

HEALTH AND SAFETY MANAGEMENT CHALLENGES IN LAFARGE CEMENT FACTORY, SHAGAMU, NIGERIA

AINA, K.O.,¹ *YOADE, A.O.¹ AND ADEYEMI, O.²

¹Department of Urban and Regional Planning, Wesley University Ondo, Nigeria

²Department of Urban and Regional Planning, Federal Polytechnic, Ado-Ekiti, Nigeria

*Corresponding author: yoadewale@yahoo.com

Abstract

Health and Safety Management policy is one of the monitoring tools used by the organization in the industrial building to ensure productivity and sustainability of the overall goals in industrial buildings. This paper therefore addresses the current situation facing application of health and safety policy industrial buildings. Questionnaire were purposively distributed to 270 employees working in Lafarge Cement WAPCO Nigeria Plc, Shagamu plant, Ogun State based on systematic sampling, 182 respondents/ samples were eventually retrieved and used for this study. Findings of this study reveal that though health and safety measures are provided for, but they are not properly or well provided and implemented in the case study. The study recommends that health and safety should be given attention for all building occupants or users (employer, employees, and visitors). Therefore, health and safety expert should be involved in the implementation of health and safety policy in the industrial organization.

Key Words: Health, Safety, Management, Industrial and Environment

Introduction

Literally, Health and Safety Management System involve the introduction of processes designed to decrease the incidence of injury and illness in the employer's operation (Alberta, 2006). The successful implementation of this system requires management commitment to the system, effective allocation of resources, and a high level of employee participation. Kalejaiye (2013) asserted that the ability of employees within an organization to share knowledge throughout the system

depends on the conditions of their work environment.

Nigeria is an emerging nation both economically and industrially. As an emerging nation, the expectation is that the process of industrialization will be carried out in an orderly manner that would allow for overall sustainability of the environmental development. The process of industrialization comes with so many facets of problems that if not properly tackled can cause damage not only to the environment but to the workers as well. The work environment consists of various factors which

introduce new dimensions to health, causing diseases and injuries which include, work accidents and exposure to hazards.

Practically, structures or buildings (such as residential, industrial, commercial buildings, among others) are basically required to provide a conducive and safe environment for the performance of various human activities. The ability of a building to provide the required environment for a particular activity is a measure of its functionality (Kadir *et al.*, 2011).

In order to ensure that the industrial building is healthy and safe for building occupants (which may consist of employers, employees and as well as visitors), it is necessary to implement effective facilities management. This must be done, during and after a building has been constructed in parallel to maintaining its functionality (Kadir *et al.*, 2011).

Construction management only focused on the levels prior to and during a buildings construction while facility management (FM), and especially the maintenance aspect, focus on all three levels, i.e. before, during and after the construction of a building. The selection of the facilities management (FM) concept for industrial building will depend on organization plan and management strategy. In an attempt to satisfy the basic need for the functionality of the building, certain organizations incorporate into their policy thrust, guaranteeing workers' safe work execution under a climate capable of enhancing the physical, mental, and emotional conditions. The Organizational policy of this nature is often categorized under health and safety policy.

Occupational Health on the other hand is defined by the International Labour Organization (ILO, 2005) and World Health Organization (WHO, 2009) as "the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations; the prevention amongst workers of departures from health caused by their working conditions; the protection of workers in their employment from risks resulting from factors adverse to health; the placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological capabilities; and, to summarize, the adaptation of work to man and of each man to his job". The various aspect of health and safety management actually mitigating the risks to an individual at the work place through initiative method like hazard analysis, risk assessment and safety information.

According to Oginni and Adesanya (2013) attribute to the fact that many companies are attracted to operate in Nigeria for a number of reasons. These reasons amongst others include the availability of skilled and unskilled labour, natural resources, a huge market for their finished products, the weak legal structure and the lack of strict enforcement of health and safety measures, which enables heinous violations of those measures.

In the foregoing, it could be viewed that the major challenge confronting the application of health and safety principle within the industrial buildings in Nigeria is how to translate those Acts (such as Factories Act of 1990, Compensation Act 2010, health and welfare bill of 2012, Mineral oil Safety Regulation Act 1997,

among others) into effective tools for managing the health and safety of employees, employers and the environment. The challenge is crucial because Nigeria like most developing countries has world class legislation on various issues which nevertheless suffer failure at the implementation stage.

In view of the importance of health and safety policy to the citizenry and national economies a number of researchers have worked on health and safety management principle or occupational health as the case may be in industrial buildings but much concentration has always been on policies and the consequences, sanctions or punishments as they relate to health and safety management issues. This paper therefore examines health and safety management principles in industrial buildings with a view to identify various challenges affecting the implementation of effective health and safety policy in the industrial building and also to make recommendations on how to adopt best practices of health and safety management in industrial buildings within the facility management perspective using WAPCO cement factory in Shagamu, Ogun state Nigeria as a case study.

Literature Review

According to Pedro (2012), many Nigerian industrial buildings are poorly equipped with abysmal safety standards and this has caused many deaths, amputation of limbs and permanent disabilities of the workers. With the low levels of compliance with the rules guiding safety in industries, companies barely loose anything. In many cases, compensations are not paid to affected

workers and because of gross unemployment, workers cannot protest as there are countless other people waiting to take their place. For example; there was a fire disaster in a Chinese company at Ikorodu, Lagos in 2004 as a result of power surge leaving about 250 employees dead (Oginni and Adesanya, 2013). It was confirmed that none of the factory workers could escape because the employer at the close of work, locked the doors leading to the factory to be opened the following day. This act was confirmed to have been the tradition in the company. It is quite intriguing to know that the state and the federal government of Nigeria kept mute to this incidence. It was only the labour union that made an effort to call the attention of the public to this event.

Also, research work carried out by Oranusi *et al.* (2013) in a cement factory around Ifo, Ogun state shows that the incidence and prevalence of several generalized and specialized occupational diseases among the factory workers and artisan in Nigeria are high due to the many chemical, physical and biological agents workers are exposed to on a daily basis. The author revealed that many occupational hazards and incidence are likely to increase if the situation is not carefully arrested. But the author fails to outline possible causes of failure in the implementation of effective health and safety management principle.

This paper outlines the gap in practices, the challenges towards adopting effective Health and Safety management practices and making appropriate recommendation to enhance the best practice health and safety management principle within the facility management perspective, using Lafarge

Cement (WAPCO) in Ogun State Nigeria as a case study. Ideally, a study of this nature should consider the whole health and safety management practices within an industrial building in the country, but this will be too complex for a research of this nature considering the time limit within which to conduct the research. Also to allow the research to form more precise conclusion, which may be more amenable to clear interpretations and create a pedestal for further research that can be extended to other sectors of the economy, the study has been restricted to a case study, which is Lafarge Cement WAPCO Nigeria plc, in Shagamu, Ogun State.

This paper therefore examines the availability, deployment as well as effectiveness of safety equipment in the industry. The study also brings into light the inadequacies in the existing organizational health and safety policy. A better understanding of the concept of health and safety management will add to existing literature by providing basis of information on the extent to which health and safety management in the industrial buildings could add value to the image of the organization and its activities.

Study Area

The study area under consideration is WAPCO cement factory in Shagamu. Lafarge Cement WAPCO Nigeria Plc, formerly West African Portland Cement Plc, was established in 1960 with its first factory in Ewekoro, Ogun State. The second factory in Shagamu, in Ogun State, was established in 1978. The company is engaged in manufacturing and marketing of cement products. The company has three plants-one in Sagamu and two in Ewekoro with a production capacity of 4.5 million metric tons. The

company operates in three divisions: Cement; Aggregates and Concrete, and Gypsum. The company commenced production with an initial capacity of 200,000 tonnes per annum, but this later grew with demand to about 1.5 million tonnes per annum. A modern state-of-the-art plant was commissioned in Ewekoro in August 2003 to replace the obsolete and aged plant. This led to an increase in the company's capacity by over 1million tonnes per annum. The Lafarge Cement Division has significant presence throughout 10 countries in Africa (Nigeria, South Africa, Kenya, Cameroon, Benin, Zimbabwe, Uganda, Zambia, Malawi, and Tanzania); with 16 cement plants and grinding stations which are strategically located with facilities for exports to other African countries. In February 2008, the name West African Portland Cement Plc was changed to Lafarge Cement WAPCO Nigeria Plc, to reflect the rebirth of the company as part of an international organization, strategically positioned for greater heights. The parent company Lafarge was created in 1833; specialized in building materials manufacturing with more than 84,000 employees in 79 countries. In 2011, Lafarge commissioned yet another new plant in Ewekoro which is referred to as "Lakatabu" or Ewekoro II, this plant is targeted at producing 12,000 tonnes of cement per day and an annual 2.5million tonnes. There are also other plants in Nigeria owned by Lafarge like the Ashaka Cement and the Unicem plant in Calabar.

Research Methodology

The researcher tries to find out the problems facing the application of health

and safety management principle in industrial building in Nigeria using Lafarge Cement WAPCO in ShagamuNigereiaas a case study.A pilot survey reveals that there are 894 employees work in Shagamu plant. Therefore, the sample frame for the study is 894 employees that work in Shagamu Plant in Ogun state.The data for the study was derived from the primary source, which was collected through field survey and questionnaire administration among the members of the staff.Data obtained include; socioeconomic characteristic of the staffin the study, area, availability of health and safety provisions and measures, extent the employer comply with health and safety policy, challenges facing the management in the implementationof health and safety management in the study area and likely solution to ameliorate the challenges.

In this study, industrial workers are distributed according to their various departments and units. In view of the fact that this assumption is similar to that underlying by Yamane's formula, the original equation from which the Yamane formula (1967), was derived from was chosen in preference to the Cochran formula (1997), and Kothari formula (2004):

$$n = \frac{Z^2 P (1-P) N}{Z^2 P (1-P) + N (e)^2}$$

Where:

n = sample size

N = population size (894)

z = standard normal variable (z = 1.96 at 95% confidence level)

P = proportion or degree of variability = 50%

e = the level of precision = 5%

The above formula yields a sample size (n) = 270 that is 30.2% of 894.

Therefore, there are a total number of 894staffemployeesworking in Lafarge Cement WAPCO Nigeria Plc, Shagamu plantout of which 270 staff were purposively selected cutting across all departments for this study.Descriptive statistics such as frequency count and percentages was used to analyze the data for this study.

A total number of 270 questionnaires were distributed across each unit while 182questionnaires eventually retrieve from them. Data was collected between the months of April and June, 2014. The administration and retrieval was achieved personally with the aid of human resources manager in each of the 19 departments and units in the company. The various responses were subsequently coded and analyzed by the means of a Statistical Package for Social Scientists (SPSS version 20) and Microsoft Excel Spread Sheet Analysis.

Result and Discussion

Socio-Economic Attributes of Respondents

The finding revealed that majority of the respondents with a share of 47.8% have first degree as their qualification, followed by 29.1% of the respondents with OND/A LEVEL as their highest qualification, respondents with primary and secondary have a respective share of 14.8% and 6.0% respectively, while only 2.2% of the respondents have a second degree as highest qualification. This is an indication that majority of the respondents by the virtue of their qualification have higher institution certificate.

The finding established that gender distribution of the respondents revealed that male have the majority share of

77.5% of the respondents while female have a share of 22.5% of the respondents. This is an indication that there are more male employees in the study area which could be attributed to the nature of the job in the company. On the age distribution of the respondents as presented in table 1 revealed that respondents between the ages of 25 to 49

accounts for the majority share 74.2% of the respondents, while respondents with age of less than 25years and above 50years have a respective share of 19.2% and 6.6% respectively. This is an indication that majority of the respondents are within the active population age, therefore, the information gathered from them can be relied upon.

Table 1: Socio-Economic Characteristics of Respondents

Educational Qualification	Frequency	Percent
Primary	11	6.0
Secondary	27	14.8
OND/A level	53	29.1
B.Sc/HND	87	47.8
M.Sc.	4	2.2
Total	182	100.0
Gender		
Male	141	77.5
Female	41	22.5
Total	182	100.0
Age		
< 25	33	19.2
25-34	80	44.0
Btw 35-49	55	30.2
> 50	12	6.6
Total	182	100

The result of findings revealed that 34.6% of the respondents have between 5 to 9 years' experience, 34.6% have between 10 to 14 years' experience while 19.8% have 15 to 19 years' experience in the organization. Also, 7.7% have less than 5 years' experience while 3.3% have spent more than 20 years in the organization. Consequently, the target respondents have in-depth knowledge of the company's operation and can supply adequate information on health and safety

management practices, due to the fact that they have spent a minimum of 5years working with the company.

On the staff strength in each department within the company, the study revealed that majority (51.1%) of the respondents 24.7% of the respondents have between 21 – 30 workers, 15.4% have 11 – 30 workers while 8.8% have 31workers and above in their organization.The finding also revealed that 47.3% of the respondents are junior

staff, 34.6% of the respondents are supervisor, 11.5% are senior staff while the remaining 6.6% of the respondents are management staff of the organization. This is an indication that the junior staff and supervisors are easily accessible during the research period. Also, information gotten from them can be relied upon as they are directly involved in the company's manufacturing process and they are likely to face health and safety challenges easily than the senior and management staff who are not most of the time involved directly with the manufacturing process of the company.

On the provision of drinking water as presented in table 3 revealed that majority (99.5%) of the respondents attest to the fact that the company provides drinking water for the workers across level and departments while just 0.5% of the respondents stated that drinking water was not provided. Also, light and ventilation were adequately provided for in the company as deduced from the views of 92.3% of the respondents. This is an indication that the factory is adequately ventilated and lightened so as to prevent suffocation or unclear view that may result into unnecessary accidents within the company. This indication shows that there is availability of the safety

measures in the case study but rather did not show the adequacy and functionality of the measures. The First aid box with materials and protective wears was also presented in this table revealing that 53.3% of the respondents attest to the fact that there is first aid box and materials within the premises of the company. This helps in the first treatment of any person who got involved in a minor accident within the company before transported to the hospital for proper treatment. The majority of the respondents with a share of 96.3% revealed that there is standby ambulance to transport casualties who get involved in the major or deadly accident and those ones that have already been given first aid but need more treatment to the hospital. The majority of the respondents with a share of 76.4% revealed that protective wears and equipment were provided for by the management so as to reduce the number of casualties on minor accident within the premises of the company. They also confirm that there are safety supervisors who move around to make workers comply with safety measures and put on their safety wears and equipment whenever they are within the premises of the company, this was revealed from the views of 58.2% of the respondents.

Table 2: Years of Experience, Staff Strength per Department and Employment Status of the Respondents

Year of Experience	Number	Percentage
<5	14	7.7
5-9	63	34.6
10-14	63	34.6
15-19	36	19.8
>=20	6	3.3
TOTAL	182	100
STAFF STRENGTH PER DEPARTMENT		
1-10	93	51.1
11-20	28	15.4
21-30	45	24.7
31-40	16	8.8
TOTAL	182	100
EMPLOYMENT STATUS		
Supervisor	63	34.6
Junior	86	47.3
Senior	21	11.5
Management	12	6.6
TOTAL	182	100

Table 3: Available Health and Safety Measures in the Area

Health and Safety Provisions	Level of Agreement (%) (N= 182)				
	NP	PP	P	WP	VWP
Drinking water	1(0.5%)	0(0.0%)	181(99.5%)	0(0.0%)	0(0.0%)
Light and Ventilation	0(0.0%)	0(0.0%)	168(92.3%)	9(4.9%)	5(2.7%)
Changing/Rest room	0(0.0%)	1(1.2%)	126(69.2%)	5(2.7%)	2(1.1%)
Cafeteria	2(2.4%)	1(1.2%)	75(91.5%)	4(4.9%)	0(0.0%)
Fire Extinguisher	0(0.0%)	1(1.2%)	77(93.9%)	1(1.2%)	1(1.2%)
Smoke detectors	1(0.5%)	12(6.6%)	166(91.2%)	3(1.6%)	0(0.0%)
Emergency Power Off	0(0.0%)	1(0.5%)	181(99.5%)	0(0.0%)	0(0.0%)
Water sprinkler	0(0.0%)	2(1.1%)	180(98.9%)	0(0.0%)	0(0.0%)
First aid box and materials	1(0.5%)	74(40.7%)	97(53.3%)	0(0.0%)	1(0.5%)
Protective Wears /equipment	0(0.0%)	0(0.0%)	139(76.4%)	43(23.6%)	0(0.0%)
Safety monitoring	0(0.0%)	33(18.1%)	106(58.2%)	43(23.6%)	0(0.0%)
Stand by ambulance	1(0.4%)	1(1.2%)	79(96.3%)	1(1.2%)	1(1.2%)
Designated safety supervisor	1(0.5%)	0(0.0%)	177(97.3%)	4(2.2%)	0(0.0%)
Pasting of emergency phone number	1(0.5%)	0(0.0%)	177(97.3%)	4(2.2%)	0(0.0%)
Safety and exit sign	0(0.0%)	0(0.0%)	139(76.4%)	43(23.6%)	0(0.0%)
Escape route in case of emergency	83(45.6%)	67(36.8%)	30(16.5%)	1(0.5%)	1(0.5%)
Emergency lightning signage	0(0.0%)	0(0.0%)	182(100%)	0(0.0%)	0(0.0%)
Air regulating equipment	1(0.5%)	34(18.7%)	96(52.7%)	50(27.5%)	1(0.5%)

NP= Not Provided, PP= Poorly Provided, P= Provided, WP= Well Provided, VWP= Very Well Provided.

Table 4: Implementation of Health and Safety Measures

Implementation of Safety Measures	Level of Agreement (%) (n = 82)				
	NAI	PI	I	VI	VMI
Keeping work environment free from hazard	7(3.8%)	78(42.9%)	46(25.3%)	19(10.4%)	32(17.6%)
Safety Training as part of orientation program	9(4.9%)	47(25.8%)	42(23.1%)	36(19.8%)	33(18.1%)
Proper disposal of waste	3(1.6%)	4(2.2%)	18(9.9%)	48(26.4%)	109(59.9%)
Regular monitoring on safety and health standard	51(28.0%)	113(62.1%)	18(9.9%)	0(0%)	0(0%)
Emergency phone numbers posted	3(1.6%)	3(1.6%)	27(14.8%)	56(30.8%)	93(51.1%)
Training on how to use fire extinguisher	44(24.2%)	112(61.5%)	21(11.5%)	5(2.7%)	0(0%)
Training on how to evacuate building in case of fire outbreak	6(3.3%)	71(39.0%)	54(29.7%)	39(21.4%)	12(6.6%)
Prompt reporting of accident and injuries	7(3.8%)	17(9.3%)	57(31.3%)	49(26.9%)	52(28.6%)
Re-training on Safety and Health	6(3.3%)	108(59.3%)	30(16.5%)	29(15.9%)	9(4.9%)
Training of Staff on how to provide first aid service	3(1.6%)	3(1.6%)	27(14.8%)	56(30.8%)	93(51.1%)
Availability of general evacuation procedure	7(3.8%)	17(9.3%)	63(34.6%)	45(24.7%)	50(27.5%)

NAI= Not at all Implemented, PI= Poorly Implemented, I= Implemented, VI= Very Implemented, VMI= Very Much Implemented.

Findings on the implementation of safety measures as presented in table 3 revealed the level of implementation of health and safety measures within the company. Keeping the work environment clean to prevent injuries and illness is one of the safety measures to be implemented in an organization, 42.9% of the respondents state that this was poorly implemented, 17.6% state that it was very much implemented while 3.8% state that it was not at all implemented and 25.3% of the respondents confirmed that safety measures are just implemented and not properly implemented within the company. This is an indication that the company did not place attention on keeping the work environment clean which may go along way reduce injuries and accidents.

Majority (25.8%) of the respondents revealed that safety training was poorly implemented during the orientation program during first recruitment into the company, 23.1% of the respondents believed that it was just safety training tips that are part of the orientation program, while 4.9% of the respondents state categorically that the company does not inculcate safety training as part of their orientation program. However, this is an indication that safety tips are inculcated into the orientation program of first appointment on how to use the safety wears and equipment and other minor tips on the operation of fire extinguisher among others but not safety training. Proper disposal of waste is another index for measuring the implementation level of safety measures. Findings on proper waste disposal revealed that 1.6% of the respondents state that proper waste disposal was not at all implemented, 2.2% of the

respondents are not sure if proper waste disposal was implemented or not while 9.9% of the respondents stated that proper waste management are implemented. Also 26.4% of the respondents state that the waste disposal system was very implemented while 59.9% agreed that there was proper disposal of waste was very much implemented within the premises of the company.

On whether the company embarks on regular monitoring on safety, majority (62.1%) of the respondents agreed that it was poorly implementation of regular monitoring on safety and health standard, 28.0% of the respondents stated that there was no monitoring of health and safety standard in the organization while 9.9% of the respondents agreed that there was implementation of regular monitoring of safety and health standard. Consequently, this indicates that the company implements proper monitoring of health and safety standard. Findings on emergency phone numbers pasted around reveal that majority (51.1%) of the respondents stated that it was very much implemented, 30.8% of the respondents stated that it was very implemented, 14.8% stated that it was implemented while just 1.6% of the respondents stated that it was not implemented in their organization. This is an indication that emergency phone numbers are posted around across the notice board for the perusal of workmen in case of emergency.

Findings on how to use the fire extinguisher revealed that majority (61.5%) of the respondents stated that it was poorly implemented while 24.2% of the respondents stated that it was not implemented at all. Also, 11.5% of the

respondents stated that training on how to use fire extinguisher while 2.7% stated that it was very implemented in the organization. The result of the finding established that majority (39.0%) of the respondents revealed that the company is poorly implemented attention in training the workmen on how to quickly evacuate the building in case of emergency situation; despite this they still train some of the senior security staff as evident from the views of 29.7% and 21.4% of the respondents that it was implemented and very implemented respectively.

Prompt feedback on accident and injuries is one of the most implemented indexes by the company as evident from the views of respondents with the respective shares of 31.3% and 28.6% attesting to the fact that the company

implement prompt feedback on accident and injuries a little and effectively. Another index that is implemented by the management of the company is the training of staff on how to administer first aid in an emergency situation; the finding established that majority (51.1%) of the respondents stated that training of staff on how to provide first aid service was very much implemented, 30.8% stated that it was very implemented while just 1.6% state that it was not at all implemented. On availability of general evaluation procedure, the study established that majority (34.6%) of the respondents agreed that it was implemented, 27.5% agreed that it was very much implemented while just 3.8% agreed that it was not at all implemented as revealed in table 4.

Table 5: Problems Facing the Implementation of Effective Health and Safety Management in the Industrial Organization

Challenges	Level of Agreement (%) (N = 182)				
	SD	D	JA	A	SA
Difficulty of achieving consistency of progress	15(0.28%)	101(55.5%)	23(12.6%)	18(9.9%)	25(13.7%)
Maintain momentum and commitment to initiative	12(6.6%)	37(20.3%)	58(31.9%)	55(30.2%)	20(11.0%)
Inadequate standard and objective setting	7(3.8%)	16(8.8%)	67(36.8%)	56(30.8%)	36(19.8%)
Resistance to change from individual or group	5(2.7%)	54(29.7%)	34(18.7%)	38(20.9%)	21(28.0%)
Insufficient allocation of resources to health safety	6(3.3%)	25(13.7%)	50(27.5%)	67(36.8%)	34(18.7%)
Failure to accept responsibility for health safety	13(7.1%)	23(12.6%)	41(22.5%)	41(22.5%)	64(32.5%)
Health and safety are not considered relevant	11(6.0%)	25(13.7%)	49(27.0%)	58(31.9%)	39(21.4%)
Lack of adequate regulation	6(3.3%)	28(15.4%)	14(21.4%)	59(32.4%)	25(27.5%)
Incompetence of staff charged with responsibilities	1(.5%)	37(20.3%)	34(18.7%)	60(33.0%)	50(27.5%)
Difficulties of managing health and safety as well as other work priorities	8(4.4%)	28(15.4%)	45(24.7%)	39(21.4%)	62(34.1%)

SD= Strongly Disagree, D= Disagree, JA= Just Agree, A= Agree, SA= Strongly Agree.

The finding revealed that the major problems encountered by the organization on the implementation of health and safety management principle is the difficulty of managing health and safety with other work priorities as revealed in table 5. Majority (34.1%) of the respondents stated that they are strongly agreed with the difficulties of managing health and safety as well as other priorities, 24.7% stated that they are just agreed while 4.4% stated that they are strongly disagreed. This is an indication that combining health and safety management with work priority constitute a great challenge to the company.

Another notable problem affecting the implementation of health and safety policy in the organization is the level followed by the incompetency on the part of the individual charged with specific responsibility as revealed that majority (79.2%) of the respondents under study agreed as against 29.8% of the respondents who are disagreed with level of incompetence of staff charged with responsibilities. This is an indication that workers attitude towards task given pose a great challenge to the company in terms of health and safety. The Finding also established that insufficient allocation of resources to health and safety as evident in the views of 88.0% as against 17.0% who had a contrary view. Furthermore, the findings on health and safety are not considered as relevant as managerial and operational personnel in the organization are evident from the views of 80.3% as against 19.7% of the respondents.

Conclusion and Recommendations

A good health and safety management practices in factory or

industrial building does not only benefit the workers in terms of the work environment, but it is of value to the industries in terms of productivity and profit. The programme does not only reduce compensation to workers, hospital care, absenteeism, labour turnover, but also promotes good working relationship between management and workers. The study therefore, concluded that lack of effective regulation and monitoring by the government has impacted negatively on health and safety practices in Nigeria's industrial organization. This trend if allowed to continue may impact on the contribution of the sector to national economic development. This situation notwithstanding, could be established that industrial workers, perhaps through personal efforts, were aware of some safety regulations and their implications. The Nigerian government has not really made any significant seriousness about the enforcement of health and safety policy within the industrial organization. This paper noted that inadequate regulation and enforcement were huge barriers to better health and safety management in the industrial organization.

However, this study has drawn attentions to some findings and implication arising from the analyzed data. The following recommendations were made based on the findings of the study: Management of the industrial company should organize regular training, workshops, seminars on health and safety for staff, publish materials on safety and many other steps to inculcate safety consciousness in the minds of workers and visitors.

Also, management must share hazard and risk information with other

employers including those on adjoining premises, other site occupiers and all sub-contractors coming on to the premises. There is need for provision of fire extinguishers in itself is good but not enough. It is recommended that management should take it a point to train staff on the effective and efficient use of fire extinguishers.

Also, workers should be given enough insight of the risk and dangers inherent in their work at the work places. Through education, some of these accidents could be minimized if not eradicated entirely. Jobs can also be designed in such a way as to remove all inherent potential dangers to make the work safe for employees.

Both the employers and the employees should be enlightened so that they would know their respective roles in executing health and safety management in the organization. The pasting of the instructions within the industrial building should be visible and easily read and understand by all the building occupants. Also, there is a need for the federal government to evolve a new dynamic national health and safety policy to replace the old factories Acts of 1990 for the benefit of employees and employers in the nation.

In summary, the factory inspectorate of Nigeria should come up with a blue print to be used as guide for the design of health and safety policies for industries, companies and other institutions, government must monitor the industries to achieve these laudable objectives. Accidents are costly both to the affected worker and the organization. Therefore, every effort should be made in order to avoid them from happening at the work place.

References

- Alberta (2006). Building An Effective Health and Safety Management. [Online] Available: <http://employment.alberta.ca/documents/WHS/WHS-PS-building.pdf> (October 6, 2014)
- Cochran, W.G. (1997). “*Sampling Techniques*” 3rd Edition, John Wiley & Sons, New York.
- Federal Republic of Nigeria. (2012). Labour, Safety Health and Welfare Bill.
- International Labour Organization (ILO). (2005). *National health policy and strategy to achieve health for all*. New York: ILO Publishers, (chapter 16).
- Kadir, A., Hafizi, Z., Shaharuddin, A., Kadaruddin, A., Muhammad, R., and Azahan, A. (2011). Facilities Management in Malaysia: Building Maintenance Perspective in Health and Safety Aspect. *Journal of Food, Agriculture and Environment*. 9(3&4): 858-863.
- Kalejaiye, P.O. (2013). Occupational health and safety: Issues, challenges and compensation in Nigeria *Peak Journal of Public Health and Management*, 1(2): 16-23.
- Kothari, C.R. (2004). *Quantitative Techniques* 3rd Ed. New Delhi: Vikas Publishing House PVT Ltd.
- Oginni, B. and Adesanya, A. (2013). The Workers’ Rights in Nigeria: Myth or Reality? *International Journal of Business and Management Invention*: 2319 – 8028, ISSN (Print): 2319 – 801X www.ijbmi.org www.ijbmi.org.
- Oranusi, U., Dahuns, S. and Idowu, S. (2013). Assessment of Occupational Diseases among

- Artisans and Factory Workers in Ifo, Nigeria. *A Journal of Scientific Research & Reports* 3(2): 294-305, 2014; Article no. JSRR.. 004
- Pedro, E. (2012). "Occupational Health and Safety Bill Passed". *Daily Times*, January, 23, 2014. Retrieved from www.dailytimes.com.ng/articles/occupational-safety-and-health-bill-passed.
- The Nigerian Factories Act of 1990.
- The Nigerian Employees' Compensation Act, 2010.
- WHO (2009). The right to health at work. World Health Organization Document. Geneva, 1995; 1-3 World Health Organization. www.who.int.
- Yamane, T. S. (1967). "An Introductory Analysis" 2nd Edition, Harper and Row, New York.