Mine Health and Safety Council

MHSC

CENTRE OF EXCELLENCE PROJECTS

"EFFECTS OF CANNABIS ON OCCUPATIONAL HEALTH AND SAFETY IN THE SAMI AND BENCHMARK FOR MAXIMUM ALLOWABLE BLOOD LEVEL OF CANNABIS AT THE WORKPLACE"

Guidance document for cannabis management in the workplace to be adopted by the South African Mining Industry

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PART A – THE GUIDELINE

1. FOREWORD

1.1. In 2018, a Constitution Court of South Africa decriminalised the use, possession, and cultivation of cannabis in private, following a series of court cases related to human rights violation as stipulated in Chapter 2 of the Constitution of the Republic of South Africa Act No 108 of 1996. Section 2 of the Cannabis for Private Purpose Act No 7 of 2024 (CPP) allows an adult to possess or use cannabis in the private space and for private purposes.

1.2. The CPP statute only clarifies the possession or use of cannabis in one's private space and capacity but does not clarify how it should be treated in the workplace thereby creating a gap in interpretation and application for purposes of occupational health and safety. However, other statutes specific to workplace safety are available to address issues of substance use and abuse which supersede the CPP.

1.3. For the SAMI, these statutes include Section 8 of the Occupational Health and Safety Act 85 of 1993 (OHSA), Section 7 of the Mine Health and Safety Act 29 of 1996 (MHSA) and Section 2A of the General Safety Regulation within the OHSA, which empowers the employer to take every reasonable measure possible to ensure a safe working environment that does not pose any health risk to the employees.

1.4. Other complimentary statutes include Sections 6 and 7 of the Employment Equity Act 55 of 1998 (EEA) and Section 10 under Schedule 8 of the Labour Relations Act 66 of 1995 (LRA), which accords rights to employers to establish conditions of employment under which employees should work within. These employment conditions then form basis for fairness in processes where there is a contravention.

1.5. In terms of these statutes, mining companies in South Africa have adopted a 'zero-tolerance' approach to alcohol and substance abuse due to the dangerous nature of the work in the mining industry. Decriminalization of cannabis does not overrule this standard whatsoever. Instead, employers are

compelled to find a workaround without trampling on human rights provisioned in the CPP.

1.6. What exacerbates the cannabis conundrum for workplace safety is that cannabis contains intricate chemical compounds which enable its metabolites to linger in the body system much longer regardless of intoxication levels, compared to alcohol. This complicates drug testing because the presence of cannabis in the body system does not necessarily mean that the user is intoxicated or under its influence. This renders some of the existing drug testing and assessment methods inadequate requiring revision to specify how cannabis should be managed in the workplace.

1.7. This guideline has been developed to provide a framework that should be adopted for managing cannabis in the South African Mining Industry.

2. OBJECTIVE OF THE GUIDELINE

The objective of this guideline is to assist all relevant stakeholders responsible for substance abuse control in the SAMI to achieve the following, if implemented and complied with:

2.1. Revise the existing drug and substance abuse policies to specify the allowable cut-off limits of cannabis in the body system while at work.

2.2. Revise the existing drug testing procedures and assessment tools to specifically include the management of cannabis.

2.3. Ensure that the employment contract is updated to cover all aspects of cannabis requirements in the workplace including declarations, testing procedures and consequence management of non-compliance, which all employees should adhere to.

2.4. Incorporate cannabis into the procedures for drug surveillance and monitoring to ensure ongoing improvement and promotion of health and safety in the SAMI workplace.

3. SCOPE OF THE GUIDELINE

3.1. This guideline covers the general and basic approach for cannabis management in the workplace in relation to fitness to perform work at a mine, advising on some measures that could be implemented to manage cannabis successfully while upholding human rights.

3.2. This guideline does not stipulate specific advice on the various scenarios in the workplace related to cannabis testing and assessment. However, the aspects of drug and substance control not addressed in this guideline are assumed to be considered and covered in the existing statutes and codes of conduct for drug and substance abuse management.

3.3. The stakeholders responsible for substance abuse control should ensure that they implement a robust cannabis management framework that is ethically sound, legally defensible, and scientifically accurate.

4. DEFINITIONS AND ACRONYMS

"COP" means Code of Practice in terms of section 9 of the MHSA.

"EEA" means Employment Equity Act No 55 of 1998.

"LRA" means Labour Relations Act No 66 of 1995.

"MHSA" means Mine Health and Safety Act No 29 of 1996 as amended.

"OHSA" means Occupational Health and Safety Act No 85 of 1993.

"SAMI" means South African Mining Industry.

"THC" means Delta9-tetrahydrocannabinol which is a chemical compound found in cannabis that produces a psychoactive effect.

"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.

"OHN" means a occupational health nurse who holds a qualification in nursing or an equivalent qualification, recognised by the Health Professions Council of South Africa.

"PWC" means physical work capacity which is the maximum amount of physical effort an individual can sustain.

"FWC" means functional work capacity which is the ability to perform specific job-related tasks.

PART B – PROPOSED UPDATES TO THE CODE OF PRACTICE (COP)

1. COP ON THE MINIMUM STANDARDS TO PERFORM WORK AT A MINE

1.1 The mandatory CoP on the minimum standards of fitness to perform work at a mine provides guidance on the most common approaches to be followed by the relevant personnel to determine fitness. The section related to alcohol, or substance abuse or dependency falls under the mental and behavioural disorders sub-section in section 8.5.5.2 and states as follows:

1.1.1 To be guided by the Alcohol and Substance Abuse Policy, as directed by the Health and Safety Committee at the mine.

However, Since the alcohol and substance abuse policy is a subset of the overall employment policy, it warrants inclusion in this mandatory CoP. Section 8.5.5.2 should therefore be updated to include the provisions of the employment contract as follows:

1.1.2 *To be guided by the Alcohol and Substance Abuse Policy, as directed by the Health and Safety Committee at the mine* ***and the provisions of the employment contract.***

PART C – GUIDANCE FOR CANNABIS TESTING AND ASSESSMENT

1. ALCOHOL AND SUBSTANCE ABUSE POLICY

1.1. In accordance with the stipulations of the MHSA, the OHSA, the LRA and the EEA, employers have the right to refuse entry to or expel from the workplace,

anyone appearing intoxicated, even if it is just a suspicion of substance use, because this is outlined in the employment contract.

1.2. To clarify the management of cannabis in the workplace, it is crucial that the existing alcohol and substance abuse code of conduct be revised to embed cannabis and the implication for non-compliance, which may lead to disciplinary action that might result in dismissal. The revision should include the allowable cut-off limits of Delta9-tetrahydrocannabinol (THC) in the blood system and the associated general contractual requirements for employment as follows:

1.3. Allowable cut-off limits of THC

i. No employee should have a blood THC concentration of more than **1 ng/ml** in their body system while at work, if they work in dangerous environments, if they are involved in handling of machinery, equipment, vehicles, and any movable objects as part of their daily duties.

ii. No employee should have a blood THC concentration of more than **2 ng/ml** in their body while at work.

2. EMPLOYMENT CONTRACTUAL REQUIREMENTS

2.1. Before entering into a contractual agreement with the employer, the employees should be made to understand the terms and conditions pertaining to cannabis testing and that positive test outcomes, above the stipulated blood THC cut-off limits, will be subjected to the disciplinary procedures applicable for substance abuse. The employee should enter into the contractual agreement only once they have agreed to these terms and conditions.

2.2. The policy should clearly stipulate the reason for the inclusion of the THC concentration thresholds in the assessment requirements, which should be to uphold health and safety in the workplace while adhering to fairness of

employment conditions as provisioned in the OHSA and the LRA, respectively.

2.3. The policy should provide that it be compulsory for employees to declare if they are using cannabis for medical purposes or if they are on prescription medications that could influence the cannabis test outcomes, prior to the test. This declaration should be made to the health practitioner or any personnel responsible for cannabis testing.

2.4. If the cannabis test results turn out to be positive, it should be clarified that employees cannot use medication of any kind, as a mitigating circumstance during the disciplinary process if they did not declare it prior to the tests. This is extremely vital for potential procedural disputes.

2.5. Once the employment contract is entered into, it is legal and binding on both the employer and employee. Refusal to be tested for cannabis for whatsoever reason, or a positive cannabis test outcome above the allowable blood cut-off thresholds will be in breach of contract.

2.6. All employees should be subjected to this policy as an inherent requirement of employment and to uphold the zero-tolerance policy against alcohol and drug abuse. There should be no exceptions to cannabis testing.

2.7. Employers should revise their drug support programs to include specific tailor-made mechanisms to manage cannabis-related drug abuse cases.

2.8. Employers should communicate the changes made to the employment contract about cannabis and increase training and awareness programs related to the impact of cannabis on mental health and safety at work and outside of work.

3. CONTRACTORS AND VISITORS

3.1. The terms and conditions pertaining to cannabis testing must be referenced in the contractual agreement between the mining companies and the contractors.

3.2. The contractors should comply with the cannabis testing procedures for the duration of the contract period.

3.3. Visitors to a mine must be informed about the cannabis provisions and that they can be screened and tested if suspected of intoxication.

4. CANNABIS TESTING PROCEDURES AND ASSESSMENT TOOLS

4.1. Employees and contractors should be inducted to the cannabis testing process. Prior to testing, the prescribed allowable cut-off limits of cannabis in the blood system must be reiterated to the employees to ensure procedural correctness as a precautionary measure should the test results lead to disciplinary action.

4.2. The reasons for testing should be explained to the employees in reference to the employment contract or contractor agreement. Any employee or contractor who does not agree to be tested at any given point in time will be contravening the terms of their contractual agreement and should be subjected to disciplinary action.

4.3. The existing procedure for drug and substance testing in the SAMI consists of screening and detection followed by confirmation. This procedure and practices will apply to cannabis testing.

4.4. Cannabis screening

4.4.1. Cannabis should be screened using the observational techniques and impairment testing.

i. Observational techniques using various sobriety testing mechanisms or any other layperson’s methods of detection should be used to screen for cannabis through observed bloodshot/glossy/blurry/reddened eyes, slurred speech, delayed reaction, aggressive or confrontational behaviour and unsteadiness.

ii. Employers should consider using impairment and other testing technology available on the market to screen for the symptoms associated with the presence of cannabis.

4.4.2. As per the existing standard screening procedures for drug use, screening for cannabis should be conducted by any staff member responsible for health and safety in the workplace. This may include mine overseers, production managers, mine operators, shit managers and the general management.

4.4.3. If the screening shows possible intoxication, the employee, contractor or visitor must be referred and subjected to further clinical testing to detect the presence of cannabis in the body system.

4.5. Cannabis detection

4.5.1. Cannabis should be detected using clinical chemistry techniques which should preliminarily detect THC in the body system.

4.5.2. Cannabis should be detected using the following non-invasive and semi-invasive tools:

i. Urine drug test using urine test strips
ii. Oral fluid drug test using disposable saliva tests
iii. Hair follicle drug test
iv. Sweat drug test using sweat patches
v. Nail drug test using fingernail drug panels.

4.5.3. Because drug testing is a cost factor, employers should find solutions that are best suited for their testing needs without compromising the quality and effectiveness of testing.

4.5.4. The procedure to detect cannabis in the body system should be conducted by qualified health professionals such as the OMP or the OHN in a controlled space.

4.5.5. The existing indicators and thresholds used to detect the presence of drugs in the body system should be maintained and applied to cannabis.

4.5.6. If the results of the drug tests indicate the present of cannabis, the employee or contractor must be referred for blood tests to confirm the THC limits in the blood system.

4.5.7. If a visitor who is suspected of intoxication, is screened, and referred for cannabis detection, and the drug test results are positive for cannabis, they should be removed from the workplace.

4.6. Cannabis confirmation

4.6.1. Confirmation of the presence of THC in the body system, including the confirmation of the allowable cut-off limits of THC concentration, should be conducted using the existing methods for drug confirmation which is through blood tests.

4.6.2. The following should be adhered to:

i. Blood tests should be conducted by a qualified health practitioner such as a phlebotomist in a controlled space.

ii. The blood sample should be stored at a temperature between 2 to $10^{o}C$ and transported to the laboratory within 24 hours where it should be analysed by qualified toxicologists and scientists.

iii. Once analysed and compiled by the toxicologists or scientists, a report containing detailed results should be securely communicated and delivered back to the qualified health practitioner who had conducted the blood tests. Thereafter, the existing procedures will be applied.

iv. It is important to observe this procedure to safeguard against legal dispute should the process be challenged in a court of law.

4.7. The frequency of testing should follow the surveillance and monitoring guidelines provided in section 5.

4.8. Throughout the process of cannabis testing, detailed documentation should be maintained showing every screening, detection, and confirmation outcome.

The test sheet should show the process that was followed and that the employee was aware of the test processes and outcomes.

4.9. In cases of a confirmed positive cannabis test outcome above the allowable cut-off thresholds in the blood system, the procedures for managing contraventions in the existing alcohol and substance abuse policy and the human resource processes should be utilized.

The employee or contractor will be subjected to disciplinary action and may be found guilty of contravening the drug policy. The appropriateness of the sanction will depend on a few factors including mitigating circumstances such as whether the employee made any declarations prior to the tests or if it is the inherent requirements of the type of work.

5. CANNABIS SURVEILANCE AND MONITORING

5.1. The surveillance and monitoring of cannabis will follow the existing risk-based framework for exposure surveillance consisting of initial, periodic/routine/ongoing and exit examinations.

However, exit examination is out of scope for this guideline as it does not apply to on-going maintenance of health and safety at a mine.

5.2. Initial examinations

5.2.1. As part of the baseline measurements, the OMP must endeavour to determine the inherent profile of the employees' cannabis use.

5.2.2. Other than the standard drug tests conducted for baseline medicals, the history of cannabis use should be established using a health questionnaire. If there is historical use of cannabis and any resultant mental issues, the purpose for using, the frequency of use and the age of use should be documented.

5.2.3. The purpose of use will reveal if it is for medicinal, or religious, or for recreational purposes.

5.2.4. If the employee or contractor has a history of using cannabis for medicinal and religious purposes, and the initial drug test results are above the allowable limits, the employer should implement the following:

i. Subject the employee or contractor to further PWC and FWC assessments to determine fitness to work.

ii. The results of the PWC and FWC assessments will determine what level of strenuous work an employee can endure and what job types they are suitable for.

5.2.5. Knowledge of this information will empower the employer to assess and quantify the risk associated with drug dependency and possible mental health of the employees and contractors which will assist in preventing work related accidents and implementation of support programs.

5.2.6. The baseline information compiled on cannabis use for medicinal and religious purposes should be documented in detail and used for continuous monitoring to ensure health and safety.

5.3. Periodic/routine/ongoing surveillance and monitoring

5.3.1 The purpose of periodic or routine surveillance and ongoing monitoring of cannabis use in the workplace is to deter abuse, identify intoxication, and detect inappropriate, irresponsible and negligent use.

5.3.2. Routine surveillance and ongoing monitoring of cannabis use should follow a risk-based approach based on the outcomes of the baseline examinations, the nature of work and the work environment.

5.3.3. If the baseline examinations suggest dependency on cannabis for medicinal or religious purposes or show a history of abuse and mental health issues, then management should determine the frequency at which the employee should be tested and monitored to ensure that the risk of repeated abuse resulting in accidents in the workplace or inability to perform work is mitigated.

5.3.4. The nature of work and the work environment play a crucial role in determining the frequency of cannabis surveillance, testing and monitoring, outside of the normal medical surveillance.

i. For work deemed dangerous such as handling of machinery, equipment, vehicles, and any movable objects, the frequency of testing should be conducted daily during pre-shifts and intra-day multiple times, as much as is necessary to identify and remove intoxicated employees from the workplace. Ongoing screening should be conducted using observational techniques, sobriety, and impairment tests.

ii. For the working environments deemed to be dangerous, such as environments with risk of explosions, cave-ins, flooding and exposure to toxic air, cannabis surveillance, testing and monitoring should be done daily during pre-shift and intra-day multiple times to ensure that intoxicated employees are identified and swiftly removed from the environment.

iii. For work of a managerial nature, high responsibility or work that could result in financial, operational, or commercial loss, the frequency of cannabis surveillance should be at least quarterly.

iv. For the rest of the work categories deemed to be less risky, cannabis surveillance and monitoring may be conducted at reduced routine or planned intervals based on the outcomes of risk-based assessments.

PART D – IMPLEMENTATION

1. IMPLEMENTATION PLAN

1.1. The employer should prepare an implementation plan that will enable successful implementation of the guideline. The implementation plan should make provisions for issues such as organisation structures, roles and responsibilities and various functionaries.

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 GUIDELINE

2.1. The employer should institute specific measures for monitoring and ensuring compliance with the guideline.

3. ACCESS TO THE GUIDELINE

3.1. The employer should ensure that a complete guideline and all the related documents are kept readily available at the mine for examination by any affected person.

3.2. Furthermore, the employer should ensure that all employees are fully conversant with those sections of the guideline relevant to their respective areas of responsibilities.

3.3. 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, should be provided with a copy. A register must be kept of such persons or institutions with copies to facilitate updating of such copies.