
   (b) 30 – 39 [✓ ]
   (c) 40 – 49 [✓ ]
   (d) 50 and Above [✓ ]
2. **Sex**
   (a) Male [ ]
   (b) Female [ ]

3. **Occupation**
   (a) Production Operations Team [ ]
   (b) Maintenance Team [ ]
   (c) Health, Safety and Env. (HSE) [ ]
   (d) Others [ ]

4. **Religion**
   (a) Christianity [ ]
   (b) Islam [ ]
   (c) Traditional religion worshiper [ ]
   (d) Not specified [ ]

5. **Marital Status**
   (a) Single / Married [ ]
   (b) Unmarried [ ]
   (c) Divorced [ ]
   (d) Widowed [ ]

6. **Educational Qualification**
   (a) First Leaving School Cert. (FLSC) / NAPTEC / Others [ ]
   (b) WASC / SSCE [ ]
   (c) HND/OND [ ]
   (d) First Degree / B.Sc. [ ]
   (e) Master’s degree / PhD. [ ]
Section B:

**Instruction:** Please respond to the following questions by ticking YES, NO or Not Sure, on your choice of answer.

**PART A: (Impact of legislation / regulations on the management of occupational Health and Safety in Nigeria; A case study of Petroleum Industries)**

1. Are you aware or conversant with “Nigeria Country Profile on Occupational Safety and Health 2016” or any occupational Health and Safety Law(s) / Regulation(s) in Nigeria? YES [ ], NO. [ ]. Not sure. [ ].

2. Does your company or organization have a written policy or guidelines in place on Occupational Health and Safety? YES [ ], No. [ ]. Not sure. [ ].

3. Are these policy document readily accessible or known by all employee in the organization? YES [ ], No. [ ]. Not Sure. [ ].

4. Are the leadership of your organization / management involve and committed on the implementation and enforcement of OHS regulations in your company? *YES [ ], No. [ ]. Not sure. [ ].

5. Does the occupational Health and Safety (OHS) regulatory body come for inspection regularly at your workplace? YES [ ], No. [ ]. Not sure. [ ].

6. Are there actions taken against any individual by your organization or against the organization by the regulatory body in cases of non-compliance with occupational Health and Safety (OHS) Regulations / legislation, if yes, do you know of any of such actions? (tick) YES [ ], No. [ ]. Not sure. [ ].

7. Are the other stakeholders responsible for making sure that oil and gas companies comply with occupational health and safety regulations? YES [ ], No. [ ]. Not sure. [ ].

8. Does your company's Health and Safety Policy include a general statement detailing the employer's concern for health and safety issues, as well as an outline of the key staff involved in health and safety in the workplace and an explanation of their duties? *YES [ ], No. [ ]. Not sure. [ ].

9. Do you know the stakeholders responsible for the enforcement and making sure that oil and gas companies comply with occupational health and safety regulations? *YES [ ], No. [ ]. Not sure. [ ].
10. Are you aware of and know your responsible organization’s representative or person who report all workplace deaths, work-related diseases, major injuries and dangerous occurrences to the relevant enforcing authority, without delay, either by phone or email, followed by an accident report form to the enforcing authority as specified by OHS regulations / laws? * YES [ ], No. [ ]. Not sure. [ ].

11. Does your organization comply with the OHS regulations in the provision of all types of personal protective equipment (PPE) suitable for the protection of all employees in relation to the types of hazard associated with the job the employees are engaged in the organization? * YES [ ], No. [ ]. Not sure. [ ].

12. Is there a provision to ensure that hazardous manual handling operations are avoided in the workplace if possible, through eliminating or redesigning processes, or by introducing mechanical operations to move or support loads? YES [ ], No. [ ] Not sure. [ ]

13. Is there a provision of adequate first aid equipment/facilities and procedure for treatment given to staff in case of a health emergency in the workplace? * YES [ ], No. [ ]. Not sure. [ ].

14. Does your organization keep records of all workplace accidents / incidents or regulatory breaches and maintain records of any significant risks found during the risk assessment and hazard identification? * YES [ ], No. [ ]. Not sure. [ ].