THE EFFECTIVENESS OF EMPLOYEES HEALTH AND SAFETY POLICY IN OIL MARKETING COMPANIES:
CASE STUDY OF GAPCO (T) LIMITED
THE EFFECTIVENESS OF EMPLOYEES HEALTH AND SAFETY POLICY IN OIL MARKETING COMPANIES
Case Study of GAPCO (T) Limited

By
Eva Halifa Marealle

A Dissertation Submitted to MUCC in Partial Fulfillment of the Requirement for the Award of the Degree of Master of Science in Human Resource Management (MSc-HRM) of Mzumbe University

2014
CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a dissertation entitled Effectiveness of Employees Health and Safety Policy in Oil Marketing Companies, A case study of Gapco Tanzania Limited, in partial fulfillment of the requirements for award of the degree of Master of Science in Human Resources management of Mzumbe University.

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DEDICATION

This research is dedicated to my beloved family; my beloved Parents; Halifa and Martha Marealle, my kids; Lilian and Adrian Mwingizi and my treasured Husband Eksi Mwingizi who always supported and encouraged me during the whole period of my studies.

May the Lord shine you with a lot of blessings.
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<td>CMA</td>
<td>Commission for Mediation and Arbitration</td>
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<td>CTC</td>
<td>Cost to the Company</td>
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<td>DMD</td>
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<td>GTL</td>
<td>Gapco Tanzania Limited</td>
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<td>MOL</td>
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<td>NEMC</td>
<td>National Environmental Management Council</td>
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<td>OHS</td>
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<td>OMC</td>
<td>Oil Marketing Companies</td>
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<td>RIL</td>
<td>Reliance Industries Limited</td>
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<td>TAZAMA</td>
<td>Tanzania Zambia Mafuta Pipeline</td>
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<td>TBS</td>
<td>Tanzania Bureau of Standards</td>
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<td>TOTAL</td>
<td>Total Tanzania Limited</td>
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<td>WMA</td>
<td>Weight and Measure Authority</td>
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ABSTRACT

The purpose of this study was to examine how effective is the occupational health and safety policy in the Oil Marketing Companies. Data collection, processing, analysis, and presentation of primary data were done by the use of observation, interview, questionnaires and face to face techniques. Secondary data was collected by consulting various literature and documents such as management reports, Acts and text books, manuals and internet.

The collected data were analyzed using narration of respondent’s views, summarization of respondents’ responses and documents and graphical presentation and illustrations. The findings were represented in different forms such as tables, percentages and few narrative notes.

The finding revealed that: The effectiveness of occupational health and safety policy is measured through systems, structures and policy implications. The finding shows that occupational Health and Safety Policy in the Oil marketing companies is weak despite the National and international move to improve issues of health and safety at works place. The level of Education of other staff and Senior Management commitment are the crucial factors to raise awareness on health and safety issues.

In the view of findings the following recommendations were made; The Oil Companies Management should find out or put strategy to reduce the health hazards and manage health and safety risks. The bodies overseeing the health and safety policy implementation and adherence and those governing operation of Oil Marketing companies need to have more resources and commitment for better performance of the institutions they are monitoring. There is need of employing an individual effort or self-commitment health and safety awareness culture to assure all parties are on board in health and safety issues.
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CHAPTER ONE

PROBLEM SETTING

1.0 Introduction
The effectiveness of occupational health and safety in the workplace is one of the current issues established for the purpose of protecting the workers’ health and safety and reduce the employers’ costs on issues of handling occupational diseases and ailments. In this chapter, the discussion will look at the background of occupational health and safety policy and the need for both the employer and employee to know and practice the occupational health and safety policy stipulation. The discussion will look at the current practices of occupational health and safety in oil marketing companies and assess the gap that exist between the policy stipulation and the current practices through the problem statement. The last part will discuss the objectives of this study and its research questions and the study coverage being in Oil marketing companies with a case study of Gapco Tanzania Limited.

1.1 Background of the Problem
Health and safety of the resources in the organizations is among the crucial factors that influence and boost performance hence increase productivity. Therefore, the policies that govern the health and safety of employees need to be effective for organization to develop and grow not only in terms of financial resources such as profit, but also in terms of people’s development health-wise in body and mind.
“...Safety and health of workers is a part and parcel of human security...... Safe Work is not only sound economic policy; it is a basic human right...” Kofi Annan, General Secretary of the United Nations (2004)

“Safe work creates no obstacles to being competitive and successful. In fact, no country and no company in the long run – has been able to jump to a high level of productivity without making sure that the work environment is safe.” International Labour Organization (2001)
Oil marketing companies have been operating in Tanzania since Colonial period offering services for a wide range of products such as petroleum, diesel, kerosene, jet oil and lubricants. Gapco (T) ltd being one of the oil marketing companies also did the same business.

Work-related accidents and diseases are very costly and have serious direct and indirect effects on the lives of employees and their families, on the side of the employer and on the general economy of the country at large. For employees some of the direct costs are: the pain and suffering, the loss of income, possible loss of a job and health-care costs and trauma. (Work Health information pack 2009)

Occupational hazards have many indirect costs to workers that it is often difficult to measure them. Most obvious indirect costs is the human suffering caused to workers' families such as lack of peace which can lead to loss of concentration at work and which cannot be compensated with money. Other indirect cost to employees includes psychological tortures, loss of stability etc.

The costs of occupational health hazardous and accidents/ illnesses to employers are also estimated to be enormous and can lead to a financial disaster. For employers, some of the direct costs are medical and compensation payments, repair of damaged equipment, reduction in production or quality of work, increased training expenses and negative effect on morale in other workers. (Encyclopedia of Occupational Health 2012)

Some of the indirect costs for employers are; the injured/ill worker has to be replaced, a new worker has to be trained and given time to adjust, time devoted to investigations, accidents influence labour relations in a negative way and poor public relations.

Overall, the costs of most work-related accidents, health hazardous and lack of safety environment to workers and their families and to employers are very high. In reality, no one really knows the total costs of work-related accidents or diseases because
there are a multitude of indirect costs which are difficult to measure besides the more obvious direct costs.

In totality, every side, the employer and employee has duties and responsibilities to ensure the health and safety environment in the work place. In order to prevent workplace injuries and ill health the employer is required, among other things, to provide and maintain a safe workplace which uses safe plants and equipment's, prevent risks from use of any article or substance and from exposure to physical agents, noise and vibration, prevent any improper conduct or behavior likely to put the safety, health and welfare of employees at risks, provide instructions and trainings to employees on health and safety, provide protective gears and equipment to employees, appointing a competent person as the organization’s Safety Officer. (OSHA ACT: 2003)

The duties of employees while at work are many and among them include the following; to take reasonable care to protect the health and safety of themselves and of other people in the workplace, not to engage in improper behavior that will endanger themselves or others, not to be under the influence of drink or drugs in the workplace, to undergo any reasonable medical or other assessment if requested to do so by the employer, to report any defects in the place of work or equipment which might be a danger to health and safety.

1.2 History of Oil Marketing Companies and Health and Safety policy in Tanzania

Oil MarketingCompanies in Tanzania has lots of operation from receiving of products from ports, storage, selling and transportation of oil products. The oil products in most of the oil marketing companies include kerosene, petrol, diesel, and lubricants. GAPCO (T) Limited being one among the largest oil marketing companies in Tanzania and is also featured with the presence of those oil products and its operations including receiving products, storage, and transportation and selling of oil products.
Oil products are one of the most volatile and flammable substance which can cause major fire. The nature of the company oil storage capacity, the neighboring oil companies with storage tanks also, the pipelines from the ports all require a high effective system and policy to ensure health and safety of employees and the area surrounding the company. One mistake in the area, such as having noncompliance to health and safety standards can cause damage to workers health, the storage tanks, and the ports operation which will in turn cause economic downturn.

1.2.1 International Efforts on Health and Safety Issues
There are also international recognized efforts that have been done to encounter the issues in occupational health and safety. In 2001, the International Labor Organization (ILO) published ILO-OSH 2001, also titled “Guidelines on occupational safety and health management systems” to assist organizations with introducing OSH management systems. These guidelines encourage continual improvement in employee health and safety, achieved via a constant process of policy, organization, planning and implementation, evaluation, and action for improvement, all supported by constant auditing to determine the success of OSH actions. The ILO management system was created to assist employers to keep pace with rapidly shifting and competitive industrial environments. The ILO recognizes that national legislation is essential, but sometimes insufficient on its own to address the challenges faced by industry, and therefore elected to ensure free and open distribution of administrative tools in the form of occupational health and safety management system guidance for everyone. (ILO 2001)

All these efforts were geared and fostered so as to create safe and healthy working environments and foster positive safety cultures within the organizations and companies operating in different environment within countries.

1.2.2 Gapco Operations in a Nutshell
Therefore, given the nature of operation of GAPCO (T) Limited and the current efforts of the organ that govern the implementation of occupational health and safety policy at the work places and the reality of the fact that employees performance is
dependent to many factors among them being the work environment and the protection of their health and safety in work location therefore the study of the effectiveness of the occupational health and safety policy, process and procedure in Oil Marketing Industry is deemed to be very important. GAPCO (T) Limited is chosen as it is among the leading Oil Marketing Company in terms of market share as it has more than 9% of the total marketing although there are more than 40 registered Oil Marketing Companies. It is also one of the Oil marketing Companies which does Bulk Procurement System (BPS), the system of procuring oil products from overseas in bulk by one Oil companies. Gapco (T) ltd storage capacity is more than one million metric tons of oil products and the areas have more than 100 staff in number including direct and indirect ones. Moreover, the topic is chosen as the bodies that govern the implementation of health and safety policy in Tanzania (OSHA) has been giving the public education, advertisements, doing work places inspection, penalties and awards and therefore efforts are seen towards the health and safety of workers though not much has been tangible observed. (Gapco Handbook: 2012)

1.2.3 Occupation Health and Safety Trends

Research in health and safety issues of workers is important so as to ensure the safety and health of human as the most crucial resource in any Company. Moreover, Gapco Tanzania Limited is also situated in a semi Industrial area where both industries such as other oil companies and human settlement are both present marking a threat to both human activities and settlement in the area. It is also worth to look and analyze how effective is the Health and Safety policy in the oil sector and the implementation and adherence of that policy in work place because the negligence of one aspects can cause huge harm to human beings and the nation at large.

One may observe the three basic trends in history of the health and safety of the workers. These trends includes, first phase occupational health and safety during colonialism and soon after independence; the second phase being during the industrialization and nationalization of economy; and last phase is on free market
economy with liberalization and globalization where there is mushrooming of international companies and growing Industrial sectors such as Oil and Gas.

The practice of health and safety also differ according to the drivers of economy and the laws that govern work place environment.

There has been many research and articles on the occupational health and safety in and outside Tanzania. However, most of the researches were done to general adherence of occupational health and safety, others were mostly done in construction industries both building and roads and other on compliance and enforcement of occupational health and safety. Other writings were done on the effectiveness of the body that governs the policy, i.e. occupational health and safety authority. Therefore, this research is going to look at occupational health and safety in oil industry. The study will mostly be based at one leading oil marketing company GAPCO (T) Limited though references and comparison will also be made to other oil companies like Oryx, Total and Tanzania Zambia pipeline, bodies like OSHA, NEMC and TBS and the laws revolve around the health and safety of workers.

1.3 Statement of the Problem

Occupational health and safety management have developed considerably over the last 20 years. There are now more Occupational health and safety management systems and polices in place and available than ever before. Yet little is known about the effectiveness of these systems and polices on employee health and safety, for individual and company benefits and on relevant economic outcomes of the nation as a whole.

According to data from the 2010 NHIS-OHS, workers employed in mining and oil and gas extraction industries had high prevalence rates of exposure to potentially harmful work organization characteristics and hazardous chemicals. Many of these workers worked long hours: 50% worked more than 48 hours a week and 25% worked more than 60 hours a week in 2010. Additionally, 42% worked non-standard shifts (not a regular day shift). These workers also had high prevalence of exposure to physical/chemical hazards. In 2010, 39% had frequent skin contact with chemicals. Among nonsmoking workers, 28% of those in mining and oil and gas
extraction industries had frequent exposure to secondhand smoke at work. About two-thirds were frequently exposed to vapors, gas, dust, or fumes at work.

Economic theory predicts that workers will demand additional wages to compensate them for workplace safety and health risks. Employers will respond by reducing such risks until it is less expensive to pay workers additional compensation than it is to invest in additional health or safety precautions. In this manner, labor markets should produce the abatement of some safety and health hazards, and workers should be compensated for the risks that remain. (Journal: Economic Theory 1997)

In this research, the gap that existed in the literatures and documentations about health and safety at work places in the Oil Companies is presented and narrated. GAPCO (T) Limited is taken as the case study for analysis and other inputs from other oil companies like Oryx, Tanzania Pipeline and Total will be taken for comparison. This is because lots have been researched, analyzed and published on health and safety of workers but little efforts have been directed in oil marketing sector especially in Tanzania.

The effectiveness of health and safety policy in oil marketing companies will be looking at how the oil marketing companies adopt and follow the health and safety policy, what measures have been put to assure adherence, awareness and adherences of the policy by implementers and employees and what are the effects of the policy to the employee, management as employers and the surrounding society.

The Occupational Safety and Health Authority was established and the governing policy on occupational health enacted on 2003. However, the extent of knowledge and practices that ensure the health and safety of workers in the oil industry is problematic. Moreover, given the nature of oil industry being vulnerable to a large extent to the health and safety paradox and hazardous effects of not only workers in the industry but also the surroundings, the study envisage the efforts and loopholes that exist within health and safety arena. (OSHA ACT 2003)
GAPCO (T) Limited has oil storage capacity of one million metric tons and its oil acquisition and distribution channels are operated both manually and systematically. Hence health and safety of those involved is very important as they are always operating in a risk situation. This research will therefore explore issues that revolve around the health and safety of GAPCO workers and the effectiveness of the occupational health and safety as pioneered by both the Management and the employees.

Occupational health and safety issues are often given less attention as they are generally more difficult to confront. However, when health is addressed, so is safety, because a healthy workplace is by definition also a safe workplace therefore issues of both health and safety must be addressed in every work place. By and large, the definition of occupational health and safety encompasses both health and safety in their broadest contexts. (Mwombeki 2005)

Occupational health and safety is important as work plays a central role in people's lives, since most workers spend at least eight hours a day in the workplace, whether it is on a plantation, in an office, factory or any other institution. Therefore, work environments should be safe and healthy. Yet this is not the case for many employers and employees. Every day workers all over Tanzania are faced with a multitude of health hazards, such as; dusts, gases, noise, vibration and extreme temperatures.
Unfortunately some employers assume little responsibility for the protection of workers' health and safety. In fact, some employers or supervisors do not even know that they have the moral and often legal responsibility to protect workers. As a result of the hazards and lack of attention given to health and safety, work-related accidents and diseases are common in many parts of our country. (Fanning, 2003)

For all of the reasons given above, it is crucial that employers and employees are committed to health and safety and that, workplace hazards are controlled - at the source whenever possible and there should be an effective and implementable policy to govern, records of any exposure or safety hazards’ are maintained for many years, both workers and employers are informed about health and safety risks in the
workplace, there is an active and effective health and safety committee that includes both workers and management, identification of hazards, assessment of risks and decide how risk can be eliminated or controlled as well as setting of standards against which performance can be measured and workers health and safety efforts are ongoing. (ILO Dec 2012)

However, as among the companies that operate within Tanzania Gapco (T) Ltd must have a well establish system of Workers Health and Safety that is effective and viable and that it has been established for the benefit of both employer and employees. The system and policy should reflect the Occupational Health and Safety Policy and actual provisions and requirements of the country’s body that governs the health and safety of workers in general.

1.4 Research Objectives of the Study
1.4.1 Main Objectives
The study of Occupational Health and Safety with case study of GAPCO main objective is to look at the effectiveness of the OHS Policy in Oil Marketing sector.

1.4.2 Specific Objectives
(i) To examine the occupational health and safety awareness among GAPCO (T) limited employees and Management.
(ii) As this occupational health and safety is a policy to be adopted by all working companies and institutions, the other objective will be to assess the extent of its application.
(iii) The other objective of the study is to analyze to what extent are the objectives of instituting occupational health and safety policies and practices effective? What are the threats and opportunities of the policy in terms of what exactly is regarded as occupational health and safety.
(iv) To analyze the management commitment on health and safety of workers and the challenges faced in the area of occupational health and safety is another objective.
Assessment of how GAPCO (T) Limited, has developed by laws and principles that governs the implementation and adherence of occupational health and safety

1.5 Research Questions

(i) To what extent are the management and staff of GAPCO (T) Limited aware of the occupational health and safety standards?

(ii) What are the impacts of occupational health and safety policy to the operational and administrative divisions of GAPCO (T) Limited?

(iii) And what is the extent of adherence of the OHS policy and procedures?

(iv) What are the objectives of having occupational health and safety principles and standards in Oil marketing industry?

(v) What instruments have been developed and adopted by GAPCO (T) Limited to govern health and safety of workers?

(vi) What are the challenges faced in implementing occupational health and safety policies within the work place?

1.6 Significance of the Study

There have been many writings on the importance of health and safety at work place. However, on the oil marketing industry, particularly in Tanzania, few have been given out about the sector’s health and safety.

Therefore, the study provides an analytical explanation on the importance of health and safety at work place. The nature of the oil industry is vulnerable to hazards and therefore the need to know how much and to what extent efforts are done on health and safety is very important. The occupational health and safety body has been legally established and the occupational health and safety Act enacted in 2003. This study will point out the extent of compliance of the Act resolutions. Tanzania workers are by large extent protected by laws. Therefore, the study will try to show the awareness of Tanzanian employees and employers on the need and importance of occupational health and safety. Lastly but not least, one will be able to understand what has been done to secure health and safety welfare of people at work and the
relationship that exist between employers and the bodies protecting the people at work against occupational hazards. Then the study will show how the enforcement of occupational health and safety standard is currently undertaken and how is it accomplished. This has help to identify if there are loop holes and recommend measures to be taken into consideration by both stakeholders and those being the government, the employers and the employees. The study will also be additional research knowledge to the management of oil marketing companies on awareness of health and safety and adherence rate of the principles and practices.

1.7 Scope of the Study
This study was conducted within the oil marketing industries which have operations in Dar es Salaam. This is because; most of the oil companies have the basic operations in Dar es Salaam, especially in Temekte District due to the nature of these industries operations they need to be near large ports for the birth of the oil products from the ship to the pipelines of the companies.

“The employer is responsible for planning, implementing and monitoring programs and systems required to ensure OHS on its premises. Such provisions shall be pro-active and preventive by identification of hazards as well as by evaluation, monitoring, and control of work related risks. The employer shall provide and maintain workplaces, plant, equipment, tools, and machinery and organize work so as to eliminate or control hazardous ambient factors at work. The employer shall provide appropriate occupational health and safety training for all employees. The organization shall, at no cost to the employee, provide adequate personal protective equipment. The employer shall record and report occupational injuries and illnesses. Contract specifications must include demands for service providers, contractors and sub-contractors to have or establish systems enabling them to meet the OHS requirements of the employer”. (OHS ACT South Africa 2003)

This study will use a case study for research and analysis and that is GAPCO (T) Limited. However, there will also be information and comparison of the health and safety issues to other companies like Oryx, Total Tanzania and TAZAMA. The choice of GAPCO is because of the nature of its market share being large, 21%
hence considered the largest company. The operations are considered to be large with a big number of employees (210) so as to acquire large percent on market share and hence the data collected will be valid for this study. Other Oil Companies were chosen due to many reasons such as Oryx having more products such as gas, Total has also large storage farm apart from the one at head office and TAZAMA being not only the oldest but also operated and governed by the laws of Tanzania and Zambia accordingly.

This research has covered not only the effectiveness of occupational health and safety, that means the objectives of having OHS, the compliance rate, the extent of knowledge about them and the challenges faced by all parties in occupational health and safety, i.e. the workers, the employers and the bodies governing these laws.
CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction
This chapter is going to review different documents that are related to Occupational Health and Safety in general. There will be review of health and safety approaches and theories as pointed out by different authors, review of OMC’s where Gapco Tanzania Limited as a company will have a thorough discussion with a look at its establishment and the policy that govern workers health and safety at the company. To have more elaboration on health and safety issues, there will be a review of different authorities that govern the operation of Oil marketing companies and the authority that manage and oversee the implementation of OHS in work places as established by the government of Tanzania. These reviews will point out the effectiveness of OHS policy in a work place, its objectives and impacts and the fissure that exist at GTL documents and policy on OHS.

2.1 Workers and Health and Safety issues Worldwide
The percentage of all workers in the world with access to occupational health services is estimated to range from 10% to 20%. The proportion of workers and workplaces with access to occupational health services is today diminishing rather than expanding. This is so despite the efforts made by several authoritative bodies, including the International Labour Organization (ILO), the World Health Organization (WHO) and numerous professional and workers organizations who have, for several decades, emphasized the need for occupational health and safety services. (Journal: ILO 2010)

2.2 Systems for managing Occupational Health and Safety in Tanzania
2.2.1 Legislation
(i) The Employment and Labour Relations Act, 2004
The ELRA 2004 protect the workers’ health and safety and has established instruments such as labour institutional act which has labour economic and social council, commission for mediation and arbitration, essential services committees, labour administration and inspections and labour court which has been assisting in governing the labour relations and workforce condition within the work place

(ii) Workmen’s Compensation Act, 2008
Apart from the OHS Act of 2003 and other laws (mentioned above), there are other principal legislations related to OHS. They include:

(iii) The Atomic Energy Act (2003),
(iv) The Industrial and Consumer Chemicals Act (1985),
(v) Tropical Pesticides Research Institute Act (1979), and
(vi) The Pharmaceuticals and Poison Act (1978)

2.2.2 Promises, Conventions, Protocols and Charters
Tanzania has ratified various regional and international conventions, protocols and charters. These are not legally enforceable, and on their own do not improve working conditions or resources for OHS, but each represents a commitment to specific principles, and in some cases to specific objectives and courses of action as well. The main conventions relevant to work-related health and safety are:

(ii) ILO Conventions on Occupational Health and Safety.
(iii) International conventions related to the use and movement of hazardous chemicals

2.3 Review of OMCs, Authorities and the laws on Occupation Health and Safety
In this section, the study will explain the background of Gapco Tanzania limited, its scope, operation and functions in oil sector. Moreover, the health and safety details of other companies and institutions involved in this study will also be discussed and
Those companies are Oryx Tanzania Limited, Total Tanzania Limited and TAZAMA pipelines Ltd.

There are institutions that are involved in this study includes Occupational Health and Safety Authority (OSHA), Energy and Water Utilities Regulatory Authority (EWURA), Weight and Measure (WMA), Tanzania Ports Authority (TPA) and therefore, this study pointed out their objectives and what they have done in a nutshell with regard to occupational Health and Safety as they are regulatory bodies and have a task of overseeing the functioning of the OHS policy and regulating the operation of OMC’s.

In a nutshell, the document reviews instruments that govern the application and implementation of health and safety issues at work places. These instruments include: The OSHA Policy, the Employment and Labour relations Act (ELRA 2004), Workers compensation Act (2003) and Code of Good Practices (2007) and other few available literatures on Health and Safety issues.

2.4 Defining Occupational Health and Safety

Occupational health and safety is defined 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 risk resulting from factors adverse to health; the placing and maintenance of workers in an environment adapted to their physiological and psychological capabilities; and, to summarize, the adaptation of work to workers and of each worker to his or her job. (Fanning, 2003)

The study enable one to understand the following in general: The main components of Health and safety management system in Gapco (T) Ltd as a case study company. How effective Health and Safety systems are implemented and cemented at work place. Why and what are the need for compliance to Healthy and Safety Laws. Legislations in relation to health and safety issues and advantages of Health and
Safety policy compliances. The actual consequences and outcome for non-compliance of the occupational health and safety policy to both the employer and employee.

Occupational Health is concerned with sustaining and promoting the health and working ability of employees. An occupational health service may include treatment of minor injuries and illnesses, emergency care and referral for care. An occupational health service may also include preparation of accident reports, health counseling, health examinations and vaccinations, and assessing the work environment to identify potential health or safety problems. Occupational Health and Safety Laws includes laws governing operation and working environment to ensure they are free of occupational hazards and health risks both at Human and environment levels. These are governed by the country laws and they have legal implications if not adhered. Occupational health and safety policy are internal polices and by laws that are produced within the national legislations that govern the occupational Health and safety issues. Therefore services, laws and policy on occupational Health and safety are crucial for the wellbeing of the workers, the company/ industry and for national economic growth. (Daniel E.2000).

2.5 The Main Reason of Managing Health and Safety

2.5.1 Moral/Humanitarian Reason
There is a moral obligation of preventing unnecessary suffering and loss of life to all human beings including those who work for you and those who are within your surroundings. People’s attitude toward HSE has been growing. Media has great attention to people’s health and safety and environmental issues. Employee moral can be greatly motivated by good Health and Safety policies and practices and this will assist in maintaining good customer relationship and ensuring good public relations. (Fanning, 2003).
2.5.2 Legal
To avoid prosecution and compensation claims. Most of country’s Law demand follow and adherence to the Health and safety issues. Failure to comply attracts punishment fines imprisonment.
“The purpose of the National OHS Compliance and Enforcement Policy is to assist workplace health and safety authorities to adopt a consistent enforcement effort that is effective (in terms of reducing the incidence of work related injury and disease) and efficient in achieving compliance while also maintaining community confidence that the laws are being administered fairly and consistently” (OSHA Act 2003)

2.5.3 Financial
The cost of accident and ill-health is a burden to both the employer and employee. Other cost includes:- Accident investigation, Payment for non-productive time (injured person) and (witnesses, investigators, clearing) Replacement of labour (can be less effective) Training for replacement of labour, Business interruption / disruption, Loss of reputation, Repair or replacement of damaged plant, Compensation cost, Legal cost and fees, Insurance etc.
“Adherence to Health and safety in construction Industry is not only important for compliance reasons but is a moral responsibility to ensure the safety of those at the site. It also gives a contractor an opportunity to maximize profit on business and ignoring can result into inefficiency, lower productivity and hence loss on profit”. (The Contractor 2009).

2.6 Benefits of Good Health Practices in work Places
There are some benefits for practicing good health practices/ habits within the workplace and these includes but not limited to increasing level of compliance with rules and procedures, Improve production, Improve staff morale, good company reputation, reduce loss of properties, reduce staff complains, reduce absenteeism, reduce staff turnover, reduce insurance premium, reduce fines and compensations

The enforcement of occupational health and safety standards is currently undertaken by OSHA. The enforcement is accomplished through the following activities,
workplace registration, statutory inspections (electrical Inspection, pressure vessels inspection and lifting equipment inspection); risk assessment; training and information on occupational health and safety, scrutiny and approval of workplace drawings/ plans. Other activities include; diagnosis of occupational diseases; occupational health surveillance, work environment monitoring, investigation of accidents; authorization of private Occupational Health and Safety Service Providers.

The core element in managing health and safety at the industrial and company level and to assist in complying with the law it is mostly advised a common sense and practical approach being in use in making sure the policy is adhered to and it is effective in all walks of life within the sector or industry in particular. It is further recommended that health and safety policy to be effective it should be part of the everyday process of running the company and an integral part of the workplace behaviors and attitudes. (Hale A, Ytehus I, 2004)

Leaving behind the size of the industry and location the core elements to effectively manage health and safety in the Oil Marketing industry are: Leadership and Management, trained and skilled workforce as well as an environment where people are trusted and involved. All these are underpinned by the understanding of the profile of risks the organization creates or faces.

However, the promotion of occupational health and safety at enterprise/ industrial and national level faces a number of challenges which needs to be addressed from national to industry and individual level. The challenges to be addressed by the National Policy include;

“Inadequate effective institutional framework to enhance commitment of the social partners; Low awareness of occupational health and safety matters amongst workers, employers and general public at large, Low compliance to OHS standards, Poor work environment in the informal sector, Inadequate OHS training and skills development, Lack of financial commitment by social partners to enhance occupational safety and health activities, Fast technological development and globalization, Inadequate OHS information and Inadequate programmes to address cross cutting and sectorial issues
like gender, HIV and AIDS, migrant workers, disabled people and people living in abject poverty”. (OHS Act 2003)

2.7 Background Information on Oil Marketing Companies

2.7.1 Gulf Africa Petroleum Company Tanzania Limited (Gapco)
Tanzania is the biggest among the East African countries of Gapco’s operations (i.e. Kenya, Uganda, Tanzania and Rwanda). Dar es Salaam is the commercial capital and major sea port for Tanzania mainland and it serves as a gateway to the neighboring land-locked countries and therefore Gapco headquarters are Dar es Salaam.

GAPCO Tanzania Limited is a subsidiary company of GAPCO Mauritius and was formed after taking over of management and operation from Esso and Caltex in 1994. The company imports petroleum products and are one of the largest retailers and marketers of petroleum products. It has an extensive network of Retail stations and depots across the country and is the major suppliers to Resellers, independent stations, industrial consumers and other oil companies. The terminal in Dar es Salaam is one of the largest terminals in East Africa. The products of Gapco include Petroleum, diesel and illuminating kerosene and lubricants. (Gapco T Ltd 2008)

Gapco Tanzania Limited has a health, safety and environment policy with a vision and mission commitment. It believes that the safety of a person overrides all production targets. GTL believes that all injuries, occupational illness and safety and environmental incidence are preventable.

The GTL Health, Safety, Security and Environmental (HSSE) Policy stipulate that “Safety and Security of person overrides all the production targets” This is the core of Health, Safety, Security and Environmental policy commitment of GAPCO Tanzania Ltd. GAPCO believes that all injuries, occupational illnesses as well as safety, security and environmental incidents are preventable.
2.7.2 GTL Operations with Regard to Occupation Health and Safety

GAPCO shall strive to be the leader in the field of management of Health, Safety, Security and Environment. In order to achieve this, we will: Promote Health, Safety, Security & Environment (HSSE) in all company facilities and manage it in the same way as any other critical business activity. Be prepared for a quick and efficient response to emergency situations to minimize the potential impact of accidents should they occur. Comply with all applicable laws and regulations and apply appropriate standards where respective legislation does not exist. Design, build and maintain facilities and utilize services in a manner to avoid risk to people and the environment. Have a sound HSSE Management System, in which competencies, responsibilities and communication channels are clearly defined. Provide training and job-specific education to all employees supported by internal standards, procedures and instructions. Provide a safe and healthy work environment for all employees and contractors with adequate facilities and appropriate protective equipment. Use energy and natural resources efficiently, and prevent and monitoring environmental pollution. Identify and analyse potential hazards and security threats and implement measures to avoid, prevent, control and restrict the associated risks. Set targets and benchmark our performance to achieve continuous improvement. Investigating all accidents related to Health, Safety, Security and Environment, including minor and near misses, followed by implementation of corrective measures and communicating lessons learnt to all employees. Conduct audits, periodical reviews and update the compliance of this Policy. (Gapco T ltd Healthy and safety Policy 2013)

Gapco Tanzania Limited has adopted a culture of managing health and safety issues through incorporating the health and safety issues to staff Job descriptions including their long and short term plans. Every individual staff has to stipulate his or her priority which led to contribution to health and safety compliance and risks management. The company core values such as customer value, respect, integrity, excellence and one team as well as management commitment by having a department to deal with Health safety security and environmental issues is among the factors that one may observe the presence of a health and safety policy. However, it
is through this research where issues will be tackled from different angles from looking at the policy content, policy stipulation, systems and practices along with both employer and employee understanding and commitment within and outside the company so as to see the effectiveness of the policy in Gapco as a case study.

2.8 Occupational Health and Safety Authority (OSHA)
The percentage of all workers in the world with access to occupational health services is estimated to range from 10% to 20%. The proportion of workers and workplaces with access to occupational health services is today diminishing rather than expanding. This is so despite the efforts made by several authoritative bodies, including the International Labour Organization (ILO), the World Health Organization (WHO) and numerous professional and workers organizations who have, for several decades, emphasized the need for services. ILO Introductory Report: Global Trends and Challenges on Occupational Safety and Health of 2011. (ILO 2011)

The Occupational Health and Safety Authority (OSHA) were established under Executive Agencies Act No. 30 of 1997 and is the custodian of Occupational Health and Safety Act No.5 of 2003. The primary objective of Occupational Safety and Health Authority (OSHA) is to ensure creation and maintenance of ideal work environments which are free from occupational hazards that may cause injuries or illness to all employees in work environment. This will be achieved by promoting occupational health and safety (OHS) practices in order to reduce accidents and occupational diseases, and ultimately achieve better productivity.

The history of OSHA establishment can be traced far after the introduction of privatization policy in 1990s most of the factories were privatized. The management which took over did not consider occupational health and safety matters as important as other production goals, particularly financing of accident prevention. The privatization process introduced new and diverse technologies which added more challenges in the field of occupational health and safety while standards remained the same.
In view of these shortcomings, the Government through Public Service Reform Programme (PSRP) established Occupational Safety and Health Authority (OSHA) under the Executive Agency Act No. 30 of 1997. OSHA was officially launched on the 31st August, 2001, the aim of the Agency is to improve the health and safety of workers at all workplaces through enforcement and promotion of occupational health and safety practices”. Improvement of health and safety at work reduces accidents and occupational diseases, which ultimately achieves better productivity.

The establishment of the Agency was followed by enactment of the Occupational Health and Safety Act in the year 2003 to repeal the Factories Ordinance. This Act broadened the scope of application to cover all workplaces. Occupational health and safety matters are cross cutting and therefore need holistic approach in their management. This has necessitated the need to have a harmonized occupation health and safety policy which will provide broad framework to guide occupational health and safety programmes and activities at workplaces.

2.8.1 Objectives of OSHA

The foreword in the OSHA ACT stipulates “The long term development goal of Tanzania is to reduce the poverty of her people and improve the working conditions of the entire workforce, at all workplace, through the provision of quality Occupational Health and Safety services. This should, in turn, lead to raised standards of living consequential to prevention and/ or elimination of occupational hazards and enhancement of all productive and service sectors as envisaged in the Development Vision 2025”. (UNDP 1990)

The National bodies and laws derive their instruments from the International bodies such as United Nations (UN) and International Labour Organization (ILO). These organs have clear stipulations on the Occupational Health and Safety.

“The positive impact of introducing occupational safety and health management systems at the organization levels, both on the reduction of hazards and risks and on
productivity, is now recognized by governments, employers and workers. These guidelines on OSH management systems have been developed by the International Labour Organization (ILO) according to internationally agreed principles defined by the ILO’s tripartite constituents. This tripartite approach provides the strength, flexibility and appropriate basis for the development of a sustainable safety culture in the organization”

The agency carries out all workplace inspections, including general inspections, plant and electrical inspections. It conducts industrial hygiene surveys and measurements, occupational health examinations of workers, offer advice on ergonomics and scrutinize workplace drawings. Training of workers and employers, collection and dissemination of OHS information are also carried out. The Agency also issue guidelines, regulations and standards on OHS to enhance its implementation. Conducting OHS research and studies in collaboration with other OHS community is also encouraged. The agency promotes, enhance and maintain the working population’s good health and safety for better productivity and contribute to national development.

The main role of OSHA is therefore to promote a good, sound and healthy working environment to create a good environment for enterprises as well as workers. By provision of a healthy working environment, both workers, enterprises, and the society at large will benefit and save precious resources. Ultimately, this will lead to enhanced productivity and economic growth. Its core values include Transparency, Confidentiality, Competency, Integrity, Team work and Timeliness.

“Promotion of Occupational Health and Safety encompasses provision and maintenance at the highest degree of safe and healthy working conditions and environment. This is prerequisite for the facilitation of optimal social, mental and physical wellbeing of workers at workplaces as well as safety of property”. OSHA ACT (2003)

Occupational health and safety services are important for sustainable development of a country, as they reduce occupational accidents and diseases which can have huge
economic burden to individuals, enterprises and the nation as whole. Improving health and safety of workers will significantly increase productivity at the workplaces to encourage more investments, increase job creation, higher morale, and job satisfaction hence industrial harmony.

The main objectives of OSHA are to ensure Compliance to OHS legislation and standards increased, Human and financial resources management improved management systems on OHS strengthened. In accordance with establishment Act.No.5 of 2003, the mandates of OSHA are as follows; to make provision for the safety, health and welfare of persons at work in the workplaces to provide for the protection of persons other than persons at work against hazards to health and safety arising out of or in connections with other activities of persons at work, to provide for connected matters. Therefore OSHA is among the instruments to research on the issues of health and safety of workers.

Apart from establishing OSHA, the government of Tanzania has made a lot of efforts related to the improvement and protection of rights of workers such as: the formulation of OHS policy, Workmen’s Compensation Act of 2008; establishment of Labour Court (LC) {a division of the High Court of Tanzania} and the Employment and Labour Relations Act No. 6 of 2004. The government also established the Commission for Mediation and Arbitration (CMA) and the Registrar of Trade Unions. Despite these initiatives, the occupational health and safety in Tanzania is still a serious problem and the Tanzanians workers in all social economic sectors are affected daily.

The same Act requires that OSHA should ensure that factories/workplaces are inspected to determine whether they are in compliance with the OHS legislation and standards. The OHS National Policy of 2009 requires that all inspections have to be properly planned in considerations of OHS risks and compliance inspections are initiated and prioritized based on: imminent danger of death or serious physical harm; Workers’ Complaint; Programmed Inspections or Follow-up Inspection to determine if previous cited violations have been abated.
Moreover, as according to OSHA stipulation both employers and employees have some duties to perform in assuring there is an effective occupational health and safety policy and procedures within the company. The employer has the following duties under the Occupational Health and Safety Act: To register his/her factory/workplace/business with the Occupational Health and Safety Authority to conduct regular medical examinations of his/her employees in accordance with the Act. To choose health and safety representatives in a workplace with four or more workers. Employers must make sure that the workplace is safe and healthy, and must not allow any worker to do work that is potentially dangerous. They must inform workers of any possible dangers in the workplace. They must reduce any dangers to a minimum before issuing protective clothing. They must issue protective clothing where necessary. They must give necessary training to workers who use dangerous machines and materials, to make sure they know the safety precautions. They must prevent workers from using or working with dangerous materials or machines, unless all safety rules have been followed. They must ensure that dangerous machines are in good working order and are safe to work with. They must make sure that dangerous machinery carries warnings and notices. They must make sure that somebody who knows the work is supervising the operations to ensure the safety of workers. They must keep the workplace open so that workers can escape from danger if necessary. (OSHA Client Chartered 2014)

The employees’ duties include taking reasonable care for the health and safety of themselves and any other persons who may be affected by his/her actions or omissions at work. They also have a duty to cooperate with the employer to enable the duty or requirement imposed by the employer to be performed or complied with. They have a duty to carry out any lawful order given to him/her and to obey the health and safety rules and procedures laid down by employer or an authorized person in the interest of health and safety. Report to his employer or health and safety representative any unsafe or unhealthy situation coming to their attention. Report to his/her employer or health and safety representative any incident or
accident which may cause injury to their health as soon as practicable (not later than
the end of a shift unless circumstances prevent so).

The primary objective of the Occupational Safety and Health Authority (OSHA) is to
ensure the creation and maintenance of ideal work environments which are free from
occupational hazards that may cause injuries or illness to all employees. The
authority has employed Labour Inspectors whose duty includes the inspection of
health and safety in workplaces, and their enforcement tools are through advising the
employer accordingly, issuing an improvement notice, Issuing a prohibition notice
referring the matter to court.

2.9   Review of Energy and Water Utilities Regulatory Authority (EWURA)
The Energy and Water Utilities Regulatory Authority (EWURA) is an autonomous
multi-sectoral regulatory authority established by the Energy and Water Utilities
Regulatory Authority Act, Cap 414 of the laws of Tanzania. It is responsible for
technical and economic regulation of the electricity, petroleum, natural gas and water
sectors in Tanzania pursuant to Cap 414 and sector legislation. The EWURA Vision
is Quality, affordable and sustainable energy and water services for all while its
Mission is to champion the delivery of energy and water services through world-
class regulation for the enhancement of the welfare of the Tanzanian society.
(EWURA ACT Cap 414)

2.9.1   Functions of EWURA
Main functions of EWURA among others are licensing, tariff review, monitoring
performance and standards with regards to quality, safety, health and environment.
EWURA is also responsible for promoting effective competition and economic
efficiency, protecting the interests of consumers and promoting the availability of
regulated services to all consumers including low
In carrying out its functions, EWURA shall strive to enhance the welfare of Tanzania
society by; promoting effective competition and economic efficiency, protecting the
interests of consumers, protecting the financial viability of efficient suppliers,
promoting the availability of regulated services to all consumers including low
income, rural and disadvantaged consumers, taking into account the need to protect and preserve the environment, enhancing public knowledge, awareness and understanding of the regulated sectors. Therefore the objective and roles of EWURA are among the important inputs in this study as the above functions are concerned.

2.10 Review of Weight and Measure Agency (WMA)

The Weights and Measures Agency (WMA) is an Executive Agency, responsible for fair trade transactions through certification of weights and measures. It is the sole agency in Tanzania for enforcing the Weights and Measures Act No.20 of 1982. Since 1999 and in pursuance to the Executive Agencies Act Number 30 of 1997, the WMA replaced the former Directorate of Weights and Measures under the Ministry of Industry and Trade. The move was part of the Civil Service Reform Programme (CSRP) to increase efficiency and effectiveness of public service delivery. (WMA ACT Cap 340)

2.10.1 Functions of Weight and Measure (WMA)

WMA is solely dedicated to protecting consumers, businesses and manufacturers from unfair practices through the application of accurate weights and measures. It endeavors to ensure optimum use of resources and fair trade interactions between investors, producers, transporters and consumers with an emphasis on consumer protection. A proper application of Weights and Measures practices is critical in order to ensure that there is clarity and certainty about measures used; that producers, traders and consumers are protected; that government collects revenues entitled to it and that proper statistical analysis of production levels may be done.

The WMA’s strategic objectives are; Minimization of weights and measures that do not conform to approved designs or meet the required accuracy. Curtail the importation and/or manufacturing of substandard weighing and measuring instruments in the country and operating resource management systems that are highly feasible, effective and efficient. (WMA ACT Cap 340)
Therefore one may observe that non adherence to the rules and regulations provided by the above bodies can results to the health and safety hazards not only of employees but also the society at large.

2.11 Approaches to Health and Safety Management

2.11.1 The Four Approaches

There are four approaches to health and safety management identified from the literatures on health and safety management systems and from the emerging case evidence.

The four approaches and their characteristics are; Traditional Management, where health and safety is integrated into the supervisory role and the 'key persons' are the supervisor and/or any health and safety specialist; employees may be involved, but their involvement is not viewed as critical for the operation of the health and safety management system.

Innovative management, where management have a key role in the health and safety effort; there is a high level of integration of health and safety into broader management systems and practices; and employee involvement is viewed as critical to system operation, with mechanisms in place to give effect to a high level of involvement.

A 'safe place' control strategy, which is focused on the control of hazards at source through attention at the design stage and application of hazard identification, risk assessment and risk control principles.

A 'safe person' control strategy, which is focused on the control of employee behavior. The last approach is sometimes known as behavioral approach. All these approaches have been currently embedded in the policy of OHS as stipulated by OSHA for the companies to adopt and follow and hence placing the health and safety responsibilities to each part, the employers and employees. (Fanning, 2003).
2.12 Theoretical Review

There are different literature with different theories on health and safety issues but for the purpose of this study three theories will be reviewed and those are; Economic Theories, system theories and social cognitive theories.

2.12.1 Economic Theories

Economic theory predicts that workers will demand additional wages, or a ‘wage premium’, to compensate them for workplace safety and health risks. Employers will respond by reducing such risks until it is less expensive to pay workers additional compensation than it is to invest in additional health or safety precautions. In this manner, labor markets should produce the abatement of some safety and health hazards, and workers should be compensated for the risks that remain. “A lack of corporate commitment to health and safety will result in OHS remaining a marginalized and insufficiently funded workplace activity”. An approach is needed to help you implement effective occupational health and safety systems. This approach can help prevent accidents, incidents, injuries, and work-related ill health. The approach may include; Develop an OHS policy and related programs, Set up a consultation mechanism with employees, establish a training strategy, establish a hazard identification and workplace assessment process, develop and implement risk control, promote, maintain and improve these strategies. (Hale A, Ytehus I, 2004)

2.12.2 System Theory

Health and safety management system is defined as a combination of the management organizational arrangements, including planning and review, the consultative arrangements, and the specific program elements that combine to improve health and safety performance. Specific program elements include hazard identification, risk assessment and control, contractor health and safety, information and recordkeeping, and training.

In this system theory it is advised to establish a system or combination of structures and systems to ensure the practicing of occupational Health and safety and assure the adherence to it. As advised in steps to Occupational Health and Safety steps journal,
“Six Steps to Occupational Health and Safety” One may introduce a system of Hierarchy of Controls which includes the following processes:

2.12.2.1 Engineering Controls
Try to ensure that hazards are 'designed out' when new materials, equipment and work systems are being planned for the workplace. Remove the hazard or substitute less hazardous materials, equipment or substances. Adopt a safer process. Alteration tools, equipment or work systems can often make them much safer. Enclose or isolate the hazards through the use of guards or remote handling techniques. Provide effective ventilation through local or general exhaust ventilation systems.

2.12.2.2 Administrative Controls
Establish appropriate administrative procedure such as: job rotation to reduce exposure or boredom; or timing the job so that fewer workers are exposed routine maintenance and housekeeping procedures training on hazards and correct work procedures.

2.12.2.3 Suitable Personal Protective Gears
Provide suitable and properly maintained personal protective equipment’s and training in its use. Note that PPE does not address the hazard. Once you have decided on a control strategy or a combination strategy e.g. replace toxic chemicals with less hazardous chemicals and implement safer work procedures and PPE to minimize exposure to risk, ensure that all employees are informed and consulted.

2.12.2.4 Programs Review
Review your programs: Promote, maintain and improve strategies it’s important to promote, maintain and keep improving OHS programs and procedures. Promotion and evaluation of programs is essential for ongoing effectiveness of OHS policy and programs. Program review should include the OHS committee. (Dianne E.G. Dyck 2011)
2.12.3 Social Cognitive Theories

Social cognitive psychology construes cognition as a part of social acts” (Barone, et al., 1997, p. 11). Throughout life, people strive to gain control of the various aspects of their environment and individuals try to gain control over desired outcomes (or attainments) and achieve control over the undesirable events. From a social cognitive perspective (cf. Bandura 1986; 1997), people are exposed to various interdependent circumstances every day (i.e., reciprocal causation), determine the best approach to these situations, assess their perceived competence (i.e., self-efficacy) to carry out their intentions (i.e., human agency), determine if the behavior they perform will produce the desired outcome (i.e., outcome expectancy), and finally decide the importance of obtaining the outcome (i.e., outcome value). One of the social cognitive theories is self-efficacy.

2.12.4 Self-Efficacy

Self-efficacy, originally defined as a person’s belief in his or her ability to perform a specific behavior to produce an outcome (Bandura, 1977), has since been expanded by Bandura (1997) to refer to “beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainment” (p. 3). Efficacy beliefs can vary in level (increasing difficulty of behavior), generality (similarity of behaviors), and strength (perseverance) and it’s widely used for improving intervention effectiveness. From Bandura’s perspective (1997; also see Maddux, 1995), people’s self-efficacy influences many aspects of their every-day life. Once an individual’s self-efficacy forms for a particular behavior or set of behaviors, these beliefs guide the person’s aspirations, behaviors, efforts, and reactions. However, these behaviors are seen more as probabilistic rather than inevitability through reciprocal determinism (Bandura, 1986; also see Geller, 1996, 1998e, 1998f). In other words, three interdependent factors, behavior, person, and environment, influence each other depending upon the situation.

However, along with the diversity of safety and health promotion and intervention approaches, many different theories and models address safety and health behavior as seen above. In fact, many of the approaches and theories to safety and health
intervention are derived from some theory or model of behavior changes. With few exceptions, the models mentioned above fail to provide the safety practitioner with guidelines for increasing the beneficial impact of health and safety related intervention especially when a model or theory stand by itself. Some authors do suggested content for interventions such as self-efficacy training, supervisor training, videotape training. But most models only provide a conceptual basis for the design and/or implementation of a behavior-change program (Conner & Norman, 1996). In a comprehensive review of occupational safety and health intervention, Goldenhar and Schulte (1994) conclude that research on the application “of etiological knowledge and on ways to conduct occupational safety and health intervention research is sparse” (p. 763).

### 2.13 Conceptual Framework

Conceptual frameworks are abstract representations, connected to the research goal that direct collection and analysis of data. It is the way ideas are organized to achieve a research project’s purpose. A theoretical structure of assumptions, principles, and rules that holds together the ideas comprising a broad concept. In conceptual framework, the dependent and independent variables are observed. The "dependent variable" represents the output or effect, or is tested to see if it is the effect. The "independent variables" represent the inputs or causes, or are tested to see if they are the cause. Other variables may also be observed for various reasons. As the illustrations below shows the dependent and independent variables in this study.

#### Figure 2.1: Conceptual Framework

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Independent variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Occupational Health and Safety policy</td>
<td>- System and structures</td>
</tr>
<tr>
<td></td>
<td>- Procedures and practices</td>
</tr>
<tr>
<td></td>
<td>- Employees and Management awareness</td>
</tr>
<tr>
<td></td>
<td>- Regulatory authorities</td>
</tr>
</tbody>
</table>

**Source:** Researcher’s own formulation, (2013).
The independent variables means that they included the OHS regulatory authorities, the OHS Policy, the systems and structures in the OMC’s, department personnel’s, procedures used in assuring the practice of OHS and the support from the top management in assuring the presence and adherence to OHS procedures as stipulated in OSHA Act 2003. The dependent variable under this study are from qualitative and quantitative data and they are the adherence to policy and procedures, awareness of the policy by the employees and employers in the OMC’s, the challenges in implementing OHS and the effects of the OHS to both employer and employees and the nation as a whole.

Therefore although Occupational health and safety management have developed considerably over the last 20 years there are more Occupational health and safety management in place and available than ever before but little is known about the effectiveness of these systems on employee health and safety and on relevant economic outcomes especially in the oil marketing industry. Research in most cases has been basing on the construction, mining and upstream fuel industries such as exploration, and in many cases the effects on non-compliance to the society in general. Little has been done on the oil marketing industry as compared to oil exploration industry specifically on the effectiveness of the policy and procedure for both employer and employee benefits. (ILO Report 2012)

Study review was also done in other sectors such as Health, Education, Mining and it was observed that occupational health and safety in those sectors is also not a priority. For example, study was carried on health sector to assess the status of occupational health and safety (OHS) in Tanzanian hospitals,14 district, regional and referral hospitals, There was lack of qualified personnel for OHS in all hospitals, none of the (430) respondents had received training on OHS as a profession. Most of the hazardous activities were carried out by nurses and attendants. Also Manyele SV, Anicetus H in Management of medical waste in Tanzanian hospital, found a large proportion (71%) of the hospitals used dust bins for transporting waste from generation points to incinerator without plastic bags this poses great risk to Health care workers who mostly work unprotected. The need to strengthen the field of
occupational hazard prevention and control in Tanzania is urgent, as the current neglect carries a heavy burden of disease and disability in the community. There are challenges and obstacles to occupational health and safety and there is little that has been done on occupational Health and safety and therefore it is important that this study will look at the areas that OHS is vital and yet there is limited documentation on it. Safety is the responsibility of each individual being employer, employee, all other governing Authorities and the Government itself.
CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

A methodology refers to the “choice we make about cases to study, methods of data gathering, forms of data analysis, etc., in planning and executing a research study” (Silverman, 2005:99). Any researcher sets out strategies that lay out the means for accomplishing the research aspirations. These research strategies are directed by the underlying study either quantitative or qualitative. Research methods are just the tools employed by researchers to gather empirical evidence, techniques of data analysis, and techniques of writing (Potter, 1996; Sarantakos, 1998). In this section, the methods that were deployed for collecting data are well narrated, what type of methods, who was involved and when the data collection method took place. The explanation of the time frame for data collection, the instruments, the technics and from whom these data were collected are clearly described in details this section.

3.1 Research Design

The research design refers to the overall strategy to integrate the different components of the study in a coherent and logical way, thereby, ensuring it effectively address the research problem; it constitutes the blueprint for the collection, measurement, and analysis of data. This study is a case study with descriptive designs. A descriptive study is one in which information is collected without changing the environment (i.e., nothing is manipulated). Sometimes these are referred to as “correlational” or “observational” studies. A descriptive study can provide information about the naturally occurring health status, behavior, attitudes or other characteristics of a particular group. Descriptive studies are also conducted to demonstrate associations or relationships between different things or scenarios.

This study is a case study research where one company GAPCO (T) Limited was intensely studied and analyzed. However, given the nature and objective of this research having a focus of occupational health and safety in oil marketing industries,
the study similarly look at other few oil companies for comparison purposes, peruse few bodies governing the safety and health of employees in Tanzania and the organizations govern the oil sector operations within Tanzania. Some references were done to International bodies that Tanzania is a member such as the UN, ILO and Organization of Petroleum Industries.

The case study was selected and used as appropriate methodology for examining issues relating to effectiveness of health and safety management systems. As Yin (1989:17) outlines, the 'how', the 'why' and the exploratory kind of 'what' questions are the questions suited to case study research. This emphasizes explanation, rather than description or prediction, and the study of events at a point in time, or over time. In short, the case study method allowed for detailed examination of occupational health and safety management systems and for explanation of relevant processes and outcomes and the actual practices in adherence from both side of the GTL employer and the employees. It supported explanation of the forces driving occupational health and safety management activity or inactivity, the factors that have assisted or hindered progress, and the dynamic processes underlying occupational health and safety.

3.2 Area of Study
The study area comprised of all the departments that are within GAPCO (T) Limited and this means; administration, the operation at the gantry and terminal areas as well as the surroundings such as the petty traders that are just within the industry/company area. Moreover, few explanation and clarifications were drawn from Occupational Health and Safety Authority as a body governing the Health and Safety at work place and deal with the policy enforcement of the same. Other areas that were involved in this study are in the organizations governing operations of oil marketing companies such as EWURA, WMA and TBS, the governing authorities such as ministries involved with health and safety issues as well as with labour issues (MoE, MoHSW, MOL) and reference made to other oil companies that are situated within the same area Gapco and that is Mafuta Street Kurasini and which have the
same operational capacity as GTL and those are Tazama Oryx and Total respectively.

3.3 Population of study
This session comprised of the population involved in this study whereby the management, employees and the selected sample from other institutions were interviewed. There are diverse sectors and issues involved in the health and safety of workers in the Oil marketing companies. This has necessitated the involvement of different populace such as the management, the employees, the petty traders, the OHS auditors, the workers in the MoHSW, MoE and bodies governing OHS and oil marketing. Few of the respondents were targeted selected purposefully in a random selection so as to capture the actual information about the study. As Patton narrated, “It is critical to understand, however, that purposeful random sample, not a representative random sample. The purpose of a small random sample is credibility, not only representativeness (Patton, 1990:180).

In this study the population included: the management, supervisors and employees of Gapco (T) Ltd, the management and employees of Oryx, TOTAL and TAZAMA pipeline, the Health and safety enforcement tools at Gapco, the representative from Authorities such as OSHA, EWURA, TBS, TPA, WMA, MoL, MoE, MoH, the neighborhood petty traders and the neighborhood household.

As the study design elaborated above, the main population in this study is the employers and employees of the OMC’s with the GTL taken as a case study and therefore was the center of discussion and automatically had produced more respondents. Accordingly, the survey type of research was used in which a sample from the target population was taken for study purposes. In total, a sample of 100 elements was selected from a targeted population of 300 populations.
3.5 Sample and Sampling technique

This session comprised of overview of the methods used in the study and it comprised of research design, population sample and sampling techniques, data collection methods and how analysis has to be done in the next chapter.

This study comprised of different methods as it was noted by Hoyle et al. (2002:3) contend that “Confining ourselves as social scientists to a single method or procedure limits what we can know.” This is so because there is no one procedure or method which can provide a complete description. Therefore there were two principal methods employed in this research the first one is fieldwork research. According to Sarantakos (1998:188-189), “A field research is a form of social inquiry into the real life situation, field research has the purpose of exploring real-life situations, studying behaviors patterns, and reasons behind social interaction or a social phenomenon.” Therefore, this was used to examine the actual work environment of Gapco and the behavior of both employees and employers on issues of health and safety though was done consequently with the second method which was interviews to the employees who were scattered around Gapco and review of GTL and other organizations documents.

Therefore, the study draws respondents from different Oil marketing Companies and bodies Governing the oil marketing sectors as well as citizens who are residing or doing business near OMC’s. The total number of respondents were 100 drawn from a total population of more than 300 people. At Gapco as a case study 80 respondents were randomly and purposeful selected from a group of 166 permanent staff, 100 casuals and petty traders and those in the neighborhood. The selection of these respondents involved both randomly and purposeful sampling as the study required the response of some of the people who have experience in safety and health issues and some who have been employed in the sector for long period so as to truck if there has been changes in the effectiveness of health and safety in work place. The other OMC’s and governing bodies produced 20 respondents who were also sampled randomly and purposeful from those institutions.
3.7 Data Collection Methods
The focus of study is on policy, systems, procedures, practices and perception and therefore the importance of primary data cannot be over-emphasized and lag behind the secondary data collection method and secondary data were collected to augment the study. The initial visit to the selected institutions was therefore to introduce and familiarize with those institutions as well as seek their consent for the study to have respondents from those institutions and look what this institution have on the ground in terms of documentation concerning this study.

3.8 Data Collection Instruments
The researcher collected data by administering questionnaires. The questionnaire used structured questions, divided into sections ‘A’ ‘B’, and ‘C’. The sections consists of questions seeking to answer the research questions However, the same questionnaire had some close-ended type of questions for respondents to mark the appropriate matching answers too.

This study involved both quantitative and qualitative data collection methods. The quantitative method enabled the study to reveal numerical and percentages on the extent of adherence to OSHA polices, to what percent is the policy effective and how many instruments are there to enforce the laws of these bodies and to what extent are the population of the area aware of the occupational Health and safety. (Kothari, C.R., 1985)

3.8.1 Questionnaire
Qualitative method was used where the questionnaires with open ended questions were distributed to the management and supervisors and appointment to fill that questionnaire with clarity was sought. The same questionnaire was divided into three sessions to capture the objectives of the research and those sections are: The first session was focusing on checking the documentation of the activities and documents available that are geared towards making an effective health and safety policy foe employees. The process is important and a standard one as it’s a useful for understanding whether the tracking of hazards to correction according to policy
stipulation is effective, the policy stipulations are adhered to, determine the quality of activities such as routine hazards analysis, near miss reports and record keeping on health and safety issue are of the required standard. Through interview and thorough checking on documentation it was easier to access those information’s’ and know to what extent is the occupational health and safety policy effective. (Kothari, C.R., 1985)

3.8.2 Documentary Analysis
There was also an intensive review of the documentations on occupational health and safety. Documents as instruments for data collection are very useful in social research and can be vital, especially when a researcher is focusing on past events (Sarantakos, 1998). The term document as Bryman (2004:380) puts it “covers a very wide range of different kinds of sources.” It can be from: Personal documents i.e. diaries, letters, autobiographies, suicide notes, confessions, and life histories. Public documents i.e. census statistics, statistical year book, prison records, and literature. Visual objects i.e. photographs. Archival records i.e. service records of hospitals, social workers, and records of organizations. Administrative documents i.e. proposals, agendas, minutes of meetings, and announcements. (Sarantakos, 1998; Bryman, 2004).

3.8.3 Interview
The other part was of interview, which provided a good indication of the quality of the health and safety procedures, systems, training, understanding and perception that are in place and how do they contribute in having a strong and effecting health and safety policy within the institution and or company. In this part one was to observe the level and the extent of knowledge and understanding of the occupational health and safety by employees, management and others.

The face to face and in-depth interview was similarly done to the management, supervisor and the experienced personnel’s. However, the other respondents were also interviewed with the same questionnaire and in the same manner although some respondents desired to be given questionnaire and fill them. In order to obtain the
records there were group discussion which allowed picking up of real events that concerns the health and safety issues to be recorded. This involved two groups of 5 employees from Gapco (T) Ltd discussed about health and safety issues that has happened at Gapco (T) ltd, the maximum of three events, the support they receive from the management level and what was done and the implication they got towards their work. This was very successful as events were well narrated and people were very free to give out their opinions. (Patton, 1990; Seidman, 1991; Sarantakos, 1998)

3.8.4 Observation
Examining the condition of work place was the third session. This was a helping hand to reveal existing hazards and it is a well-established technique for assessing the effectiveness of health and safety policy and practices by looking at the actual situations. This process included obtaining of valuable visual evidence on whether the employee health and safety policy is effective and doing root cause analysis of the observed hazards such as doing effective investigation technique.

Although there were questionnaire, in most cases interview where possible because interview normally has the advantages that one can see things which cannot be directly observed or discovered and can be adjusted to meet many diverse situations (flexibility) and at the same time there is a high response rate in interviews. Interviews helps to understand details of peoples experience from their point of view and respondents are not required to have abilities for reading, handling complex documents or long questionnaires. The interviewer has an opportunity to control the condition under which questions are answered and there is also a possibility of correcting respondents’ misunderstandings. As an interviewer, one get assurance that all questions will be attempted and it is because the interviewer presents the questions. The presence of the interviewer can assist in answering complex questions. (Patton, 1990; Seidman, 1991; Sarantakos, 1998)

All of the above technics and sections were done following the below components under the same series of documentation, interview and observation: Worksite policy
on safe and healthful working condition, goals and objectives for workers safety and health, visible Top Management leadership, employees participation, assessment of responsibility and accountability, resources and adequate authority.

3.9 Reliability and Validity of Data
The researcher improved reliability by standardizing the conditions, under which the measurement takes place, not only that but also the researcher signed direction for measurement with no variation from group to group and by asking similar questions to sampled respondents. In order to achieve validity, the researcher ensures the measuring instrument provides adequate coverage of the topic. (Patton, M. Q. 2002).

3.10 Data Analysis Plan
Data and information collected during the study was reduced into summary form that will be processed by normal office applications such as Microsoft Excel spreadsheet software. The findings of the research study were organized and the data was presented in the form of words, numbers and percentages by using tables, pie charts, and graphs.

The data collected from questionnaires was carefully checked for correctness, and then presented in tables and figures by using words, numbers and percentages. The data was analyzed by using SPSS and presented in the form of charts graphs. Qualitative data collected were summarized and presented after being narrated. (Patton, M. Q. 2002).
CHAPTER FOUR

PRESENTATION OF FINDINGS

4.0 Introduction
This chapter looked at the general findings of the study by presenting the findings from the collected data both primary and secondary data. The presentation of data although is focusing on the information collected from the case study but also the information from other sources as mentioned in the earlier chapter like review of documents from other institutions regulating the OHS, regulating the OMC’s and Energy sector in general. There will also be information obtained from other institutions such as MoH, MoE and MoL. Therefore results of the investigation are given in this section and they are narrated according to the objectives of the study.

Collected data was cleared and entered into the computer using a database created in MS Excel. Some of the data used for cross checking the other explanation and then all data were cleared and processed. The data processing was initiated by invoking the analysis of descriptive statistics and focusing on frequencies as per presentation that was drawn from the graphs and explanations of the summarized collected information. The collected data therefore are reported as explained above and the produced data is presented through discussion in this section and stored as secondary data.

4.1 Data Presentation
In this chapter the presentation of findings starts by table presentation of the respondents according to their area of origin whether it’s an office/ company or house hold. This has been able to summarize in a nutshell the number of respondents from different institutions who were able to give detailed data and description on issues of health and safety either to their workplace or as the monitoring organs of OHS issues including policy implementation.
Table 4.1: Interview and Questionnaires on Responses and Awareness of OHS Policy

<table>
<thead>
<tr>
<th>Institution</th>
<th>Target Respondents</th>
<th>Responded to study</th>
<th>Have reasons for non-response</th>
<th>Aware of National OHS policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>GTL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>8</td>
<td>8</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Supervisor</td>
<td>12</td>
<td>12</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Experienced</td>
<td>5</td>
<td>4</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Expats</td>
<td>2</td>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Other staff</td>
<td>36</td>
<td>36</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>TAZAMA</td>
<td>2</td>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>ORYX</td>
<td>4</td>
<td>2</td>
<td>No valid reason</td>
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</tr>
<tr>
<td>OSHA</td>
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<td>2</td>
</tr>
<tr>
<td>EWURA</td>
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<td></td>
<td>1</td>
</tr>
<tr>
<td>MoE</td>
<td>2</td>
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</tr>
<tr>
<td>MoL</td>
<td>4</td>
<td>3</td>
<td>No valid reason</td>
<td>2</td>
</tr>
<tr>
<td>MoHSW</td>
<td>2</td>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>WMA</td>
<td>2</td>
<td>1</td>
<td>Time frame</td>
<td>1</td>
</tr>
<tr>
<td>TBS</td>
<td>2</td>
<td>1</td>
<td>One is enough</td>
<td>1</td>
</tr>
<tr>
<td>TPA</td>
<td>2</td>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Traders</td>
<td>8</td>
<td>7</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>GTL customers</td>
<td>4</td>
<td>4</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Households</td>
<td>10</td>
<td>8</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Research Data (2014)

4.2 Information about Occupational Health and Safety

In Tanzania there are pieces of legislation covering the Occupational Health and Safety of an employee and these include the OSH Act, Employment and Labour Relations Act, 2004 as mentioned in the literature review chapter. However, a more specific, relevant and direct legislation is the Occupational Health and Safety Act, 2003. The Act is aimed at protecting workers’ rights in health and safety in the workplace. It provides for the protection of persons other than persons at work against hazards to health and safety arising out of or in connection with activities of persons at work, and to provide for connected matters. The Occupational Health and
Safety Authority (OSHA) was established (under Executive Agencies Act No. 30 of 1997) and is the custodian and enforce the Occupational Health and Safety Act. The sustainability of occupational health and safety structures, policy and functions is one of the primary concerns as this is an enforcement tool to all work places. It was observed during document review that OSHA has the mandate and legal authority to enter into the work place and audit as well as monitor the progress of OHS in the workplace.

According to Encyclopedia America (1998), Safety in broadest sense is a condition of being free from injury or risk. Based on the above explanation, occupational health and safety deals with all aspects of health and safety in the workplace and has a strong focus on primary prevention of hazards. The health of the workers has several determinants, including risk factors at the workplace leading to cancers, accidents, musculoskeletal diseases, respiratory diseases, hearing loss, circulatory diseases, stress related disorders, communicable diseases and others. Occupational health and safety is a cross disciplinary area concerned with protecting the safety, health and welfare of people engaged in work. The goal of all occupational health and safety programmes is to foster a safe working environment.

4.3 Information about Health and Safety in OMC’s

On April 28 The International Labour Organization celebrates "World Day for Safety and Health" to raise awareness of health and safety in the workplace. Occurring annually since 2003, each year it focuses on a specific area and bases a campaign around the theme. Tanzania as a Nation and OMC’s operating within the country are also aware of the importance of having the Occupational Health and Safety issues as one of the companies’ major concern. The health and safety of every employee in an organization is important if the organization is to continuously operate to meet its stated goals and objectives. (ILO report 2012)

According to the OHS Act of 2003, the Safety and Health Committees (SHC) should be established at the factory or workplaces where two or more health representatives have been designated. The SHC among others have the role of making
recommendations to the employer regarding any matter affecting the health or safety of persons at the factory or workplace. (OSHA ACT 2003)

Any employer who has more than twenty employees in his employment at any factory or workplace should have an OHS representative. The main task of OHS representative is to review the effectiveness of health and safety measures and identify potential hazards and major accidents at a factory or workplaces and advise the management for ratification and improvement of the situation

According to section 95 of OHS Act of 2003, every employer or workplace occupier has the duty to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all his employees and rehabilitation of affected employees. Similarly, employer has to make arrangements for ensuring the safety and absence of risks to health in connection with production, use, handling, storage and transport of articles and substances and should also take all necessary measures to ensure that the requirements of the OHS Act of 2003 are compiled with by every person in his employment. The employer should also enforce such measures as may be necessary in the interest of health and safety

According to section 99 of the OHS Act of 2003, among others, the general duties of employee include carrying-out any lawful order given to him and obey the health and safety rules and procedures laid down by his employer or any other person authorized by his employer in the interest of health and safety.

The OMC’s operations in Tanzania started long before independence but issues of health and safety took place along with the enactment of the laws and establishment of the authority to deal with occupational health and safety. There are several systems and key stake holders and players for management of OHS activities in Tanzania as observed throughout this study and these include ministries, Government Departments such as Tanzania Bureau of Standards (TBS), Government Chemist Laboratory Agency (GCLA), Tanzania Pesticide Research Institute (TPRI), Disaster Management Department (DMD), Private OHS Institutions, employers and
employees. These have in a way necessitated the OMC’s to take a big turn towards management of OHS within their area of jurisdiction as they have to comply with the conditions set by these agencies and sometimes for a smooth working operation they have to align their working and environment standards to suite the stipulations as laid by these agencies.

**Table 4.2: OSHA Registrations and Abiding to Implementation of OSHA Policy**

<table>
<thead>
<tr>
<th>S.N</th>
<th>Company</th>
<th>OSHA Registration</th>
<th>OHS Policy</th>
<th>OHSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GTL</td>
<td>2009</td>
<td>Yes</td>
<td>Present</td>
</tr>
<tr>
<td>2</td>
<td>TAZAMA</td>
<td>2010</td>
<td>Yes</td>
<td>Not present (In process)</td>
</tr>
<tr>
<td>3</td>
<td>ORYX</td>
<td>2011</td>
<td>Yes</td>
<td>Not present</td>
</tr>
<tr>
<td>4</td>
<td>TOTAL</td>
<td>2011</td>
<td>Yes</td>
<td>Present</td>
</tr>
</tbody>
</table>

**Source:** Document review during interviews to these OMC’s (2014)

The data collected through different methods were trying to answer some of the research questions that were presented in the beginning. The respondents were through interview and questionnaire able to explains some of the occupational health and safety issues.

The general information observed from Gapco and other OMC’s as well as other institutions and bodies governing and overseeing the Occupational Health and safety about the effectiveness of employee’s health and safety revolved around many issues as stipulated in the research questions, sample population and data collected. Therefore, these are general information about the health and safety polices as understood by employer, employees and practitioners in the governing institutions, assessment of occupational health and safety policy at GTL and other OMC’s, reviewing of systems and procedures as stipulated by OSHA and adopted by GTL, awareness level of both employers and employees and the challenges faced by the management of the OMC’s in having an effective health and safety policy as well as challenges faced by these governing bodies such as OSHA in implementation, monitoring and follow up of their stipulations.
The data collected through these research questions portrayed that the management of Gapco T ltd is aware of occupational health and safety standards as out of all respondents they were observed to know the existence of the OHS policy understand it and its practicability and were in one way part of the efforts to assure the company had a health and safety policy. Managers have among other documents the company health and safety policy and use it when assigning tasks to their subordinates. However the objectives and goals of the health and safety of workers they are written but known to a minimum scale by those at the managerial level. It is only by 30% of the managers who knows the objectives and stand by them. As per the discussion, one of the Managers pointed out that the essence is to avoid large health and safety risks as compared to individual health risks even if these are company employees. Therefore, awareness level is very low as having the policy by itself is not sufficient reason to say the management has awareness of the policy while the policy implication is not something that is within their daily practice, nor the policy making system and neither part of the management of the company. One may observe the age demarcation of the respondents has a direct impact with knowledge they have and that is why as a researcher it was crucial to capture the respondents’ age group to ensure quality response. (Gapco Human Resource Policy 2012)

Table 4.3: Age Profile of Study Respondents

<table>
<thead>
<tr>
<th>Age Group</th>
<th>25-30 years</th>
<th>31-35 years</th>
<th>36-40 years</th>
<th>41-55 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of respondents</td>
<td>14</td>
<td>22</td>
<td>38</td>
<td>26</td>
</tr>
<tr>
<td>Percentage (%)</td>
<td>14%</td>
<td>22%</td>
<td>38%</td>
<td>26%</td>
</tr>
</tbody>
</table>

Source: Researcher’s Analysis (2014)
On the side of staff of GAPCO (T) Limited the awareness of the occupational health and safety standards is very minimal. Most of the questioned staff knew some of the rules and procedure that they use in their everyday performance of work. More than 90% of the respondents were aware that they are supposed to have protective gears but they said they normally wear them when their supervisors are present or they are within a very critical situation such as cleaning of the tanks. On issues of safe and health work condition most of the lower cadre respondents were only advocating to have better remuneration and other things will sort out automatically when one is paid very well. Therefore, although there are written policy regulations and procedures on health and safety of workers as well as security and environment, workers have little knowledge on its importance and management efforts to impart them with extensive knowledge and rising of awareness efforts have not been done.
Table 4.4: Incidence Reporting by Individual Staff

<table>
<thead>
<tr>
<th>S/no</th>
<th>Time range for reporting incidence</th>
<th>Number of employees reporting OHS incidence (GTL)</th>
<th>Percentage of reporting/not reporting as per total employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1hr – 5hrs</td>
<td>1</td>
<td>0.322</td>
</tr>
<tr>
<td>2</td>
<td>6hrs – 24hrs</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>1day – 3days</td>
<td>2</td>
<td>0.645</td>
</tr>
<tr>
<td>4</td>
<td>3days – 7days</td>
<td>1</td>
<td>0.322</td>
</tr>
<tr>
<td>5</td>
<td>7days – 14days</td>
<td>1</td>
<td>0.322</td>
</tr>
<tr>
<td>6</td>
<td>One month</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>Not reporting at all</td>
<td>15</td>
<td>4.840</td>
</tr>
</tbody>
</table>

Source: Analysis based on the response to questionnaire, interview and observation.

Moreover, when you look at Gapco core values which are Respect, Integrity, Excellence, Ownership Mindset, Customer Value and One Team, nothing has been explained or pointed out to tackle issues of occupational health and safety although the company has a department to deal with health, safety, security and environment issues (HSSE) and the HOD of that department forms part of the management team. Therefore on issues of worksite policy on safe and healthful working condition GTL has demonstrated a weak policy as even the staff handbook/employee’s HR policy has explained health and safety issues in a nutshell. OSHA as a monitoring authority demands the “Employers must make sure that the workplace is safe and healthy, and must not allow any worker to do work that is potentially dangerous. They must inform workers of any possible dangers in the workplace.” (HSSE Policy Gapco 2013)

In answering the research question, one may refer to the above explanation on awareness of the policy and because this was seen to very few, the management and staff know and recognize the importance of occupational health and safety although by only a word of mouth and discussion and not by having a regular policy awareness, review and application and systems which when followed or not followed one may be rewarded or punished or having a self-moral obligation on health and safety issues. Given the nature of the industry, it was expected health and safety
issues to be among the core values, to be along all job description of employees and to observe signboards and many other informative signs about health and safety. Instead, the managers were able to explain the importance however, in the interview, investigation and surveillance it was observed that this is not the practice and systems which are available are only in documents and not practical.

The reports shows there are injuries to staff some of them go unrecorded, there are some of staffs who go to the gantry area and load the fuel tanks with no protective gears (helmet or mask) and some of the staff visit the terminal area with their mobile phones and they not only have them but also not switched off. This reflects the low awareness level that these staff have on the importance of the occupational health and safety and the observations done shows that these staff are also not very aware of the risks and hazards involved in occupational health and safety other than fire because of the nature of the industry being very precarious to fire. The level of education of respondents was important as it shows the awareness and knowledge as well as skills that one possess is a vital component in decision making on issues pertaining to health and safety in a work place. (Health and Safety Report: Gapco T Ltd 2013)

### Table 4.5: Level of Education of Respondents

<table>
<thead>
<tr>
<th>Level of education</th>
<th>No. of respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Seven</td>
<td>15</td>
<td>15%</td>
</tr>
<tr>
<td>Grade Twelve (Form IV)</td>
<td>17</td>
<td>17%</td>
</tr>
<tr>
<td>Certificate</td>
<td>23</td>
<td>23%</td>
</tr>
<tr>
<td>Diploma</td>
<td>14</td>
<td>14%</td>
</tr>
<tr>
<td>Degree</td>
<td>14</td>
<td>14%</td>
</tr>
<tr>
<td>Post Graduate Diploma</td>
<td>8</td>
<td>8%</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>9</td>
<td>9%</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Source:** Researcher’s Analysis (2014)
The impacts of occupational health and safety policy to the operational and administrative divisions of GAPCO (T) Limited were exposed very well during the interview and examination through observation and even on questionnaires. It was noted that, through OSHA rulings and suggestions, employees of Gapco are now doing Medical examination before being employed and those on work are also doing the same through the Ministry of Health medical practitioners. There were also efforts done and changed the fire systems by improving the fire mock alarm, the fire rescue tools and systems and fire and first aid trainings were also done. All these are the positive impacts brought by the occupational health and safety. Nonetheless, there are more crucial issues that have not been touched though the National policy and the Company policy stipulate clearly. The work environment of the company, the outcome of violation of health and safety rules and the company apparatus to deal direct with health and safety issues are not stipulated anywhere or known thoroughly by the employees. It was observed that when OSHA or any other health and Safety official either from Municipal or Ward level visit the company, it is sometimes not very clear whether the HSSE Manager, HRM or the OPS Manager should receive him and guide him through what he needs. OSHA demanded the employer to ensure
that ‘They must issue protective clothing where necessary. They must give necessary training to workers who use dangerous machines and materials, to make sure they know the safety precaution. (OSHA Act 2003).

There are instruments that have been developed and adopted by GAPCO (T) Limited to govern health and safety of workers such as having the HSSE department, HSSE committee and commitment sheet for employees to report near miss incidences. There are first Aid kits available, the assembly point’s area are well marked, smoke detectors and fire alarms, ambulance rescue and few sign boards to say what is allowed and not allowed and to show directions in performing some of the works which may result to health and safety risks. These are in place but through this study, the observation was that, the first aid kits have very few requirements and are kept in offices where it’s not easy to access them just in case they are needed on emergency basis. Likewise it was observed that there has been some few testing of fire alarms but the employees are saying they did not respond as they did not hear the fire mock. Other instruments are such as those policies as discussed before which is not well known to staff and management group and which its stipulations are as well not so binding to performance of duties and there are no reward and punishment for adherence or breach. One may observe OSHA’s demand employers that ‘They must inform workers of any possible dangers in the workplace and this is not the case for Gapco or other OMC’s. Very little is known to the employees about health and safety to the extent that even the occupational diseases, risks and hazards are similarly not well-known. (Occupational Health report for Private Sector 2013)

Looking at the extent of adherence of occupation health and safety procedures by employees in OMC’s taking GTL as an example, one may observe a lot through the questionnaire, interview and observation. The company as a whole have done some efforts as adopting to OSHA polices and produce one for the company, adherence to OSHA audit and inspections and at the same time have been able to deliver some instruments to assure staff of health and safe work place. However, this were all done to a minimum extent especially for those issues which seems they will involve penalties of huge amount of money or will be a threat to survival of the company. As
a company when you look at the canteen area, the back yard of the office, fewer open space offices they are either full of sewage water, waste water have been standing for long and employees are saying it’s for more than three years those area are on huge environmental risks and there are also wires and cables passing over and through offices without any covers. One of OSHA stipulation is to assure the effective work health and safety is for ‘Employers must make sure that the workplace is safe and healthy, and must not allow any worker to do work that is potentially dangerous. They must reduce any dangers to a minimum’. During the interview this was not the case as employees were very clear that themselves and the company itself have not been adhering to OHS policy of the Nation or the company to the maximum extent and therefore makes it difficult to cement the policy to the peoples mind and actions.

Table 4.6:  Years of work Experience for Respondents

<table>
<thead>
<tr>
<th>Years of work</th>
<th>No. of respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 5 years</td>
<td>18</td>
<td>18%</td>
</tr>
<tr>
<td>6 - 10 years</td>
<td>28</td>
<td>28%</td>
</tr>
<tr>
<td>11 - 15 years</td>
<td>24</td>
<td>24%</td>
</tr>
<tr>
<td>16 – 20 years</td>
<td>20</td>
<td>20%</td>
</tr>
<tr>
<td>21 years or more</td>
<td>10</td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Researcher’s Analysis (2014)
Source: Researcher’s Analysis (2014)

The application of health and safety rules differ within the OMC’s as every company has set different Health and Safety System, rules and procedures as per National OSH policy but also according to the actual environment they are operating. GTL Mother Company is based in India but it is a registered local company and therefore almost all of its rules and procedures are local based and very few issues are drawn from RIL as a base company. TAZAMA pipeline on the other hand is operating in two countries, Tanzania and Zambia and therefore the systems, rules, policy and procedures are formulated by taking into consideration the requirements stipulated by both companies reflecting both Nations. ORYX and TOTAL Tanzania has also been formulated assimilating both the requirements and deliberation of National policy and those of their original countries being Netherlands and France respectively. Therefore the study observed that although GTL has by a large extent accommodate the National policy to its internal Health and Safety policy other companies have taken much attention to the requirements stipulated by their headquarter as these company are operating locally but as a subsidiary of the large external international company. (TAZAMA Personal Safety Plan Commitment 2014)
CHAPTER FIVE

DISCUSSION OF FINDINGS

5.0 Introduction
This chapter is a discussion on data findings as raw data do not make any sense without being analyzed. Data analysis involves making sense out of the raw data, integrating and organizing what different people have said, and connecting peoples’ experiences into major themes. For the sake of this study, it is connecting the responses and observations as well as documentation of the reviewed OHS issues at GTL and other institutions as per the presented data. Although data analysis deals with collected data, it is difficult to demarcate where data collection activity ends and data analysis begins. This is so because data analysis in most cases starts in the field. It is part and parcel of data collection (Patton, 1990; Potter, 1996; Sarantakos, 1998; Silverman, 2005). Patton (1990:377) asserts that; there is typically not a precise point at which data collection ends and analysis begins. In the course of data gathering, ideas about possible analysis will occur.

In this study, data were collected in the field simultaneously with describing some of them. Where there were interview, there were also some observation and examination of some areas such as work environment and at the same time review of documents and then organized and assembled the information that was collected from the field.

5.1 Discussion on Findings
Two qualitative methods were employed in data analysis.

5.1.1 Historical Analysis and Observations
The first one is historical or documentation analysis. Historical analysis “is a method of discovering, from records and accounts, what happened in the past” (Marshall and Rossman, 1989:5 cited in Potter, 1996:142). Historians depend on data like oral
testimonies, documents, and records. Using a historical analysis approach is not just a matter of reporting past events, but providing a link to a wider context or deeper interpretation (Potter, 1996). This perception occurred after the redefinition of the term history. For example, Tuchman (1994) differentiated the 1920s definition of history and the contemporary one. In the 1920s, “history sought to find out what actually happened and how the events occurred” while in its contemporary definition “it is now more focused on exploring meaning than on documenting occurrences” (Tuchman, 1994 in Potter, 1996:142). This kind of data analysis was applied to explore the effectiveness in system and practices of the OHS policy from its establishment up to present at GTL as one of the OMC’s and from the OSHA as an authority.

Few observations were made in this analysis which includes the strengths and weaknesses of the OHS policy, systems and authorities. During documentation review and interview with OSHA official, it was noted that most of OHS Committees in OMC’s have not been reporting occupational accidents and diseases to OSHA as stipulated by the law. Only one incidence report for the year 2011 – 2013 was submitted to OSHA that occurred at GTL Morogoro where the failure to follow procedures in preparation and implementation of fuel tank cleaning resulted to the death of one person whom was also observed to lack basic training in conducting that task safely. Similarly, a number of fatalities are under-reported, since those who report accidents and diseases to MoLE are demanding compensation from the employers. (OSHA report on Private sector 2013)

Inadequate Training Plans as OHS Act 2003 requires employers upon consultation with the Chief Inspector to ensure that training is provided at least once in every two years. The Authority has not conducted training as per its planned schedule of activities. It was also observed that GTL has done only one training on First Aid for the year 2012 -2013, the participants were few staffs and most of the management personnel at GTL were claiming those training to be very costly.
It was further noted that, despite the requirement of the OHS Act. 2003 on imposing sanctions to employers who do not ensure that their employees are provided with training, sanctions were hardly imposed by OSHA to these employers. OSHA follows ILO directives which do not prioritize on sanctions. According to interview with OSHA official, sanctions do not improve working conditions. Sanctions are only applied to employers who failed to comply with the law requirement regardless of the awareness campaign provided by the Authority. Therefore it was noted during the study that there are contradictions between the international bodies governing the OHS and National legislations which in turn reduce the enforcement power of OSHA as authority.

5.1.2 Relevance of the Study Area, Populace and Materials

The second method employed is grounded theory; doing a research to draw conclusion and not testing available data or hypothesis. This methodology was pioneered by two sociologists in 1967; Barney Glaser and Anselm Strauss. In grounded theory, “one does not begin with a theory, and then prove it. Rather, one begins with an area of study and what is relevant to that area is allowed to emerge” (Strauss and Corbin, 1990:23). By using grounded theory, I as a researcher started with an area of study (the effectiveness of occupational health and safety policy in OMC’s a case study of Gapco T Ltd), and then collecting data. Thereafter, I examined and interpreted those responses in questionnaires, the observation from the investigation of the studied area and the interviews that were done carefully in order to find out different patterns, ideas, concepts, themes and thoughts that could permit the drawing of the conclusion. This method was crucial for me to obtain information that are beyond my research questions and expected outcomes. This system helped and assisted me through observations and interviews were I was able to interview and examine beyond my area of questionnaire. Information such as the presence of blocked sewage system at GTL for about 3 years, the presence of monitoring institutions such as EWURA and WMA on everyday basis and sometime TBS at GTL premises and ad hoc audit and inspections that are done by OSHA, the Municipal Council through Ward Executive and NEMC were very crucial.
Even though the study is qualitative in nature (exploratory study), some quantitative methods were employed in data analysis. It is not the case that there is totally absence of quantification in qualitative studies (Sarantakos, 1998; Bryman, 2004; Silverman, 2005). Some simple statistical inferences such as, tables, counting and percentages, are applied to make meaning out of the qualitative data collected.

Reliability and Validity as explained earlier in the beginning of this chapter means that the research methods may be treated differently, depending on the research type either quantitative or qualitative. Queries of reliability and validity are however important in any kind of research method (Brock-Utne, 1996; Durrheim and Wassenaar, 2002). According to Brock-Utne (1996:612), “in ordinary speech, ‘valid’ refers to the truth and correctness of a statement.” Quantitative researchers make sure that they maintain validity by identifying validity threats in advance when designing their studies. They use experimental arrangements and statistical techniques to ensure that the accurate conclusions can be drawn from the research results (Durrheim and Wassenaar, 2002). In qualitative research it is very complicated to identify validity threats before conducting a study. Qualitative research can be weighed up according to its credibility, whether its product and results are convincing and believable (Durrheim and Wassenaar, 2002). More than one method of data collections were applied in this study, observation, interview and questionnaire filling as well as review of documents to ensure the issue of credibility. Also, the use of interview guide in certain instances in order to make interviews more focused on the research questions as well as avoiding ambiguities.

The term reliability as Bryman (2004:543) defined it “is the degree to which a measure of a concept is stable.” This means that research findings can be repeatable. However this belief is important to the positivists only. It is so because of their belief that they are studying a stable and unchanging reality. This is, however, not the case for interpretive and constructionist investigators and researchers. As a researcher, I do not expect to find repeatable results because things in the world are not static as believed by constructionist and modern researchers. Instead, they propose that findings should be dependable. Dependable in the sense that the reader and all other
beneficiaries should be convinced that findings occur as the researcher reported them (Durrheim and Wassenaar, 2002). Being conscious about the issue of dependability, I used detailed descriptions that unveil how certain events and views were rooted in and developed out of the contextual interaction as well as having personal and group discussion with the respondents. The study observed the presence of work injuries and other health hazards that were not in records but through discussions with the two dissimilar groups of staff at different occasions certain scenario such as the injuries of the employees when there were placement of metal covers at the glass door without any sign which led to few staff to be injured by the metal. Four staffs were injured at the same door at the same day and this showed there were no efforts for correctness of the situation from the first instance which led to continuation of injuries. Therefore, one may observe lack of proper reporting systems when it came to near miss, hazards and risks situation.

Generalization refers “to the extent to which the results or findings of a study can be extrapolated to a wider context than that used in the implementation of the research design” (Tredoux et al. 2002:313). According to Durrheim and Wassenaar (2002:63), generalizations are important when; (a) “researchers want to make general theoretical claims or (b) “researchers aim to describe populations.” The above is applicable to positivist researchers as generalizability is very important to them. They assume that behavior laws are universal and they are operating not only in the laboratory, but also in the real world. In survey research representative samples are used to describe the entire population. Based on the small sample of this study, I was able to provide a deeper understanding of the effectiveness of occupational health and safety in OMC’s and do not have the intention that the findings should be generalizable. It is my hope that these findings can be applicable in any different area, but with a similar situation or context.

5.2 Assessing OHS Policy and its Stipulation Awareness
The findings of the study revealed that though the management and few employees of GTL have little awareness of the existence of the OHS policy, they are not informed about policy stipulation, the application of the policy as well as the
outcome. For the employees they just do their work and avoid risks per the common knowledge and understanding and according to the nature of their work at the work place. The study findings showed that this is not only the case with GTL but it is also with other OMC’s were OHS policy lag behind other policy for company performance and economic gains. It was also observed during this study that the level of education was a factor to determine the awareness of employees on the OHS policy and its stipulation. The policy both National and Company policy on OHS is written in foreign language which is English and for GTL the large segment of staff are either primary, secondary or certificate courses graduates. The language and narration of the policy is an essential element for easier understanding of the policy and its application. It was observed that the little understanding the large group of staff have comes form on hands experience, common knowledge and slight clarifications they normally receive from their supervisor or coworkers. Most of those staff have been working for the company for years and change to them is a threat even if it’s a positive change, therefore imposition of new policy and procedure becomes very challenging. There were supposed to be formal trainings to update and educate staff on issues of OHS and this has not been the case either with GTL and other OMC’s with exception of TAZAMA pipeline who have been operating internationally because of demands from two different countries, Zambia and Tanzania.

Table 5.1: Level of Awareness of Respondents on Health and Safety

<table>
<thead>
<tr>
<th>Awareness Level of Respondents</th>
<th>No. of respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total awareness</td>
<td>09</td>
<td>9%</td>
</tr>
<tr>
<td>Average Awareness</td>
<td>15</td>
<td>15%</td>
</tr>
<tr>
<td>Partially Aware</td>
<td>28</td>
<td>28%</td>
</tr>
<tr>
<td>Not aware at all</td>
<td>48</td>
<td>48%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>

5.3 Analysis of written Goals and Objectives of OHS

The study revealed that GTL and other OMC’s have written goals and objectives to be accomplished by the OHS policy of the company. Those goals are either derived from company work condition and performance, the mother company of a certain OMC and the national stipulation of the OSHA act. However, it was also noted and observed that these goals and objectives are not well known to the entire group of staff; they are written and kept with HOD’s of HRD, HSSE department or Operation. These are updated when a risk situation or incidences happen and its adherence is not enforced by main company apparatus for enforcement such as rewards, punishment, sanctions and others. Although some employees’ job descriptions and working manual have some objectives for OHS adherence but they are lined for fewer staffs whose work jurisdictions are directly imposed to OHS risks and they have compounding effects to employer’s gains. For GTL employees they were all supposed to sign a safety commitment sheet which when their personal files were reviewed only 24 out of 166 staff have signed that to show he/ she has read, understood and commit him/ herself to safety standards of the company. This is totally lack of awareness and commitment on OHS issues from both the employee and management side.
5.4 The Importance of Health and Safety in Oil Marketing Companies

The study observed that although these OMC’s current situation has OHS policy but the reality is that these OHS policy is known to very low rate/extent. Staff does not know why and what are the reasons for having OHS policy procedures and systems and its implication for own and company benefits. GTL as other OMC’s are exposed to high environmental risks because of the nature of the product and it is from office buildings, outside environment, the operation area and the canteen area. The study findings show that these are not threat to either the employees or the management although some of them know that they pose high health and safety threats and at the same time high environmental risks. The study reveals there are health and safety hazards which keep on re occurring such as floods, blocked sewage, absence/ignorance of wearing protective helmet and sometimes noise pollution. Given the nature of the industry, it is expected that GTL as company storing huge amount of fuel a product which is one of the high risk product, issues of health and safety were to take lead in company policy, operations and decisions. GTL has a storage capacity of one million metric tons, its distribution pipes are operated manual and automatically and in most instances with the bulk procurement system and hospitality business all of its storage tanks are full of products. (Gapco Operation Tank Farm Manual 2008)

However, the consideration of the risks associated with work place and surrounding areas is very truncated. In follow up of rules and procedures, all employees disregard of the level within the company are following the same rules and procedures on OHS although some few staff managers and those considered to be unskilled they sometimes violet the rules and go unpunished. One respondent noted that: “Few bosses they normally have their mobile phones with them and they don’t even bother to switch them off when they visit the tank farm or the gantry area although it is well known that even in the retail outlet stations when refueling the vehicles we are supposed to switch off the mobile phones”.
5.5 Employees’ Participation on OHS Issues

The study revealed that employees’ participation on issues of OHS though mostly as written procedures while in practice involvement is very low. Documentation of different activities such as trainings, report inspections and minutes of the OHSC are well kept but the deliberations and suggestions from those instruments are rarely done. However, there are also no written guarantees for protection of employee when reporting OHS issues whether to internal or external players, management or any other institutions. There is an incidence observed where one of the workers who tie seals to the tanker got injured and he reported after 3 days and at the same manner the report was never worked upon by the HSSE manager who received the report or by his line manager. This issue went on silent and from February 2013 up to the end of the year there were no any progress such as compensation, changes in operation such as the mode seals are tied or any recognition from the concerned department or management about this issue. The study findings revealed that employees at GTL are not aware of ways they can participate in decision that affect the health and safety of their working place for their own benefits and for the benefit of the company their working.

5.6 OHS system and Structures

This study was also aimed at doing a systematic critical examination of each stage of organizations management systems and procedures in relation to adherence to Health and Safety. In so doing as a researcher I looked at the top management leadership and the next level officers to review their participation and commitment in the OHS issues. There was also review of documents to check if there are written programs which involve the top management in its formulation and implementation. The study findings reveled that these were not fully involved in the programs; communication was just for review and approvals of those program and systems to be implemented. This is return is said to create a company commitment gap in OHS policy and its implementation.

It was also noted in the GTL training reports from 2011 – 2013, the top management have never attended the GTL training on OHS such as First Aid, Wellness program,
MoHSW Medical checkups and fire training. The GTL management invisibility on OHS issues is clearly observed, the extent of OHS policy application is minimum and hence this led to lack of system and procedures on OHS making the policy ineffective. (Gapco Training report 2013)

**Figure 1.2: Healthy and Safety Coordination at Gapco T Ltd**

The study revealed that the top management has also not provided systems, structures or any other mechanism for the employees to approach them and discuss OHS issues. This is quite an obstacle to an effective OHS policy as employees are on the ground and they have many of the hands on issues, experiences and ideas that will be necessary to be considered and incorporated in either making, reviewing and updating the company OHS policy.

### 5.7 Recognition Efforts on OHS Issues

Almost all OMC’s revealed that there are no systems to reward the best health and safety practices or suggestions. There are no even recognition efforts as chances for normal employees to interact with management is low or null hence most of the
suggestions given ends up to supervisors and if go further they will end with line managers who are also considered to weigh OHS versus the cost to the company (CTC). The study noted that in a way this has also demoralized the employees to look for better ways and suggestions so as to have an effective OHS. When asked if there has been any of the rewards for those who were keen on OHS issues such as reporting near misses, alerting the health and safety risks and reporting of accidents almost all employees were puzzled and management responded that they are in the efforts to establish systems that will capture those records and rewards them for the sake of raising health and safety awareness.

### Table 5.2: Shortage of Financial Resources Hinders Effectiveness of OHS

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Supervisor</td>
<td>6</td>
<td>8</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Others</td>
<td>39</td>
<td>16</td>
<td>9</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total respondents</td>
<td>45</td>
<td>25</td>
<td>17</td>
<td>5</td>
<td>9</td>
</tr>
</tbody>
</table>

**Source:** Researcher’s Analysis, (2014).

### 5.8 Accountability and Responsibility

In assessing the accountability and responsibility of GTL on OHS, the study observed that in terms of documentation, there were clear accountability and responsibility. Some of employee’s job description were clearly stipulating the responsibility in health and safety issues and from 2013 May the performance evaluation policy and process has OHS as criteria for evaluation to some of the officials/ ranks. There are no evidence of employees being held accountable for violating OHS policy and procedures but there are exchange of emails and letters to reminding the employees about the OHS rules and procedures of the company. However, the study noted that this was not enough and as per OSHA Act 2003, the employer and employees were both having responsibilities and accountabilities on
health and safety issues and this should be stipulated clearly on all staff manuals, contracts or job descriptions without segregating certain levels or cadres.

The study findings show there is a move towards having an effective OHS at GTL. The establishment of OHSC, the incorporation of the OHS issues to staff job descriptions and performance evaluation suggested that there is a positive move and attitude of the management and employees. However there is lack of adequate expertise and authority and this is very essential aspect in having an effective OHS policy in a company. However, the move was late to be established and the pace of raising awareness and implanting policy requirement is also very low.

5.9 Challenges Facing GAPCO on Occupational Health and Safety Policy

This study finds that there are several challenges facing Gapco and other OMC’s which are associated with implementing and managing health and safety policy, system and procedures in the workplace. Some of observable ones include; Management perception of HSE programs as cost rather than benefit to the organization or company was observed and this created lack of support to some of the recommended issues pertaining OHS. Organization culture and values are not geared and prepared for HSE programs. There is lack of funds and expertise especially for issues pertaining to adherence to OSHA stipulations. Commitment from shareholders stakeholders and employees on the need for action as the research observed that GTL lacks management commitment, quality assurance, inadequate planning and ineffective systems. Most of the resources are not well trained on how to provide and support medical care counseling and alternative working arrangement and GTL in particular lacks effective OHS training.

The sensitivity of the issue of health and safety in the workplace and how to deal with employee’s negligence for safety rules’ such as not wearing protective equipment provided for their safety and the direct or indirect long and short term impacts. Building ergonomic into occupational health and safety; this concerns the appropriateness of building ergonomic insights into occupational health and safety. Ergonomics has also pointed up the fallacy in the idea of an average worker.
Promoting more active cooperation between workers and employers; there is a need to promote more active cooperation between workers and employers on OHS. These processes will improve safety, workers’ health, working condition and the working environment should come naturally. Encourage the extension of safety culture in education, in the family and at work. Extension of the scope of occupational safety and health, bringing it into the field of habits, attitudes and culture. GTL as other OMC’s is encountered with a challenge of achieving better analysis, recording and reporting of accidents and occupational diseases because of negligence, ignorance and absence of proper follow up of procedures. Convergence of occupational health safety and environment standards within a working environment has also been a challenge to both GTL as a company and employer and employees in general.

The OHS policy is essential for developing a stable and productive work environment, promotes healthier labour relations, appropriate working conditions, equity in the workplace and improved skills. Improved working conditions are necessary to ensure higher labour productivity, better quality work, healthier labour relations and compliance with quality standards.

Objective of the occupational health and safety policy in a country in general and for Gapco in particular is to reduce the number of work-related accidents and diseases in company. This requires the adoption and implementation of a culture of prevention by government, employers and employees. The effective prevention of work-related accidents and ill-health will have enormous social and economic benefits. These include improvements in productivity and competitiveness and the quality of life of the working population. The effective management of many safety hazards will contribute to improved levels of public safety in general and employee’s safety in particular. The effective control at source in workplaces of hazardous substances will improve levels of public health and minimize environmental pollution.

The other objective of the policy is to provide equitable compensation benefits to those who are injured in work-related accidents or who contract occupational diseases. These compensation benefits include medical aid, financial compensation
and access to rehabilitation services. The compensation system, in particular the contributions paid by employers, must be sensitive to an employer’s OHS performance so as to act as an incentive for improved performance. When all these objectives are taken into consideration the company will have a tremendous move towards having the effective occupational health and safety policy.

In concluding the findings discussion it is imperative to show the nature of the response in comparison to the objectives of this research. The main objectives was to capture how effective is the policy of OHS in OMC’s and to internment this there was a need to look at the awareness, system, structures and implementation of OHS activities in these OMC’s. It was observed that these companies and the governing authority have been lagging behind in OHS although current there is a slight move towards implementation and monitoring to assure OHS adherence.
CHAPTER SIX

SUMMARY, CONCLUSION AND IMPLICATION

6.0 Introduction
This chapter presents the summary of research findings conclusion and recommendations. Therefore this chapter will comprise three sections, first is summary of the findings in comparison to the objective of the research, the concluding remarks and recommendation for GTL on OHS and for further studies.

6.1 Summary and Recommendations
The study explores the effectiveness of occupational health and safety in OMC’s with the case study of GTL. The study was concerned with the general information on OHS policy in OMC’s at one part and the effectiveness of the systems and procedures for OHS at GTL on the other part.

The objectives of the study were mainly to observe and analyze the occupational health and safety awareness among GTL employees and Management and to look at the extent of its application and at what extent are the objectives of instituting occupational health and safety policies and practices effective. Data were gathered through interview, questionnaire and examination / observation of the situation and events as well as review of documents.

Major discoveries of the findings were although the GTL as one of the major OMC’s operating in Tanzania, with a huge risk of OHS hazards in its operations and that has a policy, systems and other instruments of OHS, the employers and employee awareness on these issues is very low. They are operating like a risk free environment while in reality the company is on the high risks which need extra efforts, attention and precautions on OHS.
Although GTL has an OHS policy, the extent of its application can be seen in very few scenarios at GTL. There are weak or non-enforcement tools to make sure the OHS policy is applicable and adhered to by all. Therefore one may find out that the extent of application though is written for all concerned parties, part most of the company operations are done without the consideration of OHS risks and hazards. During the interview and discussion, it was observed that for OMC’s with the depot or tank farm there should be no placement or storage of petrol tanks trucks but at GTL the transit trucks are stored even for two to three nights.

The effectiveness of OHS policy has been looked upon through different criteria such as the presence of the policy, its application to all structures of the company, the rules and procedures made to support the application of the policy and the extent of its adherence. This was also done through interview and observation and review of documents and the findings were that the policy though is present, made according to national policy on OHS but the support from the GTL management and as well as other OMC’s to assure these policies are effective are observed to be null.

6.2 Conclusion and Implication

As economic theorist predicted that workers will tend to demand additional wages, to compensate them for workplace safety and health risks and at the same time employers will respond by reducing such risks until it is less expensive to pay workers additional compensation than it is to invest in additional health or safety precautions. In this manner, labor markets should produce the abatement of some safety and health hazards, and workers should be compensated for the risks that remain. “A lack of corporate commitment to health and safety will result in OHS remaining a marginalized and insufficiently funded workplace activity”.

There is a huge need by the government and its authorities as well as employers, both private and public ones to help in implementing effective occupational health and safety systems. This can help to prevent accidents, incidents, injuries, and work-related ill health. The approach may include; develop an OHS policy and related programs, setting of consultation mechanism with employees, establish a training
strategy, establish a hazard identification and workplace assessment process develop and implement risk control, promote, maintain and improve these strategies. There is also a need of the monitoring authorities to be empowered enough in terms of resources, both physical and human so that they can perform their duties as per their requirements as we have noted that both OSHA, NEMC, MoHSW and TBS have been encountered with lots of challenges including in area of the policy that govern them and resources.

In the system theory it is also advised that corporate, industries, authorizes and government should have more efforts to establish a system or combination of structures and systems to ensure the practicing of occupational Health and safety and assure the adherence to it. Specific program elements include hazard identification, risk assessment and control, information and recordkeeping, and training. The presence of systems and structures and the mechanism for follow up will definitely led to an effective OHS policy in GTL and to other OMC’s and organization that operate within the country. Therefore this will ensure the public on the effective governance and risks free work environment. Prevention is always better than cure and therefore, proactive attitude and character is needed than the reactive which normally is a response to an incidence or situation.

Related studies should be done to other sectors, other institutions and companies and focus on other OHS issues rather than effectiveness of the policy.

“A Safe and Healthy Workplace is a Wealthy place to work”
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www.tanzaniaports.com/reports
APPENDICES

Appendix 1. Guide to interviews

Company: ........................................................................................................................................
Position: ........................................................................................................................................
Gender: ................................................................. Age:........................................ Education
Level: ........................................................................................................................................
Duration within this company: ........................................................................................................

1. Worksite policy on safe and healthful working condition.
   (i) Documentation:
       (a) Are there any written policy on health and safety of workers?
       (b) Are health and safety issues of employees’ part of the organization core values?
   (ii) Interviews:
       Are all employees aware of the existence of the health and safety policy within the company?
       Are they aware of the policy content?
       Do they see the policy being beneficial to them and to the company?
       Do they know how easier to access that policy?
   (iii) Examination:
       Are there any injuries that have occurred? What were the root causes?
       Was there a way to reduce the health or safety risk before it occurred?
       Do you think the level of understanding of the health and safety policy for all employees is enough to deal with those issues?

2. Goals and objectives for workers safety and health
   (i) Documentation:
       Are there written goals for employee safety and health programs and policy?
       How often are these goals updated?
Are these goals observable in employees work manuals/job descriptions?

(ii) Interviews:
Do employees at all cadres have a clear idea of the general objectives and goals of the occupational health and safety policy?
Do all employees understand the current goal of the health and safety policy?

(iii) Examination:
The current condition of the place
The hazards that have occurred

3. Visible Top Management leadership

(i) Documentation
Are there any written programs which involve the top management in health and safety issues?
Does Management provide time for employees to approach them and discuss health and safety issues of their concern?
Are there systems to reward best safety suggestions and practices on specified intervals?

(ii) Interviews:
Can a normal employee describe how management officials are involved in health and safety issues as policy, systems, procedures and programs formulation and updating?
Do management officials follow the health and safety policy, procedures and rules as part of their work practices?

(iii) Examination:
Does what is happening to a normal employee when happen not to follow proper health and safety rules and procedure as stipulated by the policy also happen to management official when not adhering to?
4. Employees participation
   (i) Documentation
   Are there written programs that provide for employee participation in decision affecting their health and safety at work place?

   Are there documentation of different activities such as: Employee Inspection reports, Employee Health and safety Committee Meetings, minutes for joint employee management meeting on health and safety issues.

   Are there any documentation of management response to employee health and safety activities?

   Are there any written guarantees of employee protection and security from harassment resulting from involvement in health and safety issues?

   (ii) Interviews
   As employee, are you aware of the ways you can participate in the decisions affecting employees’ health and safety at work place.
   As employee are you proud of any achievement at work on health and safety programs?
   As employee, do you feel you have management support on health and safety programs and activities?

   (iii) What sorts of activities do employee participate fully to ensure themselves adherence to health and safety policy?

5. Assessment of responsibility and accountability
   (i) Documentation
   Are responsibilities written out so that they can clearly and easily be understood?
Do performance evaluation policy and process relate to health and safety issues and policy?
Are there evidence for employees held accountable for the issues relating to health and safety?

(ii) Interviews
Do employees understand their own responsibilities and those of others towards health and safety?
Do those who violate policy held accountable?

(iii) Examination
Are hazards caused because no one was assigned with the responsibilities to control and prevent them?
Do hazards reoccur because no one was held accountable?

6. Resources and adequate authority.
(i) Documentation
What is the inventory on health and safety of workers?

(ii) Interviews:
Do employees have adequate authority and resources over safety issues?
Do employees complain about management awareness on health and safety issues?

(iii) Examination
Do hazards go unrecognized because greater expertise is needed to recognize them?
Appendix 2: Management / Supervisor Questionnaire

Please tick (√) the appropriate answer or fill in the gap

Company: ……………………………………………………………………………………………

Position: ……………………………………………………………………………………………

Gender: …………………Age: …………………Education Level: ……………………………

Duration within this company: …………………………………………………………………

1. Have you attended the Health and safety seminar conducted by your company or any other organization?
   (i.) Yes (    )
   (ii.) No (    )

2. Does the Gapco allocate enough funds for Health and Safety procedures?
   (i.) Yes (    )
   (ii.) No (    )

3. Do you as management act on time on issues pertaining health and safety?
   (i.) Yes (    )
   (ii.) No (    )

4. What challenges do you face in implementing the OHS policy as a company?
   (i.) Yes (    )
   (ii.) No (    )

5. What have you done to solve problems on health or safety risks?
   (i.) …………………………………………………………………………………………………
   (ii.) ………………………………………………………………………………………………
   (iii.) ……………………………………………………………………………………………
6. What recommendation would you propose to be included in National OHS policy for easier implementation of the policy?

(i) …………………………………………………………………………………

(ii) …………………………………………………………………………………

These information are confidential and will only be used for research purposes
Appendix 3: Research Questions

Company:..........................................................................................................
Position:..........................................................................................................
Gender:.................. Age:.................. Education Level: ..................
Duration within this company: .................................................................

1. To what extent are the management and staff of GAPCO (T) Limited aware of the occupational health and safety standards?
2. To what extent is management and staff know and recognize the importance of occupational health and safety?
3. What are the impacts of occupational health and safety policy to the operational and administrative divisions of GAPCO (T) Limited?
4. What are the objectives of having occupational health and safety principles and standards in oil marketing industry?
5. What instruments have been developed and adopted by GAPCO (T) Limited to govern health and safety of workers?
6. What is the extent of adherence of occupation health and safety procedures by employees in oil marketing industry?
7. How is the application of health and safety rules differ within the Oil Companies?
8. What are the challenges in implementing occupational health and safety policies within the work place?