

# Implementation and Compliance with Safety and Environmental Laws in Selected Oil Companies in Port Harcourt

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## ABSTRACT

This study assessed the awareness level and compliance to safety and environmental laws in selected oil companies in Port Harcourt. Activities of the oil company pose health, safety, and environmental risks but with laws, regulations and regulatory bodies these are expected to be in check to ensure implementations and compliance with safety and environmental laws. The study adopted a descriptive study and focused on Port Harcourt since it is a hub of oil companies, with known long standing environmental issues like black soot and Ogoni spills. A total of 70 samples were determined using Yamane's statistical technique. Combined method of data collection was adopted, which included the use of questionnaire, interview for primary data, review of articles for secondary data and report from a regulatory body. Collected data were analyzed using SPSS software. From the analysis, the following findings were made: 79.9% of the selected companies admitted to the existence of safety and environmental laws and policies to guide, the results showed that the level of awareness and compliance of safety and environmental laws is at a significant level and some of the factors cited to be contributing to the poor compliance and implementation of environmental and safety laws include: management negligence and poor attitude of employees towards safety and environmental practices. Regulatory bodies need to enforce compliance to these laws by oil companies. The study recommended among others for service companies to provide adequate training of workers, promote the safety culture.

**KEYWORDS:** environmental laws, safety implementation, safety compliance

## I. INTRODUCTION

Globally, energy plays a very vital and crucial role in the economic, socio-political and

environmental domains of every nation and its importance can be seen in every side of life. In Nigeria, the economy is greatly dependent on the proceeds from the energy industries [9]. Oil production activities are broadly classified upstream and downstream operations. The upstream operations involve the search for and production of crude oil and gas with: exploration, evaluation and appraisals, field development, production and decommissioning activities [2]. Whereas, the downstream operations involve refining, product storage, transportation, distribution, and retailing. The operations of both upstream and downstream sectors of the oil and gas industries potentially poses high humanhealth, safety, and environmental risks; thus, the need for every responsible society to prevent, mitigate and control the unhealthy concerns that may arise from these operations [12]. Hence, the need for safety and environmental laws, guidelines, regulations and monitoring some of which gained popularity from (Principle 11, Rio Declaration, 1992). The non-implementation and compliance to safety and environmental laws is a global issue because it meddles with human safety, degrades and pollutes the environment leading to global warming. Presently, there is a Port Harcourt Soot issue and Ogoni oil spill which are part of the environmental disasters created as a result of nonimplementation and compliance to safety and environmental laws poses a great health challenge to residents. Safety and environmental laws, guidelines and regulations are concerned with ensuring the protection and preservation of humans and the environment which as well comprises of land, water and soil with penalties of various kinds for defaulters [14]. Lack of follow-up is arguably the weakest point in many jurisdictions. If effectively enforced, an environmental law should reduce the environmental impacts of developments. However, without follow-up being completed it is only the

predicted effects on the environment and not the real effects that are realized. [11] affirms that for environmental and safety laws to effectively protect the impacts of the hazardous oil and gas operations, there should be effective and efficient monitoring, post-approval phase of environmental laws. Environmental Management System (EMS), Environmental Impacts Assessment (EIA) and risk assessment. EIA, ISO 14001 EMS are some of the tools for managing the environment. Therefore, the study is aimed at investigating the level of awareness and compliance level of safety and environmental laws in selected oil companies in Port Harcourt through the evaluation of level awareness and understanding of applicable safety and environmental laws of companies and workers, programs, implementation and monitoring across selected oil companies in Port Harcourt, Rivers State.

## II. LITERATURE REVIEW

National governments, regions, organisations and the global community have developed numerous programs, laws, guidelines and signed different treaties all in the campaign for a safe environment [1]. In response to the impact of industrialization on the environment, environmental policies, programmes and law had to be charted. This led to the enactment of some laws such as the Factories Act, the Oil in Navigable Waters Regulations 1968., the Petroleum Act 1969, the Petroleum (Drilling and Production) Regulations 1969, Petroleum Drilling and Production (Amendment) Regulations 1973, the Petroleum Refining Regulations 1974 and the Oil Pipeline Act in Nigeria. The Toxic Waste saga of Koko in Delta State (Bendel State then) in 1988 gave rise to the Harmful Waste Decree 42 of

1988. The Federal Environmental Protection Agency (FEPA) through Decrees 58 of 1988 and 59 as amended of 1992. FEPA was then charged with the overall responsibility for environmental management and protection across the country. NESREA is charged with enforcing all the environmental laws, guidelines, policies, standards, and regulations in Nigeria [3]. The 1999 Constitution of the Federal Republic of Nigeria in Section 17 subsection 3, specifically made mention that the State shall direct its policy towards ensuring that the health, safety and welfare of all persons in employment are safeguarded and not endangered or abused. Major legislations that have been enacted to provide for the safety and health of workforce include: The Factories Act, CAP F1, Laws of the Federation of Nigeria (LFN), 2004,

Employees Compensation Act, 2010, Nigerian Minerals and Mining Act, 2007, Nigerian Nuclear Safety and Radiation Act, 1995 while guidance to the implementation of occupational safety and health in the country are: Nigeria Basic Ionising Radiation Regulations, 2003, Nigerian Radiation Safety in Nuclear Regulations, 2006, Minerals Oils (Safety) Regulations, 1962, Petroleum (Drilling and Petroleum) Regulations, 1967 and others.

Some state in the country have enacted laws to this effect and they include: the Lagos State Environmental Protection Agency (LASEPA), the Akwa Ibom State Environmental Protection and Waste Management Act (EPWMA). Some of the regulatory authorities in Nigeria include: National Environmental Standards and Regulations

Enforcement Agency (NESREA), National Oil Spill Detection and Response Agency (NOSDRA), Federal Ministry of Environment, Directorate of Petroleum Resources (DPR), Nigerian Nuclear Regulatory Authority, Energy Commission of Nigeria and others. [8] identifies the key elements of enforcement strategies as: Inspection compliance monitoring, negotiation, legal action and prosecution. Whereas, enforcement strategies are: issue of permits and licences, issue of prohibition and enforcement notices, variation of licence conditions, implementing the "polluter pays" principle, suspension and/or revocation of permits and licences, injunction and carrying out of remedial works. Nigeria became a member of ILO upon gaining independence in 1960 and has ratified forty (40) ILO Conventions till date, out of which ten (10) has been automatically denounced. The country has presently three (3) core occupational safety and health Conventions in place, namely: C155 – Occupational Safety and Health, 1981; C032 – Protection against Accidents (Dockers) 1932; and C019 – Equality of Treatment (Accident Compensation) 1925. Occupational Health Safety and Environmental Management System just as EMS, an OHSMS is a coordinated and systematic approach to managing health and safety risks. OHSMSs help organisations to continually improve their safety performance and compliance to health and safety legislation and standards. In doing so, they establish safer working environments that protect people at work by eliminating, or better managing, health and safety hazards [4]. The benefits of OHSMSs are: creation of a safer work environment, reduction of injury and injury-related cost, reduction in employers' medical expenses, insurance claim excesses, replacement labour and increased workers' compensation insurance premiums [5]. In [6], OHSMS improves business opportunities provides measurable systems that can

verify OHS performance, demonstrates that the organisation is meeting legal requirements and it also enhances the organisation's reputation. There are clear links between good OHS management systems and longterm business efficiency [7].

### III. METHODOLOGY

In this research, a descriptive method was adopted. Descriptive in the sense that it gives a precise characteristic of the situation [10]. The study area is Port Harcourt. Port Harcourt is a metropolitan city and capital of Rivers state, occupying approximately 1811.6 km<sup>2</sup> area, with a

population of about 1.5 million. It constitutes the state's main city and has one of the largest seaports in the Niger Delta region, Nigeria [14]. Ten (10) oil companies were used for the survey. A random sampling technique was derived utilizing Yamane Taro's statistical technique. Both primary and secondary data were utilized in the work while, interviews and survey (questionnaire) of both structured and semistructured nature were used for data collection. Data was dissected both quantitatively and qualitatively using SPSS and hypotheses tested at 0.05 level of significance.

### IV. RESULTS AND DISCUSSIONS

**Table 1: Existence of Safety and Environmental policies (Policy/No Policy)**

	Frequency	Percent	Valid Percent	Cumulative Percent
We have and know of safety and environmental policies	51	79.7	79.7	79.7
We do not have or know of any safety and environmental policies	13	20.3	20.3	100.0
Valid Total	64	100.0	100.0	

Table 1 shows that out of 64, thirteen (13) of the study participants constituting 20.3% indicates that they do not have or know of any safety and environmental laws or policies while the other (51) participants constituting 79.7% indicated

the presence/existence of environmental laws/policies. This comes as a surprise because the popular assumptions will be that oil companies will have operational safety and environmental policy because of the nature and size of their operations.

**Table 2: Knowledge Level of your Company and Competitors Safety and Environmental Management Systems**

	Frequency	Percent	Valid Percent	Cumulative Percent
0-20% (1)	14	21.9	21.9	21.9
Don't Know (2)				40.6
41-60% (3)	12	18.8	18.8	65.6
21-40% (4)				100.0
Valid Total	16	25.0	25.0	
	22	34.4	34.4	
	64	100.0	100.0	

The participants level of awareness of other oil companies' adoption of safety and environmental management system. 16 of the participants indicated up to 41-60% of other oil companies he/she knows of has adopted an Occupational Health and Safety Management system (OHSMS) and environmental management system (EMS). Meanwhile 12 persons expressed that they have no idea of their competitor's adoption of an OHSMS and EMS whereas another 22 of the participants indicated that 21-40% of other oil companies they know of have adopted an OHSMS and EMS while the other 14 persons indicated that 0-20% of known competitors have adopted an OHSMS and EMS. This implies that although 13 of that number established that their organizations do not have an environmental and safety policy, they know other oil companies that have adopted an OHSMS and EMS which also suggest that the concept of an environmental management system (EMS) is not new to them even though they cannot say out rightly that their organizations have existing environmental laws.

## V. CONCLUSION

This study assessed the awareness level and compliance of safety and environmental laws in selected oil companies in Port Harcourt. The study ascertained that there are existing environmental laws and policies in the selected oil companies are well aware of. The outcome showed that the awareness level of safety and environmental laws is at a significant level as majority of the respondent responded positively to presented questions.

## VI. RECOMMENDATIONS

To ensure safety standards, procedures and policies in the oil and gas companies' operations specially to minimize accidents, injuries casualties at workplace, environmental degradation and pollution, the researchers therefore recommend the following:

- i. Adequate training of workers to promote good safety and environmental culture
- ii. Top management commitment in safety and environmental laws
- iii. Proper communication of all safety and environmental laws, guidelines and regulations
- iv. Efficient and effective in-house and regulatory agencies monitoring of safety and environment parameters.

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