

GENERAL NOTICES • ALGEMENE KENNISGEWINGS

DEPARTMENT OF MINERAL RESOURCES

NOTICE 262 OF 2020

The Chief Inspector of Mines intends to publish guidelines in terms of section 9(3) of the Mine Health and Safety Act, 1996 (Act No. 29 of 1996) as amended ("the Act"), requiring employers (as defined in the Act) to prepare and implement a code or codes of practice, to mitigate the effect of the outbreak of Covid-19 on the health and safety of employees (as defined in the Act) and persons who may be directly affected by the disease at the mine.

Draft Guidelines is hereby published in the Schedule for public comment

Written comments is hereby invited which must reach the Office of the Chief Inspector of Mines by 14 May 2020.

Written comments must be forwarded by E-mail to:

David.Msiza@dmre.gov.za

For Attention: Dr L Ndelu

SCHEDULE

DEPARTMENT OF MINERAL RESOURCES AND ENERGY

MINE HEALTH & SAFETY INSPECTORATE



GUIDELINE FOR THE COMPILATION OF A MANDATORY CODE OF PRACTICE FOR THE MITIGATION AND MANAGEMENT OF COVID-19 OUTBREAK

Chief Inspector of Mines

DATE:

REVISION DATE:

CONTENTS OF THE GUIDELINE

PART A: THE GUIDELINE

1. Foreword	4
2. Legal status of the guideline and codes of practice	5
3. Objectives of the guideline	5
4. Definitions and acronyms	5
5. Scope	8
6. Members of the task group	8

PART B: AUTHOR'S GUIDE 9

PART C: FORMAT AND CONTENT OF THE MANDATORY CODE OF PRACTICE 9

1. Title page	9
2. Table of contents	10
3. Status of mandatory code of practice	10
4. Members of the drafting committee	11
5. General information	12
6. Terms and definitions	12
7. Risk management	13
8. Key elements to be addressed in the mandatory code of practice	13
8.1 Risk assessment and review	14
8.2 Start-up procedure for mines	16
8.3 COVID-19 Management Programme	17
8.4 Monitoring and reporting	29

8.5 Compensation	29
-------------------------	-----------

PART D: IMPLEMENTATION	30
-------------------------------	-----------

1. Implementation plan	30
-------------------------------	-----------

2. Compliance with the code of practice	30
--	-----------

3. Access to the code of practice and related documents	30
--	-----------

LIST OF ANNEXURES

ANNEXURE 1: WORKER COVID-19 RISK ASSESSMENT	31
ANNEXURE 2: SPECIALISED HEALTH RISK ASSESSMENT FOR WORKPLACES	32
ANNEXURE 3: COVID-19 WALK-THROUGH RISK ASSESSMENT	33
ANNEXURE 4: GUIDELINE ON SAFE AND HEALTHY START-UP PROCEDURE POST THE COVID-19 LOCKDOWN	34
ANNEXURE 5: START UP_CHIEF INSPECTOR OF MINES INSTRUCTION AND LETTER	35
ANNEXURE 6: CONTROL MEASURES TO MANAGE THE RISK OF EXPOSURE TO BREATHALYSER	36
ANNEXURE 7: HANDLING OF OCCUPATIONAL HYGIENE PERSONAL SAMPLING WITH REGARDS TO COVID-19.	37
ANNEXURE 8: NOTICE ON COMPENSATION FOR OCCUPATIONALLY ACQUIRED CORONA VIRUS UNDER COIDA AMENDED ACT	38
ANNEXURE 9: CRITERIA FOR PERSON UNDER INVESTIGATION	39
ANNEXURE 10: SPIROMETRY TESTING	41

PART A: THE GUIDELINE

1. FOREWORD

- 1.1 During late 2019, the first cases of a new disease, later named COVID-19 by the World Health Organization (WHO), were reported by healthcare workers from Wuhan, China. In January 2020, the WHO declared COVID-19, as a public health emergency of international concern and later in March 2020 declared it a global pandemic.
- 1.2 On 15 March 2020 the President of South Africa declared a national state of disaster on COVID -19, in terms of the Disaster Management Act; which introduced several restrictions aimed to curb the disease. Despite these measures, the numbers of COVID-19 increased dramatically and, on the 26th of March 2020, a document called the "Guiding Principles on the Prevention and Management of COVID-19 in SAMI", in a bid to provide guidance to the SAMI members on how to prevent and manage the spread of COVID-19 pandemic. The Guiding Principles were developed through the Mine Health and Safety Council (MHSC) in consultation with the tripartite stakeholders.
- 1.3 On 26th of March 2020, a nation-wide lockdown was declared in South Africa. The President further announced that Companies whose operations require continuous processes such as furnaces and underground mine operations will be required to make arrangements for care and maintenance to avoid damage to their continuous operations. The lockdown was extended from the 16th of April 2020 to the end of April 2020.
- 1.4 Also, the amended regulations were issued on the 16th of April 2020 in terms of section 27(2) of the Disaster Management Act, 2002. On 29th of April 2020, the Minister of Mineral Resources and Energy issued directions in terms of regulation 10(8) of the regulations issued in terms of section 27(2) of the Disaster Management Act No. 57 of 2002.
- 1.5 Following an order handed down in the Labour Court of South Africa on 1st of May 2020, the DMRE in consultation with MHSC developed a guideline in accordance with Section 9 of the Mine Health and Safety Act 29 of 1996 ("the MHSA") (as amended). The guideline requires employers to prepare and implement a code of practice for the mitigation and management of COVID-19 outbreak.

1.6 This guideline has been developed to provide a framework to mitigate and manage COVID-19 outbreak amongst employees in the SAMI.

2. LEGAL STATUS OF THE GUIDELINE AND CODES OF PRACTICE

2.1 In accordance with Section 9(2) of the Mine Health and Safety Act, 1996 (Act 29 of 1996), as amended (**MHSA**), an employer must prepare and implement a **COP** on COVID-19 viral pandemic present and spreading in South Africa. This **COP** must comply with any relevant guidelines and instructions issued by the **CIOM** [Section 9(3) MHSA], including regulations and guidelines from Disaster Management Act (Act no 57 of 2002) and any other relevant guidance with regards to COVID-19. Failure by the employer to prepare or implement a **COP** in compliance with this guideline will be a contravention, a criminal offence and a breach of the **MHSA**.

3. OBJECTIVES OF THE GUIDELINE

The objective of this guideline is to assist employers to establish and maintain a COVID-19 mitigation and management programme at mines, which if properly implemented and complied with, would assist the health and safety of the mine's employees.

4. DEFINITIONS AND ACRONYMS

“**Airborne pollutant**” means any substance in the air that is harmful to health, including dust, fumes, aerosols, gases, fibres, vapours or mists;

“**CIoM**” means Chief Inspector of Mines;

“**Compensation**” means any temporary or permanent occupational disease compensation awarded in terms of Compensation of Occupational Injuries and Diseases Act (COIDA), (as amended), in terms of sections 47 or 49, respectively, read together with section 65 and 66 of the same Act;

“**Confirmed case**” means a person who has been diagnosed with COVID-19 by means of a laboratory diagnostic method approved by the Department of Health;

“**COP**” means Code of Practice in terms of section 9 of the MHSA;

“**COVID-19**” means Corona Virus Infection Disease 2019

“**Decontamination**” means to remove, as far as is reasonably practicable, all inanimate objects or infectious organic matter by way of sweeping, cleaning, washing, ventilating or any other process aimed at removing the contaminant;

“**DMA**” means Disaster Management Act, Act 57 of 2002;

“**DMRE**” means the Department of Mineral Resources and Energy;

“**DOH**” means the Department of Health;

“**EAP**” means employee assistance programme;

“**Exposure**” means the subjection of a person to an **airborne pollutant** in the course of employment through any route of entry (e.g. inhalation, ingestion, skin contact or absorption);

“**Healthcare Worker**” means all people primarily engaged to enhance health by providing preventative, curative, promotional or rehabilitative health care services;

“**Isolation**” means separating a sick individual with a contagious disease from health individuals that are not infected with such disease in a manner that aims to prevent the spreading of infection or contamination;

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

“**MHSC**” means the Mine Health and Safety Council, established in terms of section 41(1) of the MHSA;

“**NDOH**” means National Department of Health;

“**NICD**” means National Institute for Communicable Diseases;

“**NIOH**” means National Institute for Occupational Health;

“**NIOSH**” means the United States National Institute for Occupational Safety and Health;

“**OMP**” means an medical practitioner who holds a qualification in occupational medicine or an equivalent qualification, recognised by the Health Professions Council of South Africa;

“**PPE**” means Personal Protective Equipment;

“**PUI**” means Person under investigation;

“**Quarantine**” means the restriction of activities or separation of a person, who was or may potentially have been exposed, to COVID-19 and who could potentially spread the disease to other non-exposed persons, to prevent the possible spread of infection or contamination to healthy individuals;

“**reasonably practicable**” means practicable having regard to - (a) the severity and scope of the hazard or risk concerned; (b) the state of knowledge reasonably available concerning that hazard or risk and of any means of removing or mitigating that hazard or risk; (c) the availability and suitability of means to remove or mitigate that hazard or risk; and (d) the costs and the benefits of removing or mitigating that hazard or risk;

“**RTW**” means Return to Work;

“**SAMI**” means South African Mining Industry;

“**Self-Isolation**” means separating yourself from others to the greatest extent possible, when you are sick with signs of COVID-19 and you have been told by a health care provider to separate yourself from others; and

“**WHO**” means World Health Organization.

5. SCOPE

5.1 This guideline applies to all mines or part/s thereof, mine employees, irrespective of employment category, and contract employees in the SAMI that might be exposed to COVID-19 in the performance of their duties.

5.2 This guideline provides minimum requirements and best practices for the mitigation and management of COVID-19 outbreak amongst mine employees returning to work and any other person/s at mines following the COVID-19 South African lockdown. The aim is to ensure good health and safety of employees on and after RTW.

5.3 This Guideline must be read in conjunction with the following where applicable:

5.3.1 Amended regulations issued in terms of section 27(2) of the Disaster Management Act, 2002.

5.3.2 Directions issued by the Minister of Mineral Resources and Energy in terms of regulation 10(8) of the regulations issued in terms of section 27(2) of the Disaster Management Act No. 57 of 2002.

5.3.3 Guiding Principles of Management of COVID-19 in SAMI.

5.3.4 Guidelines developed by the World Health Organization; National Department of Health, National Department of Employment and Labour.

6. MEMBERS OF THE TASK TEAM

State	Organised Labour	Employers
Dr L. Ndelu	Mr. J. Kok	Dr. T Balfour
Dr D. Mokoboto	Mr. D. Blaauw	Mr. B Mongoma
Ms C. Kekana	Ms S. Nongingi	Mr. J Oosthuyzen
Ms D. Mahlaba		Dr K. Baloyi
Ms M. Hlapane		Mr. T Letanta

PART B: AUTHOR'S GUIDE

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, where possible, to facilitate cross-referencing. Wording must be unambiguous and concise.
2. It must be indicated in the **COP** and on each annexure to the **COP** whether:
 - 2.1 The annexure forms part of the **COP** and must be complied with or incorporated in the **COP** or whether aspects thereof must be complied with or incorporated in the **COP**; or
 - 2.2 The annexure is merely attached as information for consideration in the preparation of the **COP** (i.e. compliance is discretionary).
3. When annexures are used, the numbering must be preceded by the letter allocated to that particular annexure and the numbering must start at one again. (e.g. 1, 2, 3 and A1, A2, A3).
4. Whenever possible illustrations, tables, graphs and the like, must be used to avoid long descriptions and/or explanations.
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 side notes as well as in a separate bibliography.

PART C: FORMAT AND CONTENT OF THE MANDATORY COP

1. TITLE PAGE

The **COP** must have a title page reflecting at least the following:

- 1.1 The name of the mine;

- 1.2 The heading: "Mandatory Code of Practice for the mitigation and management of COVID-19 outbreak";
- 1.3 A statement to the effect that the **COP** was drawn up in accordance with guideline **DMRE (Number from SSU)** issued by the **CIOM**;
- 1.4 The mine reference number for the **COP**;
- 1.5 The effective date;
- 1.6 The revision dates (if applicable); and
- 1.7 The **DMRE** mine code number.

2. TABLE OF CONTENTS

The **COP** must have a comprehensive table of contents.

3. STATUS OF THE MANDATORY CODE OF PRACTICE

3.1. This section must contain statements to the effect that:

- i. The guideline has been compiled specifically with the view to provide guidance to all stakeholders regarding their roles and responsibilities with regards to the mitigation and management of COVID-19 outbreak.
- ii. This guideline requires the mitigation and management of COVID-19 outbreak at the mine. In implementing the requirements of this guideline, the employer is required to continue complying with the provisions of the Mine Health and Safety Act 1996 (MHSA) as amended and it's the related guidelines including the Guiding Principles on the management of COVID-19 Instruction issued by the Chief Inspector of the Mines (CIoM).
- iii. In ensuring that mine employees are provided with a healthy and safe working environment that is also maintained, the employer must put a procedure in place

to be followed by employees to exercise section 23 of the MHSA during the COVID-19 outbreak.

- iv. This guideline must be considered as a living document which may need to be updated as new developments on the prevention and management of COVID-19 emerges.
- v. The employer must apply the requirements of this guideline as a minimum (where applicable) guiding principle in developing his/her own guideline in preventing and managing COVID-19 transmission.

3.2 The **COP** was drawn up in accordance with guideline **DMRE**.....issued by the **CIOM**;

3.3 This is a mandatory **COP** in terms of Section 9(2) and 9(3) of the **MHSA**;

3.4 The **COP** may be used in an accident investigation/inquiry to ascertain compliance and to establish whether the **COP** is effective and fit for purpose;

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 THE DRAFTING COMMITTEE

4.1 In terms of Section 9(4) of the **MHSA** the employer must consult with the health and safety committee and any other affected parties on the preparation, implementation or revision of any **COP**.

4.2 It is recommended that the employer must, 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**, must be listed giving their full names, designations, affiliations and experience. This committee must include competent persons sufficient in number to effectively draft the **COP**.

5. GENERAL INFORMATION

General relevant information relating to the mine must be stated in this section of the **COP**, which must include at least the following:

- 5.1 A brief description of the mine and its location;
- 5.2 The commodities produced;
- 5.3 The mining method or combination of methods used at the mine must be listed. This section must discuss the degree of mechanisation, taking care to identify the potential risk of exposure to COVID-19, and possible exposure scenarios;
- 5.4 The general controls in place to prevent exposure to COVID-19;
- 5.5 Other related regulations, COPs and management standards must be reviewed concurrently to avoid conflict of requirements as laid down by the employer. The objective would be to have an integrated system; and
- 5.6 The unique features of the mine that have a bearing on this **COP** and cross-reference them to the risk assessment conducted.

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 must be used as far as possible. The drafting committee must avoid jargon and abbreviations that are not in common use or that have not been defined. The definitions section must 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 requirement of Section 11(2) and 11(3) that, as far as reasonably practicable, attempts must 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 with all possible relevant information such as incidents statistics, research reports, manufacturers specifications, approvals, design and performance criteria for all relevant equipment must be obtained and considered.
- 7.3 In addition to the periodic review required by Section 11(4) of the **MHSA**, the **COP** must 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. KEY ELEMENTS TO BE ADDRESSED IN THE COP

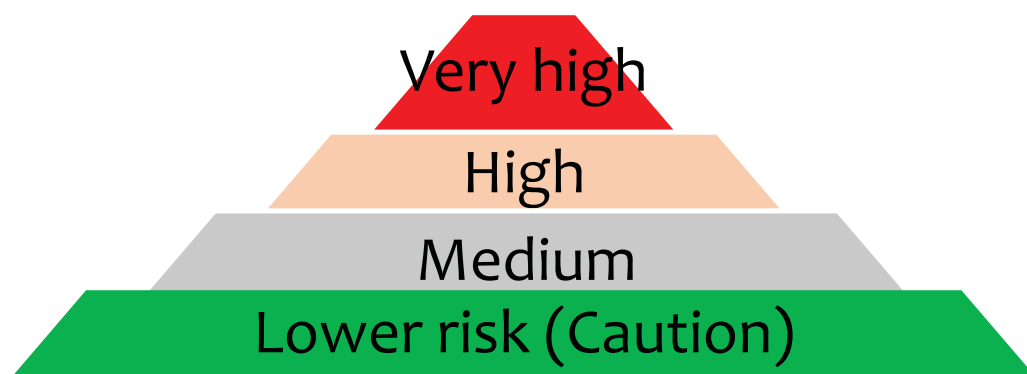
The following key elements be must be addressed in the **COP**:

- 8.1 Risk assessment and Review
- 8.2 Start-up and on-going procedure for mines
- 8.3 COVID-19 Management Programme
- 8.4 Monitoring and reporting
- 8.5 Compensation for occupationally acquired corona virus (COVID-19)

8.1. RISK ASSESSMENT

- 8.1.1 In terms of Section of 11 of the Mine Health and Safety Act (MHSA), the employer must assess and respond to risk.

- 8.1.2 The employer is required to conduct a risk-based assessment covering all workings at mines and the risk assessment should be described with reference to but not limited to:
- 8.1.3 All sources of COVID-19 infection transmission.
- 8.1.4 Health effects associated with exposure to COVID-19.
- 8.1.5 Nature of the key workplace operations and activities that pose all potential risk of COVID-19 transmission.
- 8.1.6 Occupations and number of employees who are likely to be exposed to and spread the COVID-19.
- 8.1.7 The risk of vulnerable employees (occupational diseases, communicable and non-communicable diseases) to COVID-19 while at work.
- 8.1.8 Control measures in place, i.e. engineering, administrative, personal protective equipment etc.
- 8.1.9 De-densification of employees on transport modes and other spaces.
- 8.1.10 The additional control measures required to be instituted in order to reduce exposure and the spread of COVID-19, such as the review of Human Resource policies around business travel, sick leave, and other related policies to account for COVID-19.
- 8.1.11 Frequency of any ongoing monitoring to assess the effectiveness of the controls mentioned above.
- 8.1.12 WHO classifies the risk of COVID-19 infection into 4 risk groups, which are illustrated by the following below Figure 1:



i. Very high exposure risk

High potential for exposure to known or suspected sources of COVID-19 during specific medical, post-mortem, or laboratory procedures. Employees in this category

include: Healthcare Workers treating COVID-19 patients for an example doctors, nurses, paramedics, emergency medical technicians, laboratory personnel, morgue employees). The very high-risk exposure activities include performing aerosol-generating procedures for an example intubation, cough induction procedures, bronchoscopies, or invasive specimen collection) on known or suspected COVID-19 patients. In the case of the mining industry, medical surveillance procedures such as spirometry fall into this category.

ii. **High exposure risk**

High exposure risk jobs are those with high potential for exposure to known or suspected sources of COVID-19. Employees in this category include healthcare delivery and support staff for an example, doctors, nurses, and other hospital staff who must enter patients' rooms. In the case of the mining industry, procedures such as breathalysers fall into this category.

iii. **Medium exposure risk**

Medium exposure risk jobs include those that require frequent and/or close contact with i.e., within 2 meters of people who may be infected with COVID-19, but it is unknown. In areas without ongoing community transmission, employees in this risk group may have frequent contact with travellers who may return from international locations with widespread COVID-19 transmission. In areas where there is ongoing community transmission, employees in this category may have contact with the general public for an example in schools and high-population-density work environments.

iv. **Low exposure risk**

Low exposure risk jobs are those that do not require contact with people known to be or suspected of being infected with COVID -19 nor frequent contact (within 2 metres) with the general public. These employees have minimum contact with the general public and co-employees.

NOTE: The attached **Annexures 1 – 3**, can be utilized by employers for the purpose of conducting COVID-19 risk assessment.

8.1.13 Scientific and evidence-based approach

In implementing any solution driven measure, the employer must aim to apply the best available evidence gained from scientific methods for decision making in preventing COVID-19 exposure.

8.1.2. REVIEW OF THE RISK ASSESSMENT

8.1.2.1 The employer must review the risk assessment continuously and whenever circumstances arise or change at the mine that could have an impact on the original assessments and at least in the following instances:

8.1.2.2 When outcomes of medical surveillance programmes indicate the need for it;

8.1.2.3 When a MHSA Section 11.5 investigation and /or any other investigation/s indicates the need;

8.1.2.4 When new or revised legislation is introduced;

8.1.2.5 When new mining methods are introduced;

8.1.2.6 When process changes are introduced (e.g. in process plants);

8.1.2.7 When new types of machinery are introduced; and

8.1.2.8 Also when new medical information on the infection, spread of, symptoms or any other relevant information comes to light in respect of the pandemic that may influence the original risk assessment.

8.2 START UP PROCEDURE FOR MINES

The employer must put a start-up procedure in place to address the following:

8.2.1 Prior to allowing any mine or shaft to commence with their production activities after a prolonged stoppage; a safe precautionary start-up procedure is developed (**See Annexure 4**).

8.2.2. The start-up procedure must be aligned with the Instruction that was issued by the Chief inspector of Mines – Instruction referenced COVID 19 issued on the 20th April 2020 (**See Annexure 5**).

8.2.3 Disinfection of the following areas but not limited to, as determined by the mine's risk assessment:

- 8.2.3.1 All Transportation of employees to the mine including from labour sending areas.
 - 8.2.3.2 Any transport entering the mine.
 - 8.2.3.3 Change Houses and its surrounding facilities.
 - 8.2.3.4 Lamp rooms.
 - 8.2.3.5 Waiting areas.
 - 8.2.3.6 Refuge Bays.
 - 8.2.3.7 Offices especially in open plan spaces.
 - 8.2.3.8 Medical stations.
 - 8.2.3.9 Examination and consulting rooms.
 - 8.2.3.10 Kitchen and dining areas.
 - 8.2.3.11 Mine accommodation.
 - 8.2.4.12 Security access points and guard houses.
- 8.2.4 Screening and testing protocols.
- 8.2.5 Withdrawal protocols, to be used in the event of a localised Covid-19 outbreak.
- 8.2.6 Measures in place to collaborate with the DOH with the prevention and management of COVID-19 for migrant workers at port of entries.

8.3 COVID-19 MITIGATION AND MANAGEMENT PROGRAMME

8.3.1 In considering management of COVID-19 infection transmission, the employer must consider the following principles:

- 8.3.1.1 To prevent the COVID-19 workplace infection, the employer must develop a policy/or integrate COVID-19 management into the existing mine's Health and Safety policy, COP and procedure/s of suspected and positive cases, while at the same time developing infection controls.
- 8.3.1.2 The mine's COP and procedure must include the following for employees who have signs and/or symptoms of COVID-19:
 - i. A dedicated 24-hour number of which employees will use to reach the mine's dedicated healthcare workers or the mine's contracted service/s of healthcare workers assigned to assist with COVID-19;

- ii. Procedure to report when an employee is sick or experiencing symptoms of COVID-19;
- iii. How, where and the duration (the required number of days being determined by the NICD) of isolation will take place for employees suspected of being infected with COVID-19;
- iv. The site/s where employees with suspected COVID-19 infection will be screened, diagnosed and treated. This must include what will lead to admission to a health care facility and all associated transport arrangements;
- v. The requirements of self-isolation; and
- vi. Include case information questionnaire for self-administration in cases of suspected cases who are self-isolating after being screen by the designated healthcare worker.

NOTE: The criteria for a PUI are dynamic and change from time to time. For the latest criteria visit the NICD website.

8.3.2 The following must be considered in the development of the COVID-19 COP:

8.3.2.1 The mine's leave policies and collective labour agreements.

8.3.2.2 Provide adequate, usable, and appropriate training, and information material about:

- i. Mine's essential job functions;
- ii. Proper hygiene practices and the use of any workplace controls (including PPE);
- iii. Prevention of COVID-19 stigma and discrimination amongst the suspected, the infected and their families;
- iv. The provision of the mine's support service or collaboration/contracted support service for the employees through the Employee Assistance Programme (EAP) or a competent person to provide such services;
- v. The employer must develop a process where an employee will be able to disclose any pre-existing conditions prior to returning to work ; and
- vi. Employees must be made aware of the Covid-19 National Hotline/s for their knowledge and information sharing with other community members.

8.3.2.3 The employer must identify employees with pre-existing conditions that will predispose them to COVID-19, and such employees will only be permitted to work after receiving a certificate of fitness to work and a return to work note from an occupational medical practitioner. Where employees are not permitted to work due to a confirmed pre-existing condition, the employer must arrange for transportation of such employees back to their homes.

8.3.2.4 The employer must utilize a risk-based method to prioritise high-risk individuals for more active interventions such as prophylaxis and individualised counselling.

8.3.2.5 Review of the mines rescue plans in consideration of COVID-19.

8.3.3 Before arrival of employees at the mine's premises, the employer must:

8.3.3.1 Develop a procedure for the management of the return to work of employees after the lockdown, which must include a history of COVID-19 contact from areas of residence during the lockdown.

8.3.3.2. Communicate and establish a process for collaborating with the Department of Health (DOH) District Communicable Diseases unit in order to be familiar with the district's plan including the district's process on early outbreak detection, diagnosis (testing) procedures, isolation, quarantine, reporting procedures for COVID-19 and arrangements for hospitalisation of employees who require it (if a mine does not have the hospital facilities).

8.3.3.3. Ensure sufficient availability of resources such as:

- i. Facilities - pre-screening areas, isolation areas, quarantine areas;
- ii. Staff - security personnel, medical staff, social worker, counselling psychologists, employee assistance programme specialists and administrative assistants;
- iii. Equipment and medical supplies including soap and water, sanitisers, appropriate PPE for healthcare workers and employees, and waste disposal receptacles for used PPE;
- iv. Flu vaccination that prioritizes those at high risk of contracting COVID-19 and give prophylaxis where required, and

v. Cleaning and disinfection consumables and services.

8.3.3.4 Communicate to employees' new procedures to be implemented for medical surveillance before they leave areas of residence during and after the lockdown.

8.3.3.5 Develop a calibration or a verification procedure for non-contact thermal scanning/screening i.e. when, where, who and how to calibrate or verify the non-contact instrument/s to correlate with the core body temperature. The calibration or verification procedure should be in line with the Original Equipment Manufacturer's specification.

8.3.3.6 Screen on a daily basis healthcare employees and staff assisting with the RTW before mass screening of employees and thereafter screen all employees on daily basis.

8.3.3.7 Screen employees in labour sending areas before they return to work, and where the employer transports the migrant employees, screening must be conducted at the port/s of entry post quarantine of such employees, in collaboration with the DOH. The employer must utilise a risk-based method to prioritise the return to work of employees.

8.3.3.8 The employer must at the start and increase of capacity at the mine make arrangements to transport employees from their homes to their respective areas of operations and put mechanisms in place to screen employees before boarding, isolation and quarantine at source where required.

8.3.3.9 In cases of employees commuting using public transport the employer must provide two cloth face masks.

8.3.3.10 The determination of the appropriate PPE used, must be done in combination with a risk assessment and expert advice on the characteristics and limitations of each type of PPE, in the context of reasonably practicable.

8.3.3.11 Apply de-densification and/physical distancing (between 1-2 metre/s) opportunities and provision of the relevant PPE for mass transport and at areas of the mine where close contact may occur.

- 8.3.3.12 Apply a staggered approach on the number of employees screened per day for return to work to minimise crowding at the screening areas and at the medical centre as well as transporting employees to the medical centre.
- 8.3.3.13 Create awareness material for employees on COVID-19 and where necessary update with the latest available information. Awareness material should be created as far as possible in predominant language spoken in the peri-mining community area.
- 8.3.3.14 Display posters on COVID19 to be visible at all areas of the mine as identified through the risk assessment.
- 8.3.3.15 Inform employees of their duty to report should they test positive for COVID-19 during the nationwide lockdown.
- 8.3.3.16 The employee is obliged to provide COVID-19 test results to the employer where available, and with a letter from the relevant health facility stating the date of onset of symptoms, diagnosis, date of specimen collection of positive tests if applicable, and expected date when isolation ends.
- 8.3.3.17 Establish a procedure for screening all persons entering and exiting the mine and ensuring that they comply with protective measures including PPE and social/physical distancing while on site.

8.3.4 Arrival of employees at the mine's premises, the employer must:

- 8.3.4.1 Implement an infection prevention and control measures to all modes of transport for employees, screening areas and departments.
- 8.3.4.2 Implement social/physical distancing between 1-2 metre/s when in contact with other people, and where this is not possible, issue appropriate PPE.
- 8.3.4.3 Induct and continuously intensify employee awareness training on signs and symptoms of COVID-19 on their return.
- 8.3.4.4 Implement a calibration or verification procedure for non-contact thermal scanning/screening i.e. when, where, who and how to calibrate or verify the non-contact instrument/s to correlate with the core body temperature.
- 8.3.4.5 be informed through the healthcare worker if an employee has pre-existing condition that will cause an employee to be unfit to return to work or classified as vulnerable employee.

8.3.4.6 Ensure that hand hygiene practices are maintained at the entrance and exit points as per the risk assessment and work places where close contact among employees is likely to occur including in underground working places.

8.3.4.7 Specify minimum standard required PPE to be worn during COVID-19 (including to and from work) and these requirements must take into consideration other standards and regulation dealing with PPE for occupational hazards at mines.

8.3.4.8 Ensure that awareness in respect of correct PPE usage and workplace practices required for COVID-19 is conducted. Awareness should be conducted as far as possible in predominant language spoken in the peri-mining community area.

NOTE: Taking the risks described in section 8.1.12 of this guideline, a guide is made in Table 1 to classify the risk for the purpose of providing appropriate PPE, jobs in the mining industry according to the level of risk. This exercise can only be refined and concluded by the individual mining companies, depending on such mining company's specific circumstances and within the context of what is reasonably practicable.

Table 1: Risk classification for the purpose of providing PPE

CLASSIFICATION	MINE EMPLOYEES AT RISK (This list is not exhaustive)
<p>i. Very high risk</p>	<ul style="list-style-type: none"> a) Intensive Care Unit b) Occupational health practitioners conducting cough inducing procedures, e.g. spirometry. c) HCWs collecting specimens for diagnosis of COVID-19, e.g. throat swabs. d) Ambulance personnel that do intubation into trachea. e) Health Care Employees (HCWs) that do removal of cardio-respiratory organs for autopsy.
<p>ii. High risk</p>	<ul style="list-style-type: none"> a) HCWs that examine employees (at Occupational health centres, medical stations and other places with potential to be in contact with a COVID-19 patient (known and unknown), ambulance drivers transporting the sick.

	<ul style="list-style-type: none"> b) Underground employees who are in confined environments during waiting to be transported, during transportation to underground and to various working stations. c) Security staff at high volume access points or conducting temperature checks and/or alcohol testing. d) Health and Safety reps during investigation of underground working sites e) Hospital waste cleaners f) Change room attendants g) Cleaners involved in workplace disinfection e.g. Following the removal of a PUI and underground sanitation employees.
iii. Medium risk	<ul style="list-style-type: none"> a) Security staff at entrances to facilities and mines b) Mine employees in work areas where social/physical distancing is possible and being practiced c) Change room cleaners d) Laundry staff e) Occupational hygienists -personal sampling procedures f) Clerks working at occupational health centres g) Human resource practitioners that interact very closely with people h) Office cleaners
iv. Low risk	<ul style="list-style-type: none"> a) Office employees b) Control room operators

- g. Awareness training on the correct wearing; fit testing (where applicable), removal, storage and disposal of PPE is provided to employees.
- h. Provide receptacles for all used PPE.
- i. Ensure that waste management procedure is in place and that it addresses equipment handling; transport and disposal sites.

- j. Ensure that in highly congested areas (such as residences, kitchens, cages and underground working places), a maximum occupation/capacity as guided by the relevant regulation/s and risk assessment is always maintained.
- k. Re-enforce compliance with the taking of chronic medication.

8.3.5 Screening and testing

8.3.5.1. The employer must screen all the employees including the visitors at the designated areas, such as the following:

a) Mine's accommodation (if these are available):

- initial pre-screening must be done at the residences, before getting to the work site. This is to isolate and quarantine any possible cases and suspects.

b) At work:

- pre-screening of employees must be done daily before entering the facility (at the gate) and before leaving, by a designated person as per agreed-on protocol. This will be a temperature check.

Note: The employer must note the calibration or verification procedure prior to screening the employees.

8.3.5.2 The employer must put systems in place to ensure that employees with elevated temperature $\geq 37.5^{\circ}\text{C}$ must be regularly checked/observed at intervals determined by the healthcare worker and employees with the temperature of 38°C to be isolated for assessment by a Registered Nurse/healthcare worker.

8.3.5.3 Employees will be tested only if they meet the PUI criteria, which includes having symptoms of a respiratory illness of recent or sudden onset. (See Annexure 9 on the PUI criteria).

8.3.5.4 Employees returning to work at the start and increase of capacity at the mine, and do not present with elevated temperature must be referred to the Medical Centre for COVID-19 Risk Assessment and to complete return to work medical.

8.3.5.5 The RTW medical must include the completion of a questionnaire and the taking of vital signs – temperature, blood pressure, and glucose assessment for known diabetics.

- 8.3.5.6. Employees with pre-existing conditions that will predispose them to COVID-19, must be identified and only be permitted to work after being declared fit by an occupational medical practitioner.
- 8.3.5.7 A risk-based method to prioritise high-risk individuals for more active interventions such as prophylaxis and individualised counselling, must be used.
- 8.3.5.8 Dates for flu vaccination for all employees must be scheduled and employees with pre-existing conditions must be prioritised.
- 8.3.5.9 Employees with normal vital signs and who are not presenting with any symptoms, must be provided with an RTW note that allows them to resume with their work duties.
- 8.3.5.10 In an event where a confirmed case is found at the mine, the employer must collaborate with the Department of Health such that contact tracing, testing and quarantining of suspected contacts is conducted to avoid further spread of Covid-19.

8.3.6 Referral for further management

- 8.3.6.1 The employer must implement a referral system that will assist in determining the need for testing:
- i. Employees with abnormal findings to the medical centre for further assessment and management.
 - ii. Employees with any psycho-social symptoms to the mine's support service or collaboration/contracted support service for the employees through the EAP or a competent person to provide such services.
- 8.3.6.2 The employer must consider the differential diagnosis for elevated temperature and respiratory symptoms in mine employees and exclude underlying medical conditions.

8.3.7 Isolation assessment area for surface and underground

- 8.3.7.1 The employer must identify and implement designated areas for isolation, whereby the following must apply:
- i. Assessment of employees for COVID-19 signs and symptoms.
 - ii. Referral of employees who meet the NICD criteria of a PUI.

- iii. Employees whose test results are positive for COVID-19 and are not very sick with the capacity to self-isolate may do so at home for 14 days (under the guidance of a healthcare worker).
- iv. Employees with a positive COVID-19 results must be provided with the necessary PPE and contact tracing must commence thereafter in accordance with NDOH procedures.
- v. The medical centre team/healthcare worker must follow-up telephonically with the employee on a daily basis, record progress and refer to hospital if required.
- vi. The employee must inform the medical centre/healthcare worker if the employee is not fit to return to work during the self-isolation period.
- vii. A register of employees presenting with symptoms, i.e. PUI and who are referred for isolation, as per DOH guidelines, must be kept.

8.3.7.2. For employees who show symptoms whilst at work, the employer must put systems in place in order to ensure that such employees are removed from the working place to designated isolation area, in order to protect the other employees.

8.3.7.3 The employer must put in place a contact tracing programme for contacts of COVID-19 cases identified on the mine and communicate with the DOH on tracing of contacts beyond the mine. The NICD contact tracing protocol must be followed.

8.3.8 FOLLOW UP SYSTEM

8.3.8.1 The employer must implement a follow up system, whereby the following will be applied:

- i. An arrangement will be made for medical assessment and a letter be obtained from the isolation/health care facility/s. In case of self-isolation an employee must submit a letter from the legal health care worker.
- ii. The fitness to work assessment and issuing of an RTW Note processes must be followed.

8.3.9 PREVENT INFECTION TO EMPLOYEES AND THOSE VISITING THE MINE OPERATION

8.3.9.1 Alignment of medical surveillance system to the COVID-19 pandemic

- i. The employer must perform a risk assessment with regards to potential cross infection linked to the different activities (e.g. spirometry, eye testing, audiometry, temperature measurements, Health Tolerance Screening, etc.) embodied in the medical surveillance system. Protection of Health for all is paramount. Consider as an option full protective gear where applicable for protection of healthcare workers. Unless sufficient infection prevention control (IPC) measures are put in place, all spirometry and/or audiometry is to be suspended.
- ii. At the discretion of the appointed occupational medical practitioner, the employer must conduct a Heat Tolerance Screening Test on the specific mine's occupation/s as identified through the mine's risk assessment, and if not practical to implement Heat Tolerance Screening Test only allow such specific occupation/s to undergo natural acclimatization.

8.3.9.2 The employer must establish and maintain a personal hygiene programme in mitigation of transmission of COVID-19, and to the following but not limited to:

- i. Maintaining physical distancing.
- ii. Regular washing of hands with soap.
- iii. Regular sanitising of hands with alcohol-based hand rub (ABHR) or other appropriate sanitisers.
- iv. Avoid touching your face areas (mouth, eyes and nose).
- v. Avoid physical hand contact such as handshakes.
- vi. Avoid using other people's personal belongings such as stationery, cell phones and sharing food etc.
- vii. When coughing or sneezing do not use your hands, rather use a tissue/toilet paper or the inside of your elbow.
- viii. Use disposable tissues rather than a handkerchief; immediately dispose of these tissues in a closed bin and wash or sanitise your hands thereafter.
- ix. Avoid big crowds and travelling.

- x. Avoid touching objects before sanitising, like trollies, toilet seats, turnstiles, tables and chairs.
- xi. Coach and teach family members.
- xii. Wearing and handling of appropriate PPE.

8.3.9.3 The employer must develop and implement measures that will prevent the spread of COVID-19 infection to employees and any person entering the mine operations.

8.3.9.4 The employer must develop and implement measures that will prevent infection to employees and those visiting the mine operation.

8.3.9.5 **Use of breathalyser testing**

For alcohol testing, the employer must use his/her discretion on which tests to implement depending on feasibility and availability e.g. single use (lowest risk) or multiple use (medium risk and used with protective measures in place). The employer must also assess the health and safety risks in order to prevent cross infection in implementing breathalyser testing. **(See Annexure 6)**.

8.3.9.6 **Use of biometrics**

8.3.9.6.1 The use of Biometric systems can be applied by the employer provided the following are complied with:

- i. Use of sanitizers at all times
- ii. Employees are informed
- iii. All necessary health and safety measures as informed by Risk Assessment are adhered to.
- iv. The biometric system is regularly disinfected before and after each use.

8.3.9.7. The employer must specify the action required and care to be taken when preparing, handling, issuing, retrieving and decontaminating occupational hygiene equipment. **(See Annexure 7)**.

8.4 MONITORING AND REPORTING

The employer must:

- 8.4.1 Record and report to the relevant authority (NICD) and relevant mine's health and safety structure as per available guidelines (confidentiality must be adhered to), using forms provided by NICD.
- 8.4.2 Investigate all confirmed Covid-19 positive cases at the mine, in terms of section 11(5)(a)(ii) and (iii) and report within 24hours to the Principal Inspector of Mines using the NICD form.
- 8.4.3 Consolidate the NCID reports into a monthly report and that must be reported to the Principal Inspector of Mines as determined by the DMRE.
- 8.4.4 Keep the COVID-19 data (data for monitoring and investigation reports) at the mine as required by the NDOH and NICD.
- 8.4.5 Appoint a COVID 19 Compliance Officer with the necessary powers to provide oversight on the implementation of this guideline.

8.5 COMPENSATION FOR OCCUPATIONALLY ACQUIRED NOVEL CORONA VIRUS DISEASE (COVID-19)

- 8.5.1 In the event of an employee acquiring COVID 19 that arises out of and in the course of the employee's employment, the employer must follow the process stipulated in the Notice on Compensation for occupationally acquired novel corona virus disease (**See Annexure 8**).

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 the **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 purposes of risk assessment

2. COMPLIANCE WITH THE CODE OF PRACTICE

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

3. ACCESS TO THE CODE OF PRACTICE 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 responsibilities.

ANNEXURE 1: For Information Purposes

Worker COVID-19 Risk Assessment

ANNEXURE 2: For Information Purposes

Specialised health risk assessment for workplaces (by employers and self-employed persons)

ANNEXURE 3: For Information Purposes

COVID-19 Walk-through Risk Assessment

ANNEXURE 4: For Information Purposes

Guideline on safe and healthy start-up procedure post the COVID-19 lockdown which resulted in extended shutdown of active mining operations

ANNEXURE 5: Mandatory

START UP _Chief Inspector of Mines instruction and letter

ANNEXURE 6: For Information Purposes

Control Measures to Manage the Risk of Exposure to Breathalyser

1. It is recommended that the procedure is performed outdoors. Where the procedure must be performed indoors, there has to be adequate ventilation and natural or artificial UV light to reduce the amount of viable organism in the air.
2. The breathalyser must be held with an extended arm away from the operator. The person must blow into the blow point, directed past the operator. This is in cases where the operator is required to hold the device.
3. It is recommended for an operator to wear mask, gloves and goggles. This is provided that they are fully trained and competent in the use of this PPE in infection control.
4. The operator will require training to put on and take off the mask without contaminating their faces and autoinoculation of their mucus membranes.
5. If possible, the people being tested can hold the device themselves - this would be preferable.
6. The mouth of the person being tested must be at a distance of 50mm from blow point.
7. Employees must be instructed not place lips on blow point.
8. The person must be instructed to blow steadily towards the blow point for 2 to 3 seconds.

ANNEXURE 7: For Information Purposes

Handling of occupational hygiene personal sampling with regards to COVID-19.

ANNEXURE 8: MANDATORY

Notice on compensation for Occupationally acquired corona virus under COIDA Amended Act

ANNEXURE 9: For Information Purposes**Criteria for Person Under Investigation**

Persons with acute respiratory illness with sudden onset of at least one of the following: cough, sore throat, shortness of breath or fever [$\geq 38^{\circ}\text{C}$ (measured) or history of fever (subjective)] irrespective of admission status **AND**

In the 14 days prior to onset of symptoms, met at least one of the following epidemiological criteria:

- Were in close contact¹ with a confirmed² or probable³ case of SARS-CoV-2 infection;

OR

- Had a history of travel to areas with presumed ongoing community transmission of SARS-CoV-2; i.e., China, USA, Spain, United Kingdom, South Korea, Japan, Iran, Hong Kong, Italy, and Taiwan (NB Affected countries will change with time, consult the NICD website for current updates); A history of travel to provinces or districts with high community transmissions should be considered as well.

OR

- Worked in, or attended a health care facility where patients with SARS-CoV-2 infections were being treated;

OR

- Admitted with severe pneumonia of unknown aetiology

¹Close contact: A person having had face-to-face contact or was in a closed environment with a COVID-19 case; this includes, amongst others, all persons living in the same household as a COVID-19 case and, people working closely in the same environment as a case. A healthcare worker or other person providing direct care for a COVID-19 case, while not wearing recommended personal protective equipment or PPE (e.g., gowns, gloves, NIOSH-certified disposable N95 respirator, eye protection). A contact in an aircraft sitting within two seats (in any direction) of the case, travel companions or persons providing care, and crew members serving in the section of the aircraft where the case was seated. ²Confirmed case: A person with laboratory confirmation of SARS-CoV-2 infection, irrespective of clinical signs and symptoms. ³Probable case: A PUI for whom testing for SARS-CoV-2 is inconclusive (the result of the test reported by the laboratory) or who tested positive on a pan-coronavirus assay.

Clinicians must also be vigilant for the possibility of atypical clinical presentations among immunocompromised patients. Consider the possibility of influenza (Northern Hemisphere season ends in April or May) and bacterial pneumonia and manage accordingly.

ANNEXURE 10: For Information Purposes

Spirometry Testing

NOTE: To be suspended unless effective IPC can be guaranteed

Process evaluation for spirometry testing

During the spirometry manoeuvre, the client is required to take a deep breath and exhale maximally into the spirometer to produce a Spirograph. This needs to be done at least three times to produce an acceptable test result. This forced manoeuvre often results in coughing and spluttering which can result in the release of droplets from the airway into the environment. The technician conducting the spirometry is usually sitting below the standing client or next to the client when sitting and there is a likelihood of the droplets landing on the face and mucus membranes of the tester. The client cannot move far away due to the cord connecting the spirometer to the computer. The operator must be in close proximity to the client to assess for any change in condition and to possibly support the client. The filters that are normally used will protect the spirometer from most microbes but it does not prevent the droplets from the client's mouth going into the environment if they cough or splutter during or after the manoeuvre.

With the current pandemic, there may be individuals who are infected, asymptomatic and shedding the virus. The SARS CoV-2 cannot be compared to other respiratory pathogens in that it is highly contagious and extremely virulent and if not always deadly, results in morbidity and required isolation

resulting in absenteeism. The impact that it has had on the world is unprecedented. The impact it could have on the working community in mines and industry will be devastating.

Control measures

In the usual day to day management of risk, spirometry requires standard infection control precautions such as adequate ventilation and airflow, UV

lights, use of appropriate filters, adequate environmental cleaning, the use of gloves by the operator and effective hand hygiene. In the current environment the operator is required to do a risk assessment on the client to establish risk of infection by utilising a respiratory questionnaire. In the case where there is any doubt, the test is delayed and the client referred for medical assessment. Should spirometry be essential, then a mask, eye protection and gloves should be donned for the procedure.