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DEPARTMENT OF MINERAL RESOURCES AND ENERGY

NOTICE 280 OF 2020

MINE HEALTH AND SAFETY ACT, 1996 (ACT NO. 29 OF 1996)

GUIDELINES FOR A MANDATORY CODE OF PRACTICE ON THE MITIGATION AND MANAGEMENT OF COVID-19 OUTBREAK

I, David Msiza, Chief inspector of Mines, under section 49(6) of the Mine Health and Safety Act, 1996 (Act No. 29 of 1996) and after consultation with the Council, hereby issue the Guideline on the Mitigation and Management of COVID-19 outbreak, as set out in the Schedule.

DAVID MSIZA

CHIEF INSPECTOR OF MINES

SCHEDULE

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DEPARTMENT OF MINERAL RESOURCES AND ENERGY

MINE HEALTH AND SAFETY INSPECTORATE

GUIDELINE FOR THE COMPILATION OF A

MANDATORY CODE OF PRACTICE ON

MITIGATION AND MANAGEMENT OF COVID-19 OUTBREAK

CHIEF INSPECTOR OF MINES

mineral resources & energy
Department:
Mineral Resources and Energy
REPUBLIC OF SOUTH AFRICA

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: 18 MAY 2020

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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"* was issued by the Department, 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 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 operations. The lockdown was extended from the 16th of April 2020 to the end of April 2020.

1.4 On the 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 the 1st of May 2020, the CIOM in consultation with MHSC developed a guideline in accordance with Section 9 of the Mine Health and Safety Act of 1996 (Act "29 of 1996 as amended) (the MHSA") (as amended). The guideline requires employers to prepare and implement a code of practice for the prevention, 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 South African Mining Industry and any other person/s (SAMI) and any other person/s they may contact in the community.

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 Code of Practice (**COP)** on COVID-19 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 all other applicable statutory obligations related to COVID-19. Failure by the employer to prepare and implement the mine's COP in line with this guideline constitutes a criminal offence and a breach of the **MHSA**.

3. OBJECTIVES OF THE GUIDELINE

The objective of this guideline is to assist employers as far as reasonably practicable to establish and maintain a COVID-19 prevention, mitigation and management programme at mines.

4. DEFINITIONS AND ACRONYMS

"CIoM" means Chief Inspector of Mines;

"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 caused by the severe acute respiratory syndrome corona virus 2 (SARS-CoV-2);

"Disinfect" means the process of cleaning using chemicals to destroy microorganisms;

"DMRE" means the Department of Mineral Resources and Energy;

"DOH" means the Provincial Department of Health;

"EAP" means Employee Assistance Programme;

"Employee" means any person who is employed or working at a mine (including the mine's contractors);

"Exposure" means the state of having no protection from something harmful, for purposes of this guideline exposure is in reference to SARS-CoV-2;

"health care worker" means all healthcare professionals 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 healthy 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;

"**OMP**" means a 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 be 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; with the objective of monitoring their symptoms and ensuring the early detection of cases.

"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;

"Vulnerable employees" means Employees with known or disclosed health issues or comorbidities or with any condition which may place such employees at a higher risk of complications or death if they are infected with SARS-CoV-2; also employees above the age of 60 who are at a higher risk of complications or death if they are infected with SARS-CoV-2.; and

"WHO" means World Health Organization.

5. SCOPE

5.1 This guideline applies to all mines or part/s thereof, employees, irrespective of employment category, and 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 compilation of a COP for the prevention, mitigation and management of COVID-19 outbreak. The aim is to ensure that mine employees returning to work and any other person/s at mines, are protected from transmission of the Coronavirus at the workplace, and where reasonably practicable, in the community, whilst providing guidance to all stakeholders regarding their roles and responsibilities in the management of COVID-19 outbreak.

5.3 This Guideline must be read in conjunction with the following documents and any other applicable statutory obligations related to COVID-19:

5.3.1 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, and 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	Mr. A. Hlakoana	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 prevention, mitigation and management of COVID-19 outbreak”;

1.3 A statement to the effect that the **COP** was drawn up in accordance with guideline **DMRE16/3/2/5-A3** 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. Due to the highly transmissible nature of the SARS-CoV-2, the employer will collaborate as far as possible with national, provincial and the local authorities in dealing with the control of the pandemic including in the community.

ii. 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.

iii. 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 MHSA as amended and it's the related guidelines including the Guiding Principles on the Management of COVID-19 in the SAMI Instruction issued by the (CIoM).

iv. 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 the right in section 23 of the MHSA during the COVID-19 outbreak.

v. 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.

vi. 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.

1.2 The **COP** was drawn up in accordance with guideline **DMRE16/3/2/5-A3** issued by the **CIoM**;

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

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

1.5 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 steering committee for COVID-19 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 SARS-CoV-2, and possible exposure scenarios;

5.4 The general controls in place to prevent exposure to SARS-CoV-2;

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 and other affected persons may be exposed, 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 reasonable available 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 within a reasonable period after implementation thereof, taking into account the number of COVID-19 illnesses at the mine and the results of investigations conducted in terms of section 11(5) of the MHSA

8. KEY ELEMENTS TO BE ADDRESSED IN THE COP

The following key elements 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 novel corona virus (COVID-19)

8.1. RISK ASSESSMENT

8.1.1 In terms of Section of 11 of the (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 SARS-CoV-2 infection transmission.

8.1.4 Health effects associated with exposure to SARS-CoV-2.

8.1.5 Nature of the key workplace operations and activities that pose all potential risk of SARS-CoV-2 transmission.

8.1.6 Occupations and number of employees who are likely to be exposed to and spread the SARS-CoV-2.

8.1.7 Mines essential occupations or critical skills that might be impacted by SARS-CoV- 2 transmission.

8.1.8 The risk of vulnerable employees to SARS- CoV- 2 while at work.

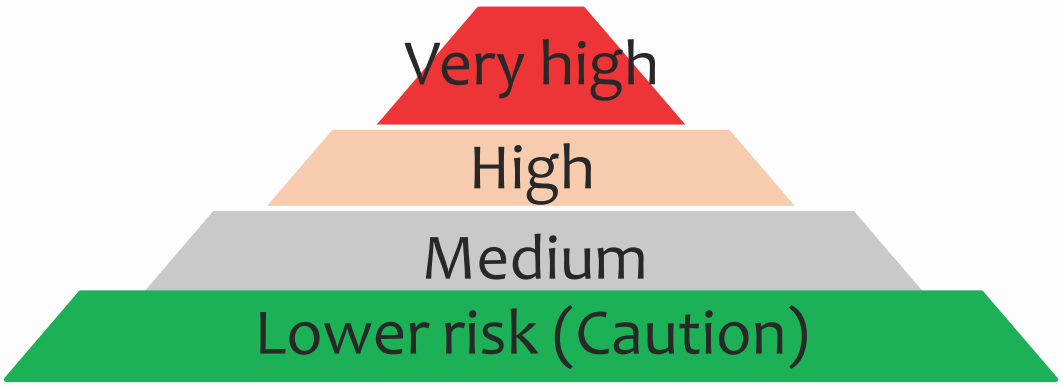
8.1.9 Control measures in place, i.e. engineering, administrative, personal protective equipment etc.

8.1.10 De-densification of employees on transport modes and other spaces.

8.1.11 The additional control measures required to be instituted in order to reduce exposure and the spread of SARS-CoV-2, such as the review of Human Resource policies around business travel, sick leave, and other related policies to account for SARS-CoV-2.

8.1.12 Frequency of any ongoing monitoring to assess the effectiveness of the controls mentioned above.

8.1.13 The mine's risk assessment methodology to take cognisance of the WHO classification of the risk of SARS-CoV-2 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 SARS-CoV-2 during specific medical, post-mortem, or laboratory procedures.

ii. **High exposure risk**

High exposure risk jobs are those with high potential for exposure to known or suspected sources of SARS-CoV-2.

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.

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.

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

8.1.14 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 exposure SARS-CoV-2.

8.1.2. Review of the risk assessment

8.1.2.1 The employer must review the risk assessment regularly and whenever circumstances arise or change at the mine that could have an impact on the original assessments and the risk of contracting COVID-19 and at least in the following instances when:

i. Outcomes of local outbreaks or community surveillance become known to the mine.
ii. Outcomes of medical surveillance programmes indicate the need for it;
iii. a MHSA Section 11(5) investigation and /or any other investigation/s indicates the need;
iv. New or revised legislation is introduced;
v. New mining methods are introduced;
vi. Process changes are introduced (e.g. in process plants);
vii. New types of machinery are introduced; and
viii. New epidemiological, public health and 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 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 mining 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 refenced COVID-19 issued by theCIoM–on the 20th April 2020 **(See Annexure 5).**

8.2.3 Routine cleaning or disinfection or industrially sanitising of surfaces that employees come into contact with such as the following areas (but not limited thereto), as determined by the mine's risk assessment:

8.2.3.1 All transportation of employees provided by employer to the mine.

8.2.3.2 Change Houses and its surrounding facilities.

8.2.3.3 Lamp rooms.

8.2.3.4 Waiting areas.

8.2.3.5 Refuge Bays.

8.2.3.6 Offices especially in open plan spaces.

8.2.3.7 Healthcare facilities (fixed and mobile).

8.2.3.8 Kitchen and dining areas.

8.2.3.9 Mine accommodation.

8.2.3.10 Security access points and guard houses.

8.2.3.11 Functional and physical assessment areas and heat tolerance screening centres.

8.2.4 Screening and testing procedures.

8.2.5 Withdrawal procedures, to be used by mines 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 ports of entry.

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 Ensure that employees returning from areas which are regarded as epicentres of COVID-19 are quarantined for 14 days before they return to work.

8.3.1.2 To prevent the COVID-19 workplace infection, the employer must develop a policy and/or integrate COVID-19 management into the existing mine's policies, COPs and standard operating procedures for Health and Safety.

8.3.1.3The 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 hotline 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; and

v. The requirements of self-isolation

8.3.1.4The mines COP and procedures must also include steps that will be taken by employees who have been in contact with confirmed COVID-19 cases and are/not symptomatic which, must include as a minimum:

i. A dedicated 24-hour hotline which employees will use to reach the mine's dedicated healthcare workers or the mine's contracted service/s of health care workers assigned to assist with COVID-19 from home/mine accommodation;

i. ii)Procedure to be followed and arrangements for the employees to be tested (including the associated PPE required for such an employee). This must include what will lead to admission to a health care facility and all associated transport arrangements; and

ii. How, where and the duration (the required number of days being determined by the NICD) of self-quarantine or isolation (as determined by the test results and the advice of the health care worker) will take place for those employees;

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

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

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

i. Mine's relevant 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 collaboration with the Public Service;

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. The available Covid-19 National Hotline/s for their knowledge and information sharing with other community members.

8.3.1.2 The employer must as far as possible with employees' consent and respecting medical confidentiality be informed through the designated healthcare worker if the employees have pre-existing conditions that will make them more susceptible to severe COVID-19. Such employees will only be permitted to work after receiving a certificate of fitness to work 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.

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

8.3.1.4 Review of the mines emergency response 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 through the use of a questionnaire.

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 As far as reasonably practicable 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.

8.3.3.7 Screen employees from labour sending areas within South Africa who use their own transport at the mine before they return to work.

8.3.3.8 Where the employer transports the migrant employees, screening must be done before boarding the transport, in collaboration with the relevant DOH

8.3.3.9 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.

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

8.3.3.11 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.

8.3.3.12 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.

8.3.3.13 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.

8.3.3.14 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.

8.3.3.15 Display posters on COVID19 to be visible at all areas of the mine as identified through the risk assessment.

8.3.3.16 Inform employees of their duty to report should they test positive for COVID-19 during the nationwide lockdown, long weekend or leave.

8.3.3.17 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(A) The employer is obliged to provide COVID-19 test results to the employee

8.3.3.18 Establish a procedure for screening all persons entering 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 (IPC) measures at all areas as identified by the mines risk assessment.

8.3.4.2 Ensure that hand hygiene practices are maintained at the strategic points as identified by the risk assessment and work places where close contact among employees is likely to occur including in underground working places.

8.3.4.3 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.

8.3.4.4 Implement social/physical distancing between 1-2 metre/s when in contact with other people, and where this is not possible, issue appropriate PPE.

8.3.4.5 Induct and regularly update employees' awareness training material on signs and symptoms of COVID-19 on their return.

8.3.4.6 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.

8.3.4.7 As far as possible with employee consent and respecting medical confidentiality be informed through the designated 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.

8.3.4.8 Intensify awareness on the importance of adherence to taking of chronic medication for management of non-communicable diseases.

8.3.4.9 Ensure that hand hygiene practices are maintained at the strategic points as identified by the risk assessment and work places where close contact among employees is likely to occur including in underground working places.

8.3.4.10 Specify minimum standard required PPE to be worn in order to prevent exposure to SARS-CoV-2 (including to and from work) and these requirements must take into consideration other standards and regulation dealing with PPE for occupational hazards at mines (**See Annexure 6**).

NOTE: Taking into account the risk classification groups described in section 8.1.13 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)
i. Very high risk	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.
ii. High risk	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. 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**	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**	a) Office employees
		b) Control room operators

8.3.4.11 Ensure that awareness is conducted in respect of correct PPE usage, fit testing (where applicable), removal, storage, disposal and workplace practices required to prevent exposure to SARS-CoV-2. Awareness should be conducted as far as possible in predominant language spoken in the peri-mining community area.

8.3.4.12 Provide receptacles for all used PPE and where applicable receptacles for hazardous biological waste.

8.3.4.13 Ensure that waste management procedure is in place and that it addresses equipment handling; transport and disposal sites.

8.3.5 Screening and testing for COVID-19

8.3.5.1 The employer must put a system in place to screen all persons (who are not employees) entering all mine premises, at the designated areas. Anyone who fails screening must be denied access and advised to seek medical assistance.

8.3.5.2 The employer must put in place a system to screen all the employees on a daily basis at mine's accommodation, at a designated areas. This is to isolate and quarantine any possible cases and suspects.

8.3.5.3 The employer must establish a system of symptom screening by a designated person at the start and end of every shift at designated areas. Pre-shift screening must include a temperature check. Any reported symptoms during or at the end of the shift must be referred for a temperature check.

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

8.3.5.4 The employer must put systems in place to ensure that employees with elevated temperature ≥ 37.5^{o}C to be referred for further assessment by the healthcare worker and employees with the temperature of ≥ 38.0^{o}C to be isolated (isolation in this cases referring to separation of such employees into temporary waiting areas while awaiting assessment) for assessment by a healthcare worker.

8.3.5.5 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 7 and Annexure 7(a) on the PUI criteria**).

8.3.5.6 The employer must ensure that results are communicated with the employee.

8.3.5.7 Employees returning to work at the start and increase of capacity at the mine, and pass the COVID-19 screening test must be referred to the Occupational Health Centre for fitness to work assessment.

8.3.5.8 Employees with pre-existing conditions that will make them more susceptible to severe COVID-19 must be identified and only be permitted to work after being declared fit by an occupational medical practitioner

8.3.5.9 A risk-based method to prioritise high-risk individuals for more active interventions such as prophylaxis and individualised counselling, must be used.

8.3.5.10 Scheduling of dates for flu vaccination should be made when vaccines are available and employees with pre-existing conditions must be prioritised.

8.3.5.11 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.

8.3.6 Isolation

8.3.6.1 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. 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.

8.3.6.2 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.

8.3.7 Follow up system

8.3.7.1 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 facilities. 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 a certificate of fitness

8.3.8 Referral for further management for other conditions other than COVID-19

8.3.8.1 The employer must implement a referral system that will assist in determining the following:

i. Employees with abnormal findings (which are not related to COVID-19) to a medical centre for further assessment and management.

ii. The provision of psychosocial support services by the mines through inhouse or contracted Employee Assistance Programme (EAP) or collaboration with the Public Service.

8.3.8.2 Differential diagnosis for elevated temperature and respiratory symptoms in mine employees and exclude underlying medical conditions.

8.3.9 Self-Isolation

8.3.9.1 The employer must allow the employees to self-isolate where possible, under the following conditions:

i. Under the guidance of a healthcare worker employees whose test results

are positive for COVID-19 and have mild disease, with the capacity to self-isolate may do so at home for 14 days.

ii. Employees must be provided with the necessary PPE and contact tracing must commence thereafter in accordance with NDOH procedures.

iii. The medical centre team/healthcare worker must follow-up telephonically with the employee on a daily basis, record progress and recommend further medical assessment, as required.

iv. A register of employees presenting with symptoms, i.e. PUI and who are referred for isolation, as per NDOH guidelines, must be kept, as well as list of contacts.

8.3.10 Prevent infection to employees and those visiting the mine operation

8.3.10.1 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, Heat 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 health care 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 as per the mine's risk assessment, and if not practical to implement Heat Tolerance Screening Test only allow specific occupation/s to undergo natural acclimatization.

8.3.10.2 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 of 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 hands, rather use a tissue/toilet paper or the inside of the elbow.
viii. Use disposable tissues rather than a handkerchief; immediately dispose of these tissues in a closed bin and wash or sanitise 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.

8.3.10.3 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 reasonably practicable.

8.3.11 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 8**).

8.3.12 Use of biometrics

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

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

8.3.12.2 The employer must specify the action required and care to be taken when preparing, handling, issuing, retrieving and disinfect occupational hygiene equipment. (**See Annexure 9**).

8.4 MONITORING AND REPORTING

The employer must establish a steering committee for COVID-19 to address the following:

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 NICD 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 in line with the DMA 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 The employer must follow the process stipulated in the Notice on Compensation for occupationally acquired novel corona virus disease. (**See Annexure 10**).

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. 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.

health
Department:
Health
REPUBLIC OF SOUTH AFRICA

employment & labour
Department:
Employment and Labour
REPUBLIC OF SOUTH AFRICA

Worker COVID-19 Risk Assessment

This document may be updated depending on the Covid-19 pandemic response
Version 1, 1 May 2020

How to use this Guide?

- Use the questions below to assess if it is safe to start work.
- If you answer '**NO'** to any of the questions, **r**eport this immediately to your supervisor, who will help to identify a practicable and reasonable solution.

Always practise these controls in your workplace
1. Social distancing must be at least 1.5 metre away from any other person in any circumstance. 2. Wash hands with soap and water for 20 seconds, or use alcohol-based hand sanitiser after contact with any person or after contact with frequently touched surfaces within a communal environment e. g. phones, door handles, stairways, lifts, etc. 3. Cough in the fold of the elbow or in a tissue which you discard in a bin and wash your hands. 4. Avoid touching your eyes, nose and mouth with unwashed hands, more so with gloved hands. 5. These pointers however do not preclude other requirements for PPE as required.

Employee training and awareness	
1. I have received training on COVID-19 and the virus causing it, how the virus is spread, the symptoms of the disease and how I can protect myself against infection.	
2. I am trained and familiar with the COVID-19 protocols in my workplace.	
3. I know the protocol of self-isolate at my home or at a quarantine site should I become ill with symptoms of COVID-19.	

4. I know the protocol to report should I become ill with symptoms of COVID-19.	
5. I have been told about the screening and testing procedure for Covid-19	
6. I have been told about contact-tracing for Covid-19 if I am tested positive for Covid-19	
7. I have been trained in the correct use, how many times PPE can be used before it needs to be replaced, storage and safe disposal of used/contaminated PPE.	
Hygiene and cleaning measures	
8. Hand washing sink with soap & approved (70% alcohol) hand sanitiser is available.	
9. Surfaces and equipment are cleaned and disinfected with approved disinfection/sanitising products on a regular basis (at least every four hours).	
10. I know the required personal hygiene practices such as coughing/sneezing into my elbow if I do not have a clean tissue with me, washing my hands regularly for 20 sec, and not sharing stationary, eating utensils and/or PPE with a colleague.	
Reduce physical contact (social distancing 1.5 m or 2 x arm-length)	
11. I know the social distancing rule of keeping a distance of at least 1.5 meter or 2 x arm-length between myself and any colleague or person from the public.	
12. I know that I need to avoid physical contact such as handshakes, touching and hugs.	
13. I know that crowds or gatherings (e.g. large groups >10 or groups in spaces where there is not sufficient ventilation) needs to be avoided at my workplace.	

14. When dining at work or during breaks, I need to maintain a 1.5 metre distance from colleagues while dining, and I must not sit face-to-face opposite any other person.	
Personal Protective Equipment	
15. I have all the PPE specific to my work tasks to protect me, in addition to my PPE required to protect me from COVID-19.	
16. My PPE is in a good condition and I am familiar with the procedure required to use it and how to replace it when it is damaged, worn or lost.	
Personal wellbeing	
17. I monitor my own health for early COVID-19 symptoms (cough, sore throat, shortness of breath or fever ≥ 38°C) or flu symptoms and know what to do and where I need to report to if I experience any of the aforementioned symptoms.	
18. I know the contact number and how to access psychological support services should I need support, within my company or external to my company.	
Emergency response	
19. I am familiar with the procedure to report in case someone at home or in my workplace has symptoms of COVID-19.	

(Document prepared by the Risk Assessment Group within the Occupational Health and Safety Workstream of the National Department of Health – Covid-19 Response)

Name and Signature of Employee Date

ANNEXURE 2: For Information Purposes

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

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

This document may be updated depending on the Covid-19 pandemic response
Version 1, 1 May 2020

Purpose

This guide is to be used by employers or self-employed persons to assess the potential risk of exposure to SARS-CoV-2 virus and control measures at all workplaces. (*SARS-CoV-2 virus is the causative virus of Covid-19*).

Objectives

i) To identify and assess the potential risk of exposure to SARS-CoV-2 virus at workplaces
ii) To identify control measures (or the absence of control measures) and assess their effectiveness to reduce the risk of transmission of SARS-CoV-2 virus from recognised and unrecognised sources of infection in a workplace
iii) To inform the employer of the risk of potential exposure to SARS-CoV-2 virus and additional controls that might be required.

Requirements for the protection of employees against hazardous biological agents (HBA) such as SARS-CoV-2 virus are covered in the South African Occupational Health and Safety Act, 1993, Regulations for Hazardous Biological Agents, 2001.

This guide serves as a departure point for employers, self-employed persons and appropriately qualified persons to guide their COVID-19 Risk Assessments. This content must not be regarded as the absolute content of a Risk Assessment, rather it is the minimum requirements.

1. Risk assessment by the employer or self-employed person

1.1. Regulation 6(1) of the Regulations for Hazardous Biological Agents (2001) requires an employer or self-employed person to determine if any person might have been exposed to a HBA.

1.2. The relevant health and safety representative or relevant health and safety committee must first be consulted before proceeding with the risk assessment.

1.3. The employer must inform the relevant health and safety representative or relevant health and safety committee in writing of the arrangements made for the risk assessment, give them reasonable time to comment thereon and ensure the outcomes and findings of the risk assessments are made available to the relevant health and safety representative or relevant health and safety committee, which may comment thereon.

1.4. The employer or self-employed person must keep a record of the risk assessment and take into account matters such as:

i) the nature and dose of the SARS-CoV-2 virus to which an employee may be exposed and the suspected route of exposure and exposure scenarios;
ii) where SARS-CoV-2 virus might be present and in what physical form it is likely to be;
iii) the nature of the work, process and any reasonable deterioration, ~~ot~~ or failure of, any control measure;
iv) what possible effects the SARS-CoV-2 virus can have on an employee; and
v) the period of exposure

1.5. An employer or a self-employed person must cause the risk assessment to be conducted by persons competent in their respective areas based on all available information as far as is reasonably practicable, including:

i) classification of SARS-CoV-2 virus into the relevant risk group, according to its level of risk of infection;
ii) recommendations from Organisations such as the World Health Organization (WHO) or a competent person regarding the control measures necessary in order to protect the health of employees against SARS-CoV-2 virus as a result of their work; and
iii) knowledge of diseases from which employees might be suffering and which may be aggravated by conditions at the workplace.

1.6. An employer must review the risk assessment if there-

i) Is a reason to suspect that the previous assessment is no longer valid; or
ii) Has been a change in a process involving SARS-CoV-2 virus or in the methods, equipment or procedures in the handling, control or processing of COVID-19 samples or patients.
iii) Has been a change in a processes as a result of SARS-CoV-2 virus or in the methods, equipment or procedures in the handling, control or processing at the workplace.

iv) Following a suspected or confirmed COVID-19 case at the workplace.

1.7. The outcomes and findings of the risk assessments must inform the programme to monitor the exposure of employees to COVID-19 as well as the programme of medical surveillance.

2. Risk management and control measures

2.1. Annexure 2 of the Regulations for Hazardous Biological Agents (2001) sets out a hierarchy of control measures using standard and transmission-based precautions.

2.2. Personal protective equipment should be appropriate to the route of transmission e.g. respirators, impermeable gloves, supply, selection, training, separate storage, decontamination or sterilisation.

2.3. Testing of engineering control measures should be conducted every 24 months by an approved HBA inspection authority (retaining records for at least 3 years).

2.4. Annexure D of the Regulations for Hazardous Biological Agents (2001) sets out requirements for the labelling, packaging, transporting and storage in special containers marked with the biohazard sign in medical settings. In non-medical settings which includes low and medium risk, disposal of 'non contaminated PPE' can take place through normal disposal means.

2.5. The employer must have written procedures for disposal of HBA to a designated site in terms of the Environmental Conservation Act and decontamination or disinfection of all containers in the medical environment.

2.6. The normal mode of disposing of items of PPE can take place through the normal means of disposing of non-contaminated trash.

3. Competencies

3.1. The Regulations for Hazardous Biological Agents (2001) do not define any competency requirements for conducting HBA risk assessments (or for the monitoring of exposure at the workplace). Employers and self-employed persons are advised to ensure anyone engaged to undertake an HBA risk assessment is competent in risk assessment processes and is familiar with the Regulations for Hazardous Biological Agents (2001). Knowledge of the HBA of concern (in this case SARS-CoV-2 virus) and HBA in general is advisable. It is recommended that the services of a registered Occupational Hygienist or certified Safety Professional is obtained to undertake the COVID-19 risk assessments.

3.2. Regulation 12(b) of the Regulations for Hazardous Biological Agents (2001) requires that examinations and tests of engineering control measures be carried out at intervals not exceeding 24 months by an approved HBA

inspection authority or by a person whose ability to do the measurements, analysis and tests is verified by such an approved HBA inspection authority.

4. Guidance notes

4.1. Anticipated high exposure areas that will need immediate assessment, then others that will require assessment, less urgently include the following areas:

- Entry points to the workplace
- Change house facilities
- On-site canteen and similar dining areas
- Waiting areas
- Gathering places
- Etc.

4.2. Persons Under Investigation (PUI)

The risk assessment must include screening of employees entering the workplace, and the immediate provision of surgical masks at the gate to those screening positive will be a major hazard control. The risk assessment should also include chaperoning of PUI to the next point at the workplace (PUI should not be left wandering around, getting lost, removing mask etc.). Preferably, a cordoned-off walkway (or at least marked walkway) should be present directing the PUI to the next point at the workplace – ideally to an isolation zone. The risk assessment must also include assessments of the controls within this isolation zone – 1.5m spacing, presence of barriers etc.

COVID-19 Risk Assessment Report								
Site: Sector*:				Date:				
Department:				Risk Assessor:		Name & Surname	Signature	
Work Area/s:				Employer Representative:		Name & Surname	Signature	
Occupations in Area:				Health & Safety Representative:		Name & Surname	Signature	
Risk Assessment								
Source of Hazard	**Route of exposure**	**Activities & tasks**	**Existing Control Measures**	**Control effectiveness**	**Risk classification**	**Additional Controls Required**	**Responsible person(s)**	**Due Date/s**

Department of Employment and Labour Exposure Risk Classification			
Low Exposure Risk Lower exposure risk (caution) jobs are those that do not require contact with people known to be or suspected of being infected with SARS-CoV-2, nor frequent close contact with (i.e. within 2 meter of) the general public.	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 SARS-CoV-2, but who are not known or suspected COVID-19 patients.	High Exposure Risk High exposure risk jobs are those with high potential for exposure to known or suspected sources of COVID-19.	Very High Exposure Risk Very high exposure risk jobs are those with high potential for exposure to known or suspected sources of COVID-19 during specific medical, postmortem, or laboratory procedures.

*Mining, Agriculture, Fishing, Forestry, Manufacturing, Service

(Document prepared by the Risk Assessment Group within the Occupational Health and Safety Workstream of the National Department of Health – Covid-19 Response)

_____ _____

Name and Signature of CEO / Designated person **Date**

COVID-19 Walk-through Risk Assessment

This document may be updated depending on the Covid-19 pandemic response
Version 1, 1 May 2020

Purpose

This tool is to be used by Occupational Health and Safety professionals at workplaces to assess:

- the potential risk of exposure to SARS-CoV-2 virus
- current control measures; and
- provides recommendations to management.

Objectives

i) To identify and assess the potential risk of exposure of employees to SARS-CoV-2 virus at workplaces
ii) To identify control measures (or the absence of control measures) and assess their effectiveness to prevent exposure
iii) To inform the management of the risk of potential exposure of employees to SARS-CoV-2 virus and additional controls that might be required.

Guidance note

Anticipated high exposure areas that will need immediate assessment, then others that will require assessment, less urgently include the following areas:

1. Entry points to the workplace
2. Change house facilities
3. On-site canteen and similar dining areas
4. Waiting areas
5. Gathering places
6. Etc.

COVID-19 Walk-through risk assessment			
Site: Sector*:	Date:		
Department:	Risk Assessor:	Name & Surname	Signature
Work Area/s:	Employer Representative:	Name & Surname	Signature
Occupations in Area:	Health & Safety Representative:	Name & Surname	Signature

***Mining, Agriculture, Fishing, Forestry, Manufacturing, Service**

COVID-19 Walk-through risk assessment summary of non-compliance				
Requirement	**Finding**	**Recommendation**	**Responsible person**	**Due date**

No	Requirement	Status			Comments
		Yes	No	NA	
1.	**Basic education & awareness campaigns**				
1.1	Staff COVID-19 education/communication programme				
1.2	Contractor staff COVID-19 education/communication programme				
1.3	PPE donning and doffing training programme				
1.4	Health status self-monitoring and reporting /or questionnaire for employees				
2.	**Hygiene / cleaning measures**				
2.1	Work surfaces are decontaminated with appropriate disinfectants at appropriate intervals				
2.2	Equipment are decontaminated before and after use				
2.3	Hand washing basin is present (located near room exit)				
2.4	Soap and paper towel or once off use material towel available at handwashing basin				
2.5	Hand washing procedure is done, on entering the workplace, after removing PPE, and before leaving the workplace) and at various other times during the course of the day e.g. use of ablutions, etc.				
2.6	There is a procedure for surface decontamination and spills				
2.7	Spill kits are provided and maintained (only where required)				

No	Requirement	Status			Comments
		Yes	No	NA	
2.8	Additional sanitation facilities (e.g. hand sanitizers, etc.) at door entrances and at or close to workstations				
3.	**Reduce physical contact (social distancing)**				
3.1	Facility access and visitation is limited or restricted				
3.2	Limit crowds or gatherings (e.g. large groups >10 or groups in restricted spaces)				
3.3	Discourage physical contact of employees (e.g. handshakes, hugs)				
3.4	Closure of communal areas (e.g. gyms)				
3.5	Scatter diners to sit 1.5 metre distance from each other while dining and sitting face-to-face is not allowed. Separate utensils and frequently disinfect				
3.6	Eliminate frequent contact of communal surfaces where possible (e.g. leave doors open only where possible)				
3.7	Stagger tea and lunch breaks to limit employee groupings				
3.8	Working places rearranged to ensure maximum distance between employees				
3.9	No clustering at or in elevators. Elevators not to carry more people than is considered safe under the current COVID-19 conditions. Be aware of contact points in elevators				
3.10	Employees, contractors and visitors entering the facility/workplace are screened for COVID-19 symptoms				
3.11	Employees, contractors and visitors entering the facility who screen positive for COVID-19 symptoms are immediately provided with 'patient' masks				
3.12	Persons under investigation (PUIs) are chaperoned to the next point at the workplace and preferably, a cordoned-off walkway (or at least marked walkway) is present directing the PUI to the next point at the workplace				
3.13	An isolation zone is provided for PUIs and the isolation zone allows for 1.5 metre spacing, presence of barriers, etc.				

No	Requirement	Status			Comments
		Yes	No	NA	
4.	**Engineering control measures**				
4.1	Mechanical ventilation is in working order (inward flow, not recirculated to other areas of building, HEPA filtered when reconditioned and recirculated in any workplace, exhausted air discharged through HEPA filters). Environments that require positive pressure may only be allowed where possible and where required without the contamination of other environments				
4.2	Biosafety Cabinets are used for specified procedures. (Only where required)				
4.3	Biosafety Cabinets (Class I to III) are present and in good working order (incl. serviced and validated in last 6/12 months. (Only where required)				
4.3	Sufficient air changes and indoor air quality of an acceptable standard is permissible and acceptable and the responsibility of employer to maintain				
4.4	Physical barriers / screens as a barrier between personnel and visitors				
4.5	If air-conditioning must be used, disable re-circulation of internal air. Weekly clean/disinfect/replace key components and filters And when required, disinfect the internal side of ducting using acceptable engineering methods				
5.	**Administrative controls**				
5.1	Reliable and sustainable source for procurement of key components, including PPE				
5.2	Adequate supplies of PPE, sanitary materials and cleaning products				
	Procedures are in place for personnel to self-check and/or supervisors and colleagues to verify that all relevant PPE is used by personnel during all shifts (e.g. checklists, briefing sessions etc.)				
5.3	Emergency communication plans are current and in place				
5.4	Access to psychological support services				

No	Requirement	Status			Comments
		Yes	No	NA	
5.5	Fatigue management plan and controls are in place				
5.6	Is the COVID-19 Infection, Prevention and Control Guidelines for South Africa available, and explained to employees				
6.	**Personal Protective Equipment**				
6.1	PPE is selected based on a documented risk assessment, and should meet the minimum recommendations without using excessive PPE for the setting/task				
6.2	PPE must be available in the appropriate sizes for every employee or person/contractor visiting the workplace				
6.3	Disposable gloves				
6.4	Disposable plastic apron (only where required)				
6.5	Closed shoes, non-slip soles and shoe covers (only where required)				
6.6	Eye protection (goggles/face shield or visors)				
6.7	Respiratory protection (an acceptable material face masks that offers very efficient protection / FFP2/N95 or better respirators – FFP2 and N95 generally left to the health care and similar types of work environments that may require that level of protection – i.e. for high risk situations e.g. aerosol-generating procedures and surgical masks for infectious persons) Extreme care should be taken when choosing a mask or respirator to use insofar as it relates to the working environment				
6.8	Each employee has been supplied with a minimum of two cloth masks. Only to be used in identified and clearly marked environments				
6.9	PPE is consistently and properly worn when required				
6.10	PPE is regular inspected, maintained and replaced, as necessary				
6.11	PPE is properly disposed of, as applicable, to avoid contamination of self, others, or the environment				
6.12	PPE is properly removed, cleaned, and stored or disposed of, as applicable, to avoid contamination of self, others, or the environment				

No	Requirement	Status			Comments
		Yes	No	NA	
6.13	Documented respiratory fitment programme that includes fit testing, training, and medical assessments				
6.14	Facial hair (clean shaving) policy for areas where respirators are mandatory				
6.14	PPE provided free of charge to employees				
7.	**Safe work practices**				
7.1	Biosafety laboratory practices (BSL 3) are available and adopted. (only where required)				
7.2	Eating, drinking, application of cosmetics and smoking in testing facility / workplace (whichever is applicable) is prohibited				
7.3	No storage of food or drink or personal items (coats, bags) in work area				
7.4	Materials (pens, pencils, gum, etc.) is not placed in the mouth while in the laboratory or clinical setting				
7.5	Cuts/broken skin is covered before entering the laboratory				
7.6	Jewelry is covered (must not affect integrity of gloves) or removed before entering any workplace where it is required				
7.7	Mobile electronic devices kept in areas where they cannot be contaminated, if not decontaminated frequently				
7.8	Mobile electronic devices are decontaminated frequently				
7.9	Laboratory doors are kept closed (and biohazardous signage is displayed) - where required				
7.10	Workplaces and working areas rearranged to ensure maximum distance between employees				
8.	**Waste management**				
8.1	Waste management policy and contract with service provider				
8.2	Waste management contractor complies with occupational health and safety requirements for their employees				
8.3	Records of waste removal, destruction, and treatment available				

No	Requirement	Status			Comments
		Yes	No	NA	
8.4	COVID-19 related waste that may contain hazardous material brought to the attention of the waste company				
9.	**Safety equipment (but not limited to)**				
9.1	First aid kits are available				
9.2	Eye wash bottles or fountains available and in working order				
10.	**Emergency response**				
10.1	Response plan in case someone becomes ill with symptoms of COVID-19 in the workplace is in place and staff are aware of it				
10.2	Suspected COVID-19 case isolation areas and protocols in place and staff are aware of it				
10.3	System to track and trace potential interactions in place (contact tracing)				
10.4	Self-isolation or quarantine protocols available and current and staff are aware of it				

(Document prepared by the Risk Assessment Group within the Occupational Health and Safety Workstream of the National Department of Health – Covid-19 Response)

Name and Signature of CEO / Designated person **Date**

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

GUIDANCE ON SAFE START-UP PROCEDURE FOR MINES POST THE COVID-19 NATIONAL LOCKDOWN

Background

It is acknowledged that since the President declared a national disaster in March 2020 and later a national lockdown, a number of related regulations were promulgated and accordingly amended as circumstances changed and the practicality of implementation became clearer. These are intended to support and ensure that organisations are directed on how to comply with the relevant regulations in the interest of the health and safety of employees and the nation in general.

This guidance on safe start-up procedure for mines post the COVID-19 National lockdown is drafted in accordance with the directive issued to mines to ensure compliance with Section 5(1) of the Mine Health and Safety Act (Act No. 29 of 1996), as amended, which requires that every employer must as far as reasonably practicable, provide and maintain a safe working environment. The guidance focuses on the areas highlighted in the latest disaster management regulations and the **President's risk-adjusted strategy for economic activity**. As a result, the guidance is intended to address the following:

- measures to be taken to prevent the spread of COVID-19, and
- actions to provide a safe working environment, especially following the prolonged closure of some operations.

Measures to be taken to prevent the spread of COVID-19

The measures as outlined in the DMRE directive to prevent the spread of COVID-19 is adequately covered in the attached MOHAC **Guidance Note on COVID-19.** Among others, the following elements of the measures to prevent the spread of the virus are addressed in the document:

1. Rigorous screening of all employees, including contractors, prior to accessing the mine;
2. Testing of employees with symptoms of Covid-19;
3. Adequate social distancing;
4. Provision of quarantine facilities for employees showing signs of COVID-19;
5. Establishment and maintenance of a personal hygiene programme; and
6. Provision of appropriate Personal Protective Equipment (PPE) including face masks.

It is anticipated that the relevant comprehensive operational risk assessments processes that would be undertaken to ensure that the health related measures

in place to address the above are implemented properly without compromising the safety of employees in the process.

Actions to provide a safe working environment following prolonged closure of operations.

Historic statistics have shown that the prolonged stoppage of working places at mines may result in the deterioration of measures in place to mitigate against health and safety risks. Examples of high risk areas following prolonged stoppages include but are not limited to the following:

- Deterioration of ground support systems, particularly in underground workings;
- Time dependent deterioration of ground conditions (e.g hanging wall bed separation; poor hanging wall conditions; poor conditions of highwalls etc.)
- Increased seismic risk for underground operations;
- Lack of or poor ventilation of old/ abandoned working places or those shut down due to lockdown;
- Accumulation of hazardous gases resulting in increase of fires and explosions risks;
- Mud rush risks especially for orepasses that were left containing ore when lockdown was declared.

Nationally, mines conduct comprehensive risk assessments from which they draft Safe Shut-down procedures and Safe-start-up procedures for normally pre-known or planned extended breaks or holidays. These includes breaks for the festive seasons in December or the Easter breaks during March/ April. Similar procedures are followed when activities in active working places are suspended for some time for some reason or another. The dates and length of occurrence of these “normal breaks” are often well known in advance and the shut-down thereof adequately planned for to ensure safe Start-up. As a result, minimal issue based risk assessments are done on an annual basis to review these procedures for relevance and adequacy for the next planned break.

Conversely, the current lockdown was relatively sudden, hence these guidance is intended to highlight and overemphasise areas that should be closely guarded, monitored and improved in the mine’s Start-up procedures to ensure an even safer start-up of workplaces that have been left idle during the lock down.

The safe start-up procedures are intended to identify all risks and hazards associated with an extended break focusing t each and every element of the operating mining system including the following:

- Mining
- Engineering.
- Environment; Health and Ventilation.
- Security
- Human Resources, HRD and Medical Surveillance.
- Geology.
- Rock Engineering
- Protection Services

After the post lockdown COVID-19 protocols to prevent the spread of COVID-19 has been implemented and complied with; the following would provide an overall guide on areas to be addressed and attended to, to ensure that the start-up of operations on mines is as safe as reasonably practicable:

Post break pre-start up Meeting

Hold the pre-start-up meeting as scheduled and co-ordinate the required work to ensure all applicable areas are covered. The following agenda items must be used when doing the pre-start-up meeting on the post break pre-start-up shift.

- **Security**
  - Access control
    - Also reminder that ALL access to the mine by suppliers/ contractors to be strictly monitored in line with the COVID-19 prevention protocols
  - Tests for intoxication and/or use/ abuse of illegal substances
  - Random searches and screening, where required.
- **HR**
  - Attendance
    - Critical occupations available to ensure safe work (e.g adequate supervision and correct number per crew to work safely)
  - Crush permission and time and attendance process
  - Novices “first timers” dezoned
  - Management Brief
  - Appointments
- **Health**
  - Emergency medical staff on standby.
- **Engineering**

  Shaft Schedules and Work Schedules to be adjusted to take cognisance of the delay caused by the various screening processes which could be time consuming, in consideration of the Basic Conditions of Employment Act in relation to hours of work. This will affect both engineering and mining. Furthermore, the following to be considered/ checked:
  - All shaft planned and scheduled work completed
  - Power failures during the break
  - Fire detection and suppression system Starting of Surface fans and Underground fans.
  - Air, water and electricity restored at the beginning of night shift.
  - Drinking water availability
  - Pump Attendants availability.
  - Lamps person and lamp room staff availability.
  - All TMMs batteries to be reconnected and all machines checked for proper functionality at the start of morning shift prior to the beginning of night shift.
- **Ventilation**
  - Critical door installations
  - Known Flammable gas intersections
  - Refuge bays
- **Rock Engineering**

- Rock Engineering reports and appropriate risk mitigation actions
- Known Panel list for treatment
- Seismicity reports during break with possible FOG working places.

- **Mining**
  - Miner and Shift supervisor reporting (tracking Labour availability /team composition)
  - Day Shift / Night Shift
  - Early/late shifts of Supervisors
  - Working place induction
  - Early Entry Examination (Stoping, development and Logistics' start-up checklists)
  - Panels only to be started up with by correct team
- **Areas that must be inspected are:**
  - Known Flammable gas intersections
  - Potential Rock Engineering "Hot Spots "
  - Critical fan installations
  - Water, air and power restoration areas
  - Check and report any water leaks

Mining

It must be emphasised that the mine's risk assessment for the restarting of active working places that were left "idling" due to lockdown should clearly identify the level of supervision, expertise and/or competency required to restart such workplaces, particularly in addressing the risks highlighted on page 2 above. The below is a guide on the process, the implementation of which will be informed by the risk assessment

- The day shift Mine Overseer must hand out the stopping / re-starting checklists to each day shift Shift Supervisor for over inspection and follow up during the start-up process. The checklist will verify if conditions observed during the last working shift prior to the break and associated special instructions issued by the Mine Overseer are adhered to. Where working places have not been stopped in accordance with the stopping procedure, only the holder of a blasting certificate (Miner or Shift Boss) may complete the competency "A" declaration for that working place.
- Shift Supervisors must do early/late shifts during the **first working dayshift.**
- Supervisors to ensure that all employees familiarise themselves with the working areas; and ensure that all resources for safe operations e.g. Support equipment, barring equipment etc. are available in the workplace.
- All Shift Supervisors, Miners to over-inspect safe declarations and ensure that all necessary precautions are adhered to. A Stop-and-Fix rule must be strictly observed.
- Ensure sufficient drinking water is available in the work place and encourage the drinking of water at regular intervals during the shift.
- Open Services valves slowly to fill columns first and only then pressurise. In the case of water this is to prevent what is called "water hammer'' which is caused by the sudden inrush of water, which may cause the flanges to fail and water/air and cause massive leaks.

- Ensure that all power at the stope gully boxes are switched on again at the start of the shift.

Development and Stoping Ends Flammable Gas issues:

- All areas to be checked for flammable gas and necessary entry examination precautions followed. In the event of flammable gas detected, barricade working place and notify ventilation department.
- Employees to be encouraged to pace themselves to maintain an acceptable work rate and report to the supervisor if not feeling well.

Ventilation Department

- Execute the plan to inspect high risk areas and ensure all areas are covered.

Store & Safety Department

- Ensure ground support equipment, PPE and other safe work equipment are available in enough quantities for supply to working places.
- Ensure that the Personal Protective Equipment store is open on the 1st shift after the break.

HR Department

- Ensure that time and attendance systems are functioning well and that all required documentation is available for the start of the shift.
- Address any block parades that should have been deferred during the shut-down period.

Engineering

- Start-up fans as per the post break pre-start-up shift requirements.
- Restore water, air and electricity as required.
- Arrange for persons to check the charging of cap lamps and gas detection devices on the post break pre-start-up shift.
- Ensure adequate staff is available in the lamp room on the first working shift.
- Ensure that there is no water locked in the ore passes.
- Conduct conveyor/ conveyance/ personnel transportation inspection and chairlift inspection.
    - ***Inspection protocols must ensure that lockdown COVID-19 protocols to prevent the spread of COVID-19 are adhered to at all times.***

Tramming Operations

- The supervisors of the **first working dayshift** and the **first working nightshift** must ensure that all box holes are inspected for water logging and that where water is present, the pulling of these boxes is prevented until the water is drained. It is extremely important to ensure that proper communication is made with the tramming crews, and the following is adhered to:
    - All Ore passes to be evaluated and inspected for the presence of water.
    - Report excessive water leaks to the control room.
    - Ensure that main haulage ventilation doors are kept in a closed position.

Geology

- High risk areas should be visited on the first production shift and treated with caution until confirmed that there is no flammable gas or water intersection risks.

Rock Engineering recommendations.

- Rock Engineer to attend the post break pre-start-up meeting with other duty officials.
- Consolidate potential Rock Engineering “Hot Spots” data and communicate the information to responsible production sections with specific reference to **the first working dayshift** and the **first working nightshift** to address any potential hazardous conditions.

Explosives control

- Inspect all explosives storage areas and compare stock with shutdown record. Report any deviation to the respective section area management and protection services.

Chronic Medical Conditions

The guide below will be informed by the **lockdown COVID-19 protocols to prevent the spread of COVID-19** and supplement them where applicable. **Where any of the guidance below is in contrast with the COVID-19 prevention protocols, the COVID protocols will take precedent**.

Primary Health Clinics:

- Adequate measures shall be put in place to identify and manage employees who are on chronic medication;
- Employees who are in default of their chronic medication protocol, must be flagged and blocked-paraded for referral and appropriate remedial measures.

Employee tracing:

- All employees who have defaulted on their chronic medication should be flagged. Tracing of such employee (s) will be initiated in an effort to assist such employee (s) and ensure observance of the chronic medication regimen.

Medical screening at the workplace

- The medical surveillance program requirements shall be adhered to with regards to the number of days’ persons who have been absent from the mine need to be booked for a review of their medical fitness certificates by the OMP.
- The backlog of medicals will be tracked by the OMP and closed out as far as reasonably practicable.
- **The provisions below are to be applied as far as reasonably practicable in close reference to the COVID-19 protocols to prevent the spread of COVID-19:**
    - All employees retuning from the extended break will be subjected to a medical questionnaire and appropriate screening at the access control points. Where concerns are noted, such persons will be referred to the on-mine clinic for further assistance and screening.
    - All persons who have visited high risk pandemic areas to first report to the medical centre for screening and present a note to the effect that they have been cleared to proceed to the workplaces.
    - The hot spot pandemic areas will be communicated from time to time by the Department of Health, the National Institute of Communicable Diseases or the UN/WHO (World Health Organization).

Records

- A shutdown and Start-up file should be maintained. This file will include all minutes, action logs and additional documentation (including the medical questionnaires) to be submitted to the section management and saved

electronically on the SHE systems by the respective Chief Safety Officers at the operations.

- An additional copy of the file to be submitted to Control room for referencing of all approved work, standby list and whereabouts of responsible supervision.

Furthermore, the latest amended disaster management regulations and the President's risk-adjusted strategy for economic activity provides that before any resumption of any activity at an operation, the following conditions must be in place:

- In addition to generally applicable health and safety protocols, the employer's COVID-19 prevention and mitigation plan must be agreed upon with the Minister of Employment and Labour, the Minister of Health and the Minister of Minerals and Energy.
- Individual operations or workplaces must have COVID-19 risk assessments and plans in place, and must conduct worker education on COVID-19 and protection measures including the following:
    - Identification and protection of vulnerable employees
    - Safe transport of employees
    - Screening of employees on entering the workplace
    - Prevention of viral spread in the workplace:
    - Cleaning of surfaces and shared equipment
    - Good ventilation
    - Managing sick employees
- Monitoring systems must be in place to (1) ensure compliance with safety protocols and (2) identify infections among employees.

ANNEXURE 5: Mandatory

Start- Up Procedure of Mines by Employers and Employees Following A 21 Day National Lockdown

Enquiries : Dr. L Ndelu
Tel : (012) 444 3667
E-mail : lindiwe.ndelu@dmr.gov.za

Regional Operations Manager: Gold and Platinum
Regional Operations Manager: Coal
Regional Operations Manager: Other Mines and Offshore
Chief Director: Technical Support Unit
Chief Director: Occupational Health Unit
Director: Support Services Unit

The Principal Inspector:	Eastern Cape	(041) 585 9097
	Free State	(057) 352 2270
	Gauteng	(011) 358 9700
	Limpopo	(015) 287 4740
	KwaZulu-Natal	(031) 335 9626
	Mpumalanga	(013) 653 0500
	Western Cape	(021) 419 6260
	Northern Cape	(053) 830 0827
	North West Klerksdorp	(018) 462 9039
	North West Rustenburg	(014) 594 9246

Legal Officer: G Ndamse

RE: START- UP PROCEDURE OF MINES BY EMPLOYERS AND EMPLOYEES FOLLOWING A 21 DAY NATIONAL LOCKDOWN

1. BACKGROUND

The Department of Mineral Resources and Energy (DMRE) have previously requested all the mines to develop and implement a risk based protocol during the lockdown period in support of the President of the Republic, HE Cyril Ramaphosa, announcement regarding the prevention of the spread of COVID – 19. The Department also issued a Guiding Principles on the Prevention and Management of COVID-19 with regards to the preparedness, mitigation and management of COVID-19 to assist the sector in developing the aforesaid protocol.

The Minister of Mineral Resources and Energy, Mr Gwede Mantashe (MP), met key stakeholders from the sector on the 8 April 2020 to engage on the appropriate measures that should be implemented to prevent the spread of COVID – 19 once all the mines commence with operations from the 17 April 2020. The following were also agreed in principle during the meeting:

- There should be ramping up instead of full-scale production.
- Transport to be provided for mine workers.
- All the employees (including contractors) should be properly screened for COVI-19 prior to accessing the mine.
- Employees who show signs of COVID – 19 should be quarantined.
- Adequate medical surveillance and care, including hospitalization where necessary, should be provided to employees who are sick.
- Adequate social distancing must be maintained.
- Prevention of close contact on transportation of mine employees to and into the mine.
- The employer must ensure that sufficient resources are available at the mine.
- The employer should establish and maintain a personal hygiene programme in mitigation of transmission of COVID-19; and
- Appropriate personal protective equipment (PPE) including face masks should be provided to the employees.

Further, historic health and safety statistics have always shown that the mines report an increase in number of fatalities and injuries following prolonged planned or unplanned mine closures. Working places remain idle for prolonged periods and the increase in fatalities and injuries is also attributed to a variety of issues, including but not limited to lack of compliance to the legal provisions; poor medical surveillance; inadequate supervision; anxiety; production pressures and associated incentives; lack focus and complacency. This also results in workers taking short cuts and failure to comply with the applicable standards and procedures.

Section 5(1) of the Mine Health and Safety Act (Act No. 29 of 1996) as amended requires that every employer, as far as reasonably practicable, must provide and maintain a working an environment that is safe and without risk to health of employees.

The mining industry has a formal procedure for medical surveillance of any workers returning to work following a significant period away from work, based on the Department of Minerals Resources and Energy's (DMRE) standards of fitness to work. This SOP outlines the additional special steps and procedures to be followed in light of workers going back to work after the Lockdown.

2. ACTION REQUIRED FROM THE MINES

All employers are instructed to ensure that 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 in consultation with organised labour at the mine.

It is advised the that the risk-based approach as embedded in the Guiding Principles of Prevention and Management of COVID-19 in SAMI, be applied in the development of t the start-up procedure, especially that these were based on WHO, NDoH and NICD guidelines.

The amended regulations issued in terms of section 27(2) of the disaster management act, 2002, have been promulgated, it is important to adhere to these as well.

The National Department of Health has in its presentation on SA's Covid-19 epidemic: Trends & Next steps informed South Africa of the next stages of South Africa's response, which are but not limited to the following.

- Surveillance to identify & intervene in hotspots, spatial monitoring of new cases, outbreak investigation & intervention teams.
- Medical Care (for the peak), surveillance on case load & capacity.
- Managing staff exposures and infections, ongoing surveillance for new cases and
- Managing psychological and social impact.

All employers are instructed to ensure that 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 in consultation with organised labour at the mine.

A presentation on the precautionary start-up procedure must be made to the office of the Principal Inspector of Mines, by both the representatives of the employer and organised labour at the mine.

The precautionary start-up presentation must address the measures that the employer is to take to prevent the spread of COVID – 19 as well as actions to provide and maintain a working environment that is safe and without risk to the health or safety of employees. The procedure must also reflect the abovementioned risk-based protocol and agreements from the stakeholder meeting of the 8 April 2020.

This instruction is effective immediately from the date of this letter.

This instruction shall remain in force until varied or set aside by the Principal Inspector of Mines.

Thanking you in advance for your co-operation.

Yours in Health and Safety,

D MSIZA
CHIEF INSPECTOR OF MINES
DATE:

Regional office postal address, tel:, and fax:]
[Street address]

Directorate: Mine Health and Safety

Enquiries: A N Other **Email**: Any.Other@dmr.gov.za
Reference No:

The Employer
Mine name
Address

Dear Sir / Madam

All Employers

RE: START- UP PROCEDURE OF MINES BY EMPLOYERS AND EMPLOYEES FOLLOWING A 21 DAY NATIONAL LOCKDOWN

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ACTION REQUIRED FROM THE MINES

1. All employers are instructed to ensure that 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 in consultation with organised labour at the mine.
2. It is advised the that the risk-based approach as embedded in the Guiding Principles of Prevention and Management of COVID-19 in SAMI, be applied in the development of the start-up procedure, asthese were based on WHO, NDoH and NICD guidelines.

3. Adherence to the amended regulations issued in terms of section 27(2) of the disaster management act, 2002, which have been promulgated, is expected.

The National Department of Health has in its presentation on SA's Covid-19 epidemic: Trends & Next steps informed South Africa of the next stages of South Africa's response, which are but not limited to the following.

- surveillance to identify & intervene in hotspots, spatial monitoring of new cases, outbreak investigation & intervention teams.
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The precautionary start-up presentation must address the measures that the employer is to take to prevent the spread of COVID – 19, as well as actions to provide and maintain a

working environment that is safe and without risk to the health or safety of employees. The procedure must also reflect the abovementioned risk-based protocol and agreements from the stakeholder meeting of the 8 April 2020.

This instruction is effective immediately from the date of this letter.

This instruction shall remain in force until varied or set aside by the Principal Inspector of Mines.

Kindly acknowledge receipt.

Yours faithfully

AN. OTHER
PRINCIPAL INSPECTOR
REGION
DATE:

GUIDANCE ON PERSONAL PROTECTIVE EQUIPMENT FOR COVID-19 PANDEMIC

21 April 2020

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1 INTRODUCTION

The global COVID-19 pandemic was recorded for the first time in South Africa on 5th March. Since then the country and industry have had to adjust the world of work drastically, resulting in a state of disaster and lockdown in the country from 26th March to 30th April 2020. This guidance is specifically directed at the use of additional personal protective equipment (PPE) for COVID-19.

2 PURPOSE AND SCOPE

This document provides recommendations for the proper use of personal protective equipment (PPE)- for specific situations, to protect employees in the South African Mining Industry (SAMI) against exposure to the coronavirus (SARS-CoV-2) called COVID-19 and airborne pollutants in the workplace. In every situation, employees may be placed in a unique exposure risk, so the recommendations are designed to ensure that the most appropriate and effective PPE to suit a specific situation. The document does not change any current practices regarding PPE that has been previously issued to employees based on the risk assessed by the employer. It is still the duty of the employer to assess any risk and the guidance is meant to assist the employer in deciding on the best PPE to be adopted for protection of employees against COVID-19.

3 RATIONALE FOR GUIDANCE DOCUMENT: CORONAVIRUS TRANSMISSION

The SARS-CoV-2 virus (COVID-19) is spread through respiratory droplets and contact with contaminated surfaces. The virus can be transmitted from infected people by cough and sneeze droplets, which land on surfaces and hands. A person can become infected if they inhale coughed or sneezed infectious droplets, or by touching contaminated surfaces and then touching their eyes, nose, or mouth without washing their hands. COVID-19, airborne transmission may be possible in specific circumstances and settings in which procedures or support treatments that generate aerosols are performed, e.g., spirometry, alcohol testing, invasive medical procedures, cardiopulmonary resuscitation and removal of cardio-thoracic organs for compensation purposes.

4 MINIMUM PRECAUTIONARY MEASURES AGAINST INFECTION

(a) Social distancing must be at least 1 (one) metre away where possible.
(b) Wash hands with soap and water for 20 seconds, or use alcohol-based hand sanitiser after contact with any person or after contact with frequently touched surfaces e. g. phones, door handles etc.
(c) Wiping workstation equipment with a disinfect (such as a 0.1% bleach solution) pre & post (during the shift if people share equipment) work shift (preventing transmission through sharing of equipment during shift change; that's equipment such as drilling machines, mobile equipment (steering wheels, gear knobs), computers in control rooms, control panels, etc. that are shared through different shifts),, especially surfaces that will be frequently touched (The Original Equipment Manufacture instruction must be consulted prior to disinfecting such equipment to prevent any damage or deterioration of such equipment).
(d) Cough in the fold of the elbow or in a tissue which you discard and wash your hands.
(e) Avoid touching your eyes, nose and mouth with unwashed hands.
(f) Wearing of fabric face mask in public places rather than using medical masks reserved for healthcare workers can assist in slowing the spread of the coronavirus, but that other hygiene measures are also crucial.

5 RESPIRATORY PROTECTIVE EQUIPMENT (RPE) APPLICATION AGAINST COVID-19

A continuing, effective respiratory protection program as specified by applicable local regulations must be implemented when using Respiratory Protective Equipment (RPE) as a control.

(a) **De-densified and social distanced areas**

In areas where de-densification and social distancing (with clearly demarcated standing, seating or working position/s) has been achieved, the use of face masks (surgical masks) is optional while cloth masks are recommended, in accordance with guidance from relevant legislative requirements and/or the appointed Section 12 Occupational Hygiene and Ventilation Engineer.

(b) **Non de-densified and social distanced areas**

In workplace areas or situations where de-densification and social distancing can't be achieved to protect workers from exposure to respiratory droplets that may be carrying COVID-19 viruses, and where the use of industrial RPE (typically FFP2 respirators or cartridge type respirators for gas/fume and particulate mitigation) is compulsory for protection against airborne particulates, the RPE can double-up as protection against COVID-19 by reducing the spread of respiratory droplets. No need for additional masks.

Where industrial respiratory protection is not used or available and mine workers are crowded in confined areas the use of face masks (surgical masks) is recommended, in accordance with guidance from relevant local authorities and/or the appointed Section 12 Occupational Hygiene and Ventilation Engineer.

(c) **"COVID-19 Mask Zones"**

Mines should identify the potential high-risk areas and tasks which social distancing is not possible, for example shaft conveyances (mine cages), underground man carriers, etc. and demarcate these as "COVID-19 mask zones". Employees should not be allowed in such demarcated areas without a respirator or facial mask.

Note: The use of cloth masks is under investigation, but for the interim, considering the potential risk posed by not being able to practice social distancing, surgical masks are recommended for use in crowded workplaces.

(d) **Safe Disposal of RPE**

- ✓ Put the used RPE in a dedicated rubbish waste bag/s and seal the rubbish waste bag when it's full;
- ✓ Store the full sealed rubbish waste bag in a dedicated storage area;
- ✓ The sealed rubbish waste bag with face masks should be stored for a period not less than 48 hours prior to being disposed of in the local waste;
- ✓ The sealed rubbish waste bag with industrial RPE should be stored for a period not less than 7 days prior to being disposed of in the local waste; and
- ✓ local waste disposal requirements must be followed.

Note: The mine should keep a record of the type of RPE being disposed, when the full rubbish waste bag was sealed and when was such full rubbish waste disposed of in the local waste.

6 GENERAL GUIDANCE INFORMATION ON PPE

Respiratory protection

The respirator protects individuals from the inhalation of droplets and particles but also reduces the spread of infectious respiratory droplets. Given that the fitting of different types of respirator will vary for each user, the respirator will require a fit testing in order to find the best fit PPE to the user. In the event of the need to assess a suspected case of COVID-19 or in the management of such a confirmed case of COVID-19, the guide suggests the use of Filtering Face Piece (FFP) respirators class 2 or 3 (FFP2 or FFP3) (N95). An FFP3 respirator should always be used when performing aerosol-generating activities/procedures.

When not in use, i.e. in the workplace where inhalable hazards are absent and where social distancing can be practised, mine workers should be provided with the means to store the RPE (for example, a sealable plastic bag) to prevent contamination when the mask is not in use.

Eye protection

Eye and face protection provide protection against contamination to the eyes from respiratory droplets arising from aerosol generating procedures and from splashing of secretions (including respiratory secretions), blood, body fluids or excretions in the health care environment. Pertaining to COVID-19 eye protection is only required by Healthcare workers, EMS personnel, COVID-19 Site Screening Teams and Cleaners who might came into contact with respiratory droplets. (high risk group)

Eye and face protection can be achieved using any one of the following:

- surgical mask with integrated visor
- full face shield or visor
- polycarbonate safety spectacles or equivalent

Body protection

In instances where very high-risk procedures are conducted, body protection in the form of gowns and plastic aprons will be required.

Gloves

Surgical (disposable but not theatre grade) gloves must be worn when providing direct patient care and when exposure to blood and or other body fluids is anticipated or likely, including during equipment and environmental decontamination. Disposable gloves are subject to single use and must be disposed of immediately after completion of a procedure or task and after each patient contact, followed by the application of hand hygiene.

Gloves provided as part of PPE for a specific occupation will continue to be utilised. Good storage of gloves should be promoted. In case of reusable gloves, they should be washed and decontaminated at end of the shift and hang to dry for next shift use.

Note: Gloves are not required as general protection against the COVID-19 virus for occupations and tasks not described above.

7 CLOTH FACE MASKS (UNDER INVESTIGATION)

There is good evidence to show that cloth face masks significantly reduce the spread of infectious respiratory droplets. Through lowered amounts of exhaled Coronavirus, wearing a mask should reduce the spread of infection from the wearer's respiratory droplets. Although a cloth face mask may not be as good as a surgical face mask in hospital settings, the cloth face mask is a suitable alternative to surgical face masks to reduce droplet spread. Hence, cloth face masks are recommended for situations where social distancing is not possible and respiratory protection for protection against inhalable hazards is not required.

Face masks are recommended in addition to hand-washing and social distancing – it does not replace these two more important strategies. Cloth face mask should never be promoted as a primary prevention strategy and be used in accordance with guidance from relevant local authorities.

N95 respirators and surgical medical masks are reserved for health workers and suspected infected COVID-19 cases.

FFP2 (or similar) respirators are reserved for workers in respirator zones to prevent exposure to inhalable particulate hazards in the workplace

Cloth face masks can be used when an individual comes into contact with people and social distancing can't be maintained like when using public/bus transport, attending essential services, general public use, etc. Cloth face masks should always be accompanied by clear user instructions on strict mask use (donning, doffing, disposal, etc.) and hygiene. Could also be used for suspected infected COVID-19 cases.

Cloth face masks should—

- fit snugly but comfortably against the side of the face;

- cover the nose and mouth completely;
- be secured with ties or ear loops;
- include multiple layers of fabric;
- allow for breathing without restriction; and
- be able to be laundered and machine dried without damage or change to the shape

Face masks should not be lowered when speaking, coughing or sneezing. Face masks should not be repeatedly touched – fiddling with the mask repeatedly is strongly discouraged as it is important to avoid touching the face with hands. The inner side of the mask should not be touched by hands.
It is important to wash hand first before putting on the face mask. Individuals should be careful not to touch their eyes, nose, and mouth when removing their cloth face mask and wash their hands after removing the cloth face mask. Wash cloth face masks with warm water [60–90 °C (140–194 °F)] common household detergent, and dry thoroughly. If possible, iron the mask after washing as it will help with disinfection. Each person will need to have at least two face masks so that one face mask is available when the other is being washed.
Cloth face masks must be accompanied with instructions to the Wearer of the mask. As minimum, the instructions must cover the following points:

- The importance that masks are used in addition to control measures such as hand washing, social distancing, etc.
- Washing the hands with soap and water or an alcohol-based hand rub before handling and putting on the mask
- To cover the nose and the mouth with the mask and to make sure that there are no obvious gaps between the mask and the wearers face.
- Avoid touching the mask when using it. If the mask needs to be touched or adjusted, wash hands with soap and water or an alcohol-based hand rub after touching the mask. This also applies when the mask is removed.

A cloth mask of acceptable standard and design must consist of three layers:

- Outer layer (faces towards other people): made from thick weave cotton like denim, calico, upholstery fabric, etc. Must be water repellent, easy to clean and be quick drying
- Inner layer (against the face): Can be made with the same material as the outer layer. Both polyester and nylon fabrics are preferred. Cotton can be used but this fabric can be highly water absorbent and become wet against skin.
- Middle/Filter layer: using the same fabric as inner/outer layer or fabric that is used in lining of suit jackets or formal coats. The layer could also be gauze from the pharmacy (non-woven), dried out wet wipes (unscented), or brand-new polyester floor wipes (dry ones). It is recommended that the non-woven layer be replaced daily with a fresh one and not be reuse.
    - Avoid T-shirt material.
    - Use fabrics that can be washed in hot water and ironed.

- Cleaning and disinfection instructions

Cloth masks for health care workers. Cloth masks are not recommended for health care workers because there is no filtration or protection against droplets or splashes. There is also the “wicking effect” which increases the risk of mucous membrane contamination.

Cloth masks for source isolation (community). As there is an urgent need to preserve essential PPE, especially face masks for healthcare workers, the use of cloth masks may be considered for source isolation for community healthcare workers, security, and the general public particularly when travelling in enclosed spaces such as taxis.

8 REPLACEMENT AND EXTENDING THE USE OF RPE

Respirators are for single use or single session use and then are to be discarded (hand hygiene must always be performed after disposal) or if re-usable cleaned accorded manufacturer's instructions. It is important that the respirator maintains its fit, function and remains tolerable for the user.

The respirator should be discarded and replaced and NOT be subject to continued use in any of the following circumstances:

- is damaged
- is soiled (for example, with secretions, body fluids)
- is damp
- facial seal is compromised
- is uncomfortable
- is difficult to breathe through

The manufacturers' guidance should be followed in regard to the maximum duration of use.

A summary of the recommended PPE for each category of worker is provided in section 10 below.

9 COVID-19 POTENTIAL EXPOSURE GROUPS AND PPE REQUIREMENTS SPECIFIC FOR COVID-19

COVID-19 Exposure Risk Group	FFP2/3 or N95	Surgical masks	Site issued RPE	Cloth face masks	Surgical gloves	Re-usable gloves	Eye protection	Gown	Disposable plastic apron	Disposable coverall
Clinical health & EMS staff	FFP2/N95				X		X	X	X	X
Mine workers in A & B Airborne Pollutant HEGs			PPP2/3 or cartridge respirators							
Mine workers in crowded areas (mine cages, etc.) without issued RPE		X		(under investigation)			X (if part of standard PPE)			
Mine workers at their workstations (not a respirator zone) also taking risk assessment outcomes into consideration for other requirements				X						
Administrative / office staff		X		X						
Cleaners (general)	FFP2/P2					X	X			

COVID-19 Exposure Risk Group	FFP2/3 or N95	Surgical masks	Site issued RPE	Cloth face masks	Surgical gloves	Re-usable gloves	Eye protection	Gown	Disposable plastic apron	Disposable coverall
Cleaners (disinfection)	FFP2/P2					X	X			X
COVID-19 Site screening teams	FFP2/N95				X		X			
Security (general)				X						
Employees with respiratory symptoms		X *(when in contact with others)*								
Mine workers in company transportation		X		X (under investigation)						
Mine workers in public transportation				X						
Visitors				X						
Social distancing compromised		X	X	X						

10 REFERENCES

National Department of Health. COVID-19 Infection Prevention and Control Guidelines for South Africa, March 2020

National Department of Health. National Practical Manual for the Implementation of the National IPC Strategic Framework, March 2020

Circular H25/20: Guidelines for PPE during coronavirus disease 2019 (covid-19) Western Cape Government: Health March 2020

South Africa Occupational Health and Safety Act, Act 85 of 1993 – Regulations for Hazardous Biological Agents, 2001.

WHO Rational use of personal protective equipment (PPE) for coronavirus disease (COVID-19), March 2020.

ECDC Technical Report- Personal protective equipment (PPE) needs in healthcare settings for the care of patients with suspected or confirmed novel coronavirus (2019-nCoV), February 2020.

UK Public Health: COVID-19 personal protective equipment (PPE), April 2020

https://www.who.int/emergencies/diseases/novel-coronavirus-2019

https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/diy-clothface-coverings.html

https://www.who.int/news-room/commentaries/detail/modes-of-transmission-of-virus-causing-covid-19-implications-for-ipc-precaution-recommendations

ANNEXURE 7: 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 [≥ 38°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 contact[1] with a confirmed[2] or probable[3] 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

[1]*Close 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.*

[2]*Confirmed case: A person with laboratory confirmation of SARS-CoV-2 infection, irrespective of clinical signs and symptoms.*

[3]*Probable 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 7 (a): For Information Purposes

Revised COVID-19 NOTIFIABLE MEDICAL CONDITIONS CASE DEFINITIONS.5 April 2020)

NATIONAL INSTITUTE FOR COMMUNICABLE DISEASES
Division of the National Health Laboratory Service

NOTIFIABLE MEDICAL CONDITIONS (NMC) CASE DEFINITIONS

Category 1: Immediate reporting telephonically followed by written or electronic notification within 24hrs of diagnosing a case

CORONAVIRUS DISEASE-2019 (COVID-19)

Why is surveillance necessary?	Who must notify and when?	Suspected case definition	Probable case definition	Confirmed case definition
On the 31st December 2019, the World Health Organization (WHO) China country office reported a cluster of pneumonia cases in Wuhan City, Hubei Province of China now known to be caused by a novel virus. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has been confirmed as the causative virus of coronavirus disease 2019 (COVID-19). Cases have now been identified in over 100 countries including South Africa and WHO has declared a global pandemic.	The healthcare worker responsible for the patient should notify authorities immediately of a **probable or confirmed case.** Outcome of patient should be updated if status changes following notification.	Not notifiable	Persons with acute respiratory illness with sudden onset of at least one of the following: cough, sore throat, shortness of breath or fever [≥ 38°C (measured) or history of fever (subjective)] irrespective of admission status **AND** 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	A person with laboratory confirmation of SARS-CoV-2 infection (using a **PCR-based assay**), irrespective of clinical signs and symptoms.

Additional notes

COVID-19 person under investigation (PUI) case definition: Persons with acute respiratory illness with sudden onset of at least one of the following: cough, sore throat, shortness of breath or fever [≥ 38°C (measured) or history of fever (subjective)] irrespective of admission status.
Persons at a highest risk are those who have an acute respiratory illness and who, in the 14 days prior to onset of symptoms, met at least one of the following epidemiological criteria:
(i) Were in close contact with a confirmed or probable case of SARS-CoV-2 infection; OR
(ii) Had a history of travel to areas with local transmission of SARS-CoV-2; OR
(iii) Worked in, or attended a health care facility where patients with SARS-CoV-2 infections were being treated; OR
(iv) Admitted with severe pneumonia of unknown aetiology.

Additional resources

Additional resources for COVID-19 including case definitions, FAQs, specimen collection instructions and guidelines may be found at: http://www.nicd.ac.za/diseases-a-z-index/covid-19/

ANNEXURE 8: 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 9: For Information Purposes

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

1. SCOPE

This document outlines and addresses the preventative measures for the **Coronavirus/COVID19**. This document will specify the preventative measures and the care to be taken when handling, preparing, issuing, retrieving and decontaminating sampling equipment for KDOHC.

2. POLICY

It is the policy of KDOHC to ensure all the activities underlined in this procedure be performed and are undertaken to ensure health and safety of all KDOHC employees, clients and service providers and suppliers. Note that the specifications in this procedure should be seen as a minimum requirement only.

3. REFERENCE DOCUMENTS

https://youtu.be/JKpVMiv
bTfg

Parliament Highlights. Gan Kim Yong speech

Centres for Disease Control and Prevention. CDC 24/7: Saving Lives. Protecting

People https://www.cdc.gov/coronavirus/2019-ncov

4. DEFINITIONS AND ABBREVIATIONS

Decontamination solution – Solution of Bleach/bleach and water (20ml Bleach per one litre of water)

5. PROCEDURE

5.1 **Issuing of equipment**

Issuing of equipment will be done in accordance with company policies and procedures, with the following recommendations:

- **Always assume that equipment is contaminated**

- Receive equipment box from the laboratory
- Fit re-useable, impervious gloves (it may be necessary to remove all jewellery and watches)
- Take equipment out of the equipment box
- Close the equipment box as soon as possible after removing the equipment
- Wipe all the equipment with a decontamination solution consisting of a Bleach and water solution
- Conduct calibrations and sample assembly as per normal with your gloves still on
- Before approaching employee to issue sampling equipment fit your mask and goggles to protect your T- zone (figure below)
- Issue equipment
- Return to the office and decontaminate your re-usable gloves before taking it off
- After decontamination, take it off and let it dry
- REPEAT THE PROCESS WHEN RETRIEVING EQUIPMENT
- When back at the office after retrieving of equipment, place all noise dosimeters inside a Ziplock bag, seal and put it in the equipment transport box
- If dosimeters stay on the site, decontaminate (wipe) with a cloth soaked in decontamination solution and submerge the windshield in the decontamination solution
- Wipe the sampling pumps and the rest of the equipment with a cloth soaked in decontamination solution
- Decontaminate the outside of the equipment transport box

T-zone

5.2 **Collecting equipment transport box from sites**

- **Always assume that equipment is contaminated**

- Fit re-useable, impervious gloves (it may be necessary to remove all jewellery and watches)
- Open the equipment box
- Inspect the equipment
- If noise dosimeters are not contained inside Ziplock bags OR when cyclone grid pots are not fitted to the cyclone anymore, assume the entire box is contaminated inside and seal the box immediately with a cable tie
- Mark the equipment box with a special sticker indicating that the content should be considered as potentially contaminated
- Inform the client that the box is potentially contaminated and that they should put the box in quarantine for a period of 14 days
- Take of your gloves and put it in a refuse bag, seal and transport it back to the laboratory
- If satisfied, take the box and put in the refuse bag with the contaminated gloves to return to the laboratory

5.3 **Decontamination and unpacking of equipment transport boxes at the laboratory**

Outside decontamination

- Receive the equipment transport boxes at a table outside the lab
- Fit a clean pair of gloves and goggles
- Take out the equipment transport box and wipe it with decontamination solution
- Submerge the contaminated gloves and Ziplock bags into the decontamination solution and hang out to dry
- Wipe all the equipment with decontamination solution and put it on a transport tray
- Spray the equipment box inserts (sponges) with decontamination solution

Inside decontamination

- Take sample equipment into the lab on the transport tray
- Take equipment to Wet lab for post calibration checks
- Fit a clean pair of gloves
- Remove the cyclone and grid pot from the sample cassette and submerge both in the decontamination solution
- Place the cyclone and the grid pot now into the ultrasonic both for further cleaning

- Disassemble the sample cassette by firstly removing the Top inlet and Extension sections of the cassette
- Take the filter with the mentioned two sections of the cassette to the weighing facility
- Remove your gloves and submerge the contaminated gloves into the decontamination solution and hang out to dry
- Take the filter out of the cassette and place it in a petri dish
- Take the sampling cassette back to the wet laboratory and submerge in the decontamination solution before placing it in the ultrasonic bath for further cleaning
- When the pumps are dry, return to the charging docking stations

5.4 **Decontamination of noise dosimeters**

- Remove the windshield and submerge in decontamination solution
- Place in the fume extraction hood and allow to dry
- Wipe noise dosimeters with decontamination solution
- Wipe down transport trays
- Remove your gloves before moving equipment

5.5 **General notes**

- When preparing equipment to be transported to the client, consider all equipment, originated from laboratory, to be decontaminated
- **All** working surfaces in the laboratory will be wiped down at the end of each shift
- Laboratory personal to wear gloves when working with control cards
- Issuers of equipment on the sites need to wear gloves when handling/completing control cards

5.6 **Decontamination of Office environment**

Decontaminate the following items in the office environment by one dedicated person per day:

- All doorknobs and handles
- Toilet handle
- All water taps
- Keyboards, mouse, printer control panel and telephones
- Door remote, alarm control pad
- Light switches
- Tabletops (all working surfaces), Kettle, microwave, fridge
- All utensils, cups, glasses, plates etc. to be washed after use with soap and water
- Designated cutlery and crockery to be provided for each employee

- Only paper towels to be allowed in the bathrooms and kitchen.

5.7 **Company vehicles**

- All company vehicles to be cleaned by KDOHC employees once a week (no external cleaning companies to be used)
- Vehicles to be disinfected on the inside on a daily basis
- Visitors to sign register
- Visitors to disinfect hands on arrival
- A poster will be displayed on the front door stating that if you experience any symptoms of the Corona/COVID 19 virus, please refrain from entering. Consult your doctor
- When suspecting that an office employee is sick or symptomatic, make the laboratory manager aware and get suspected employee to seek medical advice

6. RECORDS

All records are kept as per QM No. 8.4/F-01.

ANNEXURE 10: Mandatory

Notice on compensation for occupationally acquired corona virus under COIDA, Amended Act

https://www.gov.za/documents/compensation-occupational-injuries-and-diseases-act-compensation-occupationally-acquired-0

ANNEXURE 11: 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.