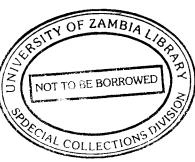
THE SAFETY OF THE MINEWORKERS IN ZAMBIA:

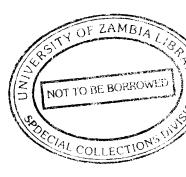
HOW EFFECTIVE ARE THE LAWS?



BY

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I recommend that the obligatory Essay prepared under my supervision by Chabala Christopher.

Entitled

THE SAFETY OF THE MINEWORKERS IN ZAMBIA: HOW EFFETIVE ARE THE LAWS?

Be accepted for examination. I have checked it carefully and I am satisfied that it fulfils the requirements relating to the format as laid down in the regulations governing Obligatory Essays.

13/01/06

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THE SAFETY OF THE MINEWORKERS IN ZAMBIA:	HOW	EFFECTIVE A	ARE
THE LAWS?			

 \mathbf{BY}

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OBLIGATORY ESSAY

Submitted in partial fulfilment of the requirements for the award of the degree of Bachelor of Laws (LL.B).

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DEDICATION

To my two children Changwe 'boy' and Changwe 'girl', whose patience and endurance I greatly appreciate.

ACKNOWLEDGEMENTS

My Special appreciation and thanks to my dear elder brother Dr. Evans David Chabala, without whose encouragement and support, I would not have managed to pull through to the end of the course. I am very grateful for both the material and financial resources that he provided.

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TABLE OF CASES

- 1. Wilson and Clyde Coal Company V. English (1938) AC 57
- 2. Stephen Mutale (As Administrator of the Estate of the late Perry Mutale V Mopani Copper Mines Plc Appeal No. 66 of 2003.
- 3. Konkola Copper Mines and Zambia State Insurance Corporation V John Mubanga Kapaya (As Administrator of the Estate of the late Geoffrey Chibale) and 8 others administrators SCZ No. 26 of 2004, Appeal No. 95 of 2003.
- 4. Betty Kalunga (suing as Administrator of the estate of the late Emmanuel Bwalya V Konkola Copper Mines Plc SCZ No. 5 of 2004, Appeal No. 147/2002.
- 5. Zambia State Insurance Corporation Ltd. V Rainford Kalaba and Zambia consolidated Copper Mines SCZ No. 2 of 2005, Appeal No. 146 of 2001.

TABLE OF STATUTES

- 1. The Mines and Minerals Act Chapter 213 of the Laws of Zambia
- 2. The Employment Act, Chapter 268 of the Laws of Zambia.
- 3. The Mining Regulations of 1974.
- 4. The Explosives Regulations of 1974
- 5. The Explosives Act, Chapter 115 of the Laws of Zambia as amended by Act No. 14 of the 1995.

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CHAPTER ONE

1.1 BACKGROUND

Recently there have been several press reports about accidents occurring in the mining premises. On 2nd March 2005 The Daily Mail¹ reported that "Konkola Copper Mines Miner killed in accident." It was reported that the Vice President for Human Resource and Corporate Affairs Mr. Passmore Hamukoma could not immediately establish the cause of the accident. "Another Tragedy - Chambishi explosion kills 51 workers" was headline in one of the daily Tabloid. It was reported in that article that an unexplained huge explosion rocked Bgrimm Explosives Zambia Limited in Chambishi yesterday morning instantly killing 51 workers most of whose bodies were blown to pieces. In that article the Minister of Mines Mr. Kaunda Lembalemba attributed the explosion to the company's failure to follow the Zambia Consolidated Copper Mines Limited (ZCCM) safety guidelines. Mines Minister's sentiments suggest negligence on the part of the mining houses. According to the Minister, Bgrimm seems not to have been observing the safety regulations provided in the Explosives Act chapter 115 of 1995 as amended by Act No. 14 of 1995. He compared the safety standards observed by the ZCCM then and the standards observed by Bgrimm. The statement seems to suggest that the new mine owners are not adequately addressing the issues of safety of the mineworkers.

¹. Volume. 9 Number. 15

². The Post, Thursday 21/04/05 No. 3108

Another report was carried in the Times of Zambia³ of "2 miners killed in Mopani Mine accident". The article reported that the 2 miners died after the rear door to the cage in which they were descending ripped off while the cage was in motion. It reported in the same article that the Government has blamed the Mopani Copper Mines Plc (MCM) for the accident citing negligence on the part of the employer. "Mwape blasts Mopani Mines chiefs"4 was another headline. In that article The Vice President blasted the MCM management for negligence which has resulted in high death toll at its mines in Kitwe and The Governments' position at this time was that mine owners were not Mufulira. sufficiently devoting their duty of care to the safety of the mineworkers. An academician, Dean of the School of Mines at the University of Zambia, a former deputy Minster in the Ministry of Mines, blamed the post-privatisation mine accidents on incompetent staff and continued use of outdated open-pit and under ground mine operations. He started that Government should compel the new mine owners to use qualified staff and modernise their operations to ensure the safety of the miners. In that article he suggested that the new mine owners are using unqualified staff and old mining ways, thus, risking the safety of the miners. He seemed to suggest that engaging cheap labour at the expense of safety seems to be disastrous in the post-privatisation era. In that article he further attributed the accidents to poor implementation of the employment policy. He states that after privatisation the new mine owners are coming with their own staff who are not qualified and not fit for the jobs. The article brings out a condition that is very cardinal for the mine. The law requires

³. Thursday, May 19, 2005 No. 13251

⁴. Sunday Mail of 22nd May 2005 Volume 11, Number. 21

⁵. Sunday Times of Zambia No. 11,513 dated 22/05/05 article entitled "Causes of mine accidents cited"

that the miner must be fit for the job. In establishing fitness a lot of examination is carried out ranging from physical to medical.

At the same time the mineworker has a responsibility to ensure his safety and that of the place he is operating in. Tim Henderson MCM Chief Operating Officer noted that the fatalities that his firm had experienced this year were as a result of total negligence and disobedience by officers charged with responsibility to carry out certain works.⁶ He supports his position by stating that as MCM they had handed over a Zambian Mine Captain to the Mines Safety Department for disobeying rules. He stated that before that the culprit was fined for a similar offence.

The article solely blames the workers for negligence and attributes that to the cause of accidents. It stated that the mineworker sometimes just neglects to follow regulations and end up posing a great risk to the safety.

In ensuring the safety of the mineworker, Government through the Ministry of Mines and Minerals Development, Mines Safety Department has a supervisory and advisory role. The competence and capacity of this department is very cardinal to the operations of the mines. In light of the recent accidents, the Vice President admitted that Government was also to blame because of the shortage of manpower in the Mines Safety Department to inspect and ensure rules are followed by the mining houses.⁷

^{6.} The Post No. 3122 Thursday May 5, 2005 Article entitled "Government admits blame for recent fatalities".

^{7.} Ibid

1.2 THE LAW RELATING TO THE SAFETY OF THE MINEWORKER

Mining, underground or open pit, is one of the most dangerous activity that posses a great risk to human life. The safety of the mineworker is of paramount importance and attracts both local and international concern. In this regard, the International Labour Organisation (ILO) has passed a number of resolutions in various conventions that seek to enhance the safety of the mineworker.

In Zambia the mining activities are regulated by the Mines and Minerals Act, Chapter 213 of the laws of Zambia, that incorporate the mining regulations of 1974 and the Explosives Act, Chapter 115 of the laws of Zambia, as amended by the Explosives Act number 14 of 1995 equally incorporating the explosives regulations of 1974.

Of the several conventions relating to the safety and health of the mineworker, Zambia has ratified only two namely:

The Medical Examination of Young Person (Underground worker) convention number 124 of 1965 and the Safety and Health in Mines convention number 176 of 1995.

Zambia has domesticated the Medical Examination of Young Persons (underground work) Convention number 124 of 1965 in chapter 216, schedule (section 2) of the laws of Zambia.

This chapter provides for any person below the age of 18 years to be subject to periodical medical examination when engaged in any mine or related activities until attaining the age of 21 years.

The Safety and Health in Mines Convention⁸ in its introduction states that:

"It is desirable to prevent fatalities, injuries or ill health

⁸ Number 176 1995, International Labour Organisation

affecting workers and that it is imperative to provide information, training and genuine consultation on matters relating to safety and health measures concerning hazards and risk."

Article 5° requires a member of the International Labour Organisation who has ratified this convention to designate a competent authority to monitor and regulate the various aspects of safety and health in mines. It requires such member countries to domesticate such laws so as to strengthen the capacity of the competent authority. This convention requires such member countries to domesticate among others such laws and regulations as:-

- (a) the supervision of safety and health in mines
- (b) the inspection of mines by inspector of mines designated for the purpose by the competent authority
- (c) investigate fatal and serious accidents and provide procedure for reporting
- (d) compilation and publication of statistics on accidents, occupational disease and dangerous occurrences
- (e) power to suspend mining activities until condition giving rise to the fatality is connected
- (f) ensure the establishment of effective procedures to ensure implementation of worker's rights.

In Zambia the competent authority is the Ministry of Mines and Minerals Development through the Mines Safety Department. At the moment it performs the duties outlined in (a)

⁹ Ibid

through to (d) above. But note that Statistics relating to occupational diseases are compiled by the Occupational Health Board.

The duties specified in (e) and (f) are not granted to the competent authority in Zambia.

CHAPTER 2

For the researcher to determine the effectiveness of the law relating to the safety of the mineworkers, it is important to establish what the roles of the mining houses, the mineworker and the Mines Safety Department are in this respect. This chapter will, therefore, briefly discuss some of the identified functions of the three players named above.

In Zambia the general relationship between the employer and employee is regulated by the Employment Act Chapter 268 of the laws of Zambia. Generally the Act implores the employer to provide safe and clean drinking water.¹⁰ The employer is also urged to provide a safe working environment generally. In the same vein the Mines and Mineral Development Act Chapter 213 grants powers to the Head of the Mines Safety Department, the Director of Mines Safety, to issue instructions, to mining rights holders, to protect the environment.11 The Mines and Minerals Development Act imposes an unspecified penalty for disregarding such directions.¹²

The Director of Mines Safety is appointed in accordance with subsection (2) of section 83 of the Mines and Minerals Development Act which provides:

"There shall be a Director of Mines Safety, who shall be a Public Officer and who shall have and may exercise and perform the powers and functions

Section 42 of chapter 268 of the laws of ZambiaSection 77 (1)

¹² Section 77 (2)

conferred or imposed upon him by or under this Act or any other written law, and who shall have general responsibility for matters concerning the safety of prospecting, exploration and mining operations."

From the foregoing it is evident that the responsibility of ensuring safety in the mines, as far as the Government is concerned, is delegated to the Director so appointed under the Act. He shall enforce any law pertaining to the safety of the mines and the miners. The duty of the mining house and the mineworker is to obey the law relating to the safety of the mine and the mineworker.

2.1 EVALUATION OF THE EFFICACY OF THE MINING REGULATIONS

Much of the law relating to the safety of the mineworker, to be enforced is contained in the Mines and Minerals Act chapter 213 of the laws of Zambia, incorporating the Mining Regulations and the Explosives Act chapter 115 of the laws of Zambia as amended by Act No. 14 of 1995 and the accompanying Explosives Regulations. These regulations contain the principle guiding rules that control almost every aspect of mining. Where these regulations are insufficient, safety letter are issued to supplement. Safety letters will normally contain extra regulations from the Director of Mines Safety to the mining house to be observed in ensuring safety in the mines. Upon issuance of a safety letter, it attains the force of mining regulations and must be observed.

The mining regulations have placed responsibility of safety and health on all the players involved in mining as provided in mining regulations 403.13 This regulation seemingly is the most paramount as it seeks to place the safety and health responsibility on all concerned. Sub-regulation (c) of regulation 40314 provides that:

"No person shall omit to do any act which it is his duty to do in accordance with the provisions of these regulations."

In its literal sense this regulation places the responsibility of health and safety on not only the miner but also on the mining houses and the Mines Safety Department of the Ministry of Mines and Minerals Development. Sub-regulation (d) of regulation 40314 makes it mandatory for any person not to omit any act which endangers or is likely to endanger the safety or health of any person. There is no exception to the three parties involved in mining to omitting or indeed failing to carryout an activity related to health and safety. Failure to observe these very important regulations is not excusable. Sub-regulation (a) of regulation 403 provides as follows:

"No person shall fail to observe any lawful order given to him personally in accordance with these or for the proper observance of these regulations; or any order whatsoever given in the interest of safety or health."

Guide to the Mining Regulationsibid

¹⁴ ibid

The above regulation espouses clearly that there is no choice by the parties involved in the safety campaign but to observe the regulations at all times.

The mining regulations equally require the worker to be physically and medically fit. The regulation grant power to a mine official to cast an opinion as to the fitness of a miner in as far as ensuring safety and good health is concerned.¹⁵

The regulations also prohibit the consumption of intoxicating liquor within the mining premises unless with permission from the mine manager where possible.¹⁶ However, if the alcohol is in transit and not removed from the vehicle in which it is being transported, this regulation will not apply.¹⁷

A mineworker is not expected to sleep within the mine premises.¹⁸ Being alert is cardinal to ensuring safety. Orderly and cautious behaviour is another cardinal requirement. It is expected that every person working in the mine, either open pit or underground, is required to behave in an orderly manner.¹⁹

Another aspect that is very cardinal in ensuring safety and good health is the observance of safety notices. Where these have been provided, no one is expected to ignore, damage, deface or remove them except in cases of repair or for the interest of safety.²⁰

¹⁵ Mining Regulation 405(1)

¹⁶ Mining Regulation 405(2)

¹⁷ Ibid

¹⁸ Mining Regulation 406

¹⁹ Mining Regulation 407

²⁰ Mining Regulation 403(b)

These regulations also place the responsibility on the miner to check for any dangerous activity within the area of operation and remove such dangerous articles or report such occurrences to the supervisor immediately where the employee lacks knowledge on the occurance.²¹

In the same event the regulations have placed a person in authority, to whom a dangerous activity has been reported, to take such reasonable measures consistent with safety standards to confirm the risk and if so confirmed take such reasonable steps to rectify such danger or prevent access to such working place.

In order to maintain safety at any reasonable time, another important aspect required is skill. It is the duty of the mining house to engage skilled workmen. It cannot be doubted that skill acquired both formally, through tertiary institutions, and informally, through experience, is of great importance to the operations of the mines. Part II²² of the regulations requires a holder, of mining rights, to appoint a manager who shall be responsible for the control, supervision and direction of the mine at all times.²³ Such a manager shall hold a suitable qualification or has had adequate experience acceptable to the Chief Inspector.²⁴ The manager shall appoint persons to assist him in the carrying out of his duties in whole or part and such persons shall be suitably qualified or have had suitable

²¹ Mining Regulation 402

²² Guide to the mining Regulations

<sup>Mining Regulation 202 (1)
Mining Regulation 202 (3)</sup>

or adequate experience in the capacity to which they are appointed.²⁵ If such competent persons appointed by the manager in accordance with regulation 207 or regulation 204(3) are primarily concerned with rock drilling and blasting operations, such competent person shall be addressed as mine captain and shall be deemed to be competent if he has worked underground and has practical mining experience for four years or two years experience if he is a university graduate specializing in mining or has a diploma in mining from a school of mines recognized and approved by the Chief Inspector.26 If employed in open cast mining he must have three years practical mining experience. If he is a university graduate specializing in mining or holds a diploma holder in mining, 11/2 years working experience is sufficient to be classified competent as long as such qualification is from an institution recognized and approved by the Chief Inspector.²⁷ If the activities are anything else other than the ones specified above, two years practical experience is sufficient to be classified competent but reduced to one year if he is a graduate from a recognized and approved university specializing in that field or has a diploma in that field from a recognized institution. Both institutions in this case must be approved by the Chief Inspector.²⁸

In instances where there are more than 50 miners employed either underground or open pit, there must be a reasonable number of shift bosses employed to observe and enforce the provisions of the regulations.²⁹ These shift bosses shall be deemed to be competent, if employed underground, has two years practical mining experience except that this may be reduced to one year if he holds a degree in mining or holds a diploma in mining from an

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²⁵ Mining Regulation 207

²⁶ Ming Regulation 208(a)

²⁷ Mining Regulation 208(b)

²⁸ Mining Regulation 208(2) (a)

²⁹ Mining Regulation 213(1)

institution recognized and approved by the Chief Inspector.³⁰ If a shift boss is employed in open pit mining, he must have one year practical experience to be considered competent.³¹ If he is a holder of a degree or diploma in mining, he must have six months practical experience provided the qualification was obtained from an institution recognized and

Supervision is very cardinal to mining operations and as far as ensuring the safety of the mine and the mineworker is concerned.

Competent electrical engineers and electricians to work in the mines are appointed in accordance with mining regulation 209. Mining Regulation 210 provides for appointment of competent mechanical engineers and subordinate engineers.

All these competent persons are by regulation suppose to hold a valid first aid certificate issued by an institution recognized and approved by the Chief Inspector.

Detailed above is a brief except highlighting how a competent person must be appointed. The researcher has noted that the regulations have provided for the appointment of almost all persons considered to be competent to work in the mine.

approved by the Chief Inspector.³²

Mining Regulation 213(2)(a)(ii)
 Mining Regulation 213(2)(b)(ii)

The regulations place the responsibility of employing and deploying competent persons to various sections of the mine, to assist the manager, on the employer. This is besides ensuring that the workplace is safe for mining operations.

The appointment of a competent manager has its own problems if the person appointed is from a foreign country. This may be so because it is very difficult to a track performance record of a person coming from outside Zambia. If the basis of the appointment on which the Chief Inspector relies, is a curriculum vitae, then that posses a great risk and challenge to the mining industry.³³ In this regard there is a danger that the manager employed could be incompetent. This point is supported by the observation made by the Dean of the School of Mines of the University of Zambia in the preceding chapter that the new mine owners are coming with unskilled and inexperienced staff who are failing to work according to the set safety standards. He stated that as a result the number of accidents has increased.

These regulations are issued to all employees, who in the opinion of the manager, are required to have specific knowledge by virtue of their employment. The employee in this case is required to sign a receipt as confirmation of issue of these regulations to such employee. It is the view of this researcher that this requirement though made to provide proof that a mineworker was provided with the regulations, the incident seeks to absolve the employer from blame where there is such evidence of the accident being a result of the negligence of the employee.

³³ Interview with Chief Inspector of Mines

In ensuring high standards of safety and health in the mines, the functions of the Government performed through the Ministry of Mines and Minerals Development, Mines Safety Department, are enforced by inspectors. The powers of the inspectors are provided for in part III³⁴. Sub-regulation (a) of regulation 30 grants powers to the inspector to conduct search examination, enquiry or test as he may consider necessary to determine whether or not the provisions of these regulations are being observed. The inspector must himself that these regulations are being observed. The inspector may enter, inspect and examine any mine and any part thereof at all times by day and by night, but in such manner that the working of the mine shall not be unnecessarily impeded by the exercise of this power and he may issue any direction deemed necessary in the interest of safety or health.³⁵ In attaching so much importance to the safety and health of the mineworker, the Government has granted power to an inspector to enter the mine at any time and conduct an This aspect removes the practice by mine owners to only adhere to the inspection. regulations when the inspectors are carrying out physical inspections. The inspector is also empowered to examine into and make enquiries respecting the state and condition of any mine or part thereof, and of all matters and things pertaining thereto, in so far as they relate to the safety or health of persons employed there in.36

This author notes with concern that there is no provision in the mining regulations that compel the mining houses to buy protective clothing for the mineworker.

An activity which is synonymous with mining is explosives manufacturing. Explosives, in mining, are used to break the rocks that contain the ore that is being mined. The activities

³⁴ (Guide to the Mining Regulations

^{35 301(}c)

³⁶ Mining regulation 301(d)

relating to the manufacture of explosives are regulated by Chapter 115 of the laws of Zambia as amended by Act No. 14 of 1995 and the explosives regulations.

Part XVI of the explosive regulations provides for health, safety and welfare. Regulation 1603^{43} provides for the safe storage of all inflammables used in the manufacture of explosives. R egulation 1604^{37} prevents welding near an explosives factory without any precaution being made.

As opposed to the mining regulations, the explosives regulations compels the employer to provide protective clothing and suitable equipment for everyone working in the explosives factory where the nature of the operations require such persons to be protected.³⁸ Regulation 288³⁹ makes it mandatory for everyone working in such areas to wear such clothing at all times.

From the above we can deduce the role of the Ministry of Mines and Minerals Development through the Mines Safety Department as that of supervisory and advisory in nature.

Just like the mining regulations, the explosives regulations do not provide for penalties or sanctions for not observing these and related regulations on the employers part. This aspect makes the mine owners relax because there is no harm in them claiming it was their

³⁸ Regulation 287, Ibid

⁴³ Guide to the Explosives Act and the Explosives Regulations

³⁷ Ibid

³⁹ Guide to the Explosives Act and the Explosives Regulations

employee who was negligent. Even in instances where the employee is acting on behalf of management, the company takes no part of the responsibility should calamity strike. This is a weakness in the law.

CHAPTER THREE

The regulations relating to mines safety covers very vast areas of operations. As earlier alluded to, nearly every aspect is regulated by the law. This chapter will analyse the identified weakness and strengths in the law relating to the mines safety. In doing so, the author has considered decided cases, looked at a sample of mine accident reports obtained from the Mines Safety Department in Kitwe, and views expressed in the questionnaires that were distributed to the mining houses and the former.

3.1 ANALYSIS OF DECIDED CASES

It is well settled at common law that the employer is responsible for the safety of the worker. The English case of <u>Wilson and Clylde Coal Company Limited V English</u>⁴⁰ illustrated the duty of the employer in ensuring the safety of the worker.

The House of Lords observed:

"...the whole authority consistently recognises a duty which rests on the employer and which is personal to the employer to take reasonable care for the safety of his workers,... whether or not the employer takes any share in the conduct of the operations. The obligation is three fold: The provision of the competent staff of men, adequate materials, and proper and effective supervision."

The Supreme Court agreed with the above position of the law argued by the appellants in **Stephen Mutale (As Administrator of the Estate of the late Percy Mutale) (Appellant)**V Mopani Copper Mines PLC (Respondent)⁴¹. In that case the court also agreed with the learned authors of Clerk and Lindsell on Torts in describing the degree of care the

⁴¹ Appeal No. 66 of 2003

⁴⁰ (1938) AC 57

employer owes to the employee in creating a safe working environment. Lord Macmillan said:

"Those who engage in operations inherently dangerous must take precautions which are not required of persons engaged in the ordinary life. The more serious the consequences, the greater the degree of care which has to be shown."42

This author reiterates the position that mining is a dangerous activity and as such the employer is required by law to ensure that the place of work is safe for the worker. The employer is, by the nature of activities, required to take extra care in ensuring the safety of the mine itself and the mineworker.

In the Stephen Mutale case cited above, there was no fine or penalty imposed on the employer. The weakness in the law is evidenced by the lack of will on the past of the government through the Ministry of Mines and Minerals Development, to domesticate into law the resolutions of Convention C176 of 1995 Concerning Safety and Health in mines. Zambia rectified this convention on 4th January 1999.

Article 6⁴³ places an explicit responsibility on the employer to assess the risk and deal with it in the following order of priority:

- eliminate the risk (a)
- control the risk at source (b)
- minimize the risk by means that include the design of safe work system and (c)
- in so far as the risk remains, provide for the use of personal protective equipment (d)

 ⁴² p 341
 ⁴³ Convention C176 of 1995, International Labour Organisation

Whereas the mining regulation 404⁴⁴ places the responsibility to report any risk on the employee, article 6 places such responsibility solely on the employer to eliminate such risk at source. This may imply that before an employee is sent to a working area, the employer may be required to carryout all such tests/examinations to eliminate any risk. This may require the employer to use certain equipment to detect risks before a risk can physically be seen.

While mining regulation 402^{45} places the responsibility of observing, reporting and rectifying a risk, where possible, on individuals, article 7^{46} places such responsibility on the employer. Regulation 402 is couched in the following terms:

"Any person who observes, knows or hears of any danger or anything which is dangerous or likely to be or become dangerous or cause danger of any kind to any person or anything shall either remove, remedy or repair such danger or thing immediately if he has the knowledge and the means to do so or, if he is unable to do so because he lacks either such knowledge or such means, he shall forthwith report the matter to a person in authority who shall take immediate steps to rectify the matter."

Now such sharing of responsibility makes the employer not responsible enough because he/she can escape liability by blaming the occurrence of an accident on the employee or natural causes. This arguments was raised by the appellants in the case of **Konkola**Copper Mines (1st Appellant) and Zambia State Insurance Corporation Ltd (2nd

Appellant) V John Mubanga Kapaya (As Administrator of the Estate of the late

Geoffrey Chibale) and 8 other administrators⁴⁷ in which the employers wanted to escape responsibility.

⁴⁴ Guide to Mining Regulations

⁴⁵ Guide to mining Regulations

⁴⁶ Convention C 176 of 1995

⁴⁷ SCZ No. 26 of 2004, Appeal No. 95 of 2003

This case brings out the inadequacies in the mining regulations. It was not contended that a representative of the employer actually witnessed the waterlogged ground. It was also not in dispute that the widening opening in the ground was reported and no immediate action was taken to avoid the accident. Instead, a few minutes before the accident, the employer's representative ordered that the equipment be moved first. This in itself is negligence of the worst kind as agreed by their Lordships.

Mining regulations do not impose a penalty on the body corporate that would act as a deterrent to such negligence. But instead, if a person acting in management capacity, on behalf of the body corporate, is negligent, it is that individual who is held negligent and fined. The law relating to this aspect is found in section 107^{48} . It provides as follows:

"If a body corporate is convicted of an offence under this Act, every person who (a) a Director of, or is otherwise concerned in the management of, the body corporate; and knowingly authorised or permitted the act or omission constituting the offence; Shall be deemed to have committed the same offence; and may be proceeded against and punished accordingly."

The above provision of the law excludes the employers or the body corporate from penal action. It is silent on the aspect of the body corporate which has negligently failed to invest in the safety of the worker. This position does not, certainly, inculcate a sense of responsibility in the body corporate and ultimately the shareholders. This is a weakness in the law.

If the law provided for a heavy penalty to be levied on a body corporate for failure to secure a working place, it would a ctually act as a deterrent. If the body corporate was aware of the heavy fine, the negligence exhibited in the above case (of Konkola Copper Mines PLC (1st Appellant) and Zambia State Insurance Corporation Ltd (2nd Appellant) V John Mubanga Kapaya (As Administrator of the Estate of the late

⁴⁸ Chapter 213 of the laws of Zambia

Geoffrey Chibale) and 8 other Administrators)⁴⁹ would have been avoided. It is surprising in that case that the official acting on behalf of management and ultimately the body corporate ordered the removal of equipment first instead of safeguarding human life first.

In the case of <u>Betty Kalunga</u> (suing as Administrator of the estate of the late <u>Emmanuel Bwalya</u> (Appellant) and Konkola Copper Mines PLC (Respondent) in which the latter wanted to escape liability using the defence of volenti non-fit injuria, the Supreme Court observed:

"The courts have been conscious of the fact that the protection intended to be given to employees by the employers must not be emasculated by the ... window of appointment although there is height authority for the view that both causation and blameworthiness must be taken into account. At the end of the day courts must send a signal to the employers to ensure safe working conditions to employees. We make these remarks against the background that there is no hard and task rule which has been laid down."

These weaknesses in the law arise from failure by the legislature to domesticate into law the convention such as C176. Article 7 of this convention is very explicit on the duties or responsibilities of the employer. The employer is required to take steps to maintain the stability of the ground in areas to which persons have access in the context of their work.⁵¹ In the case cited above there were no steps taken by the employer to safeguard the ground.

The employer must ensure the monitoring, assessment and regular inspection of the working environment to identity the various hazards to which the workers may be exposed and to assess their levels of exposure.⁵² Though this article does not specify how regular the inspection is supposed to be carried out, the employer must inspect the working

⁴⁹ opcit

⁵⁰ SCZ Number 5 of 2004, Appeal Number 147/2002

⁵¹ Article 7 (c) Convention C 176, International Labour Organization

⁵² Article 7 (e), ibid

premises and detect in advance what is hazardous. In the John Mubanga Kapaya case cited above, there was no indication that the employer carried out the inspection of the working premises to detect the hazard. Instead it was the employee who noticed the crack in the ground and reported the same to the supervisor. The law should have provided for the penalty for not regularly inspecting the ground which must be borne by the body corporate in the capacity as employers.

Lack of regular inspection caused the fatal accident which resulted into litigation in Zambia State Insurance Corporation Ltd V Rainford Kaluba (1st Respondent) and Zambia Consolidated Copper Mines Ltd (2nd Respondent)⁵³. In that case, according to the witness, management did not enforce the code of safe working environment. It was stated that there was a huge pile of waste across the rail that caused the accident that resulted in the fatality. This kind of negligence brings this author to the earlier point alluded to in this research paper that the absence of a fine on the body corporate makes the employer relax.

In respect of zones susceptible to particular hazards, the employer must, draw up and implement an operating plan and procedure to ensure a safe system of work and the protection of the workers.⁵⁴ This is particularly applicable to explosives manufacturing plants. The nature of the chemicals handled is such that if the chemical proportions are not as specified, an explosion can occur at anytime. In such working areas it is only prudent to put up measures that would ensure the safety of the worker in case of an explosion. The employer must take measures and precautions appropriate to the nature of the mine operations to prevent, detect and combat the start and spread of fires and explosions.⁵⁵

 ⁵³ SCZ No. 2005, Appeal No. 146 of 2001
 54 Article 7 (g), opcit

3.2 ANALYSIS OF MINE ACCIDENT REPORTS

Mine accidents are classified into three categories namely; fatal, serious and lost time. A fatal accident is one in which a human life is lost.⁵⁶ A serious accident is one in which a mine worker is severely injured, incapacitating him probably for the rest of his life and may result into a medical discharge.⁵⁷ A lost time accident is usually a minor one in which a victim is usually given sick leave to recover from the injury before reporting back for work.⁵⁸ All the above accidents are reportable to the Director of the Mines Safety Department of the Ministry of Mines and Minerals Development. It must be noted that there are some accidents which are not reportable. For instance, such accidents that result into skin laceration which requires dressing only and the worker reports back for work.

If a fatal or serious accident is reported, the Director of Mines Safety assigns an Inspector from the Department to investigate the cause of the accident almost immediately. The Inspector together with officials from other government departments such as Zambia Police, Office of the President, Mine workers union, the mining house concerned and relatives to the victim will form an investigating team. After investigating the cause of the accident, the Inspector writes a report to the Director of Mines Safety.

The report will normally contain events leading to the accident, an analysis of the accident itself, events after the accident and the possible breaches of the mining regulations. Below is an analysis of accident reports that were randomly selected from the Mines Safety Department in Kitwe.

On Wednesday, 14th November 2002, an accident occurred at Konkola Copper Mine in the underground mining department. The report written by the Inspector of Mines suggests that the driver of the Diesel Loader was negligent because he gave the Diesel Loader to someone incompetent to drive. After that incompetent driver noticed that he had caused an

⁵⁶ Interview with Senior Inspector of Mines

⁵⁷ Ibid

⁵⁸ Ibid

accident, he failed to secure the loader in a still position. These two events suggest gross negligence on the part of the authorised driver who was the victim in this fatal accident.

It was also established that the loader had defects that were not attended to. This accident resulted from multiple causes according to the Inspector. The following mining regulations were in breach:

"The manager shall ensure that no self-propelled trackless vehicle is permitted to move underground in any place unless adequate clearance is provided for the safety of such vehicle..."

The mine manager or supervisor should not have allowed a defective loader to be in operation in the first place, whether driven by a negligent driver or not on the part of the mining house. Because there is no law that provide for sanctions against the mining houses in such breaches, there was no fine levied for being negligent.

Equally there was negligence on the part of the employee (the deceased). Mining Regulation 1005 provides:

"There shall be no movement of persons on food whilst a vehicle is travelling therein."

Also in contravention was Mining Regulation 1019(f) which provides:

"No person shall negligently or wilfully drive or operate or cause to be driven any vehicle in such manner as to endanger the safety or health of any person."

Just the act of surrendering the loader to a person who is not competent is gross negligence. Later on, to walk on a road not designated for humans/mineworkers, compounds the

⁵⁹ Mining Regulation 1003 (1)

negligent acts of the driver. To be fair, the law should have penalised both, with severe punishment to the mining house for allowing an unfit loader to be in operation.

The accident of 9th January 2003, in which Mr. Wellington Mwape, the driver of the Diesel Loader died at Mopani Copper Mines, is purely out of the deceased's negligence. There was a hydraulic leakage on the loader which was not reported. This was contrary to regulation 402 cited above which provides:

"Any person who observes, knows or hears of any danger or anything which is dangerous or likely to be or become dangerous or cause danger of any kind to any person or anything shall..."

When the deceased left the loader while the engine was running was another negligent act contrary to mining regulation 1012 cited above which provides:

"The driver of any self-propelled vehicle shall not leave his vehicle unattended..."

It was noted in this report that the driver used the steering wheel lever as a handle for climbing into the driver's cabin. This act is prohibited and is contrary to safety rules given by the manufacturer of the loader, Sandvik Tamrock.

The acts by the deceased were contrary to sub-regulations (c) and (d) of mining regulation 403. And regulation 403(d) provides:

"No person shall omit to do any act the omission of which endangers or is likely to endanger the safety or health of any person."

Regulation 403 (c) provides:

"No person shall omit to do any act the omission of which endangers

or is likely to endanger the safety or health of any person."

Equally the shift boss was negligent in that he failed to remedy the hydraulic fuel leakage which was reported. This omission is an offence.⁶⁰ If the shift boss was acting as a management official, then management should have been held responsible and ultimately the mining house.

There was another fatal accident at Nchanga Open Pit of the Konkola Copper Mines on Saturday 5th March 2005 in which Mr. Abednego Singoyi, the operator of a truck, died.

It was alleged that the deceased did not obey the basic driving rule of observing a distance equivalent to three trucks between the trucks. He drove into a stationary truck as a result of not observing this rule. The deceased was said to be in breach of mining regulation 1019(1) which provides:

"No person shall negligently or wilfully drive or operate or cause to be driven or operated any vehicle in such a manner as to endanger the safety of the mine or the safety or health of any person."

What made the truck that was hit behind to be stationed in that position were the road-works that were being carried on. According to the report the works went on beyond sunset contrary to standard code of practice. The Superintendent in charge of roads did not communicate to the loaders and drivers that work would continue until after sunset.

Failure to communicate by the superintendent is an offence according to regulation 403(c) and 403 (d) cited above. If the superintendent was acting on behalf of management, then management and ultimately the mining house should be held responsible.

On Tuesday, 4th January 2005, another fatal accident occurred at central shaft of Mopani Copper Mines in which Mr. Fraywell Zimba, a Banksman and Mr. Makuyuya Mukumba,

⁶⁰ Mining Regulation 215(3)

both workmen died. An explosive detonated accidentally killing both. The Inspector of Mines stated in the report that the deceased could not secure themselves to any form of anchorage because these were not provided for and the skip man's belt did not have a safety lanyard.

It is long settled that the employer has a duty to ensure that the working environment is safe. The absence of any form of anchorage where there should have been a provision is a failure on the part of the employers.

In this report it was also observed that the Shift Bosses and Mine Captains rush to the surface even when there are problems to be solved underground. It is the duty of the two officials to ensure that the place where the workmen are operating from is safe. From the report it can be inferred that the Shift Boss and the Mine Captain did not ensure the safety of the workmen at the time of assigning the task. This is contrary to mining regulation 215(7) which states that:

"The person in charge after having made safe in accordance with sub-regulation (6) shall, during the time that any person is working under his charge, take all reasonable precautions for the safety of any person present in such working place, and such precautions as he may take shall continue for as long as he allows any person to remain in the working place or until he is relieved of responsibility by another person in charge."

Now such a responsibility placed on the Shift Boss and Mine Captain, who are mere employees, with no resources of their own may be difficult to execute. This is simply because the mining house may not be interested in investing, above a certain limit, in safety. It is also difficult in the sense that the person in charge has to strike a balance between the employers' production interest and the safety of the worker. In most cases the employers' interest outweigh the interest of the employees' safety. As a result the person in charge may not halt production because of the competing interests.

In such a case it is only fair that the employers take responsibility for such accidents that occur under such circumstances. The responsibility of the employers to ensure the safety of the workers, as far as explosives are concerned, is expressly provided for in Explosives Regulation 121 which states:

"The Manager or holder of any mine or works shall ensure that adequate precautions are taken, as far as reasonably practicable, to prevent, where electric detonators are used underground the accidental detonation of any explosives."

On 15th November 2004, a fatal accident occurred at Nkana Mine's Mindola North Portal section, of Mopani Copper Mines in which Mr. Alex Siame, a workman, lost his life.

According to the accident report, the cause of the accident was due to insufficient Camlock props in the section. It is expressly stated that management failed to provide sufficient Camlock props in the section. This condition prompted the deceased to look for the extra Camlock props from other sections. In the process the deceased ignored the standard procedure for removing them.

It is evident that there was negligence on the part of management by failing to provide sufficient Camlcok props in the section. This act in itself should be sufficient to hold management, and ultimately the employers, responsible for the accident. The act is a serious omission on the part of management which is contrary to mining regulations 403(c) and 403(d) quoted above. The act by management of ignoring the insufficiency is also contrary to mining regulations 402 which has also been quoted above. From the report it appears management was aware that there were insufficient Camlock props but ignored the situation. It must be noted here that some of these inactions are as a result of weaknesses in the law. There is no provision for penalising a body corporate that has abrogated the regulations. The absence of a deterrent makes these mining houses reluctant to observe the regulations that have a cost aspect to it.

It should be noted that the employers in this case were going to incur an expense in order to buy the required number of Camlock props.

The fatal accident of Sunday 28th March 2004, at Mopani Copper Mines, Mindola shaft in which Mr. Mapala lost his life is yet another negligent act by management. Management did not erect a concrete barrier to prevent workers from falling at the level the deceased fell from. In this report it was also noted that the chain barrier that was found on the accident scene was only put there after the accident. This was confirmed by witnesses.

The deliberate o mission by the management of Mopani C opper M ines is a very serious occurrence. As earlier alluded to in this research paper, lack of a deterrent is perpetuating the lack of investment in the safety of the worker and the mine operations. This is a clear case of negligence on the part of the employers. The inaction on the part of management was contrary to mining regulation 403 (d) cited above.

The fatal accident of Saturday 31st January 2004, at Konkola Copper Mines No. 3 shaft in which Mr. Harrison Mbugi, a Hadleman, lost his life was equally another negligent omission by the mining house.

From the report it was stated that the rock drilling machine was modified without the approval of the Chief Inspector of Mines. S econdly, the drilling operation should have been supervised by a skilled Shift Boss, which was not the case.

According to the report the code of practice for drilling was only put in place after the accident. This was the evidence adduced by two witnesses. Now this act by the mining house leaves much to be desired. This omission is contrary to mining regulations 403 (c) and 403 (d) cited above.

The failure by the mining house to appoint a shift boss is contrary to mining regulation 207 which states as follows:

"When the competent person appointed in terms of sub-regulation (3) of regulation 204 is the status of superintendent, such competent person may, if he has been specially so authorised in his letter of appointment, appoint in writing, one or more persons, who shall be suitably qualified or have had adequate and suitable experience in the capacity to which they are appointed, to assist him in the management of his portion of the mine, and every such person shall have the same responsibility under these regulations as the competent person who appointed him to the extent which shall be clearly defined in his letter of appointment; any such appointment shall not relieve the competent person making the appointment of his personal responsibility under the regulations."

The following mining regulations also provide guidance in the way a competent person is appointed. These are regulations 208 (1) (a) (ii), 213 (1) (2) (a) (ii) and 215(3) (ii) cited in chapter two. The use of a modified drilling machine is contrary to mining regulation 924 which states:

"Except with the written approval of the Chief Inspector and subject to such conditions as he may impose, no rock drilling, rock boring or portable rock-breaking machine which is not an approved machine shall be used."

From the mining regulations referred to in this accident, it is clear that the employer did not take the safety of the mine worker with the seriousness it deserves. To have been operating without supervision by a competent person is a serious omission.

Management equally ignored the safety letter number A43 of 30th April 1991, part 1 which states that:

"Every person in charge, whilst at work shall be under the personal supervision of a competent person who for the purpose of this safety letter, shall be referred to as a Section Boss."

The absence of a deterrent i.e. a heavy fine on the employers seems to be abetting this kind of attitude towards the safety of the mine worker.

The fatal accident of 8th January 2004 at an unnamed mine, in which Mr. Chipasa, a shaft timberman died, was as a result of gross negligence exhibited by the Shift Boss though the mining house cannot escape blame. There was a space in the 'orepass' through which water was leaking and posed a danger of a possible rock fall because of the soft wet ground. The report states that the Shift Boss, a Mr. a Malombola, physically checked 3140 feet level (area of operation) but left all the anomalies unrectified.

The Shift Boss was in breach of mining regulation 402 in that he failed to remedy the situation that he was shown in the orepass. In the event that the remedy was beyond his competency, he should have reported the anomaly to his immediate supervisor.

The mine manager is under an obligation to secure the working place by preventing it from flooding. The failure to secure the place was contrary to mining regulation 2115 which provides:

"The manager shall ensure that suitable precautions are taken to prevent or reduce to a minimum any danger to any part of any mine from flooding from any source whatsoever"

There was also a lapse on the part of the manager by failing to provide a stretcher for use in times of accidents. This omission is contrary to mining regulation 1203 (b) which provides:

"Where at any time there are fifty persons or less at work the manager shall ensure that such accommodation is provided with a stretcher, atleast two blankets, splints, drinking water and an adequate supply of dressing in the first aid treatment of all accidents, burns, or other injuries likely to occur."

However, the accident report does not disclose the reasons for not providing a stretcher and two blankets. This omission is contrary to mining regulation 403 (c) and (d) cited above.

From the accident report, it can be noted that there was a lapse in observing safety regulations both on the part of the employee and the employer.

On Wednesday 10th September 2003, a fatal accident occurred at Aakala Emerald mine in which Mr. Rodgers M'fubisha died. The accident occurred as a result of not observing laid down procedures as specified by the relevant mining regulations. There were no safety precautions that were taken prior to commencement of that days' work. That simply meant that the supervisor did not ensure that the conditions of the working place in which the workmen were operating were safe.

These omissions are contrary to mining regulations 403 (c), (d) and 402 cited above.

Whereas the omissions can be said to be negligent on the part of the supervisor, the author is left to wonder why the body corporate could not be held responsible for such an accident.

Lastly, the fatal accident of 21st July 2003, at Mopani Copper Mines, North shaft of Nkana mining site, in which Mr. J. Tabasha lost his life is considered. The deceased was assigned to drill holes in the ore using Jackhamnmers. It is a safety requirement that every time drilling is being done, the ventilation fun must be in operation to suck out the dust that is produced in the course of the exercise. The ventilation fun was not operational and so the dust obscured the visibility of the deceased. The noise from the drilling operation also

impaired his hearing. This meant that he could not hear any sound of approaching loaders. As a result of these conditions, the deceased was run over by a loader. The report states that Mr. Tabasha died as a result of the dangers which existed in his mining environment due to negligence on the tramming section officials and on the loader drivers.

In normal operations when the ventilation fun is not operational, no drilling should take place and loaders must be parked with engines turned off.

The acts or omissions that led to the accident are contrary to the following mining regulations:

911 states that:

"Every diesel unit shall be operated only in haulage ways or working places where mechanical ventilation is maintained by mechanical means."

912 (1) states that:

"In the event of failure of the mechanical means mentioned in regulation 911, the engine of each diesel unit in the haulage or working places affected by the failure shall be stopped forthwith."

and

912 (2) provides that:

"When a mechanical failure occurs as above no engine of any diesel unit shall be restarted until such time as the mechanical means have been restored to satisfactory working order."

In the accident report it was also alleged that the supervisor did not inspect the area of operation and make it safe contrary to mining regulation 215 (2) which provides:

"The person-in-charge shall be the first person to enter each working place assigned to him and the immediate approaches thereto and he shall examine and make safe or cause to make safe each such working place and the immediate approaches thereto permitting any work to take place, and shall ensure that the provisions of these regulations are observed by any person in such working place and the immediate approaches thereto whether such person is under his personal supervision or not"

3.3 EVALUATION OF QUESTIONNAIRES

Ascertaining the effectiveness of the laws entailed that the researcher obtains views from the players in the mines safety and the mineworkers. The mining houses and the Mines Safety Department of the Ministry of Mines and Minerals Development were targeted.

The responses from the selected targets were rather not encouraging. Out of a total number of fifty five (55) questionnaires distributed, only eight (8) were returned to the author and not all of them were completed to the authors' satisfaction. Below is a table showing the distribution of the questionnaires and the number responses.

<u>Organisation</u>	No. of questionnaires	Response
Mopani Copper Mines	10	1
Konkola Copper Mines	10	Nil
Luanshya Copper Mines	10	Nil
Bwana Mkubwa Copper Mine	10	3

Mines Safety Department	10	4
Mineworkers Union of Zambia	_5	<u>Nil</u>
Total	<u>55</u>	<u>8</u>

The reason for not getting a good response from Mopani Copper Mines was attributed to fear of victimization by management.⁶¹ The Group Head of Safety at Mopani Copper Mines also confirmed the fears of victimisation among the mineworkers and hence no response, except from him.⁶²

From the questionnaire the Group Head of Safety has been in the Health, Safety and Environment Department for 24 years. His duties are to direct and supervise the implementation of safety rules and regulations. Of all the regulations, he singled out mining regulation 402 as the most important as far as safety is concerned.

He attributes the causes of accidents to two factors namely: the human factor (unsafe acts) and mechanical factors (unsafe conditions). He attributes the cause of the recent mine accidents to

- Poor supervision (a)
- Failure to observe laid down safety procedures and (b)
- Lack of completeness in risk assessment for some critical tasks (c)

Poor supervision (a) and lack of completeness in risk assessment for some critical tasks (b) can be related to management functions. Failure to observe laid down safety procedures (b) can be related to both management and employees.

Poor supervision may arise from deployment of incompetent supervisions, contrary to mining regulation, lack of will to carryout duties by the supervisors and sometimes lack of

Interview with Corporate Manager
 Interview with Group Head of Safety

adequate safety facilities. Lack of completeness in risk assessment, for some critical tasks arise, because of lack of equipment or capacity to assess the risk before it is brought to physical notice. This entails the use of advanced equipment to detect i.e. soft grounds that many fall at any time. This may require a lot more of investment in safety which includes training of relevant members of staff.

The Group Head of Safety admits that there is a bit of financing in this area but lacks management drive. This may imply that there is lack of will on the part of management to spearhead the safety campaign in a bid to spend less on this venture and hence save cost.

This position may be adopted by an organisation where there are noticeable lacunas in the regulations that make the body corporate escape responsibility without a penalty.

Though, he notes that there is notable improvement in the risk assessment of critical jobs.

The Group Head of Safety stated that the Mines Safety Department is NOT efficient. The inspectors in the Department lack skill and capacity to carryout inspections and have no transport in most cases, among other inadequacies. He states that Government does not train the inspectors in safety programmes.

He states that Government should improve the supervisory skills of inspectors at the Mines Safety Department, develop procedures for critical tasks assessment and empower the Mines Safety Department to shut down unsafe operations.

He states that there is immediate need to revise the mining and explosives regulations.

The Group Head of Safety, through an interview, admits lack of political will on the part of Government to revise the safety regulations. He also admits that there is no action taken against the mine house for any irresponsible act that they commit that causes accidents.

Of the three questionnaires responded to at Bwana Mukubwa Mining Limited, the first respondent respond that the safety standards are same as those observed in the former ZCCM.

The respondent admits that he has never heard of any mining house that has been penalized for not observing safety regulations. He admits knowledge of the Mines Safety Department and pegs the efficiency rate of 60%. He states that accidents are caused by various human factors.

The second respondent attributes the cause of accidents to human error and defective equipment. He seems to be attributing the laxity in mining houses in investing in safety to the non-revision of safety regulations that have not been changed with time and advancement in technology. Hence there is a lacuna in the law which the mine owners take advantage of.

He disagrees with the first respondent on the standards of safety. He states that they are not the same. He states that the new mine owners, only, partially observe the safety standards.

He agrees with the first respondent that he has never heard of any action being taken against the new mine owners for not observing the mining regulations.

Just like the first respondent and the respondent from Mopani Copper Mines, he is aware of the Mines Safety Department but has not noticed any achievements.

He states that the current safety regulations are sufficient noticeably opposing the first respondent's views.

The third respondent, just like the respondent from Mopani Copper Mines, attributes the cause of accidents to unsafe acts. He attributes the recent accidents to the new mine owners not willing to compromise production at the expense of safety.

He states that in ZCCM time mine accidents were not as many as they occur now under the management of the new owners because the standards of safety were 'superb'.

Just like all other respondents, he is aware of the Mines Safety Department but differs with all of them when he states that the Department is 'efficient with reservation'.

The second group of respondents is from the Mines Safety Department, Kitwe.

The first respondent attributes the cause of accidents to disregard of safety procedures on the part of employees, supervisors and mine management. He states that the law is sufficient. He is the only one who is aware of a mine owner who was fined and detached from performing mining duties but reverted after obtaining an injunction. He states that the Mines Safety Department is efficient except for understaffing.

Though, this author attributes the penal action being referred to above to the employee as an individual and not the body corporate.

The second respondent is a Senior Inspector of Mines who been employed at the Mines Safety Department for 3 years only. Just like the first respondent, he attributes the cause of the accident to failure to observe the laid down safety procedures by both employees and management of mine owners. He emphasizes that some managements fail to enforce the safety regulations. He admits that the new mine owner are not observing the high safety standards that were being observed in the time of ZCCM and hence more mine accidents now. He states that in the time of ZCCM there was strict adherence to regulations on the parts of both management and employees. He implied that the mining regulations are not sufficient. He states that he is not aware of any mine owner who has been penalized for not observing the mining regulations.

The third respondent, an inspector of mines for 3 years, like the first and second respondents, attributes the cause of mine accidents to non-observance of mining regulations

by both management and employees. He states that management makes wrong decisions sometimes while in the case of an employee, it is mainly mistakes that cause accidents.

He supports the notion that the mining regulations are sufficient and that the Mines Safety Department is efficient to the extent of availability of resources.

The fourth respondent attributes the cause of accidents to negligence but does not attribute it to any party. He just states that some new mine owners do not observe the safety regulations while others do. He states that he is a ware of a mine owner who has been penalized for not observing the mining and environment regulations. But this researcher relates that penal fee to the breach of environment regulations and not the mining regulations.

CHAPTER FOUR

It has been noted from the previous chapters that the task of ensuring safety for the mineworker is threefold. It involves the Ministry of Mines and Minerals Development through the Department of Mines Safety, the mining houses and mineworker. Each of these has a specific task as far as safety of the mineworker is concerned.

Much as almost every aspect of mining is regulated by the law (mining regulations), this research has highlighted a number of weaknesses in the law and capacities of the parties involved that may have contributed to the increased number of accidents. This research has brought to the fore the incapacities of Government, through the Ministry of Mines and Minerals Development, Mines Safety Department, the mining houses and the worker. Relating to the capacities is the laxity in the law that has left, especially the employers (mining houses), go unpunished for negligent acts that they have committed. The law has equally not provided for penalising an Inspector of Mines or the Mines Safety Department for failing to carryout their duties.

One of the respondents from the Mines Safety Department attributed the laxity and lack of capacity to ineffective management. He states that the creation of a Safety Board that would have powers to hire and fire erring officers, would go a long way on resolving some of the problems.

For the mining houses, it is the law relating to the safety of the mineworker that is weak. In the absence of effective and stern deterrents, the situation is likely to deteriorate even further.

Amongst all these findings is the requirement of the employee to work for the master (employer) to produce the copper or cobalt. As the law stands now, the mineworker must ensure the safety of the environment he is operating from while serving the interest of the master. While there is a requirement to ensure safety of the worker on the part of the

mining house, the employer wants increased production at all costs. As earlier alluded to, the two competing interests are difficult harmonize. The employee (mineworker) is put in fear of losing employment should be refuse to carryout an instruction due to safety reasons.

The Government, in a hurry to find development partners in the field of mining, might not be willing to enact laws that may be seen to scare away potential investors. It would rather leave the law relating to the mineworkers safety unchanged so as not to impose what it may perceive to be a burden on the prospective partner. Penalising the new owner, whether in form of a monetary fine or otherwise, may be seen as a hindrance to new capital investors.

As alluded to in this research paper, the skill and competence of the expartriate staff is an area of concern that needs to be addressed. It could be true that some of the accidents are caused by the incompetence of such expartriate employees.

4.1 CONCLUSION

From the foregoing, the following has been drawn:

- 1. Lack of political will on the part of Government to formulate the National Safety Policy and create a Safety Board.
- 2. The mining regulations are devoid of
 - (a) the provision to fine a body corporate, instead it is a lways the individual who is targeted even if he is acting on behalf of management.
 - (b) the power to the inspector of mines to suspend risky operations.
 - (c) a penalty for a mine inspector who has failed to perform his duties.
- 3. Because of the weakness in the law, the new mine owners are not compelled to invest in safety because of the absence of a penalty on the body corporate.

4. Because of Government position on the requirement to find development partners in the mining industry, the law is left not to be seen to prevent to attract foreign investment.

Though some of these weakness/omissions were for the protection of the Government then, as the beneficial owner, from spending colossal amounts of money on fines and compensation, the new mineworkers have taken advantage of that position.

It is also a finding of fact that Government has failed to domesticate into national laws the Safety and Health in Mines Convention number C176 of 1995 which was ratified on 4th January 1999.

4.2 RECOMMENDATIONS

Arising from the research and findings, the following are recommended.

Government, through the Ministry of Mines and Mineral Development, Mines Safety Department should endeavour to:

- (a) formulate the National Safety Policy that will give safety guidelines to all investors in the mining industry. This will enable all stake holders to express expert knowledge on safety. The national safety policy will compel the mining houses to adopt a uniform safety policy and not the way things are now.
- (b) constitute the Safety Board. As earlier alluded to, the Mines Safety Department lacks capacity to carryout the necessary inspections. The safety board will be an autonomous body charged with the responsibility of ensuring safety. The board should be able to hire and fire its members of staff as it deems fit without political interference. This will improve the level of efficiency.

- (c) revise the mining and explosives regulations to reflect that the duty to ensure safety of the worker is solely the employers if they are engaged in dangerous activities i.e. mining. This will give no room to the employer to pass the blame on to the mineworker where an accident has occurred. The revision should also reflect the current level of technological advancement.
- (c) give power to the Inspector of Mines to suspend risky mining operations. This will prevent accidents because any activity that is noted to be a danger to the mineworker will be corrected almost immediately it is noticed.
- (d) amend the law to provide for the heavy penalisation of the body corporate (mining house) that wilfully neglect to invest in safety of the worker. This would act as a deterrent.
- (e) build the capacity of the inspections both in skill and equipment. This will enable the inspectors make timely decisions as far as ensuring the safety of the mineworker is concerned.
- (f) Government must domesticate into national laws the recommendations of the Safety and Health in mines convention number C176 of 1995. Then the law will provide explicitly for the duties of both the employer and the mineworker. This will stop the tendency by mining houses of passing the blame on to the mineworker whenever an accident occurs.

Appendix A

THE UNIVERSITY OF ZAMBIA

SCHOOL OF LAW

QUESTIONNAIRE

This questionnaire is designed for research and academic purposes only. Whatever information will be given herein will be treated in the strictest confidence.

ORGANISATION		
A.	PERSONAL INFORMATION	
1.	Name	
2.	Age	
3.	Sex	
4.	PositionDuration of service	
5.	Department or section	
6.	What are your duties?	
B.	SAFETY	
7.	Who is responsible for safety?	
8.	What are your duties in ensuring safety?	
9.	What are the safety regulations that you follow or observe?	

10.	What are the most important regulations?
11.	Do you observe them?
12.	What causes mine accidents?
13.	Why have there been so many mine accidents recently?
14.	In time of ZCCM, were there so many mine accidents?
15.	If YES, state what the causes could have been
16.	If NO, state what standards of safety were observed/followed
17.	Are the standards of safety the same?
18.	Are the new mine owners observing the standards?
19.	In the case of irresponsibility by the new mine owners, are you aware of any action that is taken against the company? (not the individual worker)

20.	What section of the regulations or law is involved?
21.	Is the section cited above sufficient to act as a deterrent?
C.	MINES SAFETY DEPARTMENT (MSD)
22.	Are you aware of the Mines Safety Department?
23.	What is the role of the MSD in ensuring safety?
24.	Are they efficient in their duties?
25.	If YES, state the level of efficiency
26.	If NO, state what is lacking
27.	Are the safety regulations sufficient to prevent these accidents?
28.	If NO, state what must be done to improve safety

D.	OPINION
29.	What is your comment on the mine accidents?
30.	Is the law relating to mines safety sufficient?