

**IMPLEMENTATION AND ENFORCEMENT OF SAFETY STANDARDS IN THE
MINING INDUSTRY IN SOUTH AFRICA: CHALLENGES AND PROSPECTS**

By

SHIBAMBU OPHREY NTSUXEKO

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DECLARATION BY STUDENT

I, Shibambu Ophrey Ntsuxeko, declare that the mini-dissertation, Implementation and enforcement of safety standards in the mining industry in South Africa: challenges and prospects. Hereby submitted to the University of Limpopo for the Masters of Laws degree has not previously been submitted by me for a degree at this or any other university, that this is my own work in design and execution, and that all the sources that I have used or referred to have been designated, acknowledged and fully cited.

Shibambu O.N(Mr)

.....

Date

DEDICATION

I dedicate this mini-dissertation to my Mother, Modjadji Annah Mabasa and my spiritual mom: Tsakani Ennie Chauke. They have raised, cherished and loved me during bad and good times. They inspired me and supported me in accomplishing my goals. Thank you for magnificent support.

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Mankayi v AngloGold Ashanti Ltd (CCT 40/10) [2011] ZACC 3; 2011 (5) BCLR 453 (CC); 2011 (3) SA 237 (CC) ; [2011] 6 BLLR 527 (CC) ; (2011) 32 ILJ 545 (CC) (3 March 2011)

In Ferreira v Levin (CCT5/95) [1995] ZACC 13; 1996 (1) SA 984 (CC); 1996 (1) BCLR 1 (6 December 1995).

INTERNATIONAL INSTRUMENTS

- **Chilean instruments: Policy, Departments and Legislations:**

Chilean Dirección del Trabajo y Previsión Social (DT)

Chile's Superintendent of the Environment (SMA)

Environmental Protection Agency (EPA)

- **Australian instruments: Policy, Departments and Legislations**

Australian Coal Mine Workers' Health Scheme

Australian Education Act 2013

Australian Mine Safety and Inspection Act 1994

Coal Mining Safety and Health Act, 1999

Higher Education Funding Act, 1988

Mines Safety and Inspection Act 1994

Mines Safety and Inspection Regulations 1995

Mining Occupational Health and Safety (OHS)

ABBREVIATIONS

ABET	: Adult Basic Education and Training
AMCU	: Association of Mineworkers and Construction Union
ANC	: African National Congress
ASPASA	: Aggregate and Sand Producers Association of Southern Africa
AZAPO	: Azanian People's Organisation
BBBEE	: Broad Based Black Economic Empowerment
BBSEE	: Broad Based Socio-Economic Empowerment
BEE	: Black Economic Empowerment
BPD	: Broad Partnership Division
CIM	: Chief Inspector of Mines
DEI	: Department of Trade and Industry
DMR	: Department of Mineral Resources
HDSA's	: Historically Disadvantaged South Africans
HET	: Higher Education AND Training
MHSC	: Mine Health and Safety Council
MPRDA	: Minerals Petroleum Resources and Development Act
MQA	: Mining Qualification Authority
MRS	: Mines Rescue Services
NP	: National Party
NSDS	: National Skills Development Strategy
NUM	: National Union of Mineworkers
OHS	: Mining Occupational Health and Safety
PSA	: Precious Stones Act
SACP	: South African Communist Party
SAQA	: South African Qualifications Authority
SDA	: Skills Development Act
SETA	: Skills Education Training Authority

SETA : Sector Education Training Authority
SSP : Sector Skills Plan
TAC : Treatment Action Campaign

ABSTRACT

In South Africa, during the then apartheid era, the mining sector had records of extremely high fatalities, injuries and occupational diseases that led to massive death of miners predominantly the Blacks. In the post-apartheid era, numerous laws have been enacted to address the problem. One of the laws that was introduced is the Mine Health and Safety Act 29 of 1996 which provides for radical enforcement of health and safety standards using various mechanisms, such as monitoring systems and inspections, investigations, and employers' and employees' duties to identify hazards and eliminate, control and minimise the risk to health and safety of mine workers. This study examines the extent, efficient and efficacy of the implementation and enforcements of these laws and points out the challenges being encountered and prospects made thus far. The study used Australia and Chile for comparative study and showcased how the government and the laws they have passed are being effectively used to contain and curtail health hazards, accidents and fatalities in the mining environment.

KEY WORDS: Health and Safety standards, Implementation, enforcement, safety measures, transformation laws, mining industry.

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CHAPTER ONE: INTRODUCTION AND BACKGROUND

1. INTRODUCTION

Apartheid laws did not provide for full protection of health and safety measures in the mining industry in South Africa, because government reserved skilled work for whites only and they were allowed to enjoy full protection contrary to black unskilled workers who did not have any protection at all.¹ Mine owners assigned hard jobs to black miners to save labour costs.² During the apartheid era black people did not possess necessary education and skills in the mining sector, hence were not able to develop to the extent of being skilled workers.³ Whites were remunerated with better wage for performing the same work as black Africans.⁴ Unskilled white workers were given preference over unskilled blacks because the white workers were provided with necessary training and skills,⁵ while their black counterparts were denied. Apartheid government entrenched and practised segregation in mining industry⁶ along skill lines.⁷

The beginning of 1990's was considered as political turnover in the history of South Africa, because apartheid laws were eradicated and there were unbanning of political organisations such as African National Congress (ANC), South African Communist Party (SACP), Azanian People's Organisation (AZAPO) and so on.⁸

¹Allan, J, Apartheid South Africa: An Insider's Overview of the Origin and Effects of Separate Development, Kindle Edition (2005), iUniverse, Inc.also see more at: <http://www.sahistory.org.za/article/apartheid-legislation-1850s-1970s#sthash.gkboxDXu3.dpuf> retrieved 24 March 2016.

²*Ibid* footnote 1 above.

³Moraka, NV, Board transformation and EE scorecard target attainment: progress made and barriers faced with transformation by JSE listed companies in the South African Mining Industry, 2013.

⁴Apartheid Museum, Understanding Apartheid (2006) Cape Town: Oxford University Press.

⁵The History of Separate Development in South Africa: South African History Online on 20-Mar-2011 - See more at: <http://www.sahistory.org.za/article/apartheid-legislation-1850s-1970s#sthash.gkboxDXu3.dpuf> retrieved 24 March 2016.

⁶*Ibid* footnote 5 above.

⁷Judith K. Hellerstein and Neumark D: Workplace segregation in the United States: race, ethnicity, and skill, 2008.

⁸Giliomee, H & Mbenga, Nuwe Geskiedenis van Suid-Afrika. Kaapstad(2007) (n 1) at 403-409.

Prior to 1994, the mining sector was known to report extremely high fatalities, injuries and occupational diseases.⁹ For example, the sector reported, “on average more than 800 fatalities and 18 000 injuries respectively per annum over two decades”¹⁰ before 1994.

In 1994, a democratic Constitution was introduced together with other policies on safety standards in the mining industry which seek to address and find solution to accidents and fatalities in the sector; hence the numbers of fatalities have gradually decreased.¹¹ For example, “there has been an 86% reduction on all mine fatalities from 615 in 1993 to 84 during 2014”.¹² The impact of these laws in the reduction of fatalities was that they compel mining enterprises to put in place steady health and safety plan, including compliance, enforcement, improvement, implementation, as well as preserving or reviewing the health and safety strategies and procedures when managing health and safety of persons at mines.¹³

More importantly, these laws have also played a critical role in ensuring that mining companies that do not comply with the ethos and standard of promoting health and safety measures in the mining sector are sanctioned either criminally or civilly liable.¹⁴ The criminal sanctions include but not limited to prosecution and imprisonment imposed on the perpetrator by the competent courts, and with civil procedure fines are being imposed as sanctions.

The gradual decrease of fatalities is because the new mining regulatory statutes and policies are being enforced by the government, as well as mining companies. Compliance is reinforced by issuing instructions that will require the mining companies

⁹Ramotlhodi N, South African Government, Department of Mineral Resources, 2014 Health and Safety statistics announcement. 30 January 2015, also available at <http://www.gov.za/statement-minister-mineral-resources-advocate-ngoako-ramatlhodi-announcement-2014-health-and-safety> retrieved 24 March 2016.

¹⁰Ramotlhodi N, South African Government, Department of Mineral Resources, 2014 Health and Safety statistics announcement. 30 January 2015, also available at <http://www.gov.za/statement-minister-mineral-resources-advocate-ngoako-ramatlhodi-announcement-2014-health-and-safety> retrieved 24 March 2016.

¹¹*Ibid* footnote 10 above.

¹²*Ibid* footnote 10 above.

¹³Zungu LI, Guidelines for the South African Small-Scale Mining to Comply with the Mine Health and Safety Act, Draft Guidelines (2016) University of South Africa, also available at http://www.claybrick.org/sites/default/files/downloads/Guidelines_SSMs_MHSC_061_14-15_Draft_Final_Report_Jan2016.pdf retrieved July 2017.

¹⁴Section 91 of the Health and Safety Act, 1996.

to develop or improve a mining environment within a specific period of time; or issue an order for suspension or revocation of a certificate of competency that might have been issued.¹⁵ Infraction is always met with the imposition of criminal penalties, as well as the imposition of severe fines for not complying with laws put in place.¹⁶

In 1996, Mine Health and Safety Act 29 of 1996 (MHSA), was introduced to safeguard health and safety of persons working in the mines. The Act was also intended to provide for radical enforcement of health and safety mechanisms, such as monitoring systems and inspections, investigations, and employers' and employees' obligations to ascertain risks and eradicate, manage and reduce the threat to “health and safety” of mine workers.¹⁷

Despite the introduction of these regulatory interventions some of the mining companies are still being found wanting because of poor implementation of safety standards as happened in the recent accident in Goldfields Lily Mine in Barberton in South African Mpumalanga (the mine that deals with gold), where mine workers remain trapped underground in the container in which they were working.¹⁸ This showed that mine-related accidents continue to be a major problem in the mining environment.¹⁹

The MHSA was enacted to safeguard the health and safety of people working in the mining industry, but the mining industry is still struggling to ensure full compliance with most of the regulatory provisions and interventions aimed at protecting mines and workers. One of the reasons for non-compliance is that some of the mining companies lack sufficient financial resources to implement the provisions in the Act. Some also

¹⁵Richard GJ, Mine health and safety in South Africa, 2016, available at <http://altminingindaba.co.za/wp-content/uploads/2016/02/Mine-Health-and-Safety-Training-Session-Georgina-Jephson.pdf> retrieved 21 July 2017.

¹⁶*Ibid* footnote 15 above.

¹⁷Mine Health and Safety Act No. 29 of 1996: The Act has been updated up to and including the regulations published in Government Gazette No. 29458 dated 15 December 2006.

¹⁸Tandwa L, News24, Lily Mine efforts still a rescue operation – Amcu (2016) Also see <http://www.news24.com/SouthAfrica/News/lily-mine-efforts-still-a-rescue-operation-amcu-2016021>

¹⁹Ramotlhodi N, South African Government, Department of Mineral Resources, 2014 Health and Safety statistics announcement. 30 January 2015, also available at <http://www.gov.za/statement-minister-mineral-resources-advocate-ngoako-ramatlhodi-announcement-2014-health-and-safety> retrieved 21 July 2017.

lack appropriate knowledge with regard to training necessities, as well as appointing competent personnel to occupy important positions.²⁰

The setback is that the mining industry is reluctant to provide necessary skills and training to mine workers as they are obliged to do so by the mining charter.²¹ This capacity gap is negatively impacting health and safety management in the mining environment. Collective efforts between the employers, employees and government are required to transform implementation and enforcement of health and safety standards in the mining industry. Consequently, there is need to improve on and strengthen good practices and compliance in order to ensure sustainable safety standards in the mining sector.²²

2. RESEARCH PROBLEM

2.1 Sources of the research problem

Poor safety standards in the mining environment are the major causes of accidents and fatalities.²³ Current democratic dispensation has enacted numerous laws to enable safe working mining environment. Despite these laws and policies aimed at promoting protection of health and safety standards of the employees and persons who are at mines, the implementation and enforcement remain weak and poor, hence mine-related accidents and diseases continue to thrive in the mining industry.²⁴ The poor enforcement of health and safety mechanisms to curb mining accidents remains a huge challenge to mine workers and persons at mines.²⁵ In order to stop the human

²⁰Mine Health and Safety Council Annual Report 2013/2014.

²¹Moraka, NV. Board transformation and EE scorecard target attainment: progress made and barriers faced with transformation by JSE listed companies in the South African Mining Industry, 2013, available at <http://uir.unisa.ac.za/handle/10500/13831> retrieved 21 July 2017.

²²Collective efforts means that the employers, employees and the Government collectively, are obliged to work together to achieve a full protection of mine workers: The employer must always ensure a safe working environment; on the other hand, employees must always adhere to the instructions of the employer with regard to safety. The Department of Mineral Resources acting through the Minister of the said Department must ensure that the provisions set out by statutes are complied with.

²³List of accidents and disasters by death toll available at https://en.wikipedia.org/wiki/List_of_accidents_and_disasters_by_death_toll retrieved at 26 March 2016.

²⁴Murray J, Davies T and Rees D, *Occupational lung disease in the South African mining industry: Research and policy implementation*, Journal of Public Health Policy, 2011.

²⁵Zuma J, Address delivered to the National Union of Mineworkers (NUM) available at <http://www.miningsafety.co.za/dynamiccontent/61/Mining-Safety-in-South-Africa> retrieved on 26 March 2016.

carnage, there is need to strengthen implementation and enforcement of safety standards in the mines so as to protect workers and the people who work in the mines.

3. BACKGROUND TO THE PROBLEM

Black miners are regarded as inferior in the colonial and apartheid era.²⁶ Race was seen as the dividing line,²⁷ the apartheid government introduced many pieces of legislation based on racial classification, such as Population Registration Act No. 30 of 1950.²⁸ This Act divided the South African population into three key racial groups: Whites, Natives (Blacks), Indians and Coloureds.²⁹ Yet the mine-owners are not only white; but also capitalists.³⁰ And the cheap labour' was not only black but was also a growing, potentially powerful working class.³¹

During 1964 to 1967, the mass of pre-Union and post-Union legislation were largely amalgamated into four main Acts applied all over the Republic of South Africa to vindicate and unify the misuse of the state's mineral resources.³² That is "Precious Stones Act 73 of 1964, (hereafter referred to as the PSA), the Mining Rights Act 20 of 1967 (hereafter referred to as the MRA),³³ the Mining Titles Registration Act 16 of 1967 and the Atomic Energy Act 90 of 1967". Apartheid laws as a comprehensive legislative project were truly discriminatory to black people.³⁴

²⁶Gold and workers the story of racism 1886 – 1924 available at <http://v1.sahistory.org.za/pages/library-resources/onlinebooks/Luli/Gold-and-workers/part%203/race.htm> retrieved 24 March 2016: 18:14 .

²⁷*Ibid* (note 26 above).

²⁸Race and ethnicity in South Africa, South African History Online on 23-Mar-2015 - See more at: <http://www.sahistory.org.za/article/race-and-ethnicity-south-africa#sthash.rOhyiWAd.dpuf> accessed 03 May 2016 at 14:37.

²⁹ *Ibid* footnote 28 above.

³⁰Mining Safety in South Africa available at <http://www.miningsafety.co.za/dynamiccontent/61/Mining-Safety-in-South-Africa> retrieved 26 March 2016.

³¹*Ibid* footnote no: 30 above.

³²Franklin BLS and Kaplan M, The mining and mineral laws, 1982, Dale MO, "A historical and comparative study", 1979. It is important to note that these four Acts were the major Acts and not the only Acts dealing with minerals and mining. For a full discussion of the remaining 26 Acts see Franklin BLS and Kaplan M, The mining and mineral laws, 1982.

³³This Act amended and consolidated the law in relation to the prospecting for and mining and disposal of

Precious metals, base minerals and natural oils.

³⁴*Ibid* footnote no 33 above.

Through the promulgation of apartheid laws in 1948, racial discrimination was established and entrenched.³⁵ Race laws affected every single aspect of social life, as well as the prohibition of marriage between non-whites and whites, the sanctioning of white-only jobs, and the parting of public space.³⁶ Apartheid laws were grounded on inequity, negation and segregation in all aspects of South African life-socially, politically and economically.³⁷ They “grossly violated human rights in many ways, and on different levels, as time passed the system of human rights violations mutated into different forms, while retaining its essentially discriminatory and violent features”.³⁸ Apartheid laws thoroughly deprived “black South Africans first generation rights like the franchise, civil equality, freedom of movement and freedom of association”.³⁹ “The social order reinforced by apartheid also ran roughshod over second generation rights, like the right to education, health care, security and social welfare.”⁴⁰

The need for negotiating solution to South Africa’s political problems became evident in light of black mass action, labour discontent, and increasing international disapproval of the policies comprising apartheid deeds.⁴¹ Beholding the Mines and Works Act 27 of 1956, criminal dispensation had been the principle means by which the observance to the standards of health and safety was ensured.⁴² However, under

³⁵Subiros P, *Apartheid: The South African Mirror Paperback*, 2007, ACTAR, Centre de Cultura Contemporània de Barcelona.

³⁶*Ibid* footnote 35 above.

³⁷Malley O: Heart of Hope, The National Party, Apartheid and the Anatomy of Repression in South Africa, 1948-1994: This resource is hosted by the Nelson Mandela Centre of Memory, but was compiled and authored by Padraig O’Malley. It is the product of almost two decades of research and includes analyses, chronologies, historical documents, and interviews from the apartheid and post-apartheid eras, also available at <https://www.nelsonmandela.org/omalley/index.php/site/q/03lv02167/04lv02264/05lv02303/06lv02304/07lv02305/08lv02310.htm> retrieved 21 July 2017.

³⁸Malley O: Heart of Hope, The National Party, Apartheid and the Anatomy of Repression in South Africa, 1948-1994, also available at <https://www.nelsonmandela.org/omalley/index.php/site/q/03lv02167/04lv02264/05lv02303/06lv02304/07lv02305/08lv02310.htm> retrieved 2017.

³⁹African National Congress: Statement to the Truth and Reconciliation Commission, 1996, also available at <http://www.anc.org.za/docs/reps/1996/trcall.html> retrieved at 24 March 2016.

⁴⁰*Ibid* footnote 39 above.

⁴¹Byrnes RM (ed) *South Africa: A country Study 3 ed* (1997) Washington DC, Federal Research Division, library of the Congress at 65ff, Glifomee & Mbenga (n 1) at 350ff, Leys R ‘South Africa gold mining in 1974: The Gold of migrant Labour’ 1975(74) African Affairs 196 at 200.

⁴²Kaplan M and Dale MO A guide to Minerals Act 1991, 1992, also see http://dspace.nwu.ac.za/bitstream/handle/10394/7021/No_64%282012%29_6_Van_der_Schyff.pdf?sequence=1 retrieved 21 July 2017.

Minerals Act⁴³ criminal sanction was appended by the probable suspension or termination of endorsement to mine.⁴⁴ This would entail that a non-compliance with health and safety measures be prosecuted and punishment be imposed accordingly for non-compliance, as well as deterring the perpetrator from causing perpetual harm to the lives of miners.

South African politics has chiefly been branded by a single-dominant political party structure since 1994 that, in contrasting to National Party (NP) of old, brought about both moral and performance decay.⁴⁵ The country has consequently laboured under an artificial period of post-liberation politics in which the expressive recovery from the consequences of apartheid were extra vital than the performance in government of the post-apartheid elected officials.⁴⁶ The situation then was different from what is being experienced nowadays, “just as the old NP administration held its stronghold on white minority power through fear and autocratic control, a similar but flipside artificial force of loyalty and gratitude to the liberation movement trumped holding the ANC to account”.⁴⁷

Amid end of 1990 and the beginning of 1994, an intermediate constitutional indulgence had to be conveyed, before the founding election of 27 April 1994 would occur.⁴⁸ “The mining policy became much more focused on privatisation and deregulation of minerals of mineral resources.”⁴⁹ A number of reasons were advanced for the improvement in mineral policy that ultimately gave rise to the promulgation of Minerals Act, 1991.⁵⁰ The purpose of this Act was largely based on the improvement of the past injustices.⁵¹

⁴³Minerals Act 20 of 1967.

⁴⁴Kaplan M and Dale MO A guide to Minerals Act 1991(1992) (n 18) at 13.

⁴⁵Silke D , South Africa begins turbulent new political transition’, 2014, available <http://www.fin24.com/Economy/SA-begins-turbulent-new-political-transition-20141120> retrieved 21 March 2017.

⁴⁶*Ibid* footnote 45 above.

⁴⁷*Ibid* footnote 45 above.

⁴⁸Giliomee, H & Mbenga, B Nuwe Geskiedenis van Suid-Afrika. Kaapstad, 2007.

⁴⁹Badenhorst PJ, Mosert H & Dendy M ‘Minerals Petroleum’ .In Jourbert (ed) LAWSA Vol 18.2 ed (2007) Durban, LexisNexis at para 1; see also Badenhorst PJ ‘The reversioning of state-held entitlements to exploit minerals in South Africa: privatisation or deregulation 1991 Tydskrif vir die Suid-Afrikaanse Reg 113 at 113ff.

⁵⁰Minerals Act 50 of 1991.

⁵¹Minerals Act 50 of 1991 came into force on January 1992. It repealed the 1960s generation of mining and mineral statutes almost in its entirety. The statutes creating the infrastructure for establishing title

This indicates that health and safety standards were taken into consideration from the inception of the democratic dispensation. However, mining companies continue to fail to adhere to occupational health and safety standards. And as such people continue to lose their lives while others sustained irreparable damages to their bodies even under the current democratic dispensation. The reasons for these are poor or ineffective implementation and enforcement of health and safety mechanisms intended to eradicate mine accidents and diseases.

4. STATEMENT OF RESEARCH PROBLEM

Despite the enactment of health and safety laws and policies, mine-related accidents and diseases continue to thrive on a daily basis in the mining environment. The reason for this is poor compliance with safety measures. There is a need to ensure critical implementation of safety standards in the mining environment and failure to, consequences should follow. While implementation is desirable and must be used effectively, failure or lack thereof should pave the way for enforcement whereby the companies are compelled to act, failure which there would also be consequences.

5. DEFINITION OF CONCEPTS

5.1 Mining industry

- (a) Mining industry refers to “the complex of branches of production engaged in the exploration for deposits of minerals and in the extraction from the earth and primary processing (concentration) of these minerals. The mining industry is divided into the following main groups: (1) the fuel industry, including petroleum, natural gas, coal, shale, and peat extraction; (2) the ore mining industry, including the extraction of ores of iron, manganese, nonferrous metals (including noble metal and rare earths), and radioactive elements”.⁵²

security over mining rights, the Mining Titles Registration Act 16 of 1967 was retained to a limited extent, for purposes of the transitional measures in chapter VII of Minerals Act, which pertained to Statutory rights registered or registrable in Mining Titles Office.

⁵²Mining Industry available at Mining Industry retrieved 27 March 2016, also see Budnitskii, I. M. Gornaya promyshlennost' v sisteme narodnogo khoziaistva SSSR. Moscow, 1965, Energeticheskie resursy SSSR. Vol. 1: Toplivno-energeticheskie resursy. Moscow, 1968, and Rachkovskii, S. Ia. Ekonomika gornorudnoi promyshlennosti. Moscow, 1965.

- (b) Furthermore, mining industry refers to “the non-metallic mineral and local building materials industry, including extraction of mable, granite, asbestos, chalk, dolomite, quartzite, kaolin, clay, gypsm, marl, feldspar, and lassuim salt; nepheline, potassium nitrate, iron pyrite, boricore, and phosphate; and the hydromineral industry, including utilization of subterranean mineral waters as well as water for supply and other purposes.”⁵³

5.2 Health and safety

- (a) Health dictionary meaning, ‘health’ refers to a state of being free from illness or injury.⁵⁴ According to the World Health Organization (WHO) health is defined in terms of its constitution (1948) as “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity”.⁵⁵⁶
- (b) Safety dictionary meaning: ‘safety’ refers to the state of being safe from or unlikely to cause danger, risk, or injury.⁵⁷ It is further defined as “preventing injury and illness to employees and volunteers in the workplace. Therefore, it's about protecting the non-profit's most valuable asset: its workers”.⁵⁸

5.3 Transformation

- (a) Transformation is well-defined as rectifying of the historical or existing biased discrimination agonized by Historically Disadvantaged Individuals in South Africa.⁵⁹It is further referred to mean as the “transformation of the administration

⁵³*Ibid* footnote 52 above.

⁵⁴Hornby AS, Oxford Advanced Learners Dictionary of Current English, Eighth ed, Oxford University Press.

⁵⁵World Health Organization. WHO definition of Health, Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19–22 June 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948. In Grad, Frank P. (2002). "The Preamble of the Constitution of the World Health Organization". Bulletin of the World Health Organization 80 (12): 982.

⁵⁶World Health Organization. Constitution of the World Health Organization – Basic Documents, Forty-fifth edition, Supplement, 2006.

⁵⁷Hornby AS, Oxford Advanced Learners Dictionary of Current English, Eighth ed, Oxford University Press.

⁵⁸Fact Sheet, workplace safety toolkit accessed at <https://nonprofitrisk.org/tools/workplace-safety/nonprofit/c1/wkplcsafety.htm> retrieved 14 June 2016.

⁵⁹ Masongwa A, Transformation in the mining industry – a practical approach, 2012, available at <http://simanggroup.com/wp-content/uploads/2015/05/Transformation-in-the-Mining-Industry.pdf> retrieved 21 July 2017.

of justice, which includes the restructuring of state legal services, as part of the broader societal transformation agenda aimed at fundamentally changing institutions of governance and society with a view to aligning all aspects of South African life with South Africa's post-apartheid Constitution".⁶⁰

(b) Transformation is also elaborated as a "change in appearance or character especially one for the better or complete change in something".⁶¹

5.4 Safety Measures

Safety measures are activities and safety measures used to expand safety standards in a workplace, i.e. diminish threat linked to human health. Common safety measures include,⁶² "geological surveys, Government regulation, Industry regulation, and Instruction manuals explaining how to use a product or perform an activity". Constant assessments of workers, departments, etc. "Physical examinations to determine whether a person has a physical condition that would create a problem, safety margins/Safety factors, as well as implementation of safety measures".⁶³

5.5 Implementation

Implementation dictionary meaning: 'implementation' is defined as an action of putting something into operation⁶⁴, OR it can be defined as an insight of an application, or accomplishment of a particular "plan, idea, model, design, specification, standard, algorithm, or policy."

5.6 Enforcement and poor-enforcement

5.6.1 Enforcement is defined as an act of compelling adherence of or obedience with a particular law, rule, or obligation.⁶⁵ It is also referred to as "any system

⁶⁰Department of Justice and Constitutional Development: A Framework for the transformation of the State, Legal Service, available at <http://www.justice.gov.za/docs/other-docs/2012tsls.pdf> retrieved 21 July 2017.

⁶¹Hornby AS Oxford advanced learners dictionary, international student's edition, 9th edition page 1587.

⁶²Safety available at <https://en.wikipedia.org/wiki/Safety> retrieved 28 March 2016. Further reading Wildavsky, Aaron; Wildavsky, Adam, "Risk and Safety" (2008). Also see David R. Henderson. Concise Encyclopedia of Economics (2nd ed.). Indianapolis: Library of Economics and Liberty. ISBN 978-0865976658. OCLC 237794267

⁶³*Ibid* footnote 62 above.

⁶⁴Hornby AS, Oxford Advanced Learners Dictionary of Current English, Eighth (ed), Oxford University Press.

⁶⁵*Ibid* footnote no 64 above.

by which some members of society act in an organized manner to enforce the law by discovering, deterring, rehabilitating, or punishing people who violate the rules and norms governing that society”.⁶⁶

5.6.2 Poor-enforcement means a lowly enforcement of the law, rules or obligations.⁶⁷

6. LITERATURE REVIEW

The purpose of implementation and enforcement of safety measures in mining environment is to provide maximum protection to the mineworkers in order to prevent mine-related accidents and diseases.⁶⁸ The enactment of health and safety laws and policies was to stimulate protection of health and safety standards of the employees and persons who are at mines, through proper implementation of health and safety measures.

The State has taken a firm stand on Mining Safety and has articulated an obligation relating to expanding of safety for all miners.⁶⁹ President Zuma once said at National Union of Mineworkers (NUM) address that “we need to vigorously support and entrench a culture of zero harm in this industry the safety record of our mines has become a central issue that will be placed under the scrutiny of government.”⁷⁰ After the Lily Mine incident Joseph Mathunjwa, head of the Association of Mineworkers and Construction Union (AMCU) said the situation needs to be scrutinized and adds, “we still appeal that they speed up the process of declaring this accident as a national disaster, whereby they will be able to dispatch more resources.”⁷¹

According to Dixon “nobody can argue that South Africa has a good record of health and safety – that’s very obvious,” “And the safety situation is going to get worse.”⁷² The

⁶⁶*New Law Journal - Volume 123, Part 1 - Page 358, 1974.*

⁶⁷*Ibid* footnote no 66 above.

⁶⁸ Shabangu S, Mineral Resources | Annual Report 2011•2012, Department of Mineral Resources Republic of South Africa.

⁶⁹The Mining Safety in South Africa accessed at <http://www.miningsafety.co.za/dynamiccontent/61/Mining-Safety-in-South-Africa> 28 March 2016.

⁷⁰Thomson Reuters, Zuma to focus on safety, black ownership in mining, 2009.

⁷¹The Mining Safety in South Africa, available at <http://www.miningsafety.co.za/dynamiccontent/61/Mining-Safety-in-South-Africa> 28 March 2016. .

⁷²Dixon R, Corporate Skills Shortage: Safety slipping on SA mines, 2013, available at http://www.miningweekly.com/article/africa-desperate-for-engineering-skills-in-mining-2013-03-29/rep_id:3650 retrieved 21 March 2017.

level of technical skill in dealing with mine safety has been declining, when the mining industry was in its heyday”, he further, said, “there were people in engineering positions with 15 to 20 years’ experience, watching and monitoring equipment and practice on a daily basis”.

Dixon indicates that “with the waves of cut-backs on the mines over the past decade or more, and the reengineering of mining companies to cut costs, there are very few qualified engineering staff with that level of experience at the workplace anymore”.⁷³ Most mining companies are currently experiencing technical skill shortage, which makes it difficult for them to retain adequate staff. Hence, there is a need to ensure that students at higher institutions of learning are encouraged to study towards the mining related courses; upon the completion of their studies they will go under certain training in order to improve skills and expertise in the sector.

Roger indicates that mining environment requires people who have the necessary skills and knowledge in monitoring the equipment to avoid the risks in the mining sector.⁷⁴ Nico Pienaar, director of the Aggregate and Sand Producers Association of Southern Africa (Aspasa) said that “safety standards could be improved through inspiring quarry owners to bargain methods of training staff in a way that makes them want to be part of wide initiatives to diminish health-and-safety-related incidents both at company and on an industry-wide level”.⁷⁵

The case of *S v Mayona and Another*⁷⁶ relates to the accused who was charged after he was alleged to have been contravening section 1(1)(a) of the Trespassing Act, after trespassing landowners land without a permission the owner, and also charged in terms of the Mine Health and Safety Act for breaching regulation 3.1.1 that prohibit any person to access entry in a mine where machinery has been erected without proper authorisation.

Regulation 3.1.1 of the Mine Health and Safety Act provides:

⁷³Dixon R (note 72 above).

⁷⁴Dixon R (note 72 above).

⁷⁵Pienaar R, director of the Aggregate and Sand Producers Association of Southern Africa (Aspasa): Training for safer mines: Effective training that engages all levels of employees on a mine and quarry, and positively influences their attitude towards mine health and safety is important to reduce accidents and maintain a healthier workforce. Inside mining 07 | 2014, also available at https://webcache.googleusercontent.com/search?q=cache:UP8iYCpGhzwJ:https://issuu.com/glen.t/docs/ism_oct2014_lowres+&cd=1&hl=en&ct=clnk&gl=za retrieved 21 July 2017.

⁷⁶*S v Mayona and Another* (181/2012, 182/2012) [2012] ZAFSHC 212 (15 November 2012).

“3.1.1 No unauthorised person shall enter a mine or works or any shaft or place or building where machinery has been erected.”⁷⁷ The Court found that “in the particular circumstances of each of these cases the act of unauthorised entering underground in the mine constituted one continuous criminal transaction with a single intent.”⁷⁸

The Court further held that “as indicated already, the essence of the crime of contravention of regulation 3.1.1 is the entering into a mine or other place where machinery has been erected. In neither case before us was this element admitted by the accused. For this reason, also, the convictions of contravention of regulation 3.1.1 cannot stand”.⁷⁹ Though the accused was found not guilty, this case still showcased an appropriate implementation of safety standards as well as ensuring that any contradiction of the statutes would be meted with appropriate sanctions.

Over and above in *Mankayi v AngloGold Ashanti Ltd*⁸⁰ the applicant in this case was Mr Mankayi who was employed by a mining company AngloGold (the respondent) as an underground mineworker. Mr Mankayi claimed “that during his employment he contracted occupational diseases in the form of tuberculosis and chronic obstructive airways which rendered him unable to work as a mineworker or in any other occupation. He instituted an action for delictual damages against AngloGold on the basis that the mine owed him a duty of care arising under both common law and statute to provide a safe and healthy working environment”.

AngloGold opposed Mr Mankayi’s contention, on the basis that his “particulars of claim” raised “no cause of action”, since section 35(1) of COIDA does not include the right of the employees to make a claim in terms of common law against their employers. Mr Mankayi’s contention “was that he is not barred by section 35(1) of COIDA because, although he is an employee in terms of section 1 of COIDA, his diseases are covered by ODIMWA and so section 35(1) of COIDA does not apply to him”.

The Court ruled that an order that was made by SCA “be set aside and replaced with an order dismissing AngloGold’s interpretation of section 35(1) of COIDA”. The Court

⁷⁷*Ibid*, para 6.

⁷⁸*Mayona* referred to above, para 15.

⁷⁹ *Ibid*, para 16.

⁸⁰*Mankayi v AngloGold Ashanti Ltd* (CCT 40/10) [2011] ZACC 3; 2011 (5) BCLR 453 (CC) ; 2011 (3) SA 237 (CC) ; [2011] 6 BLLR 527 (CC) ; (2011) 32 ILJ 545 (CC) (3 March 2011).

also directed AngloGold to “pay costs in the High Court, in the SCA and in this Court”. The court further held “that if an employee contracts a disease at a controlled mine, which is compensatable under both Compensation for Occupational Injuries and Diseases Act (COIDA) and Occupational Diseases in Mines and Works Act (ODIMWA), by virtue of section 100(2) of ODIMWA, that employee is obliged to claim compensation under ODIMWA”. The Court’s findings in this case would assist mineworkers and their dependents (if deceased) “who, as a result of workplace accident or work-related disease are injured, disabled, or killed, or become ill, to claim the compensation” to take necessary steps to seek compensation accordingly.

6.1 Duty of care under Common Law

Common law is those rules which are part of our law and which are extracted from “custom and judicial precedent rather than legislation”.⁸¹ Common law is law established by judges, courts, and similar tribunals; these are decisions that nominally emanate from individual cases but have precedential effect on future cases.⁸² According to Tshoose “the common law refers to those rules which form part of our law, but which are not created by legislation”.⁸³ In *SAR & H v Cruywagen*⁸⁴ it was indicated that in terms of “common law”, an employer has responsibility to afford workplace that is not harmful, “safe equipment and tools and a safe method of work”.⁸⁵

According to Marco Schepers Associate “health and safety legislation is intended to give content to the employer’s duty of care and then to enhance accountability by

⁸¹Schepers M: Health and Safety in the Workplace: A South African Perspective – Is the Employer’s Obligation to Provide a Safe Working Environment a Satisfactory Position?. Page 5, see also <http://www.jiclt.com/index.php/jiclt/article/viewFile/136/134> retrieved 21 July 2017.

⁸²Duhaime L. "Common Law Legal Definition", 2016, available at <http://webcache.googleusercontent.com/search?q=cache:x6VnW6Wrjx8J:beststore2u.com.my/the-common-law-system.pdf+&cd=1&hl=en&ct=clnk&gl=za> retrieved 21 July 2017.

⁸³Tshoose IC, *Employer’s Duty to Provide a Safe Working Environment: A South African Perspective*; *Journal of International Commercial Law and Technology*, 2011, Vol. 6, Issue 3 available at <http://www.jiclt.com/index.php/jiclt/article/viewFile/136/134> retrieved 21 July 2017.

⁸⁴*SAR & H v Cruywagen* 1938 CPD 219 at 229.

⁸⁵See In *SAR & H v Cruywagen* footnote no: 84 above page 13, also see *Van Deventer v Workmen's Compensation Commissioner*, summarising an employer's duty as follows: “An employer owes a common law duty to a workman to take reasonable care for his safety. The question arises in each particular case what reasonable care is required. This is a question of fact and depends upon the circumstances of each particular case. A master [employer] is in the first place under a duty to see that his servants [employees] do not suffer through his personal negligence, such as failure to provide a safe working environment and a failure to provide [a] proper and suitable plant, if he knows or ought to have known of such failure.”

providing for a range of additional criminal and administrative sanctions and secondly to provide for facilitation of civil liability through the principle of strict liability for breach of a statutory duty. Currently, this is not the case in South Africa. The general duty is prevalent but the enforcement thereof is not reaching its potential, leaving employees without the sufficient opportunity to enforce legal proceedings and is to an extent restricted by the provisions of Compensation for Occupational Injuries and Diseases Act (COIDA).⁸⁶

Section 35 of the Act is restrictive in the sense that it precludes an employee who incurred an injury when performing his duty to claim for compensation from the employer.⁸⁷ However, as an alternative, employee is instantly allowed to claim directly from the compensation Commissioner.⁸⁸ Essentially what COIDA does is protecting the employee from proving the negligent conduct of the employer when claiming damages. In other words, makes it simple for employee to claim for compensation, since they are not expected to prove that the employer acted negligently in the circumstance.⁸⁹

This will assist in ensuring that the employers comply with the provisions of the legislation put in place by providing employees with necessary skills, education, training and ensuring a safe working mining environment. The employer is obligated under common law to take reasonable steps to ensure that health and safety measures are complied with regularly.⁹⁰ The employees should be able to access ample opportunity of access to justice if there is a breach of a statutory duty, as the aptitude of employees to pursue and attain a remedy by way of formal or informal institutions of justice for complaints in compliance with safety standards.⁹¹

⁸⁶Schepers M: Health and Safety in the Workplace: A South African Perspective – Is the Employer's Obligation to Provide a Safe Working Environment a Satisfactory Position?. Page 5 available at <http://www.jiclt.com/index.php/jiclt/article/viewFile/136/134> retrieved 21 July 2017.

⁸⁷Tshoose IC, Employer's Duty to Provide a Safe Working Environment: A South African Perspective; Journal of International Commercial Law and Technology Vol. 6, Issue 3, 2011, available at <http://www.jiclt.com/index.php/jiclt/article/viewFile/136/134> retrieved 21 July 2017.

⁸⁸*Ibid* (note 87 above).

⁸⁹*Ibid* (note 87 above).

⁹⁰*Ibid* (note 87 above).

⁹¹United State Institute of Peace: Making Peace Possible, Necessary Condition: Access to Justice available at <http://www.usip.org/guiding-principles-stabilization-and-reconstruction-the-web-version/7-rule-law/access-justice> retrieved at 30 March 2016.

6.2 Statutory framework on mining accidents and safety compliance and enforcement.

(a) Skills Development Act of 1998 (SDA)

The SDA was intended to “develop the skills of the South African workforce, improve the quality of life of workers, their prospects of work and labour mobility and to encourage the employers to use the workplace as an active learning environment”⁹², “to provide employees with the opportunities to acquire new skills;”⁹³ and “to provide opportunities for new entrants to the labour market to gain work experience”.⁹⁴

It is very imperative that workers must acquire necessary skills and knowledge in order to execute their duty properly. Yet again the skills development is very critical as it seeks to achieve a long-term goal of zero harm in the mining sector. It also assists with regard to improvement of safety measures of the workers and enhances the productivity of minerals.⁹⁵ Mining companies in South Africa invest in skills development to ensure that people at mines are equipped with necessary expertise that enhances safe working environment for all.⁹⁶ Skills improvement increases productivity and competitiveness of employers, and improve the quality of life of workers.⁹⁷

(b) Mine Health and Safety Act, 1996 (MHSA)

This Act⁹⁸ provides that the “purpose is to protect the health and safety of persons at mines”⁹⁹, “to require employers and employees to identify hazards and to eliminate control and minimize the risks relating to health and safety at mines”¹⁰⁰ “to provide for effective monitoring of health and safety conditions at mines”¹⁰¹ “to provide for enforcement of health and safety measures at mines”¹⁰². Proper enforcement of these rules shall encourage employers to build safe mining environment “through creation

⁹²Section 2 (1) (a) of ACT 97 of 1998.

⁹³ Section 2 (1) (a) (ii) of ACT 97 OF 1998.

⁹⁴Section 2 (1) (a) (iii) of ACT 97 OF 1998.

⁹⁵Fact Sheet, Chamber of Mine Training and Skills Deployment (2016).

⁹⁶These ways include,” learner ships, bursaries, portable skills (in mechanical, electrical and construction trades), internships and adult education”.

⁹⁷Skills Development Act 97 of 1998 (SDA)

⁹⁸Mine Health and Safety Act 29, 1996

⁹⁹Section 1(a) of the Act 29 of 1996.

¹⁰⁰Section 1(b) of the Act 29 of 1996.

¹⁰¹Section 1(e) of the Act 29 of 1996

¹⁰² Section 1(f) of the Act 29 of 1996

of codes of practice, training, identifying potentially hazardous factors, investigating said factors, employing hygienists for the industry, and founding methods of medical attention and recording for the site.”

According to Warren Beech, one of stable tactics to safety in mining must also include the use of Section 55 of the MHSA.¹⁰³ Section 55(1) of the MHSA provides that: “If an inspector has reason to believe that an employer has failed to comply with any provision of this Act, the inspector may instruct that employer in writing to take any steps that the inspector considers necessary to comply with the provision; and specifies in the instruction”.¹⁰⁴

Beech further states: “Indeed Section 54 work stoppages may have improved the attitude towards safety and a safety culture over the past few years. However, there are cases where a Section 55 instruction could have been issued by an inspector, as opposed to closing an entire mining operation in terms of Section 54. Closing a mining operation is not always an answer to every challenge experienced on a mine”.¹⁰⁵ Effective implementation of sections 54 and 55 will ensure that inspectors pay official visits to mining environment, in order to see if rules are being followed and things are in their proper conditions, so as to improve the health safety standards.

(c) Occupational Health and Safety Act, 1993 (OHSA)

The OHSA is aimed at providing “for the health and safety of persons at work and for the health and safety of persons in connection with the use of plant and machinery; the protection of persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work; to establish an advisory council for occupational health and safety; and to provide for matters connected therewith”.¹⁰⁶ This Act also provides for the essential inspection which is the inspection that ought to be approved by the chief inspector¹⁰⁷, thus primarily assists in handling “risks to health and safety” by eradicating them as much as is

¹⁰³Naidoo B: Section 54 vs 55: Enforcing Efficiency For SA’s Safety Laws, 2014 available at <http://businessmediamags.co.za/section-54-vs-55-enforcing-efficiency-for-sas-safety-laws/> retrieved 21 July 2017.

¹⁰⁴Mining Health and Safety Act, 1996.

¹⁰⁵ *Ibid* footnote 104 above.

¹⁰⁶See Occupational health and Safety Act [assented to 23 June, 1993] [date of commencement: 1 January, 1994] (Unless otherwise indicated) (English text signed by the State President) as amended by Occupational Health and Safety Amendment Act, No. 181 of 1993

¹⁰⁷Section 1 of Act 85 of 1993.

reasonably possible before they occur. Although, the Act does not apply to mining enterprises it is a type of statute that showcases the importance of improving and enforcing safety standards in the workplace.

(d) Broad-Based Black Economic Empowerment Act, 2013 (BBEEA)

The BBEEA is aimed at facilitating empowerment of Previously Disadvantaged South Africans by “increasing the extent to which communities, workers, cooperatives and other collective enterprises own and manages existing and new enterprises and increasing their access to economic activities, infrastructure and skills training”,¹⁰⁸ and “achieving a substantial change in the racial composition of ownership and management structures and in the skilled occupations of existing and new enterprises”.¹⁰⁹

Hence, the “Broad-Based Black Economic Empowerment (B-BBEE) aims to ensure that the economy is structured and transformed to enable meaningful participation of the majority of its citizens and to create capacity within the broader economic landscape at all levels through skills development, employment equity, socio economic growth, preferential procurement, enterprise development, especially small and medium enterprises, promoting the entry of black entrepreneurs into the mainstream of economic activity, and the advancement of co-operatives”.¹¹⁰

This Act provides for ample change in the mining industry and promotes skills training and skilled occupation which will enhance a safe working environment. The so called Broad-Based Black Economic Empowerment Act, 2003¹¹¹ was promulgated to create a statutory framework for the advancement of BEE. It was further intended “to empower the Minister to issue codes of good practice and to publish transformation charters.”¹¹² According to Boyseen “the majority of the mining industry is still controlled by white owned companies and steps are required to address the slow pace of transformation. To achieve sustainable BEE in the mining industry, it requires the

¹⁰⁸Section 2(c) of the Act 46 of 2013.

¹⁰⁹Section 2(b) of the Act 46 of 2013.

¹¹⁰Broad-based Black Economic Empowerment available at <http://www.economic.gov.za/about-us/programmes/economic-policy-development/b-bbee> retrieved 30 March 2016.

¹¹¹ Broad-Based Black Economic Empowerment Act, 53 of 2003.

¹¹²Boyseen SA, The Scorecard for the Broad-Based Socio-Economic Empowerment Charter for the South African Mining Industry: A Performance Measuring Instrument, 2006 available at http://dspace.nwu.ac.za/bitstream/handle/10394/1036/booyens_sarela.pdf?sequence=1 retrieved 21 July 2017.

involvement of a number of Government Departments, mining companies and other role players. The statutory and regulatory framework drives the process. Legislation (BBBEE Act) that has a significant role to play in achieving BEE will be dealt with.”¹¹³

(e) Minerals Petroleum Resources and Development Amendment Bill 2013 (MPRDAB)

According to Stevens “a new definition of “beneficiation” has been inserted to mean “the transformation, value addition or downstream beneficiation of a mineral and petroleum resource (or a combination of minerals) to a higher value product, over baselines to be determined by the Minister, which can either be consumed locally or exported”.¹¹⁴The Bill entails that the minister “must in order to regulate the mining industry to meet national development imperatives and to bring optimal benefit for the Republic initiate or promote the beneficiation of mineral resources in the Republic: ensure transformation of the mining and other sectors involved in the beneficiation of minerals”.¹¹⁵ This Act is regarded as a role player in the mining environment, since it promotes transformation of the mining and beneficiation of minerals. This Act established the state’s custodianship over the country’s mineral resources.¹¹⁶ Moreover, “the MPRDA regulates all aspects of the industry, including certain respects (such as enforcement and implementation) of safety and health measures”.¹¹⁷

(f) Compensation for Occupational Injuries and Diseases Act, 1997 (COIDA)

The COIDA is aimed at providing compensation to the impairment which might have resulted from “occupational injuries or disease sustained or contracted by employees in the course of employment, or death resulting from such injuries or diseases”.¹¹⁸ This

¹¹³*Ibid* (note 112 above).

¹¹⁴Stevens C Director, Head of Mining & Resources practice: The impact of the MPRDA Amendment Bill, 2013 available at https://www.werksmans.com/wp-content/uploads/2013/04/161_JN5499-Werksmans-Brief_MPRDA-Amendment-Bill.pdf retrieved 21 July 2017.

¹¹⁵Tucker and Sibisi S brief overview of the main amendments enacted in terms of the Minerals and Petroleum Development Amendment Bill, 2013 available at <http://www.internationallawoffice.com/Newsletters/Energy-Natural-Resources/South-Africa/Bowman-Gilfillan/Mineral-and-Petroleum-Resources-Development-Amendment-Bill-2013-approved> retrieved 21 July 2017.

¹¹⁶Russell C Spokesperson acting on behalf of the gold producers Anglo Gold Ashanti: Harmony Sbanye Gold: A South African gold mining industry initiative: fact sheet: occupational health in the gold sector

¹¹⁷*Ibid* footnote no: 116 above.

¹¹⁸Compensation for Occupational Injuries and Diseases Act, 1997, also see <http://www.labour.gov.za/DOL/downloads/legislation/acts/compensation-for-occupational-injuries->

Act provides that “if an employee meets with accidents resulting in his disablements or death such employee or dependants of such employee shall, subject to the provision of this Act, be entitled to the benefits provided for and prescribed in this Act”.¹¹⁹

It further states that “for the purpose of this Act an accidents shall be deemed to have arisen out of and in the course of employment of the employees notwithstanding that the employee was at the time of the accidents acting contrary to any law applicable to his employment or to any order by or on behalf of his employer or that he was acting without any order of his employer, if the employee was, in the opinion of the Director-General, so acting for the purposes of or in the interest of or in connection with the business of his employer”.¹²⁰ This Act will primary assists the employees or dependants of the employee to claim the damages for a particular loss or injury sustained by the employee due to employer’s breach of duty or negligent conduct, and the employee bears the burden of proof. This entails that the employee must prove the negligent conduct of the employer on the balance of probabilities.

(g) Occupational Diseases in Mines and Works Amendment Act, 2002 (ODMWAA) The purpose of this Act¹²¹ is “to amalgamate and modify the law concerning the payment of compensation in respect of certain diseases contracted by persons employed in mines and works and matters incidental thereto”.¹²² The Act further states that “the Minister may by notice in the Gazette declare to be risk work any particular work or all work performed in or at or in connection with any mine or works or part of a mine or works, or at a particular place or under particular circumstances in or at or in connection with any mine or works”.¹²³

Moreover, “the Minister shall under subsection (1) declare any such work as is referred to in that subsection to be risk work if he or she is satisfied, after consultation with the

and
diseases/amendments/Amended%20Act%20%20Compensation%20for%20Occupational%20Injuries
%20and%20Diseases.pdf retrieved at 30 March 2016.

¹¹⁹Section 22(1) of the Act 61 of 1997.

¹²⁰Section 22(4) of the Act 61 of 1997.

¹²¹Occupational Diseases in Mines and Works Amendment Act, 60 of 2002: Government Notice R1249 / GG 32845 / 20091228.

¹²²See objectives of the Amendment Act,2002.

¹²³Section 13(1) of the Amendment Act, 2002.

risk committee and after consideration of such representations (if any) as may have been made to him or her by the owner of the mine or works in question or by any organization acting on behalf of such owner or on behalf of persons employed at that mine or works, that any person performing the work in question is exposed to dust of which the composition and concentration is such that it is in the opinion of the Minister harmful or potentially harmful¹²⁴; or gases, vapours or chemical substances, or factors or working conditions, which, in the opinion of the Minister, are harmful or potentially harmful".¹²⁵

This Act is very important because it gives every employee who is employed in the mine an opportunity to claim the benefits resulting from any disease contracted by the employee. It further assists in ensuring that the work performed by the mine worker is not harmful to the health and if the work performed is harmful such mine worker will be entitled to compensation.

(h) Labour Relations Amendment Act, 1996 (LRA)

According to Boda "South Africa's progressive labour laws are there to protect you from exploitation and unfair treatment."¹²⁶ They're aligned with the Bill of Rights and the Constitution, meaning that they enshrine rights that every citizen in the country is entitled to,"¹²⁷ he continued "they are worth celebrating. All workers should familiarise themselves with the contents of these laws so that they have the tools to protect themselves against unlawful and unfair treatment in the workplace."¹²⁸ The LRA is also relevant to health and safety, since the Act regulates the relationship between the employer and the employee.

This Act does promote health and safety standards, though there are no specific provisions that deal with such. However, reference is made to other employment laws that deal with health and safety, such as Occupational Health and Safety Act, which imposes severe liability on the employer, and indicates how much must be paid to the

¹²⁴Section 13(2)(a) of the Amendment Act, 2002.

¹²⁵Section 13(2)(b) of the Amendment Act, 2002

¹²⁶Boda Y, Legal and Tax also see <http://www.legalandtax.co.za/in-the-media/labour-law/rights-in-the-workplace/> retrieved 07 April 2016.

¹²⁷*Ibid* footnote 126 above.

¹²⁸*Ibid* footnote 126 above.

employee if accidents take place.¹²⁹ Reference is also made to the common law; that employers should afford their employees with equitably safe and healthy working environment.¹³⁰ The inspector from the Department of Labour must regularly pay visit to workplaces in order to check if the legislation put in place are being complied with.

(i) Mining Charter 2010

South Africa has introduced a new charter to assist in viable transformation and improvement of its mining productiveness.¹³¹ The former Minister of Mineral Resources Susan Shabangu said that “the observations are that growth in the mining industry has left much to be desired and transformation within the sector has been disappointingly slow.”¹³² The Mining Charter presents a viable component, premised on the fact that the “social licence” to operate consists of the environment, health and safety implementations.¹³³ In terms of the new charter all companies that do not meet the terms of the charter could face punishment, and consequently revocation of mining licences.¹³⁴ The charter also guarantees “transformation of the mining and other related mining activities involved in the beneficiation of minerals.”

(j) Constitution of the Republic of South Africa, 1996

Section 2 of the Constitution provides for the Supremacy clause as follows: “This Constitution is the supreme law of the Republic; law or conduct inconsistent with it is invalid, and the obligations imposed by it must be fulfilled”.¹³⁵ This section grants the Constitutional Court and the other courts the authority to uphold acts of Parliament, elements of the common law and actions of the executive that are unconstitutional. For example the duty of care under common law indicates that an employer has a full

¹²⁹South African labour law available at https://en.wikipedia.org/wiki/South_African_labour_law retrieved 06 April 2016.

¹³⁰*Ibid* footnote 129 above.

¹³¹BuaNews, South Africa's new mining charter, 2010, available at <http://www.southafrica.info/business/economy/policies/miningcharter-140910.htm> 07 April 2016.

¹³²South Africa News Agency, Reviewed mining charter launched, 2010 available <http://www.sanews.gov.za/south-africa/reviewed-mining-charter-launched> retrieved 22 November 2016.

¹³³*Ibid* footnote 132 above, page 21.

¹³⁴Footnote 132 above. For further reading visit <http://www.southafrica.info/business/economy/policies/miningcharter-140910.htm#ixzz42ZrKdTpj>.

¹³⁵Section 2 of the Constitution of the Republic, 1996.

responsibility to afford a workplace that is safe, riskless equipment, tools, as well as a safe work plan on how work is to be performed.¹³⁶

The constitution provides that “everyone has the right to an environment which is not harmful to their health or well-being”.¹³⁷Section 24 also guarantees the employees a safe working environment, and encourages the employers to establish a conducive workplace that is not hazardous to the health and well-being”. It further promotes health and safety environment to all people of the Republic. Thus, any contravention of this section is violation of the constitutionally guaranteed right to clean environment. Consequently, perpetrators shall be held criminally or civilly liable (fines and imprisonment), as well as requiring them to rectify the damage caused and to compensate the persons affected.¹³⁸

7. THE PURPOSE OF THE STUDY

7.1 Aim

This study seeks to examine and analyse implementation, enforcement and observance of legislation and policies dealing with the health and safety standards in order to curb the high rate of accidents and possible injuries in the mining environment.

7.2 Objectives

The main objective of the study is to examine the laws and policies that have been introduced to prevent mine accidents, injuries, death at the mines, and strengthening enforcement in order to deter recurrent accidents and fatalities if they occur.

The other objectives relevant to the key objective are as follows:

- Appraise the prominence of the intercession by the Department of Mineral Resources acting through the Minister of the said Department to ensure that the provisions set out by statutes are complied with.

¹³⁶See *SAR & H v Cruywagen* 1938 CPD 219 at 229.

¹³⁷Section 24(a) of the Constitution of the Republic, 1996.

¹³⁸Nel G, Environmental Law and Liability, 2007 available http://www.enviropaedia.com/topic/default.php?topic_id=293 retrieved 21 July 2017.

- The need to provide or improve emergency escape and survival equipment in order to rescue the employees from sudden accident or natural catastrophe that might occurred.
- The emphasis on a regular inspection of mining industry by competent inspectors in terms of section 54 and 55 of the MHSA.

8. RESEARCH METHODOLOGY

The Research methodology used is qualitative as opposed to quantitative. The research will be strictly library based and will rely on library materials such as textbook, reports, legislations, regulations, charters, policies, amendments to legislations, journals, case laws, articles, Constitution of the Republic, international and national journals.

9. SIGNIFICACE OF THE RESEARCH

This study is important because it seeks to:

- contribute to the health and safety standards through proper implementation and enforcement of health and safety measures stipulated by Mine Health and Safety Act.
- assist the Department of Mineral Resources and other interested party to ensure effective implementation, enforcement and compliance with the laws that have been put in place.
- robustly backup a radical establishment of a culture of zero harm in the mining industry, which will therefore, increase the production of minerals resources and definitely influence our social and economic growth.

CHAPTER TWO: IMPROVING THE SAFETY MEASURES IN THE MINING INDUSTRY

2.1 Introduction

Prior to 1994, apartheid laws were discriminatory to black Africans, and favoured the white minority. According to the former Minister Ramatlhodi “we have travelled quite a long and challenging road to overturn the legacy of apartheid on the health and safety of mineworkers. In May 1994, former State President, the late Dr Nelson Mandela, who himself was a former mineworker, appointed the Leon Commission of Inquiry to conduct a comprehensive review of the state of health and safety on the mines, and provide recommendations”.¹³⁹

He further states that the old Minerals Act focused mainly on safety matters in the mining industry and did not stress much on supporting the occupational health of mine workers. This lack of emphasis on the promotion of health of mineworkers made the Commission to endorse, amongst others, the enactment of a new Mine Health and Safety Act 29 of 1996 (herein after referred to as MHSA), which started operating from January 1997.¹⁴⁰ The Act (MHSA) has established a council known as Mine Health and Safety Council (MHSC), that contemplates the status of health and safety in the mining sector, recommends policy and legislation, commissions’ research, and offers suitable advice to the Minister of Mineral Resources.

In addition, different types of legislation were passed to assist in the transformation and “improvement of the safety standards in the mining sector, among others, the Skills Development Act of 1998 (SDA), Broad-Based Black Economic Empowerment Act, 2013 (BBEEA), (Minerals Petroleum Resources and Development Amendment Bill 2013 (MPRDAB), Compensation for Occupational Injuries and Diseases Act, 1997 (COIDA), Occupational Diseases in Mines and Works Amendment Act, 2002 (ODMWAA), Labour Relations Act, 1996 (LRA), Basic Conditions of Employment Act of 1997, Mining Charter 2010, and the Constitution of the Republic of South Africa, 1996”. Regardless of enactment of these statutes, mine accidents and diseases continue to have a negative impact in the mining sector which points to the poor

¹³⁹ Ramatlhodi N: Mine Health and Safety Tripartite summit, 2014, South African Government available <http://www.gov.za/minister-ngoako-ramatlhodi-mine-health-and-safety> retrieved 21 July 2017.

¹⁴⁰*Ibid* (note 139 above).

enforcement and implementation of the laws that have been introduced. Therefore, the laws and policies governing workplace need to be improved to advance healthful industry relations, favourable working conditions, promoting fairness, as well as developing skills of workers through proper training.¹⁴¹ Enhanced “working conditions” are essential to make sure that there is high level of labour production, improved value of work, bettered relationship between the employer and the employee and compliance with variety of laws, policies, regulations and standards of safety.¹⁴² In order to achieve this, the study looks at the laws, policies and regulations and measures that have been introduced to improve safety standards.

2.2 Mine Health and Safety Act, 1996 (MHSA)

The MHSA is very helpful in maintaining health and safety standards of mineworkers who are more vulnerable. The Act is aimed “to ensure owner responsibility for health and safety through creation of codes of practise, training, identifying potentially hazardous factors, investigating said factors, employing hygienists for the industry, and founding methods of medical attention and recording for the site”.¹⁴³ Lastly, it is intended “to safeguard the rights of employees to refuse or move away from areas which are unsafe or potentially unsafe and to establish the Inspectorate of Mining Health and Safety”.¹⁴⁴

Furthermore, in terms of the requirements of the MHSA, and the Mine Health and Safety Regulations, employers are obliged to inform respective Regional Principal Inspectors of certain accidents and harmful occurrences that take place at a mine.¹⁴⁵ Therefore, in order to improve the working condition in South African mining industry, the Mine Health and Safety Inspectorate opted to gather comprehensive data for each

¹⁴¹The National Occupational Health and Safety Policy, 2003.

¹⁴²*Ibid* (note 141 above).

¹⁴³Gallagher N: Mining Health and Safety in South Africa also see [G:\Mining Health and Safety in South Africa - The African Business Journal.html](http://www.dmr.gov.za/mine-health-a-safety/occupational-safety.html) retrieved 11 May 2016, 15:27.

¹⁴⁴*Ibid* (note 143 above).

¹⁴⁵See Occupational Safety available at <http://www.dmr.gov.za/mine-health-a-safety/occupational-safety.html> retrieved 11 May 2016, 20:32.

- Following amendments in 1997, the original 1996 act now also includes:

. Provision of a monetary fining system in support of tripartite institution regulation and to provide health and safety-appointed employees in the case of any inquiry.

. The constitution of the Mine Health and Safety Council concerning matters of procedure within said council.

. Amendment concerning the election and appointment of health and safety employees, and establishing the authority of health and safety inspectors.

accident in order to use such data for investigation purposes.¹⁴⁶ The information is recorded onto the South African Mines Reportable Accidents Statistical System from which the statistics is evaluated or analysed.¹⁴⁷ This data assist mining enterprises to make well informed decisions in avoiding occurrence of mining accidents and to fashion the means in which they will protect workers from contracting diseases such as silicosis, TB and etc. The Inspectorate works together with sector and mine unions to decrease the numbers of mine accidents, with interested parties pledging themselves to constantly decrease fatalities in the sector through proper co-ordination and consultation with one another.¹⁴⁸

(a) Inspectorate of mine health and safety

The MHSA also create Mining Health and Inspectorate which is officially employed to ensure that the statutes regulating health and safety in mining sector are fully complied with. It states that “a juristic person to be known as the Mine Health and Safety Inspectorate is hereby established”.¹⁴⁹ Furthermore, “the Minister, by notice in the Gazette, may establish regions of the country for the purpose of administering this Act through regional offices of the Mine Health and Safety Inspectorate”.¹⁵⁰

In 2014 the Director Inspector for mine said “we will continue to strengthen those efforts and ensure that our record on health of mineworkers also demonstrates that considerable improvement as well. In this regard, the mining sector has increasingly been giving more attention to health matters as a result of the promulgation and implementation of the Mine Health and Safety Act as amended.”¹⁵¹ He further indicated that “as a result of the legislation changes and the implementation of the law, there has been a 64% reduction in the total number of occupational diseases being reported by the mines from 18 371 during 2003 to 6577 in 2014”.¹⁵² Nonetheless, we

¹⁴⁶Department of Mineral Resources, Occupational Safety available at <http://www.dmr.gov.za/mine-health-a-safety/occupational-safety.html> retrieved 08 December 2016

¹⁴⁷Department of Mineral Resources, Occupational Safety available at <http://www.dmr.gov.za/mine-health-a-safety/occupational-safety.html> retrieved 08 December 2016

¹⁴⁸*Ibid* (note 147 above).

¹⁴⁹Section 47(1)(a) of the Act, 1996.

¹⁵⁰Section 47(1)(b) of the Act, 1996.

¹⁵¹Msiza D, on behalf of the Deputy Minister of Mineral Resources, Honourable Godfrey Oliphant, MP, on the occasion of the opening of the 7th South African AIDS Conference. Hilton Hotel, Durban 09 June 2015.

¹⁵²*Ibid* (note 151 above), He also stressed much on health and safety standards of mineworkers by submitting that “Department will continue to partner with our stakeholders to ensure that all workers

are really alarmed with the increased of number of mine-related accidents and occupational diseases such as “Pulmonary TB, Noise-Induced Hearing Loss and silicosis” threatening mining sectors.¹⁵³ Thus, adequate information on dust amounts and disease afflictions will play a critical role in the circumstance; policies/legislation has to promote identification of effective intercessions by all interested parties.¹⁵⁴ Moreover, focusing on accident preclusion, immediacy (giving rise to sense of urgency) of injuries and traumatic deaths lessens effort on the “more insidious impact of disease mortality, by all role players.”

(b) Functions of the Chief Inspector of Mines

The Act also summaries the functions of the Chief Inspector of Mines (CIM), where he or she is expected to observe and ensure that the provisions relating to health and safety are properly enforced by mining companies. The Chief Inspector has the responsibility to make sure policies are implemented that would support health and safety standards of people at mines and people affected by mining operations.¹⁵⁵ The inspector also has the accountability to forces or compels compliance with all provisions stipulated by this Act to ensure that mining companies advance and keep up a cohesive health and safety measures in the industry.¹⁵⁶ Since, inspection is an important aspect that should be taken into account, this function must also include more versatile and perpetual visit at mining industry by the inspector to ensure that probable dangers are identified and curbed before causing any harm or damage.

(c) Mine Health and Safety Council (MHSC)

The Mine Health and Safety Council (herein after referred to as MHSC) is public entity listed under schedule 3A which emanated from Mine Health and Safety Act, No 29 of 1996 (as amended).¹⁵⁷ The council consist of a three-party board inclusive of the

ultimately return from work unharmed every day. In this regard, we will through the Mine Health and Safety Council, monitor the situation to ensure that the 2014 Mine Health and Safety Tripartite Summit commitments and action plan are implemented”.

¹⁵³*Ibid* (note 151 above).

¹⁵⁴Murray J, Davies T, and Reesa D *Occupational lung disease in the South African mining industry: Research and policy implementation*, 2011 Macmillan Publishers Ltd. 0197-5897 *Journal of Public Health Policy* Vol. 32, S1, S65–S79.

¹⁵⁵Section 49(1) (e) of the Act, 1996.

¹⁵⁶Section 49(1) (a) of the Act, 1996.

¹⁵⁷See Welcome to Mine Health and Safety Council, every mine worker returning from work unharmed every day. Striving for Zero Harm accessed at <http://www.mhsc.org.za/> retrieved 12 May 2016, 08:30.

Government, Employer, and Labour affiliates chaired by the Chief Inspector of Mines.¹⁵⁸ It also comprises of five members acting on behalf of owners in the mining industry;¹⁵⁹ five members acting on behalf of workers in the mining sector,¹⁶⁰ four other members representing different of departments in government,¹⁶¹ as well the Chief Inspector, who oversees the entity.¹⁶²

MHSA also provides that the Minister is responsible for appointments in the Council in line with the guiding principles of the Act.¹⁶³ The MHSC has duty to advise the Minister on any matter relating to safety and health standards including procedures or guidelines about rehabilitating mines for purpose of health and safety.¹⁶⁴ It (MHSA) must also support and promote ethos of safety and health measures in the mining sector.¹⁶⁵

MHSC must also make ensure that the provisions of the legislation and policies put in place to regulate the mining sector are adhered to, in other words it is the responsibility of the Council to circumvent poor enforcement of “safety and health standards” in the mining sector. In so far, Mine Health and Safety Council have created the so-called “Culture transformation framework” (CTF) intended to advance “a culture transformation framework that will allow the South African mining industry to significantly improve health and safety performance.”¹⁶⁶ It further promotes safety culture development and improves safety implementation strategy. However, there is always a room for improvement with regard to mine health and safety measures; hence all industry stakeholders are required to commit themselves.¹⁶⁷ The mines, organisations and government to improve and observe progress and make sure that steady reports are available to Principals.¹⁶⁸

¹⁵⁸Mine Health and Safety Council Annual Report ,2009.

¹⁵⁹Section 42(1)(a) of the Act, 1996.

¹⁶⁰Section 42(1)(b) of the Act, 1996.

¹⁶¹Section 42(1)(c) of the Act, 1996.

¹⁶²Section 42(1)(d) of the Act, 1996.

¹⁶³Section 42(2) of the Act, 1996.

¹⁶⁴Section 43(a) of the Act, 1996.

¹⁶⁵Section 43(d) of the Act, 1996.

¹⁶⁶Mine Health & Safety Council available at <http://www.mhsc.org.za/sites/default/files/CTF%20and%20CoE.pdf> on 08 December 2016.

¹⁶⁷*Ibid* (note 166 above).

¹⁶⁸*Ibid* (note 166 above).

2.3 Compensation for Occupational Injuries and Diseases Act, 1993 (COIDA)

The object of the Act (COIDA) is “to provide for compensation for disablement caused by occupational injuries or diseases sustained or contracted by employees in the course of their employment, or for death resulting from such injuries or diseases; and to provide for matters connected”. Under this Act “workers give up the right to sue for damages and in return be given compensation, whether or not there was negligence”.¹⁶⁹

On the other hand, COIDA provides what is called a “no-fault” compensation for workers with occupational injuries and diseases.¹⁷⁰ The phrase “no-fault” means that a worker is entitled to compensation whether or not injuries are as result of the negligent on the mining company or any other party.¹⁷¹ It is recognised that “safety and health” of employees form part of human security and it is a basic human right and therefore mining companies must commit to provide for health and safety of their employees, as well as those who may be affected by mining activities.¹⁷²

If an employee¹⁷³ is involved in an accident resulting in him being disabled, or death of that particular employee, the dependents will be eligible to benefit under this Act (COIDA).¹⁷⁴ The legal principles called “no-fault compensation” entails that an injured

¹⁶⁹Industrial Health Resource Group, section 8 Compensation for workplace injuries and diseases available at [http://www.ihrig.org.za/oid%5Cdownloads%5C4%5C10_8_6_47_31_AM_Section%2008%20-%20Compensation%20\(Final\).pdf](http://www.ihrig.org.za/oid%5Cdownloads%5C4%5C10_8_6_47_31_AM_Section%2008%20-%20Compensation%20(Final).pdf) retrieved 12 May 2016.

¹⁷⁰See footnote 169 *op-cit*.

¹⁷¹*Ibid* (note 169 above).

¹⁷²Sibande G District Municipality, compensation for occupational diseases and injuries policy, 2013 see also <http://www.labour.gov.za/DOL/downloads/documents/useful-documents/compensation-for-occupational-injuries-and-diseases/>

¹⁷³An employee is an individual who works part-time or full-time under a contract of employment, whether oral or written, express or implied, and has recognized rights and duties. Also called worker. Read more at Bussines Dictionary accessed at <http://www.businessdictionary.com/definition/employee.html#ixzz48Qu7khgV> retrieved 12 May 2016.

¹⁷⁴Section 22(1) of the Act, 1993. COID Act defines accident for the purpose of adjudicating claims for benefits, consists of three criteria.

-The criteria for the compensation Commissioner accepting claim for an accident are that:

- It is unexpected occurrence arising out of and in the course of performance of an employee’s duties.
- The occurrence must result in personal injuries. The question is can the injury be linked to be accident? There must be a medical evidence that the employee has an injury and there must be evidence that the injury was caused by the accident in the workplace.
- The occurrence must happen at a specific time and place-this excludes the evidence that are not work-related.

party is eligible to claim for damages devoid of having to demonstrate the negligent conduct of any other person for the accident.¹⁷⁵ This must include all the dependents of the diseased miner to claim for compensation with the condition that such dependents should have prima facie evidence that proves that they were depending on the diseased miner for support or subsistence.

2.4 Occupational Diseases in Mines and Works Amendment Act, 2002 (ODMWAA)

The Act oversees the constant intensive care and surveillance and assessment of both former and current miners for probable compensable occupational lung diseases. The surveillance of current mineworkers is the accountability of the employer as required by the Mine Health and Safety Act that came into force in 1997.

This Act provides opportunity for both former and current mineworkers to lodge an application claiming for damages that might have arisen from silicosis and pneumoconiosis caused by mining dust or any other mine-related incident. Similarly, Compensation for Occupational Injuries and Diseases Act, 1997 will also gratify mineworkers a chance to claim for compensable damages from mining companies. The Act states that “any person who works or has worked at a mine or works, or any other person acting on behalf of such a person, may at any time apply to the director for a medical examination of such person for the purpose of determining whether such person is suffering from a compensable disease, or, if he or she has previously been found to be suffering from such a disease, the degree of such disease”.¹⁷⁶

Therefore, “upon receipt of such application made by any mineworker, the director shall, subject to the provisions of subsection (3) of the Act, cause the person concerned to go under medical examination as soon as possible;¹⁷⁷ hand over to the certification committee a full report on the state of the health of that person¹⁷⁸; and cause such further examinations, tests and observations to be carried out as the director may deem necessary or as the certification committee may require.”¹⁷⁹ Finally,

¹⁷⁵The Compensation Fund Preliminary Report 2nd Draft also see <http://www.treasury.gov.za/publications/other/ssrr/Session%20One%20Papers/Compensation%20Fund%20Project%202nd%20draft.pdf> retrieved 08 December 2016.

¹⁷⁶Section 32(1) of the Amendment Act, 2002.

¹⁷⁷Section 32(2)(a) of the Amendment Act, 2002.

¹⁷⁸Section 32(2)(b) of the Amendment Act, 2002.

¹⁷⁹Section 32(2)(c) of the Amendment Act, 2002.

“the director reserves the right to reject such application if the person concerned was medically examined under this Act within the period of 24 months immediately preceding the date on which such application is received, unless if the medical practitioner has supported such an application in writing.”¹⁸⁰¹⁸¹

The ultimate aim of both ODMWAA and COIDA is to give current and former mineworkers who are suffering from mining related diseases such as silicosis, tuberculosis and pneumoconiosis an opportunity to institute an application claiming compensation for the damages. These Acts vary in terms of administration and benefits provided. ODMWA is not limited to damages only, but it also covers for “post mortem benefits (through the National Institute for Occupational Health’s Pathology Section) for miners if an occupational disease is found, even if it was not the cause of death. ODMWA also pays lump sum benefits founded on the level of impairment and does not make any further pension provision.”¹⁸²

In actual fact diseases covered by ODMWA “are those that have been determined to have been contracted while executing work that is hazardous in mines or similar work and that consist of “pneumoconiosis, tuberculosis, permanent obstruction of airways and progressive systemic sclerosis.” This Act gives the former and current miners an opportunity to claim for compensation for any injury or disease contracted while performing risky mine-related work.¹⁸³

This was evident in the case of *Nkala v Harmony Gold Mining Company Limited*¹⁸⁴, where the applicants suffered from silicosis had locus standi in terms section 38 of the

¹⁸⁰Section 32(3) of the Amendment Act, 2002.

¹⁸¹Any mineworker that makes an application for damages under ODMWA must go under medical examination in order to be diagnosed of any mine-related disease. Roberts J submits that “there is an urgent need to develop learning and training materials on the ODMWA for all health personnel. This needs to encompass nursing staff, doctors, hospital managers, and private sector doctors. There is enormous potential in the use of private sector doctors to facilitate bringing BMEs to the people who need them. Importantly, the legal rights of patients need to be known by health personnel. Training courses need to be developed to teach the legislation and the policies to all health personnel. These training courses could obviously be undertaken more strategically, in the beginning, in targeting those health personnel in areas of high mine recruitment and areas of high labour-sending”.

¹⁸² National Institute for Occupational, Health Compensation Systems For Occupational Diseases available at <http://www.nioh.ac.za/?page=topical&id=13&rid=19> retrieved 25 June 2016.

¹⁸³The Compensation Fund Preliminary Report 2nd Draft also see <http://www.treasury.gov.za/publications/other/ssrr/Session%20One%20Papers/Compensation%20Fund%20Project%202nd%20draft.pdf> retrieved 08 December 2016.

¹⁸⁴*Nkala v Harmony Gold Mining Company Limited 2016 JDR 0881 (GJ).*

Constitution, and proceeded with the class action against mining companies claiming for compensation. The court ruled in favour of the applicants and granted the certification to proceed with the class action. Hence the significance and the relevance of the judgment in this case is that it gives the former and current miners ample opportunity to approach any competent court of law alleging the infringement of any right, as well as accessibility of claiming for damages resulting from such infringement.

2.5 Skills Development Act of 1998 (SDA)

The purposes of SDA is “to develop the skills of the South African workforce - to improve the quality of life of workers, their prospects of work and labour mobility; to improve productivity in the workplace and the competitiveness of employers; to promote self-employment; and to improve the delivery of social services; to increase the levels of investment in education and training in the labour market and to increase the return on that investment; to encourage employers - to use the workplace as an active learning environment; to provide employees with the opportunities to acquire new skills”.

As well as “providing opportunities for new entrants to the labour market to gain work experience; to employ persons who find it difficult to be employed; to encourage workers to participate in learning programmes.” In addition, it also “improves the employment prospects of persons previously disadvantaged by unfair discrimination and to redress those disadvantages through training and education; to ensure the quality of learning in and for the workplace; to assist - work-seekers to find work; retrenched workers to re-enter the labour market; employers to find qualified employees; to provide and regulate employment services”.¹⁸⁵ Training is one of the fundamentals in the workplace since employees or the new entrants gain work experience relating to mine sector. It is also vital to train employees to avoid unnecessary injuries and diseases, as well as assist in sustaining a low-slung accident rate.

¹⁸⁵Section 2(1) of the Act, 1998 available at https://en.wikipedia.org/wiki/Skills_Development_Act,_1998 retrieved 13 May 2016, 08:57.

(a) Mining Qualifications Authority (MQA)

The MQA was created in accordance with the requirements set by the MHSA.¹⁸⁶ It is now the accredited Skills Education Training Authority (SETA) for the mining and minerals industry in accordance with the Skills Development Act which came into operation in the year in 1998. It's been in operation as a training facility since the year 2000.¹⁸⁷ The "South African Qualifications Authority (SAQA)" required the MQA to establish a qualification and standards unit for the mining sector.¹⁸⁸ This led to SAQA in approving the MQA as an Education and Training Quality Assurance (ETQA) body for the mining industry.¹⁸⁹

In other words, the MQA is obliged to advance the goals of the renowned National Skills Development Strategy (the NSDS) which intended to advance expertise in South Africa and throughout the mining sector, as a result refining efficiency and providing additional individuals' work opportunities.¹⁹⁰ "The MQA is responsible for monitoring and auditing of all occupationally directed unit standards and qualifications related to the mining and minerals sector".

Qualifications are very important for most job opportunities, because they give a full description of what a person is capable of doing. Qualifications describe the employability skills, problem solving, communication skills and whether a person is a team worker.¹⁹¹ Providing skills to previously underprivileged group is a significant

¹⁸⁶See Mining and Minerals Sector Education and Training Authority MqaSETA available at <http://www.vocational.co.za/mqaseta-mining-and-minerals-sector-education-and-training-authority/>, retrieved 12 May 2016, 20:01.

¹⁸⁷*Ibid* (note 186 above).

¹⁸⁸See Mining and Minerals Sector Education and Training Authority MqaSETA available at <http://www.vocational.co.za/mqaseta-mining-and-minerals-sector-education-and-training-authority/>, retrieved 12 May 2016, 20:01. In addition, Mining Charter must also contain a provision where Mining Qualification Authority provide scholarships to science and mathematics students who wish to study mining related courses as this shall promote transformation and ensuring that individuals with proper qualification are employed in the mining sector

¹⁸⁹*Ibid* (note 188 above).

¹⁹⁰*Ibid* (note 188 above).

¹⁹¹Villiers A made a submission that some of the benefits of further qualifications lie not in course content but in:

- Exposure to leading experts, thought leaders, and networks.
- An enhanced ability to see new relationships and trends.
- Ability to provide sound advice and technical leadership.
- Ability to translate information across professions e.g. finance to IT
- Increased awareness of relevant risks and how to manage them
- Better understanding of the theoretical underpinning's of your own professional practice

long-term success to the mining transformation.¹⁹² Most black people were not exposed to any kind of training during the apartheid government; they lack the experience and necessary skills to occupy executive positions.¹⁹³ Therefore, obtaining proper qualifications will contribute towards improving safety and efficiency in the sector; as well as providing opportunities for historical disadvantaged individuals to gain skills and procure necessary qualifications so that mine enterprises can “attract and retain suitable employees.”¹⁹⁴

(b) Sector Skills Plan, 2011

The main aim of the SSP is “to ensure that the SSETA has relevant, up-to-date information and analysis to allow it to perform its strategic skills planning function for the sector, and to maximise participation by employers in the National Skills Development Strategy through the efficient use of resources available for training within the sector”.¹⁹⁵ Furthermore, “the Sector Skills Plan is an analysis of the labour market within the local government sector which gets compiled once every five years, and submitted to the Department of Higher Education and Training, and is updated annually.”¹⁹⁶

The “Sector Skills Plan” is considered to be the most crucial strategic analysis dealing with the application of skills and training improvement in the mining industry.¹⁹⁷ The efficiency and efficacy of the SSP is that it ascertain a set of sector skills, improvement of ideas and goals required to satisfy industry necessities, as well as cost-effective or

•The acquisition of an extended range of practical tools, techniques, applications.

¹⁹²Fact Sheet, Skill Development, Chambers of miner of South Africa, 2015.

¹⁹³*Ibid* (note 192 above)

¹⁹⁴Fact Sheet, Skill Development, Chambers of miner of South Africa, 2015.

¹⁹⁵Service Sector Education and Training: Sector Skills Plan\Research available at <http://www.serviceseta.org.za/EmployersMemberCompanies/Pages/Sector-Skill-Plan.aspx> retrieved 13 May 2016, 07:49.

¹⁹⁶The Sector Skills Plan provides the:

- Profile of the labour force within the sector by province, race, age, gender, qualification and occupational category
- It monitors the supply of, and demand for labour within the sector.
- It tracks the absorption of new labour market entrants into the sector.
- It identifies areas of skills growth and skills need
- It identifies opportunities and constraints on employment growth in the sector.

¹⁹⁷Service Sector Education and Training: Sector Skills Plan\Research Available at <http://www.serviceseta.org.za/EmployersMemberCompanies/Pages/Sector-Skill-Plan.aspx> retrieved 13 May 2016, 07:49.

industry progression plans, and address skills deficiency.¹⁹⁸ Mining Qualifications Authority (MQA) formulates this Sector Skills Plan (SSP) and appraises it in line with the requirements set out by the Department of Higher Education and Training (DHET).¹⁹⁹ It is critical to note that the MQA was created in terms of the Mine Health and Safety Act²⁰⁰ prior to the enactment of the Skills Development Act. The MQA was enacted to advance “health and safety standards through education and training in the mining sector.”²⁰¹

(c) Internship Programmes

In the process of improving skills improvement initiatives and the change in the mining and minerals industry, the MQA created internship programme in the year 2005 known as “Graduate development programme (GDP)”, presently referred to the Internship Programme.²⁰² The MQA Internship Programme is focused at expanding the extent of “technical graduates with the basic training and qualifications necessary for proficient employment in the mining and minerals sector.”²⁰³

This programme targets young people without a job, previously underprivileged South Africans who are in possession of “degrees or diplomas in the scarce skills disciplines as identified in the MQA Sector Skills Plan”.²⁰⁴ Such as: “Mining Engineering, Mine Survey, Metallurgical Engineering, Mechanical Engineering, Industrial Engineering, Environmental Management, Electro Mechanical Engineering, Electrical Engineering, Chemical Engineering and Mineral processing, Analytical Chemistry and Geology.”

¹⁹⁸Msiza D, Chairperson: MQA Board Sector, Skills Plan for the Mining and Minerals Sector Submitted by the Mining Qualifications Authority (MQA) to the Department of Higher Education and Training, 2014-2019.

¹⁹⁹*Ibid* (note 298 above).

²⁰⁰Mine Health and Safety Act No. 29 of 1996,

²⁰¹Msiza D, Chairperson: MQA Board Sector, Skills Plan for the Mining and Minerals Sector Submitted by the Mining Qualifications Authority (MQA) to the Department of Higher Education and Training 2014-2019 also available at <https://www.mqa.org.za/sites/default/files/FINAL%20MQA%20SSP%20Jan%202014.pdf> retrieved 21 July 2017.

²⁰²The Internship Programme – Another product of the MQA available at <http://www.mqa.org.za/learning-programmes/internships> retrieved 13 May 2016, 08:06.

²⁰³See footnote 202 *op-cit*.

²⁰⁴The Internship Programme – Another product of the MQA available at <http://www.mqa.org.za/learning-programmes/internships> retrieved 13 May 2016, 08:06.

Internship programme is one which affords students with an opportunity to procure necessary workplace experience or a chance to put into practice what they were taught at institutions of higher learning.²⁰⁵ Through careful selection of “practical work assignments”, internships permit the intern to reach a considerable understanding of the mining sector, and all its facets.²⁰⁶ The main object internship is “to resolve the general shortage of qualified and skilled people in the workforce by encouraging graduates to equip themselves with the necessary practical experience. To assist in meeting the strategic staffing needs of the mining industry by providing practical and accelerated work experience programmes that expose interns to specific occupations”.²⁰⁷

The internship programme is regarded as a mechanism that provides unemployed graduates who have not been exposed to workplace with adequate and necessary work experience. The programme will also assist the interns to come to a clear understanding of the importance of mining health and safety environment and how the work should be executed and what is exactly expected of them in enhancing health and safety measures in the sector.²⁰⁸

2.6 Labour Relations Act, 1996 (LRA)

LRA oversees how the employer and the employee deal with one another²⁰⁹, in other words the LRA governs the relationship between the employer and the employee.²¹⁰ Although, LRA does not provide for specific section that deals with the health and safety of the workers, it also governs the safety and health of employees. Thus, reference was made “to Occupational Health and Safety Act, 1993(hereafter referred to as OHSA), which is administered by the Chief Directorate of Occupational Health

²⁰⁵Department of Public Service and Administration: The Public Service Internship Programme step by step guide ,2006.

²⁰⁶*Ibid* (note 205 above).

²⁰⁷Department of Public Service and Administration: The Public Service Internship Programme step by step guide, 2006.

²⁰⁸If we want to do away with unfair and unjust workplace, and create a workplace where everyone is given equal opportunities, we need to invest more in education. Mining companies must award bursaries to most deserving students who are studying mining related courses, thus in completion of their studies are deployed in various mining companies to procure work experience.

²⁰⁹ South African labour law available at https://en.wikipedia.org/wiki/South_African_labour_law retrieved 26 June 2016, 12:34.

²¹⁰Professional labour relations consultancy the South African Labour Guide stipulates” that workers and employers must share the responsibility for health and safety in the workplace. Both parties must proactively identify dangers and develop control measures to make the workplace safe.

and Safety of the Department of Labour. In order to ensure the health and safety of workers, provincial offices have been established in all the provinces.”²¹¹ This means that inspectors from various provinces should conduct inspections and investigations at workplaces regularly.²¹²

The OHS Act is one of the legislation that falls within the ambit of the Department of Labour. It provides the Inspectors with extensive powers to explore and examine workplaces, enables them to interrogate people in a workplace, as well as demanding for clarifications or reports from an employer and so on.²¹³ The Act also gives the inspectors the authority to impose monetary fine not exceeding R50 000 and imprisonment for period not longer than one year on any individual or person who contravenes the provisions of this Act.²¹⁴ If such a person is not satisfied with the fine imposed by the inspector, they can appeal to the Chief Inspector. Similarly, if they are not pleased with the decision of the Chief Inspector, they may as well resort to Labour Court.²¹⁵

2.7 Broad-Based Black Economic Empowerment Act, 2013 (BBEEA)

South Africa became a democratic country in 1994 after the democratic government was elected, with a clear intention of redressing the imbalances caused by the apartheid regime in all spheres; socially, politically and economically. Since then, government has gone on board introducing various programmes ensuring that statutory framework and policies for transformation are implemented in order to shape South Africa’s economy.²¹⁶ The BBEEA is “aimed at redressing the results of past or present discrimination based on race, gender or other disability of historically

²¹¹The South African Labour Guide: Health and Safety in the Workplace available at <http://www.labourguide.co.za/health-and-safety/739-what-every-worker-and-employer-should-know-about> retrieved 13 May 2016, 09:37

²¹²*Ibid* (note 211 above).

²¹³WageIndicator Foundation, Health and Safety, 2016 also available at <http://www.mywage.co.za/main/decent-work/health-and-safety-at-work/health-and-safety> retrieved 13 May 2016, 09:46. The worker is expected to cooperate with the employer where the Act imposes a duty or requirements on the worker and to give information to an inspector from the Department of Labour (DoL) inspectorate, if required. Further, the worker must carry out any lawful instruction which the employer or authorised person prescribes for health and safety.

²¹⁴Section 38(1)(p) of the Act, 181 of 1993(as amended).

²¹⁵My wage: Health and Safety available at <http://www.mywage.co.za/main/decent-work/health-and-safety-at-work/health-and-safety> retrieved 13 May 2016, 09:46.

²¹⁶Broad-Based Black Economic Empowerment: Proclamation by the President of the Republic of South Africa available at https://www.thedti.gov.za/economic_empowerment/bee.jsp retrieved 13 May 2016, 10:29.

disadvantaged persons in the minerals and petroleum industry, related industries and in the value chain of such industries; and transforming such industries so as to assist in, provide for, initiate, facilitate or benefit from them”.²¹⁷

The Broad-Based Black Economic Empowerment Act, No 53 of 2003 (BEE Act) was amended by The Broad-Based Black Economic Empowerment Amendment Act, No 46 of 2013, which makes BBE Act as a principal statute in South Africa that deals with BEE, requiring all governmental organizations to make use of standard BEE “Codes of Good Practice” or any related “code of good practice” gazetted in terms of the BEE Act with regard to procurement of “goods or services or issuing licences or other authorisations under any other laws, and to penalise fronting or misrepresentation of BEE information, came into force and effect on 24 October 2014”.²¹⁸

Safety standards fall within the word “transformation” and cannot be neglected. Subsequently, mining companies are obligated to pursue the national goal towards mining transformation, improving the health and safety of the mineworkers, as well as mining communities.

2.8 Mining Charter 2010

The “Broad Based Socio Economic Empowerment Charter for the South African Industry”, also known as the Mining Charter, is a mining tool introduced by the government and designed to promote sustainable development, growth and radical transformation in the mining sector. It is definite embracer of both section 9 and 100(2) of the Constitution of 1996 and the Mineral and Petroleum Resources Act, 2002 respectively.

Mining charter plays a vibrant role in upgrading “safety and health” performances in the mining sector by “implementing management systems focused on continuous improvement of all aspects of operations that have a significant impact on the health and safety of employees, contractors and communities where mining takes place; providing all employees with health and safety training and require employees of

²¹⁷Broad-Based Black Economic Empowerment Act 46 of 2013.

²¹⁸Pillay V, BEE Amendment Act and draft codes of good practice, 2014 available at <https://www.cliffedekkerhofmeyr.com/en/news/publications/2014/bee/bee-alert-3-november-bee-amendment-act-and-draft-codes-of-good-practice.html> retrieved 21 July 2017.

contractors to have undergone such training; Implement regular health surveillance and risk-based monitoring of employees”.²¹⁹

2.9 Minerals Petroleum Resources and Development Act 28 of 2002

The MPRDA repealed the Mineral Act 50 of 1991, which did not address environmental issues confronting South African mining sector. The provisions of MPRDA more specifically section 100(2) are intended for fair and significance participation of the people who were previously over looked by apartheid laws (that excluded blacks and coloured to access the industry).²²⁰ One of the objects of the MPRDA is to “give effect to section 24 of the Constitution by ensuring that the nation's mineral and petroleum resources are developed in an orderly and ecologically sustainable manner while promoting justifiable social and economic development.”²²¹ Section 24 of the Constitution shields the right to clean environment, it protects people from being exposed to environment that is not conducive to their health and well-being.

Tucker highlighted that “as the Constitution certainly applies, all persons had the right to an environment that was not harmful to their health or wellbeing and that a company or entity that will impact on the environment had to demonstrate that it had reasonably considered the environmental impact of its operations. Also, before taking a decision on a mining or prospecting right, the MPRDA requires the decision-maker to be satisfied that no unacceptable harm will result to the environment from the envisaged operations”.²²²

MPRDA also deals with transformation and empowerment of Historically Disadvantaged South Africans (HDSA) in the mining sector in terms of skills and managerial positions. Therefore, health and safety standards in the workplace are constitutional rights that need to be protected.

²¹⁹Amendment of the Broad-Based Socio-economic Empowerment Charter for the South African Mining and Minerals industry, 2010.

²²⁰*Ibid* (note 219 above).

²²¹Minerals Petroleum Resources and Development Act 28 of 2002.

²²²Tucker C, Bill increases possibility of single authorisation for exploration, mining available at <http://www.bowman.co.za/Filebrowser/ContentDocuments/Authorisation-for-exploration.pdf> retrieved 25 June 2016.

2.10 Constitution of the Republic of South Africa, 1996

The Constitution of the Republic of South Africa contains within it the fundamental rights that are enshrined in Chapter 2 of the Constitution.²²³ One of the fundamental rights is the right to clean environment. This right is contained in Section 24(1) of the Final Constitution which states that, “everyone has the right to an environment that is not harmful to their health or wellbeing”. Section 24 is a justiciable socio-economic right. It is a socio-economic right because it is human centred, and it also obliges the state to “take reasonable legislative measures, within its available resources to achieve a progressive realisation” of the socio-economic right. According to Swart “mines have to comply with the South African constitutional and common law by conducting their operational and closure activities with due diligence and care for the rights of others”.²²⁴

The right to a clean environment is very important because it protects people from being exposed to environment that is harmful to their health and well-being. The right to a clean environment as contained in Section 24 gave a constitutional mandate which gave birth to the National Environmental Management Act.²²⁵ Section 24, also encompasses the concept of sustainable development,²²⁶ where all three organs of State must work together, consult with and assist each other. Section 28 of NEMA also imposes a duty of care on every person who damages or pollutes or degrades the environment to take reasonable and prudent measures to stop or minimize such degradation from continuing or recurring.²²⁷ In addition section 32 reads with section 33 of the Act provide for *locus standi* to implement and enforce laws regulating environmental protection, as well as private prosecution thereof.²²⁸

²²³The Constitution of the Republic of South Africa, 1996 Chapter 2, the Bill of Rights.

²²⁴Swart E, The South African Legislative Framework for Mine Closure, 2003 available at <https://www.saimm.co.za/Journal/v103n08p489.pdf> retrieved 21 July 2017.

²²⁵National Environmental Management Act 107 of 1998.

²²⁶The World Commission on Environment and Development coined the concept of sustainable development and defined it as follows; sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

²²⁷Swart E, The South African Legislative Framework for Mine Closure, 2003 available at <https://www.saimm.co.za/Journal/v103n08p489.pdf> retrieved 21 July 2017.

²²⁸*Ibid* (note 227 above).

2.11 Conclusion

The Constitution of the Republic is the supreme law of the country and any legislation passed by the legislature must be in line with the Constitution. It protects the rights of the citizen of the Republic, and promotes transformation in our democratic society. Therefore, all legislation and policies regulating mining industry must conform to the standard of human rights protection. South Africa is one of the countries that has cluster of laws and policies that have been put in place to ensure health safety standards in the mining sector, however poor implementation and ineffective enforcement of these legislation and policies remain a huge predicament in the sector. Thus, effective and proficient implementation and enforcement of these legislation and policies is imperative. Mining companies are expected to comply with the provisions of the statutes in place to regulate the mining industry, failure which there would be consequences against companies that break the laws.

CHAPTER THREE: IMPLEMENTATION AND ENFORCEMENT OF MINE SAFETY STANDARDS: A CAMPARISON OF AUSTRLIA, CHILE AND SOUTH AFRICA

3.1 Introduction

This chapter compares Australia, Chile and South Africa in respect of health and safety standards in the mining industry, and how each country implements and enforces safety measures in the industry. The main focus will be on the assessment of current and emerging occupational health and safety issues emanating from mining sector in both Australia and Chile and the lessons that can be learned by South Africa. South Africa, Australia and Chile are active and productive mining countries in the world.²²⁹

3.2 Australia

(a) Health and safety standards in Australia: lessons to be learned by South Africa

In Australia, the administration of Mining Occupational Health and Safety (OHS) legislation in the Australian mining sector is primarily centred upon the implementation and improvement of OHS management systems.²³⁰ The enactment of appropriate statutes has played a very big role with regard to the idea of duty of care and risk management, with more prescriptive and compliance-driven approaches retained in some areas.²³¹

Moreover, duty of care in the mining sector is regulated by Mines Safety and Inspection Act 1994, which is aimed at “promoting and improving occupational safety and health standards within the minerals industry, as well the Mines Safety and Inspection Regulations 1995 (the regulations) which provide more specific requirements for a range of activities”.²³² All regulations in terms of this Act are

²²⁹World Mineral Production 2006-2010. British Geological Survey, 2012.

²³⁰Cliff D, The Management of Occupational Health and Safety in the Australian Mining Industry, 2012 available at <https://pdfs.semanticscholar.org/6625/75fe4001b93872dfa4aed58b76b4f29875e8.pdf> retrieved 21 July 2017.

²³¹*Ibid* (note 230 above).

²³²Government of Western America, Department of Mines and Petroleum, General duty of care in Western Australian mines-Guideline, Second edition, 2011 available at https://webcache.googleusercontent.com/search?q=cache:3J_j7Q9FQ54J:https://www.international-sos-foundation.org/~media/international-sos-foundation/files/resources/asia-pacific/australia/general-duty-of-care-in-western-australian-mines--second-edition.pdf%3F1a%3Den+&cd=1&hl=en&ct=clnk&gl=za retrieved 21 July 2017.

enforceable and any contravention constitutes prosecution accompanied by a fine, or an order terminating mining processes and take on remedial action.²³³

Employers are obliged to come up with the safety measures and make sure that all workers are protected and not exposed to hazardous environment.²³⁴ Thus, mining industries have established external training courses to offer a service to certain mining sectors and most of these courses have received official accreditation nationwide, as well state organizations.²³⁵ Some industries also arrange for in-house training by delegating some of their own workers as mentors, or making use of professional instructors.²³⁶ In-house training is the most prominent method that grants the managing board and workers an opportunity to learn new things and sharing of service delivery in the industry.²³⁷

In addition, mineworkers must familiarise themselves with what is called “in-house safety rules and regulations”, which are referred to as written safety rules and

²³³*Ibid* (note 232 above).

²³⁴*Ibid* (note 232 above).

²³⁵*Ibid* (note 232 above). According to Letts D, external training will have the following benefits –

- “Improved organizational efficiency: Hiring an outside training provider allows an organization to focus on its core competencies. Qualified training providers can help organizations align training initiatives with key business objectives, ensuring any and all training efforts support larger company goals. Ideally, a training partner will also assist in implementing post-training follow up courses and refreshers. These can help organizations maximize learning ROI and better determine training’s impact on company operations, culture, etc.
- Better control training costs: When an organization manages training programs internally, it is responsible for both the training activities (content development, delivery, logistics, post-training follow up, etc.), and other – often unseen – training costs. A significant amount of company time and resources may be poured into these programs. An external training provider can help identify and reduce these unseen costs, and will even bear some of the risks associated with the process. This creates maximum value for your training spends which, ultimately, frees up funds for additional training activities. In addition, training providers regularly invest in tools and processes to drive further efficiencies.
- Access to expertise: This aspect is especially important to companies that do not have a deep bench of subject matter experts or access to advanced technologies. When cultivated correctly, an outsourced training provider who is a true partner can help develop new training paths for your organization and further align training spend with business requirements. Hiring an expert to lead a training initiative can also ensure a higher level of learning consistency across the enterprise. Those in the training program will benefit from exposure to proven training techniques, and ideally learn the skills they need in a more efficient and effective manner. The quicker new skills are learned, the quicker they can be applied to the business, which can translate into a competitive advantage.”

²³⁶*Ibid* (note 232 above).

²³⁷*Ibid* (note 232 above).

regulations for all personnel in the mining sector established to instil a common understanding of their “safety and health” duties and responsibilities.²³⁸ It is also explained as a set of basic safety rules and guidelines formulated to regulate safety and health behaviour at a workplace.²³⁹ The rules shall cover the main work operation or process in the sector.²⁴⁰ The objective of this in-house rules and regulations is to convey direction on all routine activities in the mining sector in order to establish a positive safety culture.²⁴¹

Furthermore, Australia also have what is called Mining Education Australia (Australian Mining School) which is aimed at providing diverse mining engineering courses to undergraduates.²⁴² Through the studies the students gain detailed skills and knowledge regarding the operation of mining industry prior to graduation and most develop self-confidence, independence and people skills for a professional career.²⁴³ For example section 17 of Coal Mining Safety and Health Act (hereafter referred to as CMSHA, 1999) promote appointment of electrical engineers with necessary qualifications to manage and control any mine electrical work.

On the other hand, Higher Education Funding Act, 1988, articulated that financial assistance of the higher education schemes is vital in addressing the educational skills development, economic and social growth, enhancing knowledge, contributing to the research competences, as well as competing in the world market economy.²⁴⁴ This shows that skills development plays a critical role in the social and economic growth; hence the government is obligated to have enough budgets in order to assist higher education systems financially.

²³⁸Wei H, Dang L, and Hoyle M, Overview of Health and Safety in China, 2008 available at https://www.icheme.org/communities/subject_groups/safety%20and%20loss%20prevention/resources/hazards%20archive/~media/Documents/Subject%20Groups/Safety_Loss_Prevention/Hazards%20Archive/XX/XX-Paper-86.pdf retrieved 21 July 2017.

²³⁹*Ibid* (note 238 above).

²⁴⁰*Ibid* (note 238 above).

²⁴¹Tey D, Leng LS, Wang W, Department of Orthopaedic Surgery In-House Rules and Regulations, 2012 also see Fernando J. Kim, Rodrigo Donalisio da Silva, Diedra Gustafson, Leticia Nogueira, Timothy Harlin and David L. Paul, Current issues in patient safety in surgery: a review, 2015 also available at <https://pssjournal.biomedcentral.com/articles/10.1186/s13037-015-0067-4> retrieved 21 July 2017.

²⁴²Australian Mining Schools available at <http://www.miningoilgasjobs.com.au/training-and-development/mining-schools.aspx> retrieved 03 July 2016

²⁴³*Ibid* footnote 242 above.

²⁴⁴Section 2A(a)(iii) and (b) of Act, 1988.

In terms of Australian Education Act 2013, it is stated in the Preamble that every student is eligible to have education that is admirable, and also entitled to be given an opportunity to reach their maximum potential that will enable them to flourish, accomplish their goals, and give back to their community, now and the future.²⁴⁵ This Act provides Australian schools with necessary funding in order to assist the schools in meeting their educational needs.²⁴⁶ It is a clear indication that skills development needs adequate budget that is accumulated by means of governmental policies. This assists in gaining robust skills and knowledge, as well as preparing or equipping the youth with necessary skills and expertise before they become exposed to working environment.

Although most of South African universities²⁴⁷ offer mining and mineral engineering programmes that are intended to provide skills and knowledge to students before they are employed in the mining industry,²⁴⁸ the question that arises is whether or not the government is doing enough in investing funds to finance those students who have enrolled with various institutions of higher learning? The answer to the question may be no, because most of the universities depend on National Student Financial Aid Scheme (NSFAS) to fund student that are financially unstable. However, this scheme is limited in terms of funds to students as it does not cover all the fees of the students concerned, because government does not invest enough funds for the most deserving students.

The South African government should adopt the strategy being used by the Australian government where it develops or establishes its own mining engineering schools and provide the students concerned with financial assistance in pursuant of mining courses, since the demand for mining skilled and knowledgeable engineers is growing too fast in the mining sector.²⁴⁹ Hence, financial assistance is a prominent catalyst to

²⁴⁵Australian Education Act 67 of 2013.

²⁴⁶*Ibid* (note 245 above).

²⁴⁷Musingwini , Cruise , Phillips (2012) stated that “the University of the Witwatersrand, University of Pretoria, University of Johannesburg, and University of South Africa have historically produced mining graduates for the South African industry”.

²⁴⁸Musingwini C, Cruise J.A, Phillips HR,A Perspective on the Supply and Utilization of Mining Graduates in the South African Context,2012 available at http://www.platinum.org.za/Pt2012/Papers/937-952_Musingwini.pdf retrieved 21 July 2017.

²⁴⁹Shabangu S once stated that as a country we must attempt to upgrade the mining diligence basing our focus on the countenance of skilling our societies, as this will certifies our industrial global competitiveness.

assist most deserving students to procure necessary qualifications before employment; this will as well enhance health and safety standards in the industry, since students would have had amplified industry experience, knowledge and understanding about the sector thereof.

In addition, this will assist students to gain robust knowledge and skills before they become exposed to the mining working environment. The government must also award bursaries to the most deserving students who are willing to pursue their studies in mining-related careers. However, to be fair enough these bursaries must not only be awarded to engineering students, but also be awarded to those students who are doing other courses other than engineering, for example law students in completion of their studies may be deployed in the sector to ensure thorough compliance with the notion of effective and proficient implementation and enforcement of rules and policies regarding health and safety measures, of course medicine students may as well be deployed to assist in health issues, as well as Human Resource Management students may be employed in the sector in order to maximize employees performance service of an employer's strategic objectives.

In terms of CMSHA, “the site senior executive must ensure a copy of each risk assessment for the mine, and information and data on which it was based, is kept at the mine until it is superseded or the hazard to which it relates is no longer at the mine”.²⁵⁰ This information and data contributes to risk management, as well as planning for unforeseen future danger in the mine. This Act also expects all coal mine concerned to submit health and safety census, disclosing all employees working in the mine for a certain quarter.²⁵¹ Any disclosure of incorrect information, will result on the mine concerned ordered to pay a specific health and safety fine.²⁵²

Moreover, one of the Western Australian-based companies(Rosslyn Hill Mining Pty Ltd) indicated that the combination or consolidation of information (data) collected from big mining companies or constructions might be helpful in reducing mining misfortunes

²⁵⁰ Section 7 of Coal Mining Safety and Health Act, 1999.

²⁵¹ Section 12F of the Act, 1999.

²⁵² Section 12G(2)(i) of the Act, 1999.

(or accidents).²⁵³ The company is making use of incident records and other information produced by big mining companies and manufacturing sites, and studies such data and plans the report correctly, and formulate collaborating risk map that can be used to foresee the possibility of occurrence of any harm and how it can be prevented.²⁵⁴

Strharsky says that:

“One of the things we think is really key to preventing accidents is having the right information at a right. And part of the problem is industry now is that it is always at the wrong time.”²⁵⁵

Consequently, lesson that can be learned by South African with regard to mining is the significance of collection of data or information such as “technical data, geographical information system imagery and electronic documents managed through a single set of web-based tools”²⁵⁶ recorded by big mining companies which will assist such mining companies to make informed decisions in preventing mining accidents and diseases that might affect health and safety of mineworkers. In addition, such data will also assist mining companies to apply what is called a precautionary principle.²⁵⁷ Only if a particular activity or event raises human threats to health or is detrimental to

²⁵³Australian Company uses big data to prevent mining accidents available at <https://www.911metallurgist.com/blog/australian-company-uses-big-data-to-prevent-mining-accidents> retrieved 03 July 2016.

²⁵⁴*Ibid*, additionally, one of the strategies of the National Mine Safety Framework (NMSF) is consistent and reliable data collection and analysis to develop a national mining industry data set, and facilitate consistent collection and analysis of data across jurisdictions. Thus assist the employers to also provide employees with necessary and adequate information, since employers are required to provide sufficient information, instructions, training and supervision to employees to enable them to perform their work safely. The information, instructions and training should be communicated in a way that employees can understand.

²⁵⁵Strharsky J a leader in Perth’s growing tech start-up ecosystem. He started technology company Synaptor in 2011 see also Strharsky J, Prickett Z, Lucey P, Innovation in WA: A Tech Startup Accelerator for the Resources Industry, 2015 available at [http://webcache.googleusercontent.com/search?q=cache:HkSRVrbA7AEJ:www.parliament.wa.gov.au/Parliament/commit.nsf/\(Evidence%2BLookup%2Bby%2BCom%2BID\)/17D0BF90B02DA5B748257EC40015BB44/%24file/009%2BResource%2BInnovation%2B%26%2BInformation%2BTechnology.pdf+%&cd=1&hl=en&ct=clnk&gl=za](http://webcache.googleusercontent.com/search?q=cache:HkSRVrbA7AEJ:www.parliament.wa.gov.au/Parliament/commit.nsf/(Evidence%2BLookup%2Bby%2BCom%2BID)/17D0BF90B02DA5B748257EC40015BB44/%24file/009%2BResource%2BInnovation%2B%26%2BInformation%2BTechnology.pdf+%&cd=1&hl=en&ct=clnk&gl=za) retrieved 21 July 2017.

²⁵⁶Environmental Data Management available at <http://www.sgs.co.za/en/Mining/Quality-Health-Safety-and-Environment/Environment/Environmental-Data-Management.aspx> retrieved 05 July 2016.

²⁵⁷ *Ibid* (note 256 above).

the environment, preventive methods ought to be taken even though the cause and harmfulness of the event or damage has not been proved scientifically.²⁵⁸

According to Caldwell “every workplace has occupational risks attached to it, but some more so than others. The mining environment in particular poses much higher risks to its workers than just spilt coffee and dodgy floorboards.”²⁵⁹ He further stated that “the health risks of working in a mining environment are varied, ranging from dust inhalation through to falls and musculoskeletal disorders. Understanding and being aware of your environment is the first step to preventing illness or injury in the workplace.”²⁶⁰

The Australian Mine Safety and Inspection Act 1994 is designed to safeguard health and safety of individuals who are working at mines, as well as assisting both the workers and the mining companies to minimize the risks through take reasonable and prudent measures.²⁶¹ Another objective also includes advancement of fostering collaboration amongst the company and workers to ensure finest workplace performances and donate to the progression and administration of safety legislation.²⁶² Under this Act the inspectors are entrusted with the powers to investigate and conduct prosecutions for failing to take reasonable measures to protect the employees from hazards.²⁶³ This legislation also provides for criminal penalties such as fine or imprisonment.²⁶⁴

In making sure that employees in coal mines are protected from hazardous environment that is detrimental to their health and well-being, the Australian government had introduced the Coal Mine Workers' Health Scheme.²⁶⁵ The Scheme fall within the ambit of Coal Mining Safety and Health Act, 1999 and is intended to

²⁵⁸Understanding the Role of Science in Regulation. The Wingspread Statement and the European Union in Environmental Health Perspectives Volume 117 Number 3, 2009 also available at <http://www.sehn.org/precaution.html> retrieved 07 July 2016.

²⁵⁹Hermanus M.A, Occupational health and safety in mining—status, new developments, and concerns, 2007 available at <https://www.saimm.co.za/Journal/v107n08p531.pdf> retrieved 21 July 2017.

²⁶⁰*Ibid* (note 259 above).

²⁶¹Section 3 of Act 1994.

²⁶²*Ibid* (note 261 above).

²⁶³Section 21(1)(m) of Act 1994.

²⁶⁴Brown KG, Mine Safety and Inspection Laws in Western Australian, Vol 1, 1999 available at <http://www.austlii.edu.au/au/journals/LegIssBus/1999/6.pdf> retrieved 21 July 2017.

²⁶⁵*Ibid* (note 264 above).

ensure that the employees go under medical assessment prior to starting with the work as a mineworker.²⁶⁶

Health assessments are provided for in terms of section 46 of the Act that states that “the employer must ensure a health assessment is carried out for each person who is to be employed, or is employed, by the employer as a coal mine worker for a task other than a low risk task.”²⁶⁷ It is a matter of fact that coal mining is the most dangerous operation in the world; therefore South Africa may adopt this type of health assessment approach in ensuring that all workers are assessed prior to their employment in the industry. This will include among others, regular assessment in the workplace in order to detect promptly any possible health effects resulting from hazardous work practices. It will also assist in determining the efficacy and capability of mechanisms to be applied for particular risk that might be a threat to the industry, as well as protecting people at mine.

Furthermore, adopting a Mine Worker’s Health Scheme that will give the health authorities the power to conduct pre-employment medical test of employees.²⁶⁸ This Scheme will assist the current and former mineworkers who have been contracted with mining-related diseases during their employment, as well as current mineworkers who are living with such diseases to access medical assistance.

In the circumstance, both the employer and the employee are required to fill in a form that will stipulates the amount each party is to contribute during the subsistence of the employment contract, and send it to the relevant department (Department of Labour), which will send back a medical card that will give employee an allowance to access medical aid. The claim will become effective the moment an employee fills in reporting form concerning the injury or disease contracted at a workplace during the course of

²⁶⁶Coal Mine Workers’ Health Scheme (formerly Coal Board Medical) accessed at <https://webcache.googleusercontent.com/search?q=cache:xNOkVkOzg7sJ:https://www.business.qld.gov.au/industries/mining-energy-water/resources/safety-health/mining/medicals/coal-board+&cd=1&hl=en&ct=clnk&gl=za> retrieved 21 July 2017.

²⁶⁷Coal Mining Safety and Health Act 1999

²⁶⁸Although, South African mining industries are duty-bound to comply with the legislations, policies and regulations, mining industries face a problem of non-compliance and poor enforcement of policies; this is supported by the ever-amassed occurrences of mining accidents and high rate of silicosis, tuberculosis, etc. Therefore, it is the government duty’s to develop and implement policies and legislation that rightfully recognises the value of the life, because disregard of health and safety will claim people’s life, which result in violation section 11 of the Constitution of the Republic.

his or her employment. The government, mining companies and the employee's contribution will play a critical role in ensuring that such a Scheme is appropriately financed and sustainable.

3.3 Chile

(a) Health and safety standards in Chile: lessons to be learned by South Africa.

Although South Africa is recognised as a country with high profile of mining statutes that give responsibility to the government, companies and workers to perform some of the duties to ensure “health and safety” values in the mining industry, there are some lessons to be learned from Chile concerning health and safety standards in the sector. According to Hodge the crucial goal for “International Council on Mining and Metals (ICMM)” and their members is zero fatalities.²⁶⁹ In order to eradicate fatalities, the greatest innovative intellectuals are moving the goal from attaining zero harm to accomplishing zero fatalities.²⁷⁰ He further stated that “at ICMM, we believe the latter can be accomplished in the near future”.²⁷¹ He alluded that in order to achieve the zero harm goal three elements must be involved, this includes among others better risk management, collaborative approach and leadership.

He is of the view that improved risk management for low-rate or high-impact incidents is of paramount importance, in other words, the industry must ensure that its resources are correctly capitalized into finding those threats and put on vibrant and active mechanisms in place to reduce their occurrence.²⁷² In general, the recent practice is to strongly invest to avoid high-rate or low-impact incidents, which have only assisted in lessening harm rates, but unable to eradicate fatality rate.²⁷³

3.3.1 Inspection processes

In Chile, the policing function is performed by the country's labour inspectors employed by the Chilean Dirección del Trabajo y Previsión Social (DT)(the Chilean agency in

²⁶⁹An Hodge, Shifting the Paradigms of Health and Safety in Mining available at <http://cornerstonemag.net/shifting-the-paradigms-of-health-and-safety-in-mining/> retrieved 16 June 2016.

²⁷⁰*Ibid* (note 269 above).

²⁷¹*Ibid* (note 269 above).

²⁷²*Ibid* (note 269 above).

²⁷³An Hodge, Shifting the Paradigms of Health and Safety in Mining available at <http://cornerstonemag.net/shifting-the-paradigms-of-health-and-safety-in-mining/> retrieved 16 June 2016.

charge of enforcing the country's labour), who has the permission to pay a visit at a place of work "at any time, either *de oficio*" without a preceding charge having been made by an employee against the employer or after accepting a charge.²⁷⁴ Labour inspection concentrates mainly on imposition of penalties in the form of fines and other forcible measures, which makes the Chilean labour inspection mainly to be punitive.²⁷⁵ They also have permissible access to physical premises for inspection processes and to assess business records of the companies, neither during the day nor at night.²⁷⁶

Furthermore, any individual who prevent or interrupt all the activities of the inspectors from being carried out properly can be punished. Employers who interrupt duties of the inspectors could incur direct and/or personal liabilities for such interruptions, as well as any ethical, material and physical lose sustained by inspectors while doing their inspection works.²⁷⁷ Once inspectors discover that an act that encroaches (or infringes) the principles of labour law has been committed by the employer, they can impose a punishment upon the employer in the form of a fine, or make an order suspending all mining operations and even close-down that particular mine if there is a likelihood that life and health of the workers might be in danger.²⁷⁸

During late 1990s, the DT issued "*actas de instrucción*" (writs of instructions), whereby inspectors would note an infraction by an employer and would give it 15 days to ensure that the employer act in accordance (or comply) with the law before fine is issued.²⁷⁹ These court orders have had a fundamental educational element to them as employers who could prove that they have eased violation and prove their compliance with the law within the stipulated period of 15 days, would forgo a fine.²⁸⁰ In South Africa, inspectors are granted the powers to issue guidelines or instructions in section

²⁷⁴*Decreto con Fuerza de Ley* No. 2 of 1967 art. 27.

²⁷⁵César F. Marzán R, Punishment and Work Law Compliance: Lessons from Chile (7-30-2012) available at http://labourlawresearch.net/sites/default/files/papers/Punishment_Final.pdf retrieved 21 July 2017.

²⁷⁶*Decreto con Fuerza de Ley* No. 2, art. 25.

²⁷⁷*Ibid* (note 276 above).

²⁷⁸*Decreto con Fuerza de Ley* No. 2, art. 25. at arts. 28, 31, 34 and 38).

²⁷⁹Interview with Maria Ester Feres, former Director of Chile's Labor Directorate, 2004. For an historical account of this informal administrative practice see also Heleen F.P. Ietswaart, Labor Relations Litigation: Chile, 1970-1972, 16 law and society review 625, 643-645 (1981-82).

²⁸⁰Interview with María Ester Feres, supra n.30.

54 of the MHSA that protect the employees from any danger that might cause harm to their health and well-being.

Therefore, South Africa may adopt this kind of approach that if the employer is found to be violating the health and safety rights of mineworkers, compliance of the law must be enforced through educational program order issued by the court within specific period. If the employer fails to comply with the law and continues to violate the rules and regulations put in place, he may be order to pay a fine. In South Africa Department of Labour should ensure that the labour law comply with the ethos and purport of fundamental rights (right to health and safety), and make sure that labour law is strengthened in order to eradicate workplace harm.²⁸¹

However, towards the end of 1990s the DT stopped the practice of issuing writs of instructions to install more formalized programs including the compliance assistance inspection policy²⁸² and the “training for fines program.”²⁸³ In South Africa, inspectors are granted powers to issue guidelines or instructions in terms of section 54 of the MHSA that protect the employees from any danger that might cause harm to their health and well-being. Therefore, as stated South Africa may adopt this kind of approach that if the employer is found to be violating the health and safety law and regulations, compliance of the law is to be enforced through educational program ordered by the court to complete the program within specific period time. Should the employer fails to do so, and continues to violate the rules and regulations put in place he may be ordered to pay a fine.

Likewise, the “compliance assistance program” was limited to unionized employers, who are a small minority in Chile, and is run by a small but highly professional service within the national office of the DT.²⁸⁴ The training for fines program entails that those small employers, or those employers consisting of nine workers or less, can request that any fine levied against them by a labour inspector be replaced by official

²⁸¹Department of Labour New labour laws to herald a new era in the labour market available at <http://www.labour.gov.za/DOL/downloads/documents/useful-documents/basic-conditions-of-employment/20yrsnewlaws.pdf> retrieved November 2016.

²⁸²Chile Directorate of Labor, Service Order No. 3, May 14, 2004, available at http://www.dt.gob.cl/1601/articles-65345_OS_3.pdf.

²⁸³*Ibid* (note 282 above).

²⁸⁴César F. Marzán R , As Chilean as a Colchagua Carmenere: Chilean Labor Law Enforcement after the US-Chile Free Trade Agreement – and what the U.S. should do to help also available at <https://www.ilo.org/legacy/english/protection/travail/pdf/rdwpaper36b.pdf> retrieved 22 July 2017.

assistance to implement the labour laws.²⁸⁵ Employers who choose training in lieu of fines usually attend a course, alone or with other employers, regarding how to comply with the laws.²⁸⁶ The fact of the matter is whether or not punishment produces profound deterrence to those mine companies that do not comply with the mining statutes and regulations intended to create safe working environment.

This approach will be beneficial in South Africa in the sense that these training initiatives could ripen a vast role, such as interpreting pertinent legislation and regulations, as well as “training safety committees in enterprises”.²⁸⁷ The training program will also assists the employers to obtain and develop understanding, abilities and approaches concerning eradication of work related risks and to comply with general content of the pertinent laws, rules, policies and standards anticipated to curb mining risks.

Finally, the training for fines program also includes middle-sized employers, or those with less than 25 workers, with an alternative to the fine, unless the employer ask for the deletion (or removal) of a fine once issued by the DT and if the violation concerns work-related health and safety regulations.²⁸⁸ Therefore, it is very important that the government, mine companies and employees work collectively in advancing the mining health and safety standards of all mineworkers.

According to South African Department of Mineral Resources the problem with poor inspection of mining sectors is that staffs are inadequate, and there is a great inspectorate exam failure rate.²⁸⁹ Therefore in improving this aspect, Chile’s Superintendent of the Environment (SMA) in collaboration with U.S. Environmental Protection Agency (EPA) have embarked in the policy improvement, as well as aiding

²⁸⁵Chile Labor Code, art. 477.

²⁸⁶ See footnote 285 *op-cit*,

²⁸⁷De Silva S, Developing the Training Role of an Employers' Organization,1997 available at <http://www.ilo.org/public/english/dialogue/actemp/downloads/publications/srsdevel.pdf> retrieved 22 July 2017.

²⁸⁸César F. Marzán R , As Chilean as a Colchagua Carmenere: Chilean Labor Law Enforcement after the US-Chile Free Trade Agreement – and what the U.S. should do to help also available at <https://www.ilo.org/legacy/english/protection/travail/pdf/rdwpaper36b.pdf> retrieved 21 July 2017.

²⁸⁹ Furter E, South Africa mining inspectors fail inspectorate exams, 2012, see also Le Roux W, Powers of the inspectorate to close a working place, 2011 available at <http://www.scielo.org.za/pdf/jsaimm/v111n8/v111n8a03.pdf> retrieved 22 July 2017.

to reinforce the capacity of SMA staff and inspectors in the industry.²⁹⁰ SMA trainers have established their peculiar version in some inspectorate courses and are currently inculcating “the material themselves to inspectors at the national and municipal levels.”²⁹¹ Thus it’s an adoptable strategy that can be emulated by South Africa in ensuring that staff and inspectors are well trained in the industry in order to increase the staff for inspection in all levels and lessen percentage for inspectorate exam failure.

The inspectors of the sector must be properly trained and the government must invest funds to ensure that inspectors acquire training necessary for the transformation of mining sector and improving quality life of employees. Again, the lesson to be learned by South Africa from Chile is that severe penalties in the form of a fine must be imposed upon mining companies that are not complying with the provisions of the legislation put in place, and the inspectors must visit the mining sector at any time to perform their inspection with or without informing the employer of such visit.

Over and above, training for fines program may be implemented where the mining companies that are in contravention with the statutes go under certain training program (on how to comply with mining safety legislation) to deter them from violating health and safety instructions. Finally, the Department of Labour must make sure that more inspectors are properly trained and deployed in various mine sectors in advancing inspection processes.

3.3.2 Team Leadership and management in extreme circumstances

The supervision of mining safety concerns the government agencies that ensure effective enforcement of statutes put in place in order to advance safe working condition in the mining sector.²⁹² Chilean robust mining leadership was apparent in

²⁹⁰Inspection training in Antofagasta, 2011 available at http://photos.state.gov/libraries/chile/5/general_2013/chile_us_inspection_capacity_building.pdf retrieved 20 November 2016.

²⁹¹*Ibid* (note 290 above).

²⁹² In Chile responsibility for supervising workplace safety is shared by a number of government agencies:

- “the Labour Ministry’s Labour Inspection Service is responsible for enforcing labour legislation in general and has the power to close an operation on grounds of safety.
- The Health Ministry also supervises working conditions in order to control the risk of work-related illnesses and accidents.

2010 conference which was held in Chile as a result of collapse of Sane Jose mine, where 33 miners were trapped underground, these miners spent 69 days underground and later rescued alive. In order to rescue those miners, Chilean mine team was a functional work team and members had some authority to determine work procedures.²⁹³

They also had strong leaders and a history of working together.²⁹⁴ It is important to consider these initial inputs to the team process since it was clear that they are related to how the team survived as the crisis unfolded.²⁹⁵ The rescue team in the Chilean mine incident exemplified the element of anticipation. This rescue effort was a great example of teamwork from everyone involved.²⁹⁶ For the rescue team, it meant a careful collaboration between the engineers and architects to ensure the exact capsule configuration could be lowered into the mine shaft.²⁹⁷

Healthcare and emergency teams ensured each miner was transported immediately to a medical review.²⁹⁸ This is a clear indication that mining safety advancement is not a separated duty; however, it requires a sensible collaboration between the government, employers, employees and other stakeholders. Therefore, the lesson spotted from Chile is that first-rate leadership and management is very imperative in advance the health and safety of the mineworkers.

Poor leadership in South African mining industry was apparent recently after the occurrence of Goldfields Lily Mine in Barberton in the South African Mpumalanga (the mine that deals with gold), where mineworkers till to date are still trapped underground

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- In the case of the mining sector, the National Geology and Mining Service is also responsible for inspecting safety conditions as well as recommending preventive measures and providing training.
 - Legislation, supervision and control of the mine, good statistic of accidents and occupational diseases, and the development of safety programme culture is crucial for sound development of mining sector.”

²⁹³Terri A. Scandura, Team leadership: The Chilean Mine Case,2013 available at http://scholarlyrepository.miami.edu/cgi/viewcontent.cgi?article=1012&context=management_article retrieved 22 July 2017.

²⁹⁴Terri A (note 293 above).

²⁹⁵Terri A (note 293 above).

²⁹⁶Three Leadership Lessons from the Chilean Mines available at <http://www.organizationimpact.com/three-leadership-lessons-from-the-chilean-mines/> retrieved 04 July 2016.

²⁹⁷*Ibid* (note 296 above).

²⁹⁸ *Ibid* (note 296 above).

in the container in which they were working.²⁹⁹ This indicates the poor leadership between three-party board headed by State, mine companies, and “Labour members” under the governance of the “Chief Inspector of Mines”. In Chile, to rescue those 33 mineworkers that were trapped under ground it required support from the government led by the State President, mining companies, other stakeholders and the community at large.

Therefore, South African mining industry should adopt ethical leadership strategy, and the reason or benefit for the ethical culture is that the management are required to ensure that the sector is run ethically as this will assist the sector to achieve zero harm of mineworkers.³⁰⁰ South Africa government must also initiates forums where government agencies, companies and other stakeholders discuss the ways in which harm in the workplace can be prevented.³⁰¹ The emergency preparedness is a critical issue that the leadership must take into account, because it is regarded as emergency response planning which serves as a risk control activity.³⁰² It is also regarded as an emergency strategy intended against sudden occurrence of accidents.³⁰³ Most accidents are caused by inappropriate setup of mining equipment and failure of systems, or as a result of natural causes, which requires emergency preparedness for rapid events.³⁰⁴

²⁹⁹Lizeka Tandwa, News24, Lily Mine efforts still a rescue operation – Amcu, 2016-02-16 12:46. Also see <http://www.news24.com/SouthAfrica/News/lily-mine-efforts-still-a-rescue-operation-amcu-20160216>.

³⁰⁰Eweje G, J Bus, Hazardous Employment and Regulatory Regimes in the South African Mining Industry: Arguments for Corporate Ethics at Workplace, 2005 available at <https://link.springer.com/article/10.1007/s10551-004-3240-8> retrieved 22 July 2017.

³⁰¹As clearly articulated by Labour Relations Act, “the functions of a workplace forum are to –
-promote the interests of all workers (not only trade union members);
-enhance workplace efficiency;
-consult with the employer; and
-take part in decision-making.”

³⁰²Taljaard J, Emergency Preparedness and Response a Management System and Legal Requirement, 2016.

³⁰³Taljaard J (note 302 above).

³⁰⁴Taljaard J (note 302 above).

3.3 The effectiveness of working together to reducing mine accidents and fatalities

South Africa has magnificent mineral wealth; and its mining industry is considered to be the most prominent role player in the world economy.³⁰⁵ Its vigour (or strengths) consists of a high level of technical applications and constructive proficiency in the workplace, extensive research as well as development implementations.³⁰⁶ South African mining industry is regulated by legislation and policies that promote a “systematic and effective risk assessment and management practice in the mining industry; as well as the effectiveness and efficacy of the Inspectorate.”³⁰⁷

The Constitution of the Republic, 1996 was promulgated to cure racial segregation and inequality between white and black Africans; it also guarantees the mineworkers a right to work in an environment that is not detrimental to their health and their well-being. South African Mining Law is also governed by the Mineral and Petroleum Resources Development Act 28 of 2002 (“MPRDA”) which is the principal Act of Parliament concerns with procurements of permits or rights to perform reconnaissance, prospecting and mining operations.³⁰⁸

In the past, mine health and safety standards were regulated by the same sphere of applicable mining rules, specifically the Minerals Act, 50 of 1991, however it was detached and “placed in a separate piece of legislation as the purpose of the two pieces of legislation is often in conflict”.³⁰⁹

A separate piece of legislation that currently deals with mining health and safety is the Mine Health and Safety Act, 1996, and its purpose is “to ensure owner responsibility for health and safety through creation of codes of practise, training, identifying potentially hazardous factors, investigating said factors, employing hygienists for the

³⁰⁵Kearney LO, Mining and minerals in South Africa (2012) Read more: <http://www.southafrica.info/business/economy/sectors/mining.htm#.V2UXu9J97IU#ixzz4BvI1POfl> retrieved 18 June 2016.

³⁰⁶*Ibid* (note 305 above).

³⁰⁷Hermanus MA, Chief Inspector of Mines, Guideline for Enforcement of the Mine Health and Safety Act, 2005 available at http://www.miningsafety.co.za/documents/guideline_enforcement_mhs_act.pdf retrieved 22 July 2017.

³⁰⁸Stevens IC, The International Comparative Legal Guide to Mining Law, 2017 available at http://www.werksmans.com/wp-content/uploads/2013/05/ML17_Chapter-26_South-Africa.pdf retrieved 22 July 2017.

³⁰⁹*Ibid* (note 308 above).

industry, and founding methods of medical attention and recording for the site. To safeguard the rights of employees to refuse or move away from areas which are unsafe or potentially unsafe. To create the Inspectorate of Mining Health and Safety”.³¹⁰ This Act designates a radical transformation in terms of health and safety standards which were not outfitted for by the old regulations, as well as speeding up the economic growth.

Furthermore, “Broad-based black economic empowerment (B-BBEE)” aims to: “promote the achievement of the constitutional right to equality, increase broad-based and effective participation of black people in the economy and promote a higher growth rate, increased employment and more equitable income distribution”.³¹¹

Skills Development Act of 1998, that is aimed “to develop the skills of the South African workforce - to improve the quality of life of workers, their prospects of work and labour mobility; to improve productivity in the workplace and the competitiveness of employers; to promote self-employment; and to improve the delivery of social services; to increase the levels of investment in education and training in the labour market and to increase the return on that investment; to encourage employers - to use the workplace as an active learning environment.”³¹²

Therefore, the lessons that can be learned from South Africa is that the country has adequate enforceable pieces of legislation that are necessary to prevent mining facilities that continue to rise drastically and ensure that mineworkers are protected from hazardous or harmful working environment.³¹³ Although, South Africa has adopted some of the safety measures similar to that of Chile, for example after the occurrence of the Lily Mine accidents, Minister Zwane said “drilling with a machine similar to the rig used to save Chilean miners in 2010 had started boring a 600mm

³¹⁰Gallaghe NR: Mining Health and Safety in South Africa also see G:\Mining Health and Safety in South Africa - The African Business Journal.html retrieved 11 May 2016, 15:27.

³¹¹ Richard W Roeder, a German lawyer and Rotary Peace Studies Scholar at the University of Queensland: Employment and Indigenous Empowerment in Mining: Australia and South Africa (see http://voices.nationalgeographic.com/2013/09/21/s_africa_au/ accessed on 14h40 28 April 2015)

³¹²Section 2(1) of the Act, 1998. Also, see https://en.wikipedia.org/wiki/Skills_Development_Act,_1998 retrieved 18 June 2016,

³¹³ See section 24 of the Constitution of the Republic, 1996.

diameter hole to reach them”. Mine safety is certainly never good enough,³¹⁴ in other words it needs to be improved and taken care of from time to time.

Although, evidence shows that in recent years, national and international big mining companies have met global safety standards.³¹⁵ Mine safety remain to be a predicament in small mines region, but then fearing that the jobs will be lost, the country is yet to put into effect (or prioritize) safety standards.³¹⁶ However, it is very important to note that Small-scale mining (SSM) is a substantial basis of income as far as emerging or developing states and also set up a central economic sector in South Africa.³¹⁷

The progressive “impact of occupational health and safety management on productivity, reduction of hazards and risks at work has been widely recognised by Government, employers and workers.”³¹⁸ Thus, Mine Health and Safety Council (MHSC) of South Africa conducted a study on the improvement of guiding principles aimed at expediting “compliance with the requirements of the amended Mine Health and Safety Act 29 of 1996”³¹⁹ Furthermore, it was intended to evaluate the level of compliance concerning requirements set out by the amended Mine Health and Safety Act³²⁰ in small mines regions, as well as advancing a culture for transformation in the sector.³²¹

Subsequent occurrence of mining accidents in Chile is not caused by lack of laws and regulations.³²² According to Holgado; “Chile has one of the strictest mining safety standards in the world, especially in large mining operations, with specific codes and

³¹⁴Sustainable Development Strategies Group, Current Issues in the Chilean mining sector available at <http://www.sdsg.org/wp-content/uploads/2010/02/10-10-08-CHILE-REPORT.pdf> retrieved 18 June 2016.

³¹⁵Sustainable Development Strategies Group, Current Issues in the Chilean mining sector available at <http://www.sdsg.org/wp-content/uploads/2010/02/10-10-08-CHILE-REPORT.pdf> retrieved 18 June 2016.

³¹⁶ *Ibid* footnote 315 above.

³¹⁷LI Zungu, Guidelines for the South African Small-Scale Mining to Comply with the Mine Health and Safety Act Draft Guidelines 2016 available at http://www.claybrick.org/sites/default/files/downloads/Guidelines_SSMs_MHSC_061_14-15_Draft_Final_Report_Jan2016.pdf retrieved 22 July 2017.

³¹⁸ *Ibid* (note 317 above).

³¹⁹LI Zungu (note 317 above).

³²⁰Mine Health and Safety Act 29 of 1996.

³²¹ *Ibid* (note 320 above).

³²² *Ibid* (note 320 above).

its own regulatory agency". "The problem is enforcement, especially in medium to small-size mines."³²³

The gist of the matter is that more or less of these mine companies are economically marginal, but then at the same time considerable local employers; the governmental willpower to implement remained wanting.³²⁴ Another lesson that can be learned from South Africa is that Health and Safety Council, Organised Labour, Organised Business and Government, as well as mining companies work in collective efforts in ensuring a robust safety of all mineworkers, since the poor health and safety administration emanates from poor implementation and enforcement of legislation and policies put forth to regulate mining industries.

Over and above, South Africa has sound legislation aimed at regulating the proper functioning of mining industry. South Africa has two compensation schemes which grant an opportunity to current and ex-mineworkers to institute an application for damages.³²⁵ One administered by the Occupational Diseases in Mines and Works Act³²⁶ (ODMWA) and another governed by the Compensation for Occupational Injuries and Diseases Act³²⁷ (COIDA).³²⁸ Most miners in South Africa are covered by ODMWA for occupational lung diseases, based on a state-determined assessment of whether a mine is 'controlled'.³²⁹ The effectiveness of these two compensation systems was apparent in the recent case of *Nkala v Harmony Gold Mining Company Limited*³³⁰, where the clause action was instituted by former mineworkers claiming damages for occupational diseases such as tuberculosis and silicosis. Where the Court ruled in favour of the mineworkers.

³²³Parker AA, The Price of Hydropower Pursuits in Patagonia, Circle of Blue Water News, 2010 available <http://www.circleofblue.org/waternews/2010/world/the-price-of-renewable-energy-pursuits-inpatagonia/> retrieved 18 June 2016.

³²⁴Parker AA, The Price of Hydropower Pursuits in Patagonia, Circle of Blue Water News, 2010 available at <http://www.circleofblue.org/waternews/2010/world/the-price-of-renewable-energy-pursuits-inpatagonia/> retrieved 18 June 2016.

³²⁵Occupational Health in South African mining industry, Compensation: While it is crucial to always improve our understanding of and expertise in dust management and disease prevention, our aim is to ensure that all former and current mine employees who have become sick during their employment are adequately compensated accessed at <http://www.oldcollab.co.za/compensation> retrieved 10 July 2016.

³²⁶Occupational Diseases in Mines and Works Amendment Act 60 of 2002.

³²⁷Compensation for Occupational Injuries and Diseases Act 130 of 1993.

³²⁸*Ibid* (note 327 above).

³²⁹*ibid* (note 327 above).

³³⁰*Nkala v Harmony Gold Mining Company Limited 2016 JDR 0881 (GJ).*

After 33 miners were rescued in a tragic accident in 2010 San Jose copper mine, according to the Guardian it was “reported that most of the men had returned to a life of poverty, and that many of them were struggling with physical and psychological health problems related to their ordeal”.³³¹ “To add even more insult to injury, in 2013, local prosecutors declined to charge the owners of the collapsed mine for numerous safety violations.” One of the miners, Alex Vega, claims that only 14 of the 33 ever received the pension promised to them by the government”.³³² This is a worst lesson that South Africa should not emulate, instead South Africa should improve COIDA to be more effective in ensuring that compensation resulting from injuries incurred in the workplace is also claimable in due time.

This shows that Chilean government working together with the mining companies are not observing the laws on proficient implementation and enforcement of pieces of legislation and policies that will govern compensation for damages emanating from mining accidents and diseases. Non-compliance by mining companies must be punishable with severe penalties, and it is the responsibility of the courts to prosecute non-complying mining companies (contraveners or violators) and impose appropriate sanctions.

3.5 Conclusion

In conclusion, the issue of “health and safety” in the workplace is something that should not be taken for granted; all countries involved in mining activities must prioritize the safe working condition of all mineworkers. Chile is one of the countries that have the most prominent safety standards, and which had increased considerably over the past five years, and the government has expanded the “number of inspectors at Chile's mines from 18 at the time of last year's accident to 45 now”. Since inspection processes are very significant in managing the risks and resolving the challenges and prospects facing mining sector. After 33 Chilean miners were rescued in 2010, it was a lesson to most of the countries whether developed or not, to make sure that sufficient funds are invested to buy the industry machines, technologies or equipment such as that were used in Chile to rescue mineworkers in case of emergency.

³³¹ Rodriguez J.M, Profits from ‘The 33’ Not Actually Going to Chilean Miners, to read more: <http://www.care2.com/causes/profits-from-the-33-not-actually-going-to-chilean-miners.html#ixzz4E0AxGMli>.

³³²Rodriguez J.M (note 331 above).

In Australia, the mining safety transformation continues to be supported by the government, and health and safety standards are more progressive in Australia.³³³ It cannot be disputed that life-threatening risks and dangers are linked with coal mining all over the world.³³⁴ In Australia, they have what is called Mining Education Australia that is intended to provide mining engineering programmes to students in various universities in order to equip them with robust skills and knowledge relating to mining. They also have Coal Mine Workers' Health Scheme that anticipates medical examination of employees prior to starting with the work as a mineworker.

In South Africa, Mine Health and Safety Act, 1996 was promulgated to ensure that employers incur a duty on “health and safety” of employees through necessary training and education.³³⁵ This was supported by Skills Development Act of 1998 (SDA), the aim of this Act was to ensure that education and training are provided to the workers so that they could acquire necessary skills and knowledge.³³⁶ Finally, each country has a room for improvement since health and safety implementation in the sector is a continued obligation imposed on mining companies and the states which will requires consistency in implementation and enforcement of laws and policies.

³³³Regulating agencies are the administrative bodies of health and safety regulations in Australia, their main function is to inspect place of work, conferring and assisting, as well as imposing sanctions to non-compliant companies.

³³⁴Cho K.S& Lee S.H, Occupational health hazards of mine workers, 1978 available at <https://www.ncbi.nlm.nih.gov/pubmed/307452> retrieved 22 July 2017.

³³⁵Section 10 of Mine Health and Safety Act 29 of 1996.

³³⁶Section 2 of Skills Development Act 97 of 1998.

CHAPTER FOUR: ADDRESSING CRITICAL CHALLENGES FACING HEALTH AND SAFETY STANDARDS IN SOUTH AFRICAN MINING INDUSTRY

4.1 Introduction

Challenges facing South African mining industries includes, among other things continuous occurrence of mining accidents and outbreak of infectious diseases, disease infection such as tuberculosis (TB), Human Immune Deficiency Virus (HIV), asthma and the ever problematic and continuous silicosis diseases caused by dust. All these challenges have negative impact in the country's social and economic growth. Hence, this chapter will examine the challenges confronting the sector and prospects or probable solution on how the challenges can be addressed.

4.2 Providing possible solutions to mining accidents

Over the years, South African mining industry has been confronted with constant mine accidents which have brought about high rate of injuries, diseases, as well as mortality rate. Even though the figures seem to have dropped over the past few years, one mine accident that cause a casualty is one too many.³³⁷ Fatalities and injuries can also occur as a result of incorrect machinery use or ill-maintenance.³³⁸

In addition, lack of skills and necessary qualifications contribute to the problem, in other words qualified and experienced people are not available in the mining sector.³³⁹ Moreover, utilisation of aged equipment, as well as incorrect operation of the machinery or equipment has been a contributing factor in causing mining accidents.³⁴⁰ After Goldfields Lily Mine in Barberton in the South African Mpumalanga

³³⁷ Mine Health and Safety Council, South African mining industry journey to zero harm, 2013 available http://www.sacollierymanagers.org.za/docs/MHSC_Journey_to_Zero_Harm_A5_Handbookprintdraft_v5_Final_Final.pdf retrieved 22 July 2017.

Here are a few examples of some of the most common causes of accidents:

- Lack of planning: If work is done without proper planning on how best to work safely and effectively, there is more chance of an accident.
- Lack of instructions: If work begins before employees know exactly what to do (or perhaps they are too scared to ask questions about the job), there is more chance of an accident.
- Poor workplace keeping: If a workplace is disorderly or messy, employees also get disorderly and messy, and there is more chance of an accident.

³³⁸ *Ibid* (note 337 above).

³³⁹ *Ibid* (note 337 above).

³⁴⁰ Other contributing factors, are as follows-Large, powerful moving machinery processing thousands of tons of ore and rock in poorly lighted and confined work areas in underground mines, and in adverse-weather conditions in surface operations, contribute to the hazardous nature of mining.
-Improper operation of the machine and maintenance and repair.

(the mine that deals with gold) disaster where three miners were trapped underground, Association of Mineworkers and Construction Union (AMCU) president Mathunjwa stated that “this would mean experienced engineering firms such as Murray and Roberts, who helped free the miners in Chile, can [transport] their massive digging gear up to Lily and get to work. Until then, the resources remain limited.”³⁴¹

A mine rescue drill rig machines must always be accessible to assist in case of emergency and sufficient funds must be invested in order to import machines (such as Fenix rescue capsule), automated underground mining, rock -falls prevention technologies, proximity detection, computerised permit-to-work system and collision warning necessary for mining processes.

The Mine Health and Safety Act, 1996, Regulation 16.5 (Emergency Preparedness and Response) entails that the “employer of every underground mine shall inter alia be part of a Mines Rescue Scheme to comply with these regulations, Mines Rescue Services (MRS) administers such a rescue scheme whereby mines and affiliated mining companies can become members of the scheme.”³⁴² Mines Rescue Services is responsible for sudden and dangerous mining disasters or accidents that occur or might have occurred in the mining industry through a collaborative agreement of joint use of resources, training life-savers forces, supplying emergency equipment, as well as emergency consultancy service to the mining sector.³⁴³

4.3 Providing possible solution to the lack of skills in mining industry

The underprivileged (historically disadvantaged South Africans) are not educated enough and lack necessary skills and qualifications that meet the average standards for employment. Skills shortage is one of the challenges confronting mining fraternity

-Poor visibility near mining equipment, machinery entanglements, slipping and tripping, operator error, and -hazards associated with equipment maintenance.

-Ineffective safeguarding of workers near machinery through the required mechanical guarding around moving components, lockout/tag out of machine power during maintenance and backup alarms for mobile equipment.

-Poor proximity detection

-Mining machinery and haul trucks have extensive operator blind spots.

-Haul roads are unsealed and need constant maintenance, blind corners are common, and intersections change frequently.

³⁴¹SA People News: Buried alive: Lily Mine disaster and the state of mining in South Africa available at <http://www.dontparty.co.za/read/lily-mine-disaster-south-africa/> retrieved 19 June 2016.

³⁴²Mining Rescue Service South Africa, available at <http://www.minesrescue.co.za/services.html> retrieved 19 June 2016.

³⁴³*Ibid* (note 342 above).

and drags down our economic growth. Therefore, in order to address the issue of skills shortage the Skills Development Act, 1998 will play a critical role in ensuring that skills development is accomplished and advanced.

The purpose of Skills Development Act, 1998 is to “increase the levels of investment in education and training in the labour market and to improve the return on that investment.”³⁴⁴ This Act encourages the employers to afford employees with necessary training in order to procure skills, knowledge and expertise that will match the standard of employment criteria. According to Sharma “everyone knows safety training is important. Everyone also knows that there are other things they’d rather be doing.”³⁴⁵

Sharma further states that “the most important part of safety training invariably ends up being how information is reinforced once classroom and e-learning sessions are over. Create regular safety meetings that showcase good work. Emphasize hazard identification and provide incentives that will keep workers interested and committed”.³⁴⁶ Maintenance and compliance are most imperative dynamics to mining operations and cannot be neglected.³⁴⁷

Adult Basic Education and Training (ABET) will contribute in ensuring that the aged miners are provided necessary skills, knowledge and expertise, because safety in the mining industry is a duty or responsibility of all employees whether aged or not. President Zuma stated that it is very important that we intensely back-up and establish a culture of zero harm in the sector.³⁴⁸ He went to say that evidence regarding safety at mines shows that mining safety has turn out to be a crucial concern that will require

³⁴⁴Section 2(1)(b) of Skills Development Act 97 of 1998.

³⁴⁵Sharma A Top, Tips for Improving Safety Training available at <http://www.warriors4safety.com/safetyarticles/top-tips-for-improving-safety-training.html> retrieved 19 June 2016.

³⁴⁶*Ibid* footnote 345. Pudasaini N elaborates that “safety is the first requirement and we should not compromise on it. Mostly, we recognize the problems but we are unwilling to solve them. Accidents are explained away, and generally we fix the cause rather than its symptoms. Our attitude needs to change so that we can build safety habits and a safety culture.”

³⁴⁷Environmentally friendly solutions to mine maintenance 17 June 2016 available <http://www.miningsafety.co.za/newscontent/4882/Environmentally-friendly-solutions-to-mine-maintenance> retrieved 19 June 2016.

³⁴⁸Mining Safety in South Africa available at <http://www.miningsafety.co.za/dynamiccontent/61/Mining-Safety-in-South-Africa> retrieved 19 June 2016.

a critical assessment or observation by the government.³⁴⁹ The apartheid government would pass legislation and policies intended to close the doors for blacks in accessing the right to education, training, and did not care much about literacy.³⁵⁰

For that reason, South Africa currently sits on 9, 4 million adults with less than nine years of educations, who demonstrated an aspiration and have the capability to re-enter the education and training system.³⁵¹ Basic education for young people and adults is essential for a truly democratic society as it prepares the general public for an extensive and vigorous participation in decision-making processes.³⁵² The Government has put emphasis on mining health and safety standards and pledged not to neglect the safety of miners.³⁵³ In the past few years a remarkable gains with regard to improvement of safety have been made, and unnecessary accidents cannot be tolerated to destroy the “hard-earned gains” that have been made over a long period of time.³⁵⁴

Basic education training programme will also assist the aged miners to properly operate the machinery in the sector and able to read the caution or warning signs place in the workplace. The mining companies must employ individuals with necessary qualification, strong leadership skills and able to make sound decision as quickly as

³⁴⁹*Ibid* (note 348 above).

³⁵⁰Policy Document on Adult Basic Education and Training available at <http://www.education.gov.za/Portals/0/Documents/Policies/GET/PolicyDocumentABET.pdf?ver=2007-08-22-081525-000> retrieved 19 June 2016.

³⁵¹*Ibid* (note 350 above).

³⁵² *Ibid* footnote 350 above. It also outlines seven critical cross-field education and training outcomes as follows:

- Identify and solve problems in which responses display that responsible decisions using critical and creative thinking have been made.
- Work effectively with others as a member of a team, group, organisation, community.
- Organise and manage oneself and one's activities responsibly and effectively.
- Collect, analyse, organise and critically evaluate information.
- Communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written presentation.
- Use science and technology effectively and critically, showing responsibility towards the environments and health of others.
- Demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation

³⁵³Mining Safety in South Africa available at <http://www.miningsafety.co.za/dynamiccontent/61/Mining-Safety-in-South-Africa> retrieved 19 June 2016.

³⁵⁴*Ibid* (note 353 above).

possible to avoid mine accidents. Finally, training of employees will play a critical role in reducing mining accidents, and improving our social and economic growth.

4.4 Significance of mine inspection processes

South African law require that all mines shaft be inspected each and every week but it is not certain on how inspection must be conducted or reported.³⁵⁵ The intention is that a detailed inspection must be done by qualified and well trained inspectors every week.³⁵⁶ Osunmakinde said “imagine if there were robots that could carry out pre-entry safety inspections of underground mines. Not only would this improve safety in mines, but it would also provide mining companies and government with the opportunity to better prepare for accidents during mining operations.”³⁵⁷ He further stated that “and when accidents occur during mining operations, rescuers find it difficult to respond immediately.”

Therefore, when dealing with inspection process, it is very important to consider section 54 and 55 of the Mine Health and Safety Act, 1996. Section 54 states that “if an inspector has reason to believe that any occurrence, practice or condition at a mine endangers or may endanger the health or safety of any person at the mine, the inspector may give any instruction necessary to protect the health and safety of persons at the mine, including but not limited to, an instruction that – operations at the mine or a part of the mine be halted; and the performance of any act or practice at the mine or a part of the mine be suspended or halted, and may place conditions on the performance of that act or practice.” Furthermore, there are certain requirements that must be complied with in terms of section 54 of the Act.

³⁵⁵Brokenshire P, Andersen S , Hoist and Haul, 2010 also see S.R. Dindarloo, M. Osanloo, and S. Frimpong *A stochastic simulation framework for truck and shovel selection and sizing in open pit mines* *The Journal of The Southern African Institute of Mining and Metallurgy* volume 115, 2015 available <http://www.saimm.co.za/Journal/v115n03p209.pdf> retrieved 22 July 2017.

³⁵⁶*Ibid* (note 355 above), and about 107 Inspectors have attended Wits training in the following:

- Inspection, audits and investigation methods
- Mine Health and Safety Act Legal Enforcement, Part I
- Mine Health and Safety Act Legal Enforcement Part, II
- Principles of Occupational Health and Hygiene Part I

³⁵⁷Hoffmeeste RN, using robots to ensure safety in mines, 2014, see also Vladimir Murashov,, Frank Hearl, and John Howard, *Working Safely with Robot Workers: Recommendations for the New Workplace*, 2016 available <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4779796/> retrieved 22 July 2017.

Requirements of Section 54

In order for a Section 54 instruction to be legally valid (lawful), the following requirements must, amongst others, be satisfied:

- objectively, a state of affairs must exist that would lead the reasonable inspector (in the position of the relevant inspector), to believe that a particular occurrence, practice or condition endangers the health or safety of persons at the mine in question; and
- the instruction must be necessary to protect the health and safety of persons at the mine.”

These requirements were outlined and confirmed by the High Court in the case of *Bert's Bricks (Pty) Ltd and Another v The Inspector of Mines, North West Region and 4 others*³⁵⁸, in this case the first applicant and previous owner of the land conducted clay mining operations on the portion of property near Potchefstroom. They also manufactured bricks from the clay they mined on one of portion of the land. In the year 2009 the business operations were separated this meant the first applicant would only mine the clay and the second applicant would own and manufacture bricks operations.

Although the property consisted of three portions of land, the first and second applicant both used portion 100 for their different activities. When the first applicant applied for a mining permit in terms of the MPRDA he excluded that portion of 100 which was used for the brick manufacturing by second applicant. Therefore, the Court was requested to determine whether the provisions of the Mine, Health and Safety Act 29 of 1996 applicable to brick making yard, since it is not a mine.

The following ruling was made that “it was declared that the provisions of the Mine, Health and Safety Act 29 of 1996 do not apply to the second applicant's brick making activities and operations conducted on Portion 100 (a Portion of Portion 98) of the Farm Harpington 461 IQ, North West Province”.³⁵⁹ The High Court found that “there were no objective facts which would lead a reasonable person to believe that the

³⁵⁸*Bert's Bricks (Pty) Ltd and Another v The Inspector of Mines, North West Region and 4 others* (15347/2011) [2012] ZAGPPHC 11 (9 February 2012).

³⁵⁹ *Bert's Bricks* note 358, para 13.

damage to the tyre tread (of a single trackless mobile vehicle) would endanger the health and safety of any person at the mine”.³⁶⁰

The High Court found that the instruction to close the entire operation was out of proportion to the risk posed.³⁶¹ This case is very significant in determining under which circumstances the MHSA will require operations closely linked to mining and to acquire mining permit in terms of the MPRDA. Moreover, it will also give direction to inspectors when issuing instructions or guidelines to non-compliant companies, as well as determining the reasonableness of the guidelines issued thereof. In other words, the inspector is also anticipated to have a reasonable believe that an unlawful conduct that place persons at mines under serious risk is being committed by the company prior to issuing guidelines. This will also include appropriate assessment of mining licencing, determining whether the aforementioned licence has been properly issued under the MPRDA and determine whether that particular operation qualifies to be a mine under the MPRDA. Mine inspectors oversee all-inclusive mining activities to ensure that the provisions of the Act are adhered to by the entire mining operations concerned.

Over and above, section 55(1) of the MHSA provides as follows that: “if an inspector has reason to believe that an employer has failed to comply with any provision of this Act, the inspector may instruct that employer in writing to take any steps that the inspector considers necessary to comply with the provision; and specifies in the instruction.”³⁶² These two provisions give the inspector power or authority to give instructions necessary to “protect the health and safety” of people at mines, and to ensure that the employer complies with the provisions of this Act. Inspectors are considered to be “creatures of statutes” this simply entails that their functions and responsibility are driven from statutes; they acquire their mandate from the legislation.

³⁶⁰De Ryhove S, Halting mine operations - The need for health and safety instructions by the mine inspectorate to be procedurally compliant, 2015 available at <http://www.polity.org.za/article/halting-mine-operations---the-need-for-health-and-safety-instructions-by-the-mine-inspectorate-to-be-procedurally-compliant-2015-02-11> retrieved 22 July 2017.

³⁶¹*Ibid* (note 360 above).

³⁶²Beech alludes that “This is without the significant impact that a Section 54 instruction often has, including an impact on the morale of the team, the health and production rhythm of the team, which is vital to health and safety in the industry, and the remuneration of employees, which often includes a safety bonus component.” He further indicates that “all of these factors, together with the inspectorate making the correct call of enforcement between Section 54 or 55, will enable the country to pursue a safer mining industry,” Beech concludes.”

In other words, the functions or powers performed by inspectors are authorised by legislation.³⁶³

Inspectors play a very big role in the implementation of principles and guidelines.³⁶⁴ What inspectors do is that they enter a particular workplace believed to have embarked on mining operation that is risky to workers, accompanied by their assistants to procure any type of evidence necessary for inspection processes.³⁶⁵ They are entrusted with the powers to block off any workplace that is precarious or risky to the health and wealth being of the persons at workplace.³⁶⁶ However, the key issues surrounding the enforcement of principles and guidelines will be the manner in which accidents investigations are conducted.³⁶⁷ More often though the investigation team would identify the guilty party to blame; however the chances of something happening to the guilty person are slight as also.³⁶⁸ Therefore, extra effort should be prioritised to detect the exact reasons that lead to an accident and also confer guiding principle to prevent similar accident from occurring once more.³⁶⁹

Similarly, in *International Ferro Metals (SA) (Pty) Ltd (Ferro) v The Minister of Mineral Resources and Others*³⁷⁰, Ferro as the employer had a duty in terms of the Mine Health and Safety Act, No 29 of 1996 (hereafter referred to as MHSA) to ensure the health and safety of people working in its mining company. In terms of section 54(1)(a) of MHSA the inspector served an instruction to stop Ferrochrome Smelter with its mining

³⁶³Mining EN Sight Instructions by the Department of Mineral Resources (The DMR) in terms of Section 54 to suspend managerial and other persons, 2013 available at <https://www.ensafrica.com/news/Instructions-by-the-Department-of-Mineral-Resources-The-DMR-in-terms-of-Section?Id=1108&STitle=Mining%20ENSight> retrieved 21 November 2016.

³⁶⁴Hamilto.Atwell, Du Toit A, Kirstein L, Louw M, Mthobeni L, Moses R, Identification of Causes of Unsafe Acts or Negligent Resulting in Roof Sidewall Accidents, 1997 available at <http://researchspace.csir.co.za/dspace/bitstream/handle/10204/1366/COL307.pdf;jsessionid=4D119D20C64DA2DE2039BD4560027F1B?sequence=1> retrieved 22 July 2017.

³⁶⁵Department of Labour, Basic Guide to Rights of Health and Safety Inspectors ,2014 available at <http://www.labour.gov.za/DOL/legislation/acts/basic-guides/basic-guide-to-rights-of-health-and-safety-inspectors> retrieved 22 July 2017.

³⁶⁶ *Ibid* (note 365 above).

³⁶⁷Hamilto.Atwell, Du Toit A, Kirstein L, Louw M, Mthobeni L, Moses R, Identification of Causes of Unsafe Acts or Negligent Resulting in Roof Sidewall Accidents, 1997 available at <http://researchspace.csir.co.za/dspace/bitstream/handle/10204/1366/COL307.pdf;jsessionid=4D119D20C64DA2DE2039BD4560027F1B?sequence=1> retrieved 22 July 2017.

³⁶⁸ *Ibid* (note 367 above).

³⁶⁹ *Ibid* (note 367 above).

³⁷⁰*International Ferro Metals (SA) (Pty) Ltd (Ferro) v The Minister of Mineral Resources and Others* (unreported case number JR 1673/13 decided on 15 January 2015).

processes before a stipulated period. The instruction compelled and projected Ferro to remove the entire group of workers in different mine areas which apparently contained extreme “carbon monoxide” quantities, till such time those are reduced or eliminated. However, Ferro approached the Labour Court on the contention that the instruction should not have served or issued since it did not contravene its contracts. It also contended on the legitimacy of the guidelines that the inspector issued to ensure compliance with the instructions in terms of section 54 of MHSA.

In resolving the issue, the Court ruled that since the application of these guidelines shook the rights of people against whom these measures were enforced, section 49(6) of MHSA is absolute and therefore guideline had to be abandoned for not complying with this requirement set out by statute. With this judgment, it is imperative to remark that apart from guideline issued by inspectors in terms of section 49 of MHSA, inspectors constantly possess necessary authorities to deal with any issue, practice or condition that may or might cause harm to the health and safety of employees empowered by section 54 of the MHSA. The inspectors are entrusted with powers to stop mining processes or to suspend any conduct and order the employer to take reasonable and prudent measures within a stipulated period to ensure robust health and safety protection of all miners is advanced.

4.5 Addressing the problem of poor health standards in the mining industry

- Human Immune Deficiency Virus and Tuberculosis

HIV, TB and silicosis are major challenges facing South African mining sector today, and they have negative impact in our social and economic growth. The truth is, in South Africa, and perhaps the rest of Africa's mines, too, respiratory TB appears to be a major predicament affecting miners' health as well as that of their families and finances.

It is also pressing companies' profits due to increased medical costs and reduced productivity,³⁷¹ since the company's failure to keep up maximum safety standards will consequently course injuries to workers, and that will as a result negatively affect

³⁷¹Vella H, The TB epidemic spreading through South Africa's mines, 2014 available at <http://www.mining-technology.com/features/featurethe-tb-epidemic-spreading-through-south-african-mines-4182343/> retrieved 22 July 2017.

mineral production.³⁷² Therefore an apt medical surveillance and assessment in accordance with legislation will certainly reduce work-cover claims and indemnity expenses.³⁷³ The production will boost up, reduce compensation claims, as well as medical costs. Notwithstanding HIV, silicosis is regarded as the most mining principal driver of the TB epidemic.³⁷⁴

According to Khumalo “mining industry is a major employer to most Southern African Development Community (SADC) economies including South Africa as the labour receiving country, structural and environmental factors make mineworkers, and their families and surrounding communities more vulnerable TB and HIV infection including other occupational diseases.”³⁷⁵ South Africa as a constitutional country must play a crucial role in ensuring that all the miners (retired or not) who are living with HIV and TB are provided with necessary medication and treatment as guaranteed by our Constitution. Section 27 of the Constitution provides that “everyone has the right to have access to healthcare services, including reproductive health care.”³⁷⁶ The right of access to healthcare will also include medicine that is accessible and affordable by all people regardless of their societal eminences.³⁷⁷ The obligation is also imposed on pricing medicine regulations and Medicine and Related Substances Control Amendment Act³⁷⁸ to be subjected to the purport and spirit of the constitution, more specifically section 27 of the constitution.³⁷⁹ This will assist in ensuring that every citizen access quality healthcare that is provided for by the Constitution, as well as protecting the welfare of the society.

³⁷²PricewaterhouseCoopers, Report: Highlighting trends in the South African mining industry, 2014 available at <http://www.pwc.co.za/en/assets/pdf/sa-mine-nov-2012.pdf> retrieved 22 July 2017.

³⁷³*Ibid* (note 372 above).

³⁷⁴Tuberculosis and Mining in South Africa, Southern Africa available at <http://www.tbfacts.org/tb-mining/> retrieved 20 June 2016.

³⁷⁵Khumalo N, Health and Mobility in the mining sector, 2005, see also Nelson G, Living in the Shadow of a Dust Cloud Occupational respiratory diseases in the South African mining industry, 1975 to 2009 available at <http://wiredspace.wits.ac.za/jspui/bitstream/10539/13609/1/Gill%20Nelson%20PhD%20Feb%202012.pdf> retrieved 22 July 2017.

³⁷⁶Section 27(1)(a) of the Constitution of the Republic, 1996.

³⁷⁷Section 15C of the Medicine and Related Substances Control Amendment Act, 1997.

³⁷⁸Medicine and Related Substances Control Amendment Act Act 90 of 1997.

³⁷⁹TAC case, para 17.

This obligation is further extended in section 27(2), according to which “the state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights”. Section 27 of the Constitution, enshrines the right to a health care, and is a justiciable socio-economic right. There are number of case law where issues concerning healthcare have been dealt with. The constitutional Court has embarked on the significant role on enforcement of socioeconomic rights.³⁸⁰ Foremost it has established the likelihood of challenging the State or private action on the basis of protecting accessibility or justiciability of the socio-economic rights.³⁸¹

The State’s programme may be challenged on the test of reasonableness, whether the programme initiated by the State meet the standard of reasonableness or not, thus if it does not meet the set standard it can be defied. This depicts that State’s programmes should be reasonable and effectively coordinated and reasonably implemented. The socio-economic right must be progressively realised by the State, the availability of the State’s resources will determine the extent on how these rights can be realised.

In the case of *Minister of Health and Others v Treatment Action Campaign and Others*³⁸², the drug manufacturing company had offered the government the ARV drug for a period of 5 years. The government however sought to embark on a pilot project targeted on certain areas and implementation of those would be delayed by a year, which resulted in exclusion of most mothers to have access to the treatment.

A non-government organisation (NGO) known as the Treatment Action Campaign (TAC) instituted a Constitutional challenge on the decision by the government in that it infringes the constitutional to access to health care services and asked that the drug be made available to everyone in need of it in the country. The reason for the Constitutional challenge was because the restrictions that would happen which would

³⁸⁰Lebenberg S, South Africa's evolving jurisprudence on socio-economic rights: An effective tool in challenging poverty, 2002 see also Diane A. Desierto Justiciability of Socio-Economic Rights: Comparative Powers, Roles, and Practices in the Philippines and South Africa, 2009 available at http://blog.hawaii.edu/aplpj/files/2011/11/APLPJ_11.1_desierto.pdf retrieved 22 July 2017.

³⁸¹*Ibid* (note 380 above).

³⁸²*Minister of Health and Others v Treatment Action Campaign and Others (No 2) (CCT8/02) [2002] ZACC 15; 2002 (5) SA 721; 2002 (10) BCLR 1033 (5 July 2002).*

result in the unnecessary infections and deaths of those not in the selected pilot areas and as such violating the right to health care in terms of section 27(1) and 28(1)(c).

High court decision

At the High Court, Judge Chris Botha judged in “favour of TAC”, ruling that “Nevirapine” be readily accessible to “infected mothers giving birth in state institutions” and that the government must provide the court with a plan of how to go about providing medication to its birthing facilities, country-wide.

Constitutional Court

The Constitutional Court overruled the appeal, judging that the restrictions of Nevirapine to pilot sites left out those who could practically be covered by the program. The Court ordered that the Government is to lengthen accessibility of Nevirapine to hospitals and clinics, make sure that counsellors are available; and to take prudent and reasonable means to outspread the testing and counselling facilities all over public health sector is concerned. The Court overruled the argument put forward by one of the interveners for the difference between a minimum core content of the right to healthcare and the duties levied “on the state in section 27(2) that are subject to progressive realization and available resources”.

Over and above, in *Soobramoney v Minister of Health (Kwazulu-Natal)*³⁸³, Mr Soobramoney was suffering from renal failure. He was also having other chronic diseases such as hypertension, diabetes and heart diseases. As a result of his medical history he was not a suitable “candidate for a kidney transplant”. He then applied to the Durban High Court saying that he was being denied emergency medical treatment as he was entitled to obtain renal dialysis treatment in terms of section 27(3).

The application was dismissed by the High Court and on appeal, the Constitutional Court held that “the right not to be refused emergency medical treatment meant that a person who suffers a sudden catastrophe which calls for immediate medical attention should not be denied ambulance or other emergency services which are available and

³⁸³*Soobramoney V Minister of Health (Kwazulu-Natal) (CCT32/97) [1997] ZACC 17; 1998 (1) SA 765 (CC); 1997 (12) BCLR 1696 (27 November 1997).*

should not be turned away from a hospital which is able to provide the necessary treatment”.

The Court further ruled that this was not an emergency which needed an instant remedial treatment. The Court held that “the right could not mean that the treatment of terminal illnesses had to be prioritised over other forms of medical care such as preventative health care. It also held that the right not to be refused emergency medical treatment was independent from the right to life and had to be interpreted in the context of the availability of health services generally”.

Moreover, the Court went on to consider whether Mr Soobramoney should to be given dialysis cure by the public hospital in a manner conforming with the provisions of the Constitution which aids every person of a right of access to health care services supplied through the government efforts (s 27). The Court indicated that the state has a legal obligation “within its available resources” to ensure that health care services are available for everyone, as well as adequate “food and water and social security”.

Finally, the Court on the other hand found that the “Department of Health in KwaZulu-Natal” didn’t have enough capitals to aid the cost of services being delivered to the public. The Court held that “the responsibility for making the difficult decisions of fixing the health budget and deciding upon the priorities that needed to be met lay with political organs and the medical authorities and added that the Court would be slow to interfere with such decisions if they were rational and taken in good faith. The Court concluded that it had not been shown that the state’s failure to provide renal dialysis facilities for all persons suffering from chronic renal failure constitutes a breach of its constitutional obligation.”

According to Ngwenya “core minimum obligations and rights are an instrument for putting the onus upon the state to justify noncompliance with socio-economic obligations. They provide the state with practical benchmarks for formulating policies and programmes that are aimed at discharging socio-economic obligations”.³⁸⁴ It is the duty of the State to ensure that with its available resources all miners living with mine-related diseases are provided with sufficient health care services. Similarly, the

³⁸⁴Ngwenya C, adjudicating socio-economic rights – transforming South African society? 2003 volume 6 No 2 available http://www.nwu.ac.za/files/images/2003x2xngwenya_art.pdf retrieved 22 July 2017.

socio-economic right is further qualified by the catchphrase used in section 26(2) and section 27(2) of the Constitution that obliges the State to take only equitable steps “within its available resources”.³⁸⁵

In terms of Soobramoney case, the obligation imposed by section 26 and 27 on the State regarding health care, housing and social security will depend on the availability of the State resources and their purpose.

The justiciability of the socio-economic right is further restricted by the qualification that they are available on to extent to which State resources permits.³⁸⁶ On the other hand, in TAC case it was indicated that the more State resources become available more must be done in realisation of the socio-economic right. Thus, the State may not be held liable for failing to realise a particular socio-economic right if its resources are not available or are not adequate to realise that specific right.³⁸⁷ Since health is a constitutional fundamental right recognised as socio-economic right. A more determined government effort, together with the health sector and mining companies are therefore expected to deal with the significance of health as a socio-economic right in South Africa.³⁸⁸

4.6 Contemporary effective redress through silicosis class action suit (case): lesson learned

Nelson alludes that the latest trends in silicosis and post-mortems report of gold mine workers evidently proves weakness on gold mines to effectively curb dust and avoid

³⁸⁵Currie I & De Waal J *The Bill of Rights handbook* (5th ed 2005) Claremont: Juta & Co Ltd.

- In Treatment Action Campaign case, the Court confirmed that the right of access to health care in s 27(1) was qualified by the obligation to take only reasonable measures within available resources to achieve progressive realisation of the right. Section 27(1) did not “give rise to self-standing and independent positive right enforceable irrespective of consideration mentioned in section 27(2). Section 26(2) and 27(2) must be read together as defining the scope of the positive rights that everyone has and the corresponding obligations on the to the State to “respect, protect, promote and fulfil” such rights.

³⁸⁶See (note 385 above).

³⁸⁷Ngwenya C, *adjudicating socio-economic rights – transforming South African society? 2003 volume 6 No 2 available http://www.nwu.ac.za/files/images/2003x2xngwenya_art.pdf retrieved 22 July 2017.* Ngwenya C indicated that “the shortcomings of Soobramoney are not confined to the legalistic interpretation of section 27(3) but stretch a little beyond that”. It is true as Professor van Rensburg observes” that the Court in Soobramoney identified resources as the most important element in the determination of socioeconomic rights. It is self-evident that resources are finite and that the imposition of a ceiling on the quantity and quality of health care services that the state can provide is inevitable. It is also clear that the type of treatment that the appellant was seeking was beyond the reach of the state to the extent that he was seeking lifelong renal dialysis.”

³⁸⁸John E Ataguba, James Akazili, and Di McIntyre Socioeconomic-related health inequality in South Africa: evidence from General Household Surveys, 2011.

work-related respirational infections.³⁸⁹ He further stated that this trend in diamond and platinum mines is clear evidence that mine workers are exposed to an environment that is harmful to their health and likely to contract “asbestos-related diseases” in diamond mines and silicosis in platinum mines.³⁹⁰ The cotemporary redress of the health and safety would perceives current and former mine workers who are suffering from mine-related diseases an opportunity to claim for compensation against any mine company through the class action suit.

What does class action entails? A class action suit entails a joint legal action where a group of people or persons are endorsed or authorised by competent court of law to bring or proceed with an application for damages in single civil proceeding, since class action excludes criminal proceedings.³⁹¹ The class action was originally initiated in our law in terms of section 38 of the Constitution which states that any person or group of people alleging that their right in the Bill of Rights have been violated may approach a competent court of law for any relief they sought to achieve.³⁹²

In *Ferreira v Levin*³⁹³, the Court was asked to determine whether an examinee in a liquidation enquiry could challenge a provision of the Companies Act of the ground of fair trial rights afforded to the accused person. The answer that was provided to the question was the interpretation of section 7(4) of the interim Constitution. Ackerman J stated that section 7(4)(a) of the interim Constitution (the equivalent of paragraph of section 38 of the 1996 Constitution) imposed a qualification on the ability of the categories of persons defined in section 7(4)(b) to approach the court. In this case the majority of the Court has differed with the approach made by Ackermann J. Thus, majority of the Court held that as long as a court has jurisdiction to provide a relief sought, applicants would have the *locus standi* if:

³⁸⁹Nelson G Occupational respiratory diseases in the South African mining industry, 2013; 6: 10.3402/gha.v6i0.19520 available <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3556678/> retrieved 22 July 2017.

³⁹⁰ *Ibid* (note 389 above).

³⁹¹Smith ID& Alison Brown A, Arnold & Porter, The International Comparative Legal Guide to: Class & Group Actions 2016 available at <https://www.cliffedekkerhofmeyr.com/export/sites/cdh/en/news/press-releases/downloads/The-International-Comparative-Legal-Guide-to-Class-Group-Actions-2016-Edition.pdf> retrieved 22 July 2017.

³⁹²Constitution of the Republic of South Africa, 1996.

³⁹³*Ferreira v Levin* (CCT5/95) [1995] ZACC 13; 1996 (1) SA 984 (CC); 1996 (1) BCLR 1 (6 December 1995).

- There is an allegation that a right in the Bill of Rights has been infringed or threatened and;
- The applicants can demonstrate, with reference to the categories listed in section 38(a) to (e) that there is sufficient interest in obtaining the relief they seek³⁹⁴

Similarly, is a matter of fact that our courts have played a very big role in the development of class action in South Africa.³⁹⁵ This was replicated by the recent landmark decision of *Nkala v Harmony Gold Mining Company Limited*³⁹⁶, in this case applicants instituted an application on behalf of current and former mineworkers who are suffering from silicosis and TB, as well as acting on behalf of the dependants of those miners who died as a result of silicosis and TB during their employment in the mine.³⁹⁷

The applicants also request the court to make an order for certification of one of joined action consisting of twofold classes, that is a “silicosis class and a TB class” against mining companies.³⁹⁸ They made a proposal that the “potential class members may range from between 17 000 and 500 000 members, the bulk of which belong to the silicosis class”.³⁹⁹ The majority of them would fall within the silicosis class.⁴⁰⁰

The Court made an order that a group of current and former underground miners who are suffering from silicosis, and the dependants of those underground miners whose life has been lost as a result of silicosis pandemic (whether or not accompanied by any other disease) constitute a class action.⁴⁰¹ Therefore, court decided to grant the case a class action certification on the basis that there was similar evidence and it would also be more economical. Judge Mojapelo concluded by saying “Class action was also designed to protect a defendant from facing multiple actions. It enhances

³⁹⁴Currie I & De Waal J *The Bill of Rights handbook* (5th ed 2005) Claremont: Juta & Co Ltd.

³⁹⁵Pansegrouw M Far-Reaching Judgment of the Recent Silicosis Class Action Case, 2016 available at <https://www.werksmans.com/wp-content/uploads/2016/08/061416-Silicosis-Class-Action-Case.pdf> retrieved 22 July 2017.

³⁹⁶*Nkala v Harmony Gold Mining Company Limited* 2016 JDR 0881 (GJ)

³⁹⁷*Ibid* para 5.

³⁹⁸*Ibid* para 6.

³⁹⁹Pansegrouw M Far-Reaching Judgment of the Recent Silicosis Class Action Case, 2016 available at <https://www.werksmans.com/wp-content/uploads/2016/08/061416-Silicosis-Class-Action-Case.pdf> retrieved 22 July 2017.

⁴⁰⁰*Nkala v Harmony Gold Mining Company Limited*, para 7.

⁴⁰¹*Nkala v Harmony Gold Mining Company Limited* 2016 JDR 0881 (GJ), para 230.

judicial economy and protects courts from having to consider the same evidence on the same issues. On the other hand, class action allows a single finding on issues which bind everyone.”⁴⁰²

The landmark judgment by the Court gives effect to Occupational Diseases in Mines and Works Act (ODMWA), which provides for remedial process such as compensation for occupational lung diseases suffered by current and former miners only and Compensation for Occupational Injuries and Diseases Act (COIDA), which covers occupational injuries and diseases in all industries as well as those from the mining sector that are not covered by ODMWA; for example, noise-induced hearing loss. The decision of the Court is a warning to mining companies that do not comply with the transformation statutes and policies put in place that non-compliance will be meted with severe consequences. It also gives the former miners the opportunity to challenge any matter that relate to mine-related diseases contracted during their employment, as well as compensation thereof.

4.7 Conclusion

In conclusion, mine health and safety are socio-economic rights which are justiciable, and it is a human right that must be protected at all times as it is enshrined in the Bill of Rights. However, South African mining companies had been confronting a number of challenges with regard to health and safety. This study suggests that training of mineworkers will play a vital role in skills development and procurement of knowledge and expertise.

This requires collective efforts the government must establish training programmes such as Basic Education Training that will assist the aged mineworker to procure skills and knowledge so that they can execute their work in a proper manner. South African law entails that mines should be inspected at least once a week; however, inspectors ought to possess original qualifications and should go under training programme before engaging themselves in the mining inspection processes. If any mineworker, current or ex-mineworker has contracted or is suffering from mine-related diseases,

⁴⁰²Pansegrouw M Far-Reaching Judgment of the Recent Silicosis Class Action Case,2016 available at <https://www.werksmans.com/wp-content/uploads/2016/08/061416-Silicosis-Class-Action-Case.pdf> retrieved 22 July 2017.

such a person shall have a right provided for by statutes to approach a competent court seeking relief for damages.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.1 CONCLUSION

The mining industry remains the most valuable source of revenue generation for social and economic growth particularly in South Africa. Therefore, this work shows that health and safety standard in the mining industry should be critically pursued and enforced in order to reduce mine accidents and fatalities. The laws are essential tools that should be used to do and achieve this. Those that have been enacted should be effectively implemented and enforced.

In South Africa, the Mine Health and Safety Act⁴⁰³ was enacted to promote the safeguard of health and safety of all mineworkers, and to ensure effective implementation and enforcement of “health and safety” measures in the mining working environment. The National Occupational Health and Safety Policy is responsible for minimize accidents and diseases that might have arisen in the workplace. Despite the enactment of laws and policies, the mining industry is still confronted with major challenges such as health and safety, as mineworkers continue to contract diseases such as tuberculosis as well as silicosis and ever amassed occurrence of accidents.

The major problem is that the mining industry is not prepared to invest sufficient funds that will assist in providing mineworkers with the necessary skills and training as they are obligated to do so by the mining charter and other relevant legislation. Furthermore, the lack of prominent and consistent inspection of mines, which is caused by untrained or incompetent inspectors, and non-compliance by inspectors with the instructions set out by section 54 and 55 of the MHSA, leads to poor implementation and enforcement of safety measures. This is a major concern, which require the government, mining companies, employees and other stakeholders to work collectively in order to advance the health and safety standards in the mining sector.

Aged mineworkers must undergo vigorous training programme to make sure that they are equipped with the necessary skills and expertise with regard to mining safety and related work. The Skills Development Act of 1998 was intended to “develop the skills of the South African workforce, improve the quality of life of workers, their prospects

⁴⁰³Mine Health and Safety Act 29 of 1996.

of work and labour mobility and to encourage the employers to use the workplace as an active learning environment”⁴⁰⁴ The government has initiated Adult Basic Education and Training (ABET) to assist in ensuring that the aged mineworkers are provided with necessary skills, knowledge and expertise to “ensure health and safety measures are implemented”.

This policy has not only improved the mining sector in terms of skills procurement, but also society as a whole has benefited from this programme. Health and safety standards are constitutionally protected, thus current and former mineworkers will always have *locus standi* to claim for compensation from the employer if there are any allegations that the rights have been infringed or threatened. This was evident in the class action case *Nkala v Harmony Gold Mining Company Limited*⁴⁰⁵, where the verdict was granted in favour of ex-mineworkers suffering from mine-related diseases, who instituted a class action against mining companies responsible for poor and ineffective health and safety measures. The State is also obligated to ensure that “reasonable legislative measures, within its available resources” are taken to achieve progressive realisation of the socio-economic right (to health care) of those mineworkers who contracted or are living with mine-related diseases.

Health and safety standards are considered to be fundamental rights, and are justiciable socio-economic right. “Section 24 of the Constitution” entrenches a right to clean environment, section is also of vital significance because it is a human right that ensures that people are not exposed to a hazardous environment that is detrimental to their health and wellbeing. Therefore, effective enforcement of health and safety measures must be prominent and consistently enhanced at all time. The right to a clean environment is intrinsically linked to the right to life, a disregard for the right to clean and safe environment could result in death, this would be a violation of the constitutional right to life.

Moreover, high quality safety standard in the mining environment is critically imperative and as such South Africa can draw useful lessons from Australia and Chile.

⁴⁰⁴Section 2 (1) (a) of Skills Development Act 97 of 1998.

⁴⁰⁵*Nkala v Harmony Gold Mining Company Limited* 2016 JDR 0881 (GJ).

Australian government initiated Coal Mine Workers' Health Scheme that requires every employee to go through medical examination before employment to ensure that the incumbent is one of a sound physical health to handle the work, as well as control of work-related diseases. South Africa should adapt this approach whereby the government implements a National Mine Worker's Health Scheme that will authorise mining enterprises and the health authorities to carry out pre-employment medical assessment to improve health and safety outcomes of the mineworkers. The health information will contribute towards employer's compliance with "health and safety" laws and to ease employees recompense costs.⁴⁰⁶

On the other hand, the Chilean DT would issue writs of instructions, whereby inspector observe and record down infraction by an employer and enforce compliance with the laws within 15 days prior to issuing a fine.⁴⁰⁷ South Africa may adopt this type of approach wherein each mining enterprise that contravenes health and safety laws and policies would be compelled to comply with the law through educational program order issued by the court within stipulated period of time, failure which the consequences (severe fine or imprisonment) will follow.

⁴⁰⁶Guthrie R, The use of medical examinations for employment purposes, 2003 available at <https://www.ncbi.nlm.nih.gov/pubmed/14526729> retrieved 22 July 2017.

⁴⁰⁷Interview with Maria Ester Feres, former Director of Chile's Labor Directorate, 2008. For an historical account of this informal administrative practice see also Heleen F.P. Ietswaart, Labor Relations Litigation: Chile, 1970-1972, 16 Law and Society Review 625, 643-645 (1981-82).

5.2 RECOMMENDATIONS

Adherence to “health and safety” standards in the mining sector is absolutely imperative, and necessary for the well-being of the employer and the employee. It is evident from this study that the poor enforcement and implementation of health and safety measures has had negative impact in the country’s social and economic growth, since the mining sector is central sector that is used to accelerate our social economic growth.

Therefore, this study makes the following recommendations:

- The government must appraise the prominence of intercession by the Department of Mineral Resources including other stakeholders, especially Mine Health and Safety Council (MHSC), Organised Labour, Organised Business to ensure that the provisions set out by statutes are complied with in order to establish the culture of zero harm in the mining sector.
- The authority empowers to enforce and implement must improve and strengthen legislation that will compel all mining companies to comply, implement and enforce legislation aimed at promoting the health and safety standards.
- Mining companies should familiarise themselves with the general content of the applicable laws, rules, policies and standards to be able to comply with their duty of care and promoting safety culture in the industry. Effective compliance should be encouraged through ethical leadership, training, education and communication in the sector.
- As provided for by section 10 of the MSHA, training system or programme are ideal for skills development, and education is an essential component of transformation of the mining industry. The National Department of Education must provide skills under the ambit of Adult Basic and Education Training, which will assist in improving the communication in the work place, the employees will be able to take on new tasks and able to operates the machines correctly, because they would be able to read and understand what is expected of them in the workplace. The aged miners will gain new skills and knowledge as they will be in a position to read and write, this will

also assist in achieving effective and proficient “implementation and enforcement of health and safety” measures in the sector.

- The Department of Mineral Resources must ensure regular inspection of mining industries by competent inspectors in terms of section 54 and 55 instructions of the Mining Health and Safety Act, inspectors must also go under training programmes that will assist them in improving their levels of investigations and inquiries as well as providing appropriate and quality report, that will be distributed in the mining sector. The government must also establish a training inspection centre where all the concerned inspectors will be trained.
- The Labour Relations Act makes no provision for “health and safety” standards, but regulates relations between employer and employee. Therefore, this need to be addressed in order to include a clause which states clearly a specific provision that deals with health and safety measures in the workplace, since the Act regulates the relationship between the employer and the employee, thus the employer has a “duty of care” to ensure that reasonable and prudent steps are taken in ensuring that employees are not exposed to hazardous environments.
- The government must “take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation” of socio-economic rights to the health care of mineworkers who have contracted or are living with tuberculosis or silicosis, because health remain a fundamental right embodied in the “Bill of Rights” and all citizens are entitled to it. However, in the absence of State resources, the state cannot be held accountable for failing to realize a particular socio-economic right. The more State’s resources become available more must be done to realize these socio-economic rights.
- The mining industry must ensure that emergency escapes are improved and survival equipment is always accessible to rescue employees in case of emergency. This requires prominent inspection by skilled and qualified inspectors on a weekly basis.
- The Government must assist by providing bursaries and scholarships to students wishing to be part of the mining industry in the near future or those

students wishing to study towards a mining related qualification or those presently working within the mining industries and who require an enhanced understanding of the statutes, laws and regulations governing the industry.

- The legislature should amend the law and incorporate a clause in the Occupational Health and Safety Act that will not only apply to (or regulate relationship between) employer and the “employee with regard to health and safety” measures, but also accommodates mines, mining areas or any mining work (as defined in the Minerals Act).⁴⁰⁸
- The government must introduce a financial scheme that will assist various South African universities to offer mining-related courses which will provide students with the necessary skill and knowledge before employment in the mining sector.
- South Africa needs to implement a scheme similar to the Coal Mine Workers' Health Scheme that was introduced by the Australian government, to ensure that the employees undergo medical assessment prior to commencing work in mine. It is also recommended that government creates or adopts a National Mine Worker's Health Scheme that will give mining companies and the health authorities the power to conduct pre-employment medical test to employees. Medical information will assist the employer to comply with “health and safety” legislation and to reduce worker's compensation costs, as well as increases productivity of mineral resources.⁴⁰⁹ This Scheme will also assist the current and former mineworkers who have contracted mining-related diseases during their employment, as well as those current mineworkers who are living with such diseases access to medical assistance. This scheme would be funded by both the state's participation processes and employer's contribution to ensure that right to health care in the workplace is realised.
- The South African government working together with mining companies must also ensure the efficient and effective workplace forums (in the Labour

⁴⁰⁸Occupational Health and Safety Act and Amendments available at <http://www.labour.gov.za/DOL/legislation/acts/occupational-health-and-safety/occupational-health-and-safety-act-and-amendments/> retrieved 22 June 2016.

⁴⁰⁹Guthrie R, The use of medical examinations for employment purposes, 2003 available at <https://www.ncbi.nlm.nih.gov/pubmed/14526729> retrieved 22 July 2017.

Relations Act) through collaboration between government agencies, companies and other stakeholders where they assemble and discuss the ways in which harm in the workplace can be prevented or eradicated.

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