

REFERENCE NUMBER : DME 16/3/2/3 – A1  
LAST REVISION DATE:.....

# **DEPARTMENT OF MINERALS AND ENERGY**

*Minerals and Energy for Development and Prosperity*

## **MINE HEALTH AND SAFETY INSPECTORATE**



### **GUIDELINE FOR THE COMPILATION OF A MANDATORY CODE OF PRACTICE**

**ON**

### **MINIMUM STANDARDS OF FITNESS TO PERFORM WORK AT A MINE**

---

**Chief Inspector of Mines**

**DATE FIRST ISSUED: 17 AUGUST 2000**

**EFFECTIVE DATE: 16 FEBRUARY 2001**

# CONTENTS OF GUIDELINE

<b>PART A : THE GUIDELINE</b>	1
1. INTRODUCTION	1
2. LEGAL STATUS OF GUIDELINES AND COPS	3
3. THE OBJECTIVE OF THIS GUIDELINE	4
4. DEFINITIONS AND ACRONYMS	5
5. SCOPE	5
6. MEMBERS OF TASK GROUP	6
<b>PART B : AUTHOR'S GUIDE</b>	7
<b>PART C : FORMAT AND CONTENT OF THE MANDATORY COP</b>	8
1. TITLE PAGE	8
2. TABLE OF CONTENTS	8
3. STATUS OF COP	8
4. MEMBERS OF DRAFTING COMMITTEE	9
5. GENERAL INFORMATION	9
6. TERMS AND DEFINITIONS	10
7. RISK MANAGEMENT	10
8. ASPECTS TO BE ADDRESSED IN THE COP	11
<b>8.1 CATEGORIES OF MEDICAL EXAMINATION FOR ASSESSMENT OF FITNESS TO WORK</b>	11
8.1.1 Initial Examination	11
8.1.2 Periodic Examination	11
<b>8.2 CATEGORISATION OF FITNESS TO WORK</b>	12
<b>8.3 MINIMUM STANDARDS OF FITNESS TO PERFORM WORK AT A MINE ON INITIAL EXAMINATION</b>	12
8.3.1 Infectious disease	12
8.3.1.1 Gastro-Intestinal Infectious Diseases	12
8.3.1.2 Active, Infectious Pulmonary Tuberculosis	12
8.3.2 Endocrine and Metabolic Dseases	13
8.3.2.1 Diabetes Mellitus	13
8.3.2.2 Obesity	13
8.3.3 Diseases of the Blood and Blood Forming Organs	13

8.3.4	Mental Disorders	13
8.3.4.1	Acute or Chronic Psychosis	13
8.3.4.2	Alcohol or Substance Abuse/Dependency	14
8.3.5	Diseases of the Nervous System and Sensory Organs	14
8.3.5.1	Epilepsy and Other Conditions of Altered or Impaired Consciousness	14
8.3.5.2	Ear, Nose and Throat	15
8.3.5.2.1	Audiometric standards	15
8.3.5.2.2	Hearing Aids	15
8.3.5.3	Vision	15
8.3.6	Cardiovascular system	16
8.3.7	Respiratory system	16
8.3.8	Diseases of the digestive system	17
8.3.9	Diseases of the genito-urinary system	17
8.3.10	Skin	17
8.3.11	Musculo-skeletal system	17
8.3.12	Heat Tolerance	18
<b>8.4</b>	<b>STANDARDS OF FITNESS FOR WORK AT A MINE AT PERIODIC EXAMINATION</b>	<b>18</b>
8.4.1	Discretion of the OMP	18
8.4.2	Certification of unfitness	22
<b>PART D: IMPLEMENTATION</b>		<b>23</b>
1.	IMPLEMENTATION PLAN	23
2.	COMPLIANCE WITH THE COP	23
3.	ACCESS TO THE COP AND RELATED DOCUMENTS	23
<b>ANNEX 1 : SCHEMATIC GUIDELINE FOR JOB PLACEMENT EVALUATION</b>		<b>24</b>

## **PART A: THE GUIDELINE**

### **1. INTRODUCTION**

- 1.1 This guideline has been drafted to assist OMPs in determining fitness to perform specified work at a mine or to continue to perform such work.
- 1.2 It is clearly impossible to encompass within the guideline specific advice on every medical condition. However, as a general rule the OMP conducting the examination should be satisfied in each case that no disease or impairment is present which could either be significantly aggravated by working in a mine or represent an unacceptable health or safety risk to the individual employee, or any other person at the mine. Conditions not specified in the guideline, which impact on health or safety, should also be assessed in the light of this general principle. The results of any risk assessments required by section 11 of the MHSA and any relevant occupational exposure should also be considered.
- 1.3 The employee's medical condition should be interpreted in functional terms and in the context of the job requirements. Some disabilities or impairments may be irrelevant to performing a particular job without risk to health or safety and therefore such person is fit to do such work.
- 1.4 The existence of a medical condition with the likelihood of precipitating an acute illness or medical emergency is of particular concern in a mine, given that evacuation may entail a delay in providing treatment, and may put the health or safety of that individual or that of others at risk. The risk of an adverse outcome in the case of acute illness must be seen in the context of the particular mine in which an employee works. For example, evacuation from deep level and open cast mines would not result in the same delays or risks.

- 1.5 In addition appropriate health education, health or safety training, medical surveillance, early detection and treatment of illness promote the health and safety of employees at the mine.
- 1.6 Health disorders that are detected during initial or any other examination must be acted on by the OMP, either immediately or by appropriate referral. In the instance of a person being found unfit for mine work at initial examination due to the presence of a remediable health disorder, that person should be referred to an appropriate health service.
- 1.7 All employees or persons who previously have been employed at a mine found unfit to perform any particular category of work have the right to appeal the decision to the Medical Inspector in terms of section 20 of the MHSA. Regarding appeals, the Medical Inspector may, as far as possible, be assisted by the disclosure, in confidence, of personal medical information, in accordance with section 15 of the MHSA.
- 1.8 When considering the content and frequency of fitness examinations, due regard must be taken of the health hazards to which the employee will be exposed, the nature of the duties to be performed and the age of the employee to be examined. In reaching a conclusion about fitness, the OMP should therefore consider the age and experience of the employee, any medical conditions past and present, the specific work which will be performed and the health hazards that have been identified in relation to that specific work. (Annex 1 sets out a schematic job placement evaluation chart and must be incorporated in the COP and be complied with). It may be appropriate on occasion and, with the employee's consent, for the OMP to consult with another practitioner or specialist. When it is appropriate to consult with other doctors the usual ethical considerations will pertain, but it should be clearly understood that the decision on fitness rests with the OMP.

## **2. LEGAL STATUS OF GUIDELINES AND COPS**

- 2.1 In accordance with section 9(2) of the MHSA an employer must prepare and implement a COP on any matter affecting the health or safety of employees and other persons who may be directly affected by activities at the mines if the Chief Inspector of Mines requires it. These COPS must comply with any relevant guidelines issued by the Chief Inspector of Mines (section 9(3)).
- 2.2 Failure by the employer to prepare or implement a COP in compliance with this guideline is a breach of the MHSA. Any contravention of, or failure to comply with, a COP is not, in itself, a breach of the MHSA, except a contravention or failure by an employer that also constitutes a failure to implement the COP. Since the DME does not approve COPS, its focus is not to enforce them either. The focus of the DME is to ensure that employers provide healthy and safe working environments at mines, i.e. focusing on system failures and compliance with the MHSA, rather than enforcing compliance with COPS.
- 2.3 The fact that a contravention of, or failure to comply with a COP is not a breach of the MHSA does not mean that such breaches will have no legal implications. As far the employer is concerned, there are numerous specific and general obligations on the employer in the MHSA aimed at ensuring the health and safety of all employees and all persons who are not employees but who may be directly affected by the activities at the mine. Where any failure to comply with a COP also constitutes a breach of any of the employer's obligations under the MHSA, the employer could be liable to an administrative fine for such breach. An inspector could also issue various instructions to the employer and employees in terms of section 54 to protect the health or safety of persons at the mine. Failure by an employer to comply with such an instruction could render the employer liable to an administrative fine.

- 2.4 As far as employees are concerned, section 22 places a number of obligations on employees, including that they must take reasonable care to protect their own health and safety and the health and safety of other persons who may be affected by their conduct. Where a failure by an employee to comply with a COP would also constitute a breach of the employee's duties in terms of section 22 (or a breach of section 84, 86(1) or 88), the employee could be criminally charged for such breach. As is the case with employers, the inspectorate could issue instructions to employees in terms of section 54 and failure to comply with such an instruction constitutes a criminal offence.
- 2.5 Employers should deal with breaches by employees of COPs in terms of the mine's standard instructions and the employer's disciplinary procedures. This is not the responsibility of the State.

### **3. THE OBJECTIVE OF THIS GUIDELINE**

- 3.1 The objective of this guideline is to assist the OMP charged with the task of preparing a COP which, if implemented and complied with, would -
- 3.1.1 be appropriate, considering the health and safety of all employees at the mine;
  - 3.1.2 ensure the employee is fit to perform that employees' work at the mine;
  - 3.1.3 ensure that the health of the employee who is certified as fit for a specific category of work is such that the employee will be able to perform that work without an unacceptable health or safety risk to that employee or any other person ; and
  - 3.1.4 establish a baseline against which to measure subsequent changes in the health status of the employee.

#### **4. DEFINITIONS AND ACRONYMS**

In this guideline for a COP or any amendment thereof, unless the context otherwise indicates -

“**COP**” means Code of Practice;

“**DME**” means the Department of Minerals and Energy;

“**MHSA**” means Mine Health and Safety Act, 1996 (Act No. 29 of 1996);

“**OMP**” means Occupational Medical Practitioner;

#### **5. SCOPE**

- 5.1 This guideline covers a basic system for the OMP managing minimum standards of fitness to perform work at a mine.
- 5.2 This guideline does not stipulate specific advice on every medical condition. However, conditions not dealt with in the guideline, which could have an impact on health or safety, should also be taken into account when determining an employee’s fitness to perform work. The hazard identification and risk assessment approach contemplated in the MHSA should be applied to fitness to perform work at a mine (see paragraphs 7 and 8 below).
- 5.3 The OMP conducting the medical examination should be satisfied in each case that no disease or impairment is present which could either be significantly aggravated by working at a mine or represent an unacceptable health or safety risk to any person.

## 6. MEMBERS OF TASK GROUP

This guideline was prepared by the Occupational Medicine Sub-Committee, which comprised of the following members –

Dr. E M Mokolobati (Chairperson from August 1998):	State
Dr. W Rabie (Chairperson until August 1998)	: State
Ms. A van der Merwe	: State
Ms. DVP Mathibeli	: State
Dr. D F Barnes	: Employers
Dr. M A C La Grange	: Employers
Dr. S Shearer	: Employers
Dr. RJ Dowdeswell	: Employers
Prof. N White	: Labour
Mr. W Mboniso	: Labour
Ms. F Duncan	: Secretariat

## **PART B: AUTHOR'S GUIDE**

- 1.1 The COP must, where possible, follow the sequence laid out in Part C “Format and Content of the COP”. The pages as well as the chapters and sections must be numbered to facilitate cross-reference. Wording must be unambiguous and concise.
- 1.2 It should be indicated in the COP and on each annex to the COP whether-
  - 1.2.1 the annex forms part of the guideline and must be complied with or incorporated in the COP or whether aspects thereof must be complied with or incorporated in the COP; or
  - 1.2.2 the annex is merely attached as information for consideration in the preparation of the COP (i.e. compliance is discretionary).
- 1.3 When annexes are used the numbering should be preceded by the letter allocated to that particular annex and the numbering should start at one (1) again. (e.g. 1, 2, 3, ..... A1, A2, A3,...).
- 1.4 Whenever possible illustrations, tables, graphs and the like, should be used to avoid long descriptions and/or explanations.
- 1.5 When reference has been made in the text to publications or reports, references to these sources must be included in the text as footnotes or sidenotes as well as in a separate bibliography.

## **PART C: FORMAT AND CONTENT OF THE MANDATORY COP**

### **1. TITLE PAGE**

The COP should have a title page reflecting at least the following -

- 1.1 name of the mine;
- 1.2 the heading: “Mandatory Code of Practice for Minimum Standards of Fitness to Perform Work at a Mine”;
- 1.3 a statement to the effect that the COP was drawn up in accordance with Guideline DME Reference Number DME 16/3/2/3-A1 issued by the Chief Inspector of Mines;
- 1.4 the mine’s reference number for the COP;
- 1.5 effective date; and
- 1.6 revision dates (if applicable).

### **2. TABLE OF CONTENTS**

The COP must have a comprehensive table of contents.

### **3. STATUS OF COP**

Under this heading the COP must contain statements to the effect that -

- 3.1 the COP was drawn up in accordance with Guideline DME Reference Number DME 6/3/2/3-A1 issued by the Chief Inspector of Mines;
- 3.2 this is a mandatory COP in terms of section 9(2) and (3) of the MHSA;
- 3.3 the COP may be used in an accident investigation/inquiry to ascertain compliance and also to establish whether the code is effective and fit for purpose;
- 3.4 the COP supersedes all previous relevant COPs; and

- 3.5 all managerial instructions, recommended procedures (voluntary COPs) and standards on the relevant topics must comply with the COP and must be reviewed to ensure compliance.

#### **4. MEMBERS OF DRAFTING COMMITTEE**

- 4.1 In terms of section 9(4) of the MHSA the employer must consult with the health and safety committee on the preparation, implementation and revision of any COP.
- 4.2 It is recommended that the employer should, after consultation with the employees in terms of the MHSA, appoint a committee responsible for the drafting of the COP.
- 4.3 The members of the drafting committee assisting the employer in drafting the COP should be listed giving their full names, designations, affiliations and experience. This committee should include competent persons sufficient in number effectively to draft the COP.

#### **5. GENERAL INFORMATION**

Relevant information relating to the mine must be stated in this paragraph. The following minimum information must be provided -

- 5.1 a brief description of the mine and its location;
- 5.2 the commodities produced;
- 5.3 the mining methods/mineral excavation processes;
- 5.4 a description of the systems in use on the mine to determine, implement and monitor minimum standards of fitness to perform work at the mine; and
- 5.5 other relevant COPs;

## **6. TERMS AND DEFINITIONS**

Any word, phrase or term of which the meaning is not absolutely clear or which will have a specific meaning assigned to it in the COP, must be clearly defined. Existing and/or known definitions should be used as far as possible. The drafting committee should avoid jargon and abbreviations that are not in common use or that have not been defined. The definitions section should also include acronyms and technical terms used.

## **7. RISK MANAGEMENT**

- 7.1 Section 11 of the MHSA requires the employer to identify hazards, assess the health and safety risks to which employees may be exposed while they are at work, record the significant hazards identified and risks assessed. The employer must determine how the significant risks identified in the risk assessment process must be dealt with, having regard to the requirements of sections 11(2) and (3) that, as far as reasonably practicable, attempts should first be made to eliminate the risk, thereafter to control the risk at source, thereafter to minimise the risk and thereafter, insofar as the risk remains, to provide personal protective equipment and to institute a programme to monitor the risk.
- 7.2 To assist the employer with the risk assessment all possible relevant information such as accident statistics, ergonomic studies, research reports, manufacturers specifications, approvals, design criteria and performance figure for all relevant equipment should be obtained and considered.
- 7.3 In addition to the periodic review required by section 11(4) of the MHSA, the COP should be reviewed and updated after every serious incident relating to the topic covered in the COP, or if significant changes are introduced to procedures, mining and ventilation layouts, mining methods, plant or equipment and material.

## **8. ASPECTS TO BE ADDRESSED IN THE COP**

The principles of the risk assessment approach referred to in paragraph 7 above must be applied to determine fitness to perform a specific category of work at a mine. First the significant hazards and risks of each specific category of work should be recorded. The COP should then ensure that the medical examinations for assessment of fitness to work have as a result that the health of an employee who is certified as fit for a specific category of work is such that the employee will be able to perform that work without an unacceptable health or safety risk to that employee or any other person.

### **8.1 CATEGORIES OF MEDICAL EXAMINATION FOR ASSESSMENT OF FITNESS TO WORK**

#### **8.1.1 Initial examination.**

The COP must require the OMP to ensure that any prospective or new employee undergoes an initial examination and baseline tests, appropriate to the health hazards or exposures of the envisaged occupation and to the results of any relevant risk assessments.

#### **8.1.2 Periodic Examination.**

The OMP must ensure that serving employees are examined at intervals appropriate to -

8.1.2.1 the health hazards they are exposed to;

8.1.2.2 the inherent requirements of their specific occupation; and

8.1.2.3 the results of any relevant risk assessment.

## **8.2 CATEGORISATION OF FITNESS TO WORK**

8.2.1 The standard has been met: an employee is fit for a particular category of work.

8.2.2 The standard has not been met: an employee is unfit for a particular category of work.

## **8.3 MINIMUM STANDARDS OF FITNESS TO PERFORM WORK AT A MINE ON INITIAL EXAMINATION**

An OMP may apply more or less stringent standards depending on circumstances or risk assessment, at a specific mine. For specific fitness requirements for job placement consult Annex 1. (Annex 1 must be complied with.)

### **8.3.1 Infectious Diseases**

Significant infectious diseases may preclude work in certain occupations.

#### **8.3.1.1 Gastro-Intestinal Infectious Diseases.**

Special care should be taken by the OMP to ensure that persons suffering from Gastro-intestinal Infectious Diseases should not be involved in the handling of food.

#### **8.3.1.2 Active, Infectious Pulmonary Tuberculosis.**

An employee suffering from active infection should be referred by the OMP for appropriate treatment. The employee is not fit to work where there is continuing infectivity or serious permanent impairment. Employees, where either one or both lungs have been seriously affected by previous tuberculosis, should not be exposed to dust environments.

## **8.3.2 Endocrine and Metabolic Diseases**

### **8.3.2.1 Diabetes Mellitus.**

Diabetics may be employed in such occupations as the OMP may consider safe having regard to their condition. Insulin dependent diabetics should not work underground except under exceptional circumstances where the OMP is satisfied that all required health or safety concerns have been met. Well-controlled, mild non-insulin dependent diabetics may be certified fit to work in a particular category of work underground. Diabetics should not work as drivers of passenger or dangerous goods conveyance. Well-controlled, mild non-insulin dependent diabetics may be certified fit to work by the OMP as drivers for non-passenger or ordinary goods conveyance.

### **8.3.2.2 Obesity.**

A degree of obesity adversely affecting heat tolerance or the ability to exercise, mobility, general health or possible medical evacuation may render a person unfit for a particular category of work.

## **8.3.3 Diseases of the Blood and Blood Forming Organs**

Any significant disease of the haemopoietic system may preclude employment in certain categories of work.

## **8.3.4 Mental Disorders**

### **8.3.4.1 Acute or Chronic Psychosis.**

A person suffering from a psychosis may not be fit for a particular category of work.

#### 8.3.4.2 Alcohol or Substance Abuse/Dependency.

8.3.4.2.1 Persistent alcohol or substance abuse affecting health by causing physical or behavioural disorder may render a person unfit for a particular category of work. Such persons will not be certified fit for employment by the OMP as drivers of passenger or dangerous goods conveyances.

8.3.4.2.2 Any person being considered for employment as a driver of passenger or dangerous goods conveyance should be screened for alcohol or substance abuse. It is advised that an alcohol and substance abuse policy, which has been agreed by the Health and Safety Committee, be in place on mines.

### **8.3.5 Diseases of the Nervous System and Sensory Organs**

#### 8.3.5.1 Epilepsy and Other Conditions of Altered or Impaired Consciousness.

8.3.5.1.1 Any medical condition which may result in an altered or impaired level of consciousness, including epilepsy renders a person unsuitable for employment in certain areas or occupations on a mine, such as underground, or operation of moving machinery or in dangerous situations such as working at heights, near water, high voltage electricity or any other potentially dangerous situations.

8.3.5.1.2 Notwithstanding the above, an epileptic under medical treatment and without any events within a preceding period of two years may be considered for certain categories of work underground or on the

surface.

8.3.5.1.3 No persons with a history of epilepsy may ever be certified fit as a driver for passenger or dangerous goods conveyance.

#### 8.3.5.2 Ear, Nose and Throat.

An ear, nose and throat examination is required (which includes intact tympanic membranes and functioning eustachian tubes) and the minimum standards set below must be met for occupations involving changes in barometric pressure and /or exposure to noise.

##### 8.3.5.2.1 Audiometric standards.

Pure tone audiometric screening at 0,5 kHz, 1 kHz, 2 kHz and 3 kHz must meet the following criteria:

- AGE 16-39: pure tone average of 15 dB or less;
- AGE 40 AND ABOVE: Pure tone average of 25 dB or less;
- IRRESPECTIVE OF AGE: a threshold of 45 dB or less at 3 kHz.

##### 8.3.5.2.2 Hearing Aids.

The use of a hearing aid by those working in a designated noise zone should not be permitted.

#### 8.3.5.3 Vision.

Binocular vision is necessary for all categories of underground employees.



8.3.7.3 In individuals where there are mild abnormalities of lung function this test should not be the sole criterion on which an individual is precluded from mine work. If the individual otherwise appears to have a normal cardiorespiratory system and is able to meet the physical performance requirements of the specified occupation then he may be found fit for a particular category of work. Refer to the MOHAC Guidance Note for OMPs on lung function testing.

8.3.7.4 Any respiratory impairment, whether occupational or non-occupational in origin, equal to or greater than that which may be required for a certification of second degree occupational lung disease, would disqualify for work in an environment considered a respiratory risk.

### **8.3.8 Diseases of the digestive system**

There should not be any significant disease of the digestive system, which may impair ability to perform a particular category of work.

### **8.3.9 Diseases of the genito-urinary system**

There should not be any cases of unexplained proteinuria, glycosuria, haematuria or other urinary abnormalities, which may render a person unfit for a particular category of work

### **8.3.10 Skin**

A history of or presence of skin conditions liable to be aggravated by working conditions may preclude employment in a particular category of work.

### **8.3.11 Musculo-skeletal system**

There should be sufficient musculo-skeletal integrity to undertake the required physical exertion for a particular category of work.

### **8.3.12 Heat Tolerance**

8.3.12.1 For employees working in conditions where the wet bulb temperature is equal to or exceeds 27,5 degrees Celsius, or the dry bulb temperature is equal to or exceeds 37,0 degrees Celsius, the COP drawn up in accordance with the Guideline for the Mandatory COP on Heat Stress Management of the DME, once issued, should be applied. Employees who need to work in such environments, must meet all the physical requirements and pass the necessary screening tests prescribed in this guideline and COP referred to above before declared fit to work.

8.3.12.2 Until the guideline contemplated in paragraph 8.3.12.1 above is issued, the COP drawn up under Minerals Act Regulation 10.12 must be applied.

## **8.4 STANDARDS OF FITNESS FOR WORK AT A MINE AT PERIODIC EXAMINATION**

Periodic examinations should be risk specific, taking into account the physical requirements of the occupation and workplace hazard exposure and results of risk assessment.

It is recommended that the result of this examination be either:

- **The standard has been met** : an employee is fit for usual category of work.
- **The standard has not been met** : an employee is unfit for usual category of work

### **8.4.1 Discretion of the OMP**

8.4.1.1 At any periodic medical examination, the standards of fitness required of an employee should generally be the same as the initial standards of fitness to perform work.

8.4.1.2 Where there is illness or impairment present the OMP should always consider the effect this would have on the ability of the employee to continue to work without endangering the health or safety of that employee or any other person.

8.4.1.3 It is impractical to cover all possible medical problems that employees may develop after employment and therefore the OMP should use professional discretion when applying the standards of fitness at periodic medical examinations.

The following must be borne in mind -

- The period of further exposure of the employee

Some occupational diseases take a long time to develop and further deterioration of health may continue even after discontinuing exposure to the hazard. The further exposure of an employee to such a hazard where there is significant impairment present should be questioned. Where it is not practicable to reduce such exposure, it must be considered whether continuous exposure to these (adversely affecting the employee's health) should be allowed and for what period of time. Where serious, permanent disablement could result, further exposure is undesirable thus e.g. an employee with more than 60 dB average pure tone hearing loss (0,5 kHz, 1,2 and 3 kHz) is not fit to work in a noise zone at a mine.

- The experience of the employee

Experience in a certain occupation or type of work usually enables employees to perform such work safely and without risk to their own or fellow employee's health or safety. This experience may compensate for impairment in such a way that allows the employee to continue performing work effectively without risk to health or safety.

- The ability to protect the employee from further deterioration in health or impairment at work and reduce risk to fellow employees. Supervision at work may reduce or eliminate health or safety risk due to illness or impairment. Examples are-
  - (i) personal protective equipment may be required and use supervised to ensure compliance where impairment has resulted from failure to use such equipment;
  - (ii) supervised work may ensure that an employee with an illness that can cause harm to that employee (e.g. diabetes) will be able to receive help immediately, but where this is not possible the employee would not be able to perform such work without risk;
  - (iii) similarly, a serving driver for passenger and goods conveyance is no longer fit to work as a driver if there is more than 40 dB averaged pure tone (0,5, 1, 2 and 3 kHz) (note: see paragraph 8.3.5.2.1) hearing loss due to unacceptable risk to fellow employees; and
  - (iv) supervised medication may eliminate or reduce risk to the health or safety of an employee or fellow employees, such as a well controlled, responsible diabetic under close medical surveillance and supervision may be able to perform work without creating unacceptable risk.

8.4.1.4 Where such supervision is not possible or where there is a documented reluctance of the employee to comply with such measures, the OMP should consider these in declaring an employee fit or unfit to continue to work.

8.4.1.5 A comprehensive assessment of the employee must be made taking account of all physical, emotional and psychological factors -

- in deciding whether an employee is fit to continue to work, consideration must be given as to how one condition may aggravate another.
- a holistic approach is required that takes cognisance of the employee's health, experience, the type of work, the risk involved etc. and how these collectively affect fitness to work.

8.4.1.6 The employee's medical condition should be interpreted in functional terms and in the context of the job requirements. Some disabilities or impairments may be irrelevant to performing a particular job without risk to health or safety and therefore such person is fit to do such work.

8.4.1.7 Alterations in exposure or medical surveillance-

- the OMP may consider declaring a person fit to continue working subject to certain conditions such as closer supervision and monitoring which may include reduction in exposure or more frequent medical surveillance.
- where the standards for fitness are not met at periodical examination, the results of the medical examination should be discussed with the employee to ensure full understanding of the risks and consequences.
- should an employee be declared fit to work, despite certain impairments and where certain qualifications are applied to certain working standards and supervision etc., this must be discussed with the employee and the importance of these stressed to the employee.

- the OMP must notify the employer of the qualifications or conditions subject to which the employee may continue to perform specific work.

#### **8.4.2 Certification of unfitness**

8.4.2.1 Should a serving employee be found unfit to perform work by the OMP, the reason thereof and the effective date must be recorded in the employee's medical record.

8.4.2.2 A decision that an employee is unfit to perform that employee's usual category of work should be reached only after thorough consideration of the case and should be fully discussed with the employee by the OMP. If requested in writing by the employee, the employee's own medical practitioner should be informed of the decision and the reasons for it.

8.4.2.3 If an employee is declared unfit to perform work by the OMP as a result of an occupational disease, the employer must conduct an investigation in terms of section 11 (5) of MHSA.

8.4.2.4 Appropriate procedures in terms of Compensation for Occupational Injuries and Diseases Act 1993 (Act No 130 of 1993) COIDA or Occupational Diseases in Mines and Works Act, 1973 (Act No 78 of 1973) ODMWA must be followed by the OMP if applicable.

8.4.2.5 It should also be noted that the MHSA contains provision (section 20) for an employee to appeal a finding of unfitness to perform a particular category of work.

## **PART D: IMPLEMENTATION**

### **1. IMPLEMENTATION PLAN**

- 1.1 The employer must prepare an implementation plan for its COP that makes provision for issues such as organisational structures, responsibilities of functionaries and programmes and schedules for this COP that will enable proper implementation of the COP. (A summary of/and a reference to, a comprehensive implementation plan may be included.)
- 1.2 Information may be graphically represented to facilitate easy interpretation of the data and to highlight trends for the purpose of risk assessment.

### **2. COMPLIANCE WITH THE COP**

The employer must institute measures for monitoring and ensuring compliance with the COP.

### **3. ACCESS TO THE COP AND RELATED DOCUMENTS**

- 3.1 The employer must ensure that a complete COP and related documents are kept readily available at the mine for examination by any affected person.
- 3.2 A registered trade union with members at the mine or where there is no such union, a health and safety representative on the mine, or if there is no health and safety representative, an employee representing the employees on the mine, must be provided with a copy on written request to the manager. A register must be kept of such persons or institutions with copies to facilitate updating of such copies.
- 3.3 The employer must ensure that all employees are fully conversant with those sections of the COP relevant to their respective areas of responsibility.

**ANNEX I: SCHEMATIC GUIDELINE FOR JOB PLACEMENT EVALUATION**

PARAMETER	NO HAZARD	MINE / WORKS: SURFACE	MINES: UNDERGROUND	SURFACE OR UNDERGROUND	
				A	B
<b>Frequency of examination</b>	At initial placement	At initial placement and 3 yearly	At initial placement and then 3 yearly	At initial placement and then 2 yearly	At initial placement and then annually
<b>Minimum age at employment</b>	16 years	18 years	18 years	21 years	21 years
<b>Vision ( corrected )</b>	--	6 / 18 Binocular 6 / 24 Worst	6 / 9 Binocular 6 / 12 Worst	6 / 9 Binocular 6 / 9 Worst	6 / 9 Binocular 6 / 9 Worst
<b>Colour Blindness</b>	--	--	--	Exclude	Exclude
<b>Visual field at least: 50/70</b>	--	--	--	Exclude	Exclude
<b>Hearing ( Pure tone average of 0,5, 1, 2 and 3 kHz )</b>	Age: 16 - 39 years < 15 dB loss; Age 40 + <25 dB loss. Also: < 45 dB loss at 3 kHz all ages				
<b>Epilepsy / Neurological state affecting level of consciousness</b>	--	Exclude for 2 years	Exclude for 2 years	Permanent exclusion	Permanent exclusion
<b>Diabetes</b>	--	Well controlled diabetes	NIDDM: well controlled IDDM : exclude except in special circumstances	Only well controlled NIDDM allowed	Exclude
<b>Cardiovascular ( e.g. ischemic heart disease)</b>	Must have sufficient cardiorespiratory function to cope with job and environment			Exclude	Exclude
<b>Alcohol / drug abuse screen</b>	--	--	--	Consider testing: exclude if positive	Compulsory testing: exclude if positive

**A NON-PASSENGER AND ORDINARY GOODS CONVEYANCE AND WORK INVOLVING HEAVY OR POTENTIALLY DANGEROUS MACHINERY:**  
e.g drivers or operators of non-passenger locomotives, dump trucks, delivery vehicles, loaders, cranes, forklifts, tractors, pumps, riggers, shaft timbermen, ventilation fan attendants, fridge plant staff, electricians, instrument technicians and other occupations thought to fall in this category.

**B PASSENGER AND DANGEROUS GOODS CONVEYANCE:**  
e.g Winding engine drivers, drivers of buses, taxis locomotives, onsetters, banksmen, and other occupations thought to fall within this category.

**Note:** The Occupational Medical Practitioner should take into account local variation in job requirements as well as a worker’s experience and individual circumstances.