

HEALTH AND SAFETY SPECIFICATION OF A MECHANICAL ENGINEERING CONTRACTOR FOR THE MAJOR REFURBISHMENT AND CONSTRUCTION OF THE ROOIWAL WASTE-WATER TREATMENT NORTH AND WEST WORKS RFP169/2024



OCCUPATIONAL HEALTH & SAFETY SERVICES		
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LIST OF ABBREVIATIONS

OHS:	Occupational Health and Safety
CEO:	Chief Executive Officer
CR:	Construction Regulations
OHSA	The Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)
PPE	Personal Protective Equipment;
HCA:	Hazardous Chemical Agents 2021
SDS:	Safety Data Sheet
AIA:	Approved Inspection Authority
HBA:	Hazardous Biological Agents
Pr CHSA:	Professional Health & Safety Agent
H&SS:	Health and Safety Specification
HS&EP:	Health, Safety and Environmental Plan
HS&EF:	Health, Safety and Environmental File
CHSO:	Construction Health and Safety Officer

DEFINITIONS

The following definitions from the Occupational Health and Safety Act are listed as follows: "**The Act**" means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993); **Agent** –means a competent person who acts as a representative for a client;

Client—means any person for whom construction work is performed;

Construction manager means a competent person responsible for the management of the physical construction processes and the coordination, administration and management of resources on a construction site;

Chief Executive Officer-In relation to a body corporate or an enterprise conducted by the State, means the person who is responsible for the overall management and control of the business of such body corporate or enterprise.

Construction site-means a work place where construction work is being performed;

Construction supervisor-means a competent person responsible for supervising construction activities on a construction site;

Construction work- means any work in connection with -

(a) the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure; or

Designer-means-

(a) a competent person who-

(i) prepares a design;

(ii) checks and approves a design;

(iii) arranges for a person at work under his or her control to prepare a design, including an employee of that person where he or she is the employer; or

- (iv) designs temporary work, including its components;
- (b) an architect or engineer contributing to, or having overall responsibility for a design;
- (c) a building services engineer designing details for fixed plant;
- (d) a surveyor specifying articles or drawing up specifications;
- (e) a contractor carrying out design work as part of a design and building project; or an interiordesigner, shop-fitter or landscape architect;

Danger- Means anything that may cause injury or damage to persons or property.

Excavation work- means the making of any man-made cavity, trench, pit or depression formed by cutting, digging or scooping;

Employee-Means, subject to the provisions of Subsection (2), any person who is employed byor works for any employer and who receives or is entitled to receive any remuneration or whoworks under the direction or supervision of an employer or any other person.

Employer-Means, subject to the provisions of Subsection (2), any person who employs or provides work for any person or remunerates that person or expressly or tacitly undertakes to remunerate him, but excludes a labour broker as defined in Section 1(1) of the Labour RelationsAct, 1953 (Act No. 28 of 1956).

Healthy -Means free from illness or injury attributable to occupational causes.

Health and Safety File –means a file, or other record containing the information in writingrequired by the Construction Regulations;

Disaster Management Act- means the Disaster Management Act, 2002 (Act No. 57 of 2002)

Health and Safety Plan–means a site, activity or project specific documented plan inaccordance with the client’s health and safety specification;

Health and Safety Specification—means a site, activity or project specific document prepared by the client pertaining to all health and safety requirements related to constructionwork;

Method Statement—means a document detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in any risk assessment;

Principal contractor-means an employer appointed by the client to perform constructionwork;

Risk Assessment—means a program to determine any risk associated with any hazard at a construction site, in order to identify the steps needed to be taken to remove, reduce or controlsuch hazard.

Machinery -Means any article or combination of articles assembled, arranged or connected and which is used or intended to be used for converting any form of energy to performing work, or which is used or intended to be used, whether incidental thereto or not, for developing, receiving, storing, containing, confining, transforming, transmitting, transferring or controllingany form of energy.

Medical Surveillance- Means a planned programme of periodic examination (which may include clinical examinations, biological monitoring or medical tests) of employees by an occupational health practitioner or, in prescribed cases, by an occupational medicine practitioner.

PART A - GENERAL OCCUPATIONAL HEALTH AND SAFETY

1. INTRODUCTION

1.1. INTRODUCTION AND BACKGROUND

In terms of the Construction Regulation 5 (1) of the OHS ACT, the client is required to compile an Occupational Health and Safety Specification for an intended project, highlighting all risks not successfully eliminated during design.

The Principal Contractor and contractors shall be responsible for the Health & Safety Policy for the site in terms of Section 7 of the Act and in line with Construction Regulation 7 as well as the Health and Safety Plan for the project.

This 'Health and Safety Specifications' document is governed by the "Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), hereinafter referred to as 'The Act'. It should be noted that no single Act or its set of Regulations be read in isolation. Furthermore, although the definition of Health and Safety Specifications stipulates 'a documented specification of all health and safety requirements pertaining to associated works on a construction site, so as to ensure the health and safety of persons', it is required that the entire scope of the Labour Legislation, including the Basic Conditions of Employment Act be considered as part of the legal compliance system. With reference to this specification document this requirement is limited to all health, safety and environmental issues pertaining to the site of the project as referred to here-in. Despite the foregoing it is reiterated that environmental management shall receive due attention.

This document forms an integral part of the contract between the client and The Principal Contractor. The Principal Contractor and its Contractors shall furthermore implement any reasonable practicable means to ensure compliance to this Occupational Health and Safety Specification and any other applicable legislation on their organization and/or activities performed by or for them. Compliance with this document does not absolve The Principal Contractor from complying with any other minimum legal requirement and The Principal Contractor remains responsible for the health and safety of his employees, those of his mandatories as well as any person coming on site or on adjacent properties as far as it relates to the construction activities.

1.2. PURPOSE OF THE CONSTRUCTION HEALTH AND SAFETY SPECIFICATION

The purpose of the construction H&S specification is to assist with the achievement of compliance with the OHS Act, and in particular with the Construction Regulations, so as to reduce incidents and injuries on the project.

The construction specification sets out the basic requirements to be met by the Contractor and all subcontractors so that the H&S of all persons potentially at risk may receive a priority at least equal to the other facets of the project such as the standard of workmanship, costs, programme, environment, etc.

2. SCOPE OF HEALTH AND SAFETY SPECIFICATION DOCUMENT

This Health and Safety (H&S) specification is the Client's H&S specification prepared in accordance with Clause 5(1)(b) of the Construction Regulations. It covers the requirements for eliminating and mitigating incidents and injuries during the construction phase of the project. The specification addresses legal compliance, hazard identification and risk assessment, risk control, and promoting a health and safety culture amongst those working on the project. The specification also makes provision for the protection of those persons other than employees of the Principal Contractor and Contractors.

These Specifications should be read in conjunction with the OHS Act 85, 1993 and its Regulations with specific reference to the Construction Regulations. This will also include any Safety Standards which were or will be promulgated under the Act or incorporated into the Act and be in force or come into force during the effective duration of the project. The stipulations in this specification, as well as those contained in all other documentation pertaining to the project, including contract documentation and technical specifications shall not be interpreted, in any way whatsoever, to cancel or nullify any stipulation of the Act, Regulations and Safety Standards which are promulgated under, or incorporated into the Act.

The Principal Contractor / Contractor is required to comply with the provisions of the Health and Safety Specification in order to reduce to a level as low as is reasonably practicable, the risks associated with the contract work that may lead to incidents causing injury or ill-health

Application of construction work Permit

The client's agent will apply construction work permit to the department of labour. The Principal Contractor is required to comply on all requirement needed to apply the permit

3. OCCUPATIONAL HEALTH AND SAFETY POLICY

The Principal Contractor has to provide the Client, as an annexure to the Health and Safety Plan, with a detailed Health and Safety Policy outlining The Principal Contractor's stance on and principles adopted for Health and Safety.

The Client 's commitment to Occupational Health and Safety Management

Development Bank of South Africa Limited is committed to be responsible for occupational health and safety management, this commitment is essential to protect the environment, employees, mandatories, visitors and provide a work environment conducive to health and safety. The Principal Contractor and their Sub Contractors shall demonstrate their commitment and concern by:

- Ensuring that decisions and practices affecting occupational health and safety performance are consistent with the issued specification;
- Ensuring adequate resources are made available for the effective implementation of occupational health and safety control and mitigation measures;
- Participating in hazard identification and risk assessments and design safety reviews;
- Communicating occupational health and safety management processes, strategies and control measures with all levels of employees, contractor and/or visitors;
- Ensuring visible leadership at all sites;
- Promoting and enforcing the use of correct types of Personal Protective Equipment (PPE);
- Reporting and investigation of incidents and accidents and ensuring actions are identified and implemented to prevent similar types of incidents reoccurring;
- Participating in Client audits and meetings and ensuring required actions are implemented within reasonable time frames on the site/project;
- Recognizing and commending safe work practices and coaching employees who require guidance;
- Applying and enforcing consequence management from deviations and transgressions of/from compliance to this OHS Specification noted and/or observed, where applicable;
- Carrying out safety observations, implement corrective and preventative actions and giving immediate feedback;
- Encouraging employee participation in the formulation of work instructions and safety rules.

4. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT

The PC shall appoint adequate, resourced, competent persons in all the areas of work that are experienced in such areas, and are aware of their CHS accountabilities and responsibilities. All appointment letters and competency certificates, CVs etc. are to be approved by the Engineer or jointly with DEVELOPMENT BANK OF SOUTH AFRICA LIMITED SHEQ/Risk Control and/or CCHSR in terms of technical and CHS competence prior to commencement of work. Where persons are replaced or added to the project, the aforementioned is required prior to appointment. The project Organogram is to be updated accordingly.

Table 1: **Structure and Organization of OH&S Responsibilities**

ROLE	RESPONSIBILITIES
Client Client Agent	The Client and/or its Agent shall ensure that the Principal Contractor, appointed in terms of Construction Regulation 5(1) (k), implements and maintains the agreed and approved Health and Safety Plan. Failure on the part of the Client or Agent to comply with this requirement will not relieve the Principal Contractor from any duties under the Act and Regulations.
CEO – Principle Contractor	The Chief Executive Officer of the Principal Contractor in terms of Section 16 (1) of the OHS Act to ensure that the Employer (as defined in the Act) complies with the Act. The pro forma Legal Compliance Audit may be used for this purpose by the Principal Contractor or his/her appointed contractor.
Person responsible for Health and Safety Section 16(2)	All OHS Act (85 /1993), Section 16 (2) appointee/s as detailed in their respective appointment forms shall regularly, in writing, report to management on health and safety matters or deviations identified during routine or ad hoc inspections/ audits. All reports shall be made available to the principal Contractor to become part of their site records (Health & Safety File).

Construction Manager Or Assistant	<p>No work may commence and/or continue without the presence of appointed Construction Manager during performance of the contracted work. It must be noted that the required appointed Construction Manager (OHS Act CR 8.1) may not leave the site unless there is a sufficient number of appointed competent Assistant Construction Managers (OHS Act – CR 8.2) on site to assist with supervision. Competent construction managers who are appointed to manage part or all of the works must have had training and/or experience in their area of responsibility. All site supervisors must show evidence of basic training in OHS, and an understanding or training in areas of responsibility (i.e. risk assessments, method statements etc.).</p>
	<p>Multiple, competent Assistant Construction Managers may be appointed where justified by the scope and complexity of the works. Curriculum Vitae (CVs) are to be submitted for approval to the Client Representative. Each supervisor will be held responsible for the safety of working teams and subordinates, housekeeping and stacking and storage of materials in their particular area.</p>
SHE Representatives	<p>All Health and Safety Representatives (SHE-Reps) shall act and report as per Section 18 of the OHS Act. SHE Representatives shall inspect and monitor activities on a daily basis and report findings to the Client and Health and Safety manager immediately. These safety representatives have the right to stop any unsafe work or work due to unsafe conditions and report findings and reason immediately.</p>
Other Legal	<p>Further (Specific) Supervision Responsibilities for OH&S</p> <p>Several appointments or designations of responsible and /or</p>

Appointees	<p>competent people in specific areas of construction work are required by the OHS Act and Regulations.</p> <p>The following competent appointments, where applicable, in terms of the Construction Regulations are required to ensure compliance to the Act, Regulations and Safety Standards.</p>
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5. REQUIRED APPOINTMENTS AS PER THE CONSTRUCTION REGULATIONS

Table 2: Required appointments as per the construction regulations

LEGAL APPOINTMENTS AS REQUIRED IN THE CONSTRUCTION REGULATIONS			
REGULATIONS			
Item	Construction Regulation	Appointment	Responsible Person
1.	5(1)(h)	Principal contractor for each phase of project	Client / Agent
2.	6	Designer	Client / Agent
3.	7(1)(c)(v)	Contractor	Principal Contractor
4.	7(2)(c)	Sub-Contractor	Contractor
5.	8(1)	Construction Manager	Principal Contractor
6.	8(2)	Assistant Construction Manager	Principal Contractor
7.	8(5 & 6)	Construction Safety Officer REGISTERED with SACPCMP	Principal Contractor & Contractor
8.	8(7)	Construction Supervisor	Construction Manager
9.	8(8)	Assistant Construction Supervisor	Principal Contractor & Contractor
10.	9(1)	Person to carry out risk assessment	Principal Contractor & Contractor

11.	9(4)	Trainer/Instructor	Principal Contractor & Contractor
12.	10(1)(a)	Fall protection officer	Principal Contractor & Contractor
13.	11(2)	Competent structure inspector	Owner
14.	6(2) & 12(1)	Temporary Works Designer	Principal Contractor & Contractor
15.	12(2)	Temporary Works Supervisor	Principal Contractor & Contractor
16.	13(1)(a)	Excavation supervisor	Principal Contractor & Contractor
17.	13(2)(b)(ii)(bb)	Professional engineer or technologist	Principal Contractor & Contractor
18.	13(2)(k)	Explosives expert	Principal Contractor & Contractor
19.	14(1)	Supervisor demolition work	Principal Contractor & Contractor
20.	14(2) + (3)	Demolition expert	Principal Contractor & Contractor
21.	14(11)	Explosives expert	Principal Contractor & Contractor
22.	16(1)	Scaffold supervisor	Principal Contractor & Contractor
23.	17(1)	Suspended platform supervisor	Principal Contractor & Contractor
24.	17(2)(c)	Compliance plan developer	Principal Contractor & Contractor
25.	17(8)(c)	Suspended platform expert	Principal Contractor & Contractor
26.	17(13)	Outrigger expert	Principal Contractor & Contractor
27.	19(8)(a)	Material hoist inspector	Principal Contractor

			& Contractor
28.	18(1)(a)	Rope access supervisor	Principal Contractor & Contractor
29.	20(1)	Bulk mixing plant supervisor	Principal Contractor & Contractor
30.	20(2)	Bulk mixing plant operator	Principal Contractor & Contractor
31.	21(2)(b)	Explosive actuated fastening device expert	Principal Contractor & Contractor
32.	21(2) (g) (i)	Explosive actuated fastening device controller	Principal Contractor & Contractor
33.	22(a)	Tower crane supervisor	Principal Contractor & Contractor
34.	22(e)	Tower crane operator	Principal Contractor & Contractor
35.	23(1)(d)(i)	Construction vehicle and mobile plantoperator	Principal Contractor & Contractor
36.	23(1)(k)	Construction vehicle and mobile plantinspector	Principal Contractor & Contractor
37.	24(d)	Temporary electrical installations inspector	Principal Contractor & Contractor
38.	24 (e)	Temporary electrical installations controller	Principal Contractor & Contractor
39.	28 (a)	Stacking and storage supervisor	Principal Contractor & Contractor
40.	29 (h)	Fire equipment inspector	Principal Contractor & Contractor

This list may be used as a reference or tool to determine which components of the Act and Regulations would be applicable. This list shall not be assumed to be exclusive or comprehensive.

6 DUTY TO INFORM

Without derogating from any specific duty imposed on the Contractor by this Act, every Principal Contractor / Contractor shall:

- As far as is reasonably practicable, cause every employee to be made conversant with the SHE hazards attached to any work which he has to perform, any article or substance which he has to produce, process, use, handle, store or transport and any plant or machinery which he is required or permitted to use, as well as with the precautionary measures which should be taken and observed with respect to those hazards;
- Inform the SHE representatives concerned beforehand of inspections, investigations or formal inquiries of which he has been notified by an inspector, and of any application for exemption made by him in terms of section 40 of the Act; and
- Inform a SHE representative as soon as reasonably practicable of the occurrence of an incident in the workplace or section of the workplace for which such representative has been designated.

Duty not to interfere with, damage or misuse things —

The Principal Contractor / Contractor shall ensure that no person under his/her control shall intentionally or recklessly interfere with, damage or misuse anything, which is provided in the interest of SHE protection.

7 RESPONSIBILITIES

6.1. Client CR(5)

- The Client or his appointed Agent on his behalf will appoint each Principal Contractor for this project or phase/section of the project in writing for assuming the role of Principal Contractor as intended by the Construction Regulations and determined by the Bills of Quantities.
- The Client or his appointed Agent on his behalf shall discuss and negotiate with the Principal Contractor the contents of the health and safety plan of the both Principal Contractor and Contractor for approval.
- The Client or his appointed Agent on his behalf, will take reasonable steps to ensure that the health and safety plan of both the Principal Contractor and Contractor is implemented and maintained. The steps taken will include periodic audits at intervals of at least once every month.
- The Client or his appointed Agent on his behalf, will prevent the Principal Contractor and/or the Contractor from commencing or continuing with construction work should the Principal Contractor

and/or the Contractor at any stage in the execution of the works be found to:

- have failed to have complied with any of the administrative measures required by the Construction Regulations in preparation for the construction project or any physical preparations necessary in terms of the Act;
- have failed to implement or maintain their health and safety plan;
- have executed construction work which is not in accordance with their health and safety plan; or
- Act in any way which may pose a threat to the health and safety of any person(s) present on the site of the works or in its vicinity, irrespective of him/them being employed or legitimately on the site of the works or in its vicinity.

6.2. Principal Contractor CR(7)

- The Principal Contractor shall accept the appointment under the terms and Conditions of Contract. The Principal Contractor shall sign and agree to those terms and conditions and shall, before commencing work, notify the Department of Labour of the intended construction work in terms of Regulation 7 of the Construction Regulations, which stipulates “Notification of Construction Work” form. The Principal Contractor shall submit the notification in writing prior to commencement of work and inform the Client or his Agent accordingly.
- The Principal Contractor shall ensure that he is fully conversant with the requirements of this Specification and all relevant health and safety legislation. This Specification is not intended to supersede the Act nor the Construction Regulations or any part of either. Those sections of the Act and the Construction Regulations which apply to the scope of work to be performed by the Principal Contractor in terms of this contract (entirely or in part) will continue to be legally required of the Principal Contractor to comply with. The Principal Contractor will in no manner or means be absolved from the responsibility to comply with all applicable sections of the Act, the Construction Regulations or any Regulations proclaimed under the Act or which may be perceivable be applicable to this contract.
- The Principal Contractor shall provide and demonstrate to the Client a suitable and sufficiently documented health and safety plan based on this Specification, the Act and the Construction Regulations, which shall be applied from the date of commencement of and for the duration of execution of the works. This plan shall, as appendices, include the health and safety plans of all Sub-contractors for which he has to take responsibility in terms of this contract.
- The Principal Contractor shall provide proof of his registration and good standing with the Compensation Fund or with a licensed compensation insurer prior to commencement with the works.
- The Potential Principal Contractor shall, in submitting his tender, demonstrate that he has made provision for the cost of compliance with the specified health and safety requirements, the Act and Construction Regulations. (Note: This shall have to be contained in the conditions of tender upon

which a tenderer's offer is based.)

- The Principal Contractor shall consistently demonstrate his competence and the adequacy of his resources to perform the duties imposed on the Principal Contractor in terms of this Specification, the Act and the Construction Regulations.
- The Principal Contractor shall ensure that a copy of his health and safety plan is available on site and is presented upon request to the Client, an Inspector, Employee or Subcontractor.
- The Principal Contractor shall ensure that a health and safety file, which shall include all documentation required in terms of the provisions of this Specification, the Act and the Construction Regulations, is opened and kept on site and made available to the Client or Inspector upon request. Upon completion of the works, the Principal Contractor shall hand over a consolidated health and safety file to the Client.
- The Principal Contractor shall, throughout execution of the contract, ensure that all conditions imposed on his Sub-contractors in terms of the Act and the Construction Regulations are complied with as if they were the Principal Contractor.
- The Principal Contractor shall from time to time evaluate the relevance of the Health and Safety Plan and revise the same as required, following which revised plan shall be submitted to the Client and/or his/her Agent for approval.

8 HEALTH AND SAFETY REPRESENTATIVE(S)

The Principal Contractor and all Contractors shall ensure that Health and Safety Representative(s) are appointed under consultation and trained to carry out their functions (**applicable when 20 or more persons are employed**). The appointment must be in writing. The Health and Safety Representative shall carry out regular inspections, keep records and report all findings to the Responsible Person forthwith and at health & safety meetings. The duties and responsibilities of the SHE representative are defined in section 19 of the Act. The Client may request the appointment of a Health and Safety Representative if there are less than 20 employees on the construction site.

9 HEALTH AND SAFETY COMMITTEES

The Principal Contractor shall ensure that project health and safety meetings are held monthly and minutes are kept on record. Meetings must be organized and chaired by The Principal Contractor's Responsible Person (**applicable when 50 or more persons are employed**). All Contractors Responsible Persons and Health & Safety Representatives shall attend the monthly health & safety committees in accordance with the OHS Act 85/1993 and minutes of their meetings shall be forwarded to the Principal Contractor on a monthly basis.

Members of this committee shall be appointed in writing and shall meet at least monthly and the meeting Agenda shall contain the following but not limited to:

Agenda:

- a. Opening & Welcome;
- b. Present/Apologies/Absent;
- c. Minutes of previous Meeting;
- d. Matters Arising from the previous Minutes;
- e. SHE Representatives Reports;
- f. Incident Reports & Investigations;
- g. Incident /Injury Statistics;
- h. Other Matters;
- i. Endorsement of Registers and other statutory documents by a representative of the Principal Contractor;
- j. Close/Next Meeting.

10 SITE SPECIFIC WORKS INFORMATION

These specifications are applicable to the specific scope of work pertaining to the **construction and refurbishment of school.**

• EXTENT OF THE WORKS

The Works consists of the **construction and refurbishment of school.**

11 HEALTH AND SAFETY FILE

The Principal Contractor must, in terms of Construction Regulation 7(1)(b), keep a Health & Safety File on site at all times that must include all documentation required in terms of the Act and Regulations and must also include a list of all Contractors on site that are accountable to the Principal Contractor and the agreements between the parties and details of work being done. A more detailed list of documents and other legal requirements that must be kept in the Health and Safety File. The file must contain the following documents but not limited to:

Principal Contractor and other Contractors will each keep an SHE File on site containing the following

minimum documentation:

1. Appointment Letter (Tender award letter) DEVELOPMENT BANK OF SOUTH AFRICA LIMITED
2. Contract for the project
3. Appointment letter : CR 5 (1)k
4. Scope of work – DEVELOPMENT BANK OF SOUTH AFRICA LIMITED
5. SHE Specifications – DEVELOPMENT BANK OF SOUTH AFRICA LIMITED
6. Copy of Baseline Risk Assessment – DEVELOPMENT BANK OF SOUTH AFRICA LIMITED
 - 6.1 List of :Mobile Plant and construction
vehicles Energy-powered portable
tools

Materials

Employees on site identity documents
verified.Sub-Contractors

Smme's
7. Site Establishment
 - Plans (Drawings)
 - Risk Assessment
 - Checklist signed by both parties
8. Safety, Health and Environmental Plan
9. SHE Policy
10. Drug, Alcohol and Substance Abuse Policy
11. HIV/AIDS Policy
12. Proof of Safety, Health and Environmental Plan
 - Emergency Plan
 - Environmental Management plan
 - Traffic Management plan
 - Risk assessments
13. Section 37(2) Agreement
14. Letter of Good Standing
15. Permit/Notification of work
16. Legal appointments
17. Equipment and tools register and Checklist
18. Medical fitness certificates
19. Records of training/competencies
20. Specific safe work procedures

21. Hazard Identification and Risk assessment
22. Fall protection plan
23. Incident Registers and Documents
24. Safety Data Sheets
25. Toolbox talks
26. Register of toolbox talks
27. Authorization for dumping
28. Way leaves
29. Proof of registration for Hazardous waste
30. Copy of OHSACT and CR 2014
31. Method statements
32. PPE issue record

Upon completion of the Works, the Contractor shall hand over the consolidated health and safety file to the Employer.

12 HAZARD IDENTIFICATION AND RISK ASSESSMENT

This section of the specification provides guidelines for The Principal Contractor in preparation of risk assessments in order to ensure compliance with Regulation 9 of the Construction Regulations, 2014. Risk is the overall process of risk identification, risk analysis, and risk evaluation. This section highlights the principles related to the preparation of suitable and sufficient risk assessments. The Principal Contractor Staff intending to prepare risk assessments should be trained and suitably experienced in the application envisaged.

a. Development of Risk Assessments

Every Principal Contractor / Contractor performing Construction Work shall, before the commencement of any Construction Work or work associated with the aforesaid Construction Work and during such work, cause a Risk Assessment to be performed by a competent person, appointed in writing, and the Risk Assessment shall form part of the SHE Plan and be implemented and maintained as contemplated in applicable Construction Regulation.

A copy of the risk assessment shall be available on site at all times for inspection.

12.1 The Risk Assessment Shall Include, At Least:

- The identification of the risks and hazards to which persons may be exposed to;
- The identification of the risks and hazards to the environment;
- The analysis and evaluation of the risks and hazards identified;
- A documented plan of safe work procedures to mitigate, reduce or control the risks and hazards that have been identified;
- A monitoring plan and;
- A review plan.

Based on the Risk Assessments, the Principal Contractor / Contractor shall develop a set of site-specific Safe Work Procedures (SWP's) that will be applied to regulate the SHE aspects of the construction.

The Contractor shall at all times carry out the Works in a manner to avoid the risk of physical harm to persons or risk of damage to any property or the environment.

The Contractor shall take all precautions, which are necessary and adequate to eliminate any conditions which contribute to the risk of injury to persons or damage to property or the environment.

b. Review of Risk Assessments

The Principal Contractor / Contractor shall review the Hazard Identification, Risk Assessments and SWP's as the construction work develops and progresses and each time changes are made to the designs, plans and construction methods and processes.

The Principal Contractor / Contractor shall provide the Development Bank of South Africa Limited and other Contractors with copies of any changes, alterations or amendments of the above-mentioned review.

12.2 Forms of Risk Assessment

In order to ensure compliance with the Construction Regulations, The Principal Contractor will be required to carry out the following three forms of risk assessment:

i. Activity based risk assessment

The Principal Contractor will be required to carry out activity-based risk assessment before the commencement of construction activities on the Works, this risk assessment will form part of The Principal Contractor Health and Safety Plan. The risks and hazards to which persons, plant, vehicles and facilities

may be exposed during the construction of the Works should be identified and evaluated. Measures to reduce or control these risks or hazards should be defined during this assessment. The effectiveness of the measures defined and the baseline risk assessment prepared by the client shall be monitored and reviewed from time to time to ensure that it remains relevant and accurate.

12.3 Issue based risk assessments

The Principal Contractor will be required to carry out separate risk assessments during construction of the Works when methods and procedures are varied, for example when:

- 12.3.1.1 Designs are amended,
- 12.3.1.2 New machines are introduced,
- 12.3.1.3 Plant is periodically cleaned and maintained,
- 12.3.1.4 Plant is started-up or shut-down,
- 12.3.1.5 Systems of work change or operations alter,
- 12.3.1.6 Incidents or near-misses occur

12.3.2 Continuous risk assessments

Occupational Health and Safety Act specifically requires that employers shall provide and maintain working environments that are safe and risk to health. The general awareness of hazards needs to be raised as work ethic to maintain a safe and risk-free environment on an ongoing basis. This is achieved by continuous risk assessment, the most important form of risk assessment that takes place as an integral part of day-to-day management. Examples of continuous risk assessment include:

- 12.3.2.1 Regular audits,
- 12.3.2.2 Maintaining general hazard awareness,
- 12.3.2.3 Pre-work risk assessment

13 HAZARDS AND POTENTIAL SITUATIONS

The Principal Contractor shall immediately notify other Contractors as well as the Clients Agent of any hazardous or potentially hazardous situations that may arise during performance of construction activities. Hazards to be taken into account;

- **Machine Hazards,** (Moving machinery Machine running out of control. Machine coming in contact

with operator or employees body parts etc.),

- **Energy Hazards**, (Live electricity underground overhead, portable generators and hand tools etc.),
- **Material Handling Hazards** (heavy loads and hot materials),
- **Work Practices Hazards**, (Working at heights and elevated positions, excavations tripping and falling, Plant and Tools, noise, Insects, Snakes, Ticks, Bees and ergonomics)
- **Moving Vehicle Hazards**, (Vehicles generating fumes and dust, unguarded machine parts and belts etc.),
- **Hazardous Chemical Hazards**, (Asbestos dust on ceilings, Asbestos containing materials, Lead dust, dust, Cement, mortar, concrete and other chemicals to be used) • **Weather conditions**. (Extreme hot and cold weather conditions)

14 NOTIFICATION OF CONSTRUCTION WORK

The Principal Contractor shall, where the Contract meets the requirements laid down in the Construction Regulation, within 5 working days of appointment, notify the Department of Labour of the intention to carry out construction work and use the applicable form (from applicable Construction Regulations) for the purpose. A copy shall be kept on file.

15 AUDITING, REPORTING AND CORRECTIVE ACTIONS

The client will conduct at least, a once monthly Health & Safety audit of the work operations including a full audit of physical site activities as well as an audit of the administration of health & safety. The Principal Contractor is obligated to conduct similar audits of all contractors appointed by it. Detailed reports of the audit findings and results shall be reported on at all levels of project management meetings/forums. Copies of the Client audit reports shall be kept in the Primary Project Health & Safety File while the Principal Contractor audit reports shall be kept in their File, a copy being forwarded to the Client. Contractors have to audit their sub-contractors and keep records of these audits in their health & safety files, available on request. These audits must be conducted by a competent person.

Inspections by SHE Representative's and Other Appointees

Occupational Health and Safety Representatives shall conduct weekly inspections of their areas of responsibility and report thereon to their foreman or supervisor whilst other appointees shall conduct inspections and report thereon as specified in their appointments e.g. vehicle, plant and machinery drivers, operators and users must conduct daily inspections before start-up.

Recording and Review of Inspection Results

All the results of the abovementioned inspections are to be reported in writing, reviewed by the Occupational Health and Safety Committee, endorsed by the chairman of the meeting and kept on file.

16 TRAINING, AWARENESS, PROMOTION AND COMPETENCE

The Principal Contractor/Contractor shall include training certificates of appointed/designated personnel in the Health and Safety Plan.

16.1. Site Specific SHE Induction Training

The Principal Contractor / Contractor shall develop project specific SHE Induction Training based on the Risk Assessments and ensure that all employees receive induction training. No employees shall be allowed on site unless in possession of valid proof of induction training and identification at all times.

16.2. Other Training

All operators, drivers and users of construction vehicles, mobile plant and other equipment shall be in possession of valid proof of training.

All employees in jobs requiring training in terms of the Act and Regulations shall be in possession of valid proof of training.

Failure to adhere to the above mentioned will result in the operator's eviction from site and no delay claims will be entertained by the client.

OH&S Training Requirements: (as required by the applicable Construction Regulations and as indicated by the OH&S Specification & the Risk Assessment/s):

- General Induction (Section 8 of the Act)
- Site/Job Specific Induction (also visitors) (Sections 8 & 9 of the Act)
- Site/Project Manager
- Construction Supervisor
- SHE Representatives (Section 18 (3) of the Act)
- Operators & Drivers of Construction Vehicles & Mobile Plant (Construction Regulation 23)

- Basic Fire Prevention & Protection (Applicable Environmental Regulations and Construction regulation)
- Basic First Aid (General Safety Regulations)
- Storekeeping Methods & Safe Stacking (Construction Regulation)
- Emergency, Security and Fire Co-coordinator

16.3. Awareness & Promotion

The Principal Contractor / Contractor shall develop and implement a SHE promotion and awareness scheme for all employees and others affected by work activities. The following are some of the methods that may be used:

- Toolbox Talks
- SHE Posters
- Competitions
- Suggestion schemes
- Participative activities such as SHE circles.

16.4. Competence

The Principal Contractor / Contractor shall ensure that his and other Contractors personnel appointed are competent and that all training required to do the work safely and without risk to health, has been completed before work commences.

The Principal Contractor / Contractor shall ensure that follow-up and refresher training is conducted as construction work progresses and the work situation changes. Records of all training shall be kept in the OH&S file for auditing purposes.

16.5. Medical certificate of fitness

The Principal Contractor must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3 of the Construction Regulations 2014.

17 LEGAL INSPECTION REGISTERS

The Principal Contractor / Contractor shall conduct all prescribed inspections. All registers shall be kept on file and Development Bank of South Africa Limited reserves the right to inspect all legal compliance registers.

- Accident/Incident Register (Annexure 1 of the General Administrative Regulations);
- OH&S Representatives Inspection Register;
- Asbestos Demolition & Stripping Register;
- Batch Plant Inspections;
- Construction Vehicles & Mobile Plant Inspections by Controller;
- Daily Inspection of Vehicles. Plant and other Equipment by the operator/Driver/User;
- Demolition Inspection Register;
- Designer's Inspection of Structures Record;
- Electrical Installations, -Equipment & -Appliances (including Portable Electrical Tools);
- Excavations Inspection;
- Explosive Powered Tool Inspection/Maintenance/Issue/Returns Register (incl. cartridges & nails);
- Fall Protection Inspection Register;
- First Aid Box Contents;
- Fire Equipment Inspection & Maintenance;
- Formwork & Support work Inspections;
- Hazardous Chemical Substances Record;
- Ladder Inspections;
- Lifting Equipment Register;
- Materials Hoist Inspection Register;
- Machinery Safety Inspection Register (incl. machine guards, lock-outs etc.);
- Scaffolding Inspections;
- Stacking & Storage Inspection;
- Inspection of Structures;

- Inspection of Suspended Platforms;
- Inspection of Tunnelling Operations;
- Inspection of Vessels under Pressure;
- Welding Equipment Inspections;
- Oxy-Acetylene equipment inspections;
- Inspection of Work conducted on or Near Water;
- All other applicable records;

18 INCIDENT INVESTIGATION AND REPORTING

The Contractor shall compile and implement procedure for Reporting and investigation of incidents

– This document sets out the procedures to be followed when reporting, recording and investigating incidents that occur on a construction site.

The Principal Contractor shall report all incidents/accidents as required in terms of legislation including nearmiss incidents, first aid, medical treatment, lost time incidents (lost time injuries and fatalities); Section 24 and 25 incidents; electrical contact; property damage; crime, chemical spillage and other environmental incidents immediately, or if not possible within the shift and no later than 24 hours after the incident has occurred.

Where a **fatality or permanent disabling injury occurs** at a construction site, Contractor must provide the **Provincial director with a report contemplated in section 24 of the Act**, in accordance with regulations 8 and 9 of the General Administrative Regulations 2013 and that the reports included measures that the contractor intends to implement to ensure a safe construction site as far as is reasonably practicable.

All fatal incidents, employee and contractor incidents, shall be reviewed by the committee within one week after the incident and the members of the Project Progress meeting notified of corrective actions taken. Preliminary investigation information shall be shared.

An incident portfolio of evidence and a comprehensive and detailed investigation report shall be submitted to the DEVELOPMENT BANK OF SOUTH AFRICA LIMITED project manager/ SHEQ Officer within 7 days after the incident which shall include: Date, time and place of incident; Description of incident; Root cause of incident/accident; Type of injury (if any); Medical treatment

provided (if any); Persons involved; Names of witness/s; Corrective action to prevent recurrence (with clear deadlines and responsible persons). It is required that all corrective action is closed out within 3 months. If this is not practicable within the time frame, then it is to be submitted at a later date agreed to by the DEVELOPMENT BANK OF SOUTH AFRICA LIMITED Project Manager.

The Principal Contractor shall ensure that all accidents/incidents are investigated by him/her and are discussed at the SHE committee meeting held on site. Accidents/incidents shall be investigated and recorded in terms of the requirements of the Occupational Health and Safety Act, the National Environmental Management Act and National Water Act as applicable.

Please note that providing the Accident/incident investigation report does not exempt the Principal Contractor from providing accident reports required by Statutory Authorities, in particular, the Contractors' responsibility for reporting accidents in accordance with the requirements of the OHS Act and COLD Act.

NB: To limit incidents resulting from community unrest / protest action, a CLO must be appointed on the project prior to site establishment.

The Principal Contractor shall keep on site/workplace a record of all accidents and incidents reported in the form of the OHS Act Annexure 1 investigation form as referenced in the OHS Act. (Incident Investigation Report). The list below shows the minimum headings that should appear in the investigation report.

18.2 Recording of incident

- i. Name of employer
- ii. Name of affected person
- iii. Identity number of affected person
- iv. Date of incident
- v. Time of incident
- vi. Part of body affected
- vii. Effect on person (e.g. sprain or strain / fracture / burn)
- viii. Expected period of disablement
- ix. Description of occupational disease
- x. Machine / process involved / type of work performed / exposure**
- xi. Was the incident reported to the Compensation Commissioner and the Provincial Director?
(Yes/No)
- xii. Was the incident reported to the police? (Yes/No) *

xiii. SAPS office and reference

**to be completed in case of a fatal incident*

***in case of a hazardous chemical substance, indicate substance exposed to*

18.3 Investigation of the above incident by a person designated thereto

- i. Name of investigator
- ii. Date of investigation
- iii. Designation of investigator
- iv. Short description of incident
- v. Suspected cause of incident
- vi. Recommended steps to prevent a recurrence

18.4 **Action taken by employer to prevent the recurrence of a similar incident** (including dated signature of employer and date)

18.5 **Remarks by Health and Safety Committee** (including dated signature of Health and Safety Committee Chairman)

All crime related incidents must be reported to SAPS and to DEVELOPMENT BANK OF SOUTH AFRICA LIMITED . The PC must also make sure that all crime related incidents are investigated. The investigation report stemming from crime related incident must contain the following information as minimum.

- i. Name of employer
- ii. Name of affected person (if anyone was injured)
- iii. Identity number of affected person (if anyone was injured)
- iv. Date of incident
- v. Time of incident
- vi. Description of incident
- vii. Was the incident reported to the police? (Yes/No)
- viii. SAPS office and reference

Investigation of the above incident by a person designated thereto

- vii. Name of investigator
- viii. Date of investigation
- ix. Designation of investigator
- x. Short description of incident
- xi. Suspected cause of incident
- xii. Immediate corrective action
- xiii. Recommended steps to prevent a recurrence (including dated signature of employer and date)

DEVELOPMENT BANK OF SOUTH AFRICA LIMITED reserves the right to conduct an independent investigation in any incident. Actions stemming from these investigation reports must be closed out within the stipulated timeframes. Any actions that have not been closed out will be raised as a non-conformance and may warrant the issue of a penalty if they are still not closed out within the required target dates.

Incidents involving the public that may impact the project by causing damage to property, harm or injury to employees and project delays must be reported as crime incidents to the SAPS as well as to DEVELOPMENT BANK OF SOUTH AFRICA LIMITED .

Investigation Teams below are expected as a minimum for the Principal Contractor to establish for incidents and accidents. In addition to the Principal Contractor and his sub-contractor investigations, DEVELOPMENT BANK OF SOUTH AFRICA LIMITED will also, separately, conduct its own separate investigation especially for disabling injuries, fatalities, serious environmental legal contraventions and damages to DEVELOPMENT BANK OF SOUTH AFRICA LIMITED property. The principal contractor and sub-contractor would be required to co-operate with the DEVELOPMENT BANK OF SOUTH AFRICA LIMITED Investigation Team.

Parties to be involved in the investigation are as follows:

Incident Type	Definition	Chairman:	Attendees:
First Aid Injuries	An incident in which an injured person is treated at the incident scene by the first Aider and released back for duty	Supervisor of Injured Person / Principal Contractor: Relevant Supervisor	Principal Contractor/s and their sub-contractor/s <ul style="list-style-type: none"> • SHE representative • Construction Safety Officer • Injured
Medical Treatment Injuries	An incident in which an injured person is treated by the OHP/Medical doctor and released back for duty	Principal Contractor's OHS Act Section 16(2) appointee	<u>Principal Contractor/s and / or their sub-contractor/s</u> <ul style="list-style-type: none"> • SHE representative • Construction Safety Officer • Injured (if possible) • Witness (if any)
Fatalities	An incident that occurs at work or arising out of, or in connection with the activities of persons at work, or in connection with the use of plant or machinery, in which, or in consequence of which a person dies,	Principal Contractor's OHS Act Section 16(2) appointee	<u>Principal Contractor/s and / or their sub-contractor/s</u> <ul style="list-style-type: none"> • SHE Representative • Construction Safety Officer • Injured (if possible) • Witness (if any) • Supervisor of the injured • OHS Act Section 16(2) of the injured
Near Miss Incidents	An incident that has the potential of causing an injury or negative impact to the environment	Principal Contractor/s Construction Manager 8.1 appointee	<u>Principal Contractor/s and / or their sub-contractor/s</u> <ul style="list-style-type: none"> • Person/s affected by near miss • SHE representative • Construction Safety Officer • Supervisor of the area

19 SITE RULES AND OTHER RESTRICTIONS

19.1 Site OH&S Rules

The Principal Contractor must develop a set of site-specific Health and Safety Rules that will be applied to regulate the Health and Safety Plan and associated aspects of the construction project.

When required for a site by law, visitors and non-employees upon entering the site shall be issued with the proper Personal Protective Equipment (PPE) as and when necessary.

19.2 Security Arrangements

19.2.1 The Principal Contractor must establish site access rules and implement and maintain these throughout the construction period. Access control must include the rule that nonemployees shall at all times be provided with fulltime supervision while on site;

19.2.2 Additional Access Rules may be imposed by the Project Manager or Client Agent in the interest of the safety of the employees, visitors and customers;

19.2.3 The Principal Contractor must develop a set of Security rules and procedures for their allocated site and maintain these throughout the construction period. These security rules must be submitted to the Client for approval. Additional security measures or rules may be specified for risk minimisation purposes;

19.2.4 If not already tasked to the H&S Officer appointed in terms of Construction Regulation 8(6), the Principal Contractor must appoint a competent Emergency Controller who must develop contingency plans for any emergency that may arise on site as indicated by the risk assessments.

20 EMERGENCY PROCEDURES

The Principal Contractor shall prepare a detailed emergency procedure prior to commencement of work on site and it shall be included in, and form part of, the H&S plan. The procedure shall be updated whenever changes occur and it shall detail the emergency response plans. The emergency procedures shall not be limited to, but shall include, the following key elements:

- List of key competent personnel on site;
- Details of the nearest emergency services, including their physical addresses and phone numbers;
- Actions or steps to be taken in the event of each specific type of emergency;
- Information on hazardous materials/situations that may be encountered on site.

Emergency procedures shall include, but shall not be limited to, fire, spills, accidents to employees, use of hazardous substances, bomb threats, and major incidents/accidents.

A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc) must be maintained and be readily available to site personnel at all times that there are persons on site i.e. it must not be located in an area which may be inaccessible outside of normal working hours.

The Principal Contractor shall advise the Client and the Engineer in writing forthwith, and thereafter at the project and H&S meetings, of any emergencies that occurred, together with a record of the action taken. Copies of all reports on emergencies shall be kept in the Project H&S File.

21 FIRST AID BOXES AND FIRST AID EQUIPMENT

The Principal Contractor and all other Contractors shall appoint First Aider(s) in writing. All Contractors with more than 10 employees shall have a trained, certified First Aider on site at all times. The appointed First Aider(s) are to be sent for accredited first aid training. Copies of the valid First Aid certificates for each First Aider are to be kept in

the Project H&S File. The Principal Contractor shall provide an on-site First Aid Station with First Aid facilities, including first aid boxes adequately stocked at all times. All Contractors with more than 5 employees shall supply their own first aid box(es).

The Contractor shall provide a safety notice board where safety notices, site regulations concerning safe working practices and information on the nearest first aid station, ambulance, doctor and telephone numbers of the safety officer and other relevant persons can be conspicuously displayed to all its staff.

The Contingency Plan of the Principal Contractor / Contractor shall include the arrangements for speedily and timeously transporting injured / ill person/s to a medical facility or of getting emergency medical aid to person/s that may require it.

The Principal Contractor / Contractor shall have firm arrangements with his other contractors in place regarding the responsibility of the other Contractor's injured / ill employees.

22 FIRE PREVENTION AND PROTECTION

Subject to the provisions of the Environmental Regulations for Workplaces promulgated by Government Notice No.R.2281 of 16 October 1987, as amended. The Principal Contractor / Contractor shall at all times ensure that:

- All appropriate measures are taken to avoid the risk of fire;
- Sufficient and suitable storage is provided for flammable liquids, solids and gases;
- Smoking is prohibited and notices in this regard are prominently displayed in all places containing readily combustible or flammable materials;
- In confined spaces and other places in which flammable gases, vapours or dust can cause danger:
- Only suitably protected electrical installations and equipment, including portable lights, are used;
- There are no flames or similar means of ignition;
- There are conspicuous notices prohibiting smoking;

- Oily rags, waste and other substances liable to ignite are without delay removed to a safe place; and
- Adequate ventilation is provided;
- Combustible materials do not accumulate on the construction site;
- Welding, flame cutting and other hot work are done only after the appropriate precautions as required have been taken to reduce the risk of fire;
- Suitable and sufficient fire-extinguishing equipment is placed at strategic locations or as may be recommended by the Fire Chief or local authority concerned, and that such equipment is maintained in a goodworking order;
- The fire equipment is inspected by a competent person, who has been appointed in writing, in the manner indicated by the manufacturer thereof;
- A sufficient number of workers are trained in the use of fire- extinguishing equipment;
- Where appropriate, suitable visual signs are provided to clearly indicate the escape routes in the case of a fire;
- The means of escape is kept clear at all times;
- There is an effective evacuation plan providing for all:
 - Persons to be evacuated speedily without panic;
 - Persons to be accounted for; and
 - Plant and processes to be shut down; and
 - A siren is installed and sounded in the event of a fire.

23 CONSTRUCTION WELFARE FACILITIES AND LIVING ACCOMODATION

The Contractor shall ensure that the requirements governing Construction welfare facilities as indicated here below are carried out in terms of the applicable Construction Regulations.

The contractor shall, depending on the number of workers and the duration of the work, provide at or within reasonable access of every construction site, the following clean and maintained facilities:

- At least one shower facility for every 15 workers;
- At least one sanitary facility for every 30 workers;
- Changing facilities for each sex; and
- Sheltered eating areas.

The Contractor shall submit to the engineer for approval plans for the layout of temporary construction buildings, facilities, fencing, access routes and anchoring systems, 10 days before installation of such temporary structures.

Fencing

The contractor shall provide temporary fencing around the site camp and for all works carried out in areas of active utilization by members of the public.

Signage

Signs warning of presence of construction hazards and requiring unauthorized persons to keep out of the construction area shall be posted on the fencing.

Living Accommodation

No employee accommodation will be allowed on site.

24 PERSONAL & OTHER PROTECTIVE EQUIPMENT

The Principal Contractor / Contractor shall identify the hazards in the workplace and deal with them. Personal Protective equipment (PPE) should, however, be the last resort and there should always first be an attempt to apply engineering and other solutions to mitigating hazardous situations before the issuing of PPE is considered.

Where it is not possible to create an absolutely safe and healthy workplace the Contractor shall inform employees regarding this and issue, free of charge, suitable equipment to protect them from any hazards being present and that allows them to work safely and without risk to health in the hazardous environment.

It is a further requirement that the Contractor maintain the said equipment, that he

instructs and trains the employees in the use of the equipment and ensures that the prescribed equipment is used by the employee/s.

Employees do not have the right to refuse to use/wear the protective equipment prescribed by the employer and, if it is impossible for an employee to use or wear prescribed protective equipment through health or any other reason, the employee cannot be allowed to continue working under the hazardous condition/s for which the equipment was prescribed but an alternative solution has to be found that may include relocating or discharging the employee.

The Contractor may not charge any fee to an employee for protective equipment prescribed by him/her but may charge for equipment under the following conditions:

- Where the employee requests additional issue in excess of what is prescribed
- Where the employee has patently abused or neglected the equipment leading to early failure
- Where the employee has lost the equipment

All employees shall, as a minimum, be required to wear the following PPE on site:

- **Hard hats** - All employees of the Contractor shall wear hard hats in areas where appropriate hazard notices are displayed. The Representative/Agent shall have the right to ban certain colours if they are similar to the Client's identifying colours. Hard hats shall not be painted or otherwise defaced.
- **Eye protection** - Suitable eye protection shall be worn in areas where appropriate hazard notices are displayed, or when grinding, chipping, breaking, drilling, arc-welding, cutting with oxyacetylene equipment or similar activities are taking place.
- **Musk** - Suitable and appropriate musk shall be worn in areas where appropriate hazard notices are displayed.
- **Hearing protection** - Suitable hearing protection shall be worn in areas where appropriate hazard notices are displayed.
- **Gloves** - All employees of the Contractor's shall wear suitable protective gloves in areas where appropriate hazard notices are displayed or when handling hot or hazardous materials or chemicals.
- **Clothing** - All employees of the Contractor shall wear suitable protective clothing

when working in proximity of machinery, power tools, hazardous materials or chemicals.

Information and Training

Employees should be provided with the instructions/training on how to use their PPE safely. Workers who are required to wear personal protective equipment must be trained on how to do the following:

- Use protective equipment properly,
- Know what kind of protective equipment is necessary,
- How to put on, adjust, wear, and take off personal protective equipment,
- Understand the limitations of personal protective equipment in protecting workers from hazards exposed to

PPE Maintenance and Storage

Without proper maintenance, the effectiveness of PPE cannot be assured. All PPE must be regularly inspected, kept clean, maintained and easily accessible and stored in accordance with the manufacturer's specifications. Where PPE is shared, such as visitor hard hats, laboratory coats etc., the relevant supervisor must ensure that the PPE is maintained in a clean and hygienic condition.

Replacement of PPE

The employer must ensure that they replace employee PPE in every **6 months in a year**, meaning that employee must be given PPE twice a year. The employer must ensure each employee has at **least TWO pairs of PPE**. There are however some basic warning signs that show that PPE needs replacing such as, rips, tears, holes, discoloration, degrading and soiling.

As an employer it's also your responsibility to train your staff about how to use, care and store their PPE, to ensure optimal safe usage and disposal of the product.

At the end of the day, you must ensure that PPE is provided to your team, they are using it and that it is clean, hygienic and in good working order. PPE is there to minimise any

risks to your staff so it's best to keep a close eye on how your employees treat, care for and use their PPE.

25 PUBLIC AND SITE VISITOR HEALTH & SAFETY

Both the Client and the Principal Contractor have a duty in terms of the OHS Act to do all that is reasonably practicable to prevent members of the public and site visitors from being adversely affected by the construction activities.

The Principal Contractor shall ensure that every person working on or visiting the site, as well as the public in general, shall be made aware of the dangers likely to arise from site activities, including the precautions to be taken to avoid or minimise those dangers.

A site visitor's register is to be kept on site and steps are to be taken to ensure that all visitors sign the visitors' register before entering the site.

An induction must be given to all visitors entering the site and proof thereof must be kept in the health and safety file. Visitor's PPE must be made available and at the cost of the contractor. Appropriate H&S notices and signs shall be posted up, but this shall not be the only measure taken.

The Contractor shall not undertake any night work without prior arrangement and a written work permit from Engineer. The Contractor shall ensure that adequate lighting is provided for all night work and failure to do so shall result in work being stopped

The construction site shall be suitably and sufficiently fenced off/ barricaded and or provided with controlled access points to prevent the entry of unauthorized persons.

26 ALCOHOL AND OTHER DRUGS

An employer or a user, as the case may be, shall not permit any person who is or who appears to be under the influence of intoxicating liquor or drugs, to enter or remain at a workplace.

No person at a workplace shall be under the influence of or have in his possession or partake of or offer any other person intoxicating liquor or drugs.

An employer or user, as the case may be, shall in the case where a person is taking medicines, only allow such person to perform duties at the workplace if the side effects of such medicine do not institute a threat to the health or safety of the person concerned or other persons at such workplace.

27 WORK STOPPAGES

The Client/Agent's representative reserves the right to stop work and issue a work stoppage non-conformance report whenever safety, health or environmental violations are observed for both Principal Contractors and/or their sub-contractors. Expenses incurred as a result of such work stoppage and standing time shall be for the Principal Contractors account. Any non-conformances/findings/observations found in these audits/inspections on sub-contractors shall be raised and discussed with the relevant Principal Contractor (with whom the sub-contractor is contracted with).

The conditions that lead to work stoppages are based on:

- Management of change – this is when there are changes to the work environment (e.g.: climatic changes) and/or construction work (e.g.: modifications to the design), in any phase of the construction project, and/or amendments with regards to DEVELOPMENT BANK OF SOUTH AFRICA LIMITED rules and regulations and/or legislative amendments;
- Unsafe acts/behaviours;
- Unsafe conditions;

The process to be followed to ensure the worksite is rendered safe:

- The relevant activity must be stopped;
- The Development Bank of South Africa Limited site/project manager and/or Principal Contractor and his subcontractors shall immediately remove the workforce from the work area and correct the health and safety or environmental

deficiencies by allowing only the people in the area that are competent to make the area safe.

- Principal Contractor and his subcontractors shall ensure that no other work is being performed during this time. Should the estimated time from the outset to make the area safe where life threatening/imminent danger situations exist, then the area will be barricaded and a sign placed with the wording “Unsafe Area – Authorized Access Only”.

Before the workforce is allowed back in the area, Principal Contractor and his subcontractors shall ensure:

- Investigation of the work stoppage and the area is to re-inspected by Contractor Safety Officer and supervisor and corrective actions taken documented on the work stoppage form;
- Sign off of the “Work Stoppage report” issued by the Development Bank of South Africa Limited Site/Representative/SHEQ to declare the area/activity/person/plant/or equipment safe for work.

Refer to requirements of Construction Regulation 5(q) of the OHS Act.

28 FACILITIES

Offices, ablutions, laboratory and dining facilities will be constructed during site establishment. Temporary works are to be managed by a competent person, all designs will be signed off by the designer and erected and maintained by competent appointed persons. The SANS 10085 is to be applied for all access scaffolding and any other Standards where appropriate.

Temporary ablution facilities are not to include formaldehyde products, and a ratio of 1:30 per gender is advised. It is preferable that a bacterial product is used.

PART B – SITE SPECIFIC REQUIREMENTS

29 FALL PROTECTION

A pre-emptive Risk Assessment shall be required for any work carried out above two metres from the ground or any floor level and will be classified as “Work in Elevated Positions”.

As far as is practicable, any person working in an elevated position shall work from a platform, ladder or other device that is at least as safe as if he/she is working at ground level and whilst working in this position be wearing a single belt with lanyard that shall be worn to prevent the person falling from the platform, ladder or other device utilized. This safety belt shall be, as far as is possible, secured to a point away from the edge over which the person might fall and the lanyard shall be of such a length that the person will not be able to move over the edge.

Alternatively, any platform, slab, deck or surface forming an edge over which a person may fall may be fitted with guard rails at two different heights as prescribed in SANS 1085: Code of Practice for the Design, Erection, Use and Inspection of Access Scaffolding.

Where the above-mentioned requirement is not practicable, the person shall be provided with a full body harness that shall be worn and attached above the wearer’s head at all times and the lanyard must be fitted with a shock absorbing device. Only double lanyard fall arrest harnesses are permitted on site.

Where the above-mentioned requirements are not practicable, a suitable catch net shall be erected. Workers working in elevated positions shall be trained to use this safely and without risk to safety and health. Where work on roofs is carried out, the Risk Assessment shall take into account the possibility of persons falling through fragile material, skylights and openings in the roof.

Where ladders are used – they are to be of good construction, sound material and adequate strength and suitable to the purpose for which it is used (e.g. electricians shall use suitable insulated ladders). Fitted with non-skid devices at the bottom of the stiles or with hooks or similar devices at the tops of the stiles.

Except for extension ladders, no ladder shall be used which is longer than 4,5m and no

ladder shall have its reach extended by tying together two or more ladders. All ladders shall be inspected weekly and a log shall be kept of the inspections.

30 STRUCTURES

The Principal Contractor / Contractor shall ensure that:

- No structure will be overloaded that it may become unsafe.
- He/she has received from the designer the following information:
- Information on known or anticipated hazards relating to the construction work and the relevant information required for the safe execution of the construction work.
- The loading the structure is designed to withstand.
- The methods and sequence of the construction process.
- Drawings will be kept on site and made available for inspection by an inspector, contractors, client, client's agent or employee.

31 TEMPORARY WORKS

- A contractor must appoint a temporary works designer in writing to design, inspect and approve the erected temporary works on site before use.
- A contractor must ensure that—
 - all temporary works structures are adequately erected, supported, braced and maintained by a competent person so that they are capable of supporting all anticipated vertical and lateral loads that may be applied to them, and that no loads are imposed onto the structure that the structure is not designed to withstand;
 - all temporary works structures are done with close reference to the structural design drawings, and where any uncertainty exists the structural designer should be consulted;
 - detailed activity specific drawings pertaining to the design of temporary works structures are kept on the site and are available on request to an inspector, other contractors, the client, the client's agent or any employee;
 - all persons required to erect, move or dismantle temporary works structures are provided with adequate training and instruction to perform those operations safely;
 - all equipment used in temporary works structure are carefully examined and checked for suitability by a competent person, before being used;
 - all temporary works structures are inspected by a competent person immediately before, during and after the placement of concrete, after inclement weather or any other imposed load and at least on a daily basis until the temporary works structure has been removed and the
 - results have been recorded in a register and made available on site;
 - no person may cast concrete, until authorization in writing has been given by the competent person contemplated in paragraph

Hidden Hazards Penetration

In order to minimize the impact of hidden hazards when performing penetration or excavation activities the following process should be followed:

- a drawing review of the affected area,
- a site investigation,
- detection using instrumentation (as appropriate),
- the use of appropriate tools
- the use of PPE.

Workers engaging in excavation or penetration activities shall use tools, which are in good working condition and utilise PPE, electrically rated gloves and double insulated tools as appropriate.

To mitigate risk, the contractor shall ensure that adequate site investigation, utilising methods that would not penetrate hidden hazards (e.g. visual inspection, detection using instrumentation) is performed prior to any excavation or penetration activity. If hidden hazards cannot be identified through site investigation, the Client shall be notified prior to excavation or penetration activities and appropriate PPE shall be worn during the work activity.

Authorisation

Where excavations will exceed 1,5 m in depth, the Principal Contractor / Contractor shall submit a Method Statement for approval before commencing with the excavation. Permission to proceed will only be granted once the Risk Assessment and Method Statement are approved.

The Principal Contractor / Contractor shall ensure that all excavation work is carried out under the supervision of a competent person who has been appointed in writing.

The Principal Contractor / Contractor shall evaluate, as far as is reasonably practicable, the stability of the ground before excavation work begins.

Every Principal Contractor / Contractor who performs excavation work shall:

- Take suitable and sufficient steps in order to prevent, as far as is reasonably practicable, any person from being buried or trapped by a fall or dislodgement of material in an

excavation;

- Not require or permit any person to work in an excavation which has not been adequately shored or braced: Provided that shoring and bracing may not be necessary where:
- The sides of the excavation are sloped to at least the maximum angle of repose measured relative to the horizontal plane; or such an excavation is in stable material:

Provided that: -

- a. Permission being given in writing by the appointed competent person contemplated in applicable

Construction Regulation upon evaluation by him or her of the site conditions; and

- b. Where any uncertainty pertaining to the stability of the soil still exists, the decision from a professional engineer or a professional technologist competent in excavations shall be decisive and such a decision shall be noted in writing and signed by both the competent person contemplated in the applicable *Construction*

Regulation and the professional engineer or technologist, as the case may be;

- Take steps to ensure that the shoring or bracing contemplated in the above paragraph is designed and constructed in such a manner rendering it strong enough to support the sides of the excavation in question;
- Ensure that no load, material, plant or equipment is placed or moved near the edge of any excavation where it is likely to cause its collapse and thereby endangering the safety of, any person, unless precautions such as the revision of sufficient and suitable shoring or bracing are taken to prevent the sides from collapsing;
- Ensure that where the stability of an adjoining building, structure or road is likely to be affected by the making of an excavation, the steps are taken that may be necessary to ensure the stability of such building, structure or road and the safety of persons;
- Cause convenient and safe means of access to be provided to every excavation in which persons are required to work and such access shall not be further than 6m from the point where any worker within the excavation is working;
- Ascertain as far as is reasonably practicable the location and nature of electricity, water, gas or other similar services which may in any way be affected by the work to be performed, and shall before the commencement of excavation work that may affect any such service, take the steps that may be necessary to render the circumstances safe for all persons involved;
- Cause every excavation, including all bracing and shoring, to be inspected:
 - daily, prior to each shift;

- after every blasting operation;
- after an unexpected fall of ground; • after substantial damage to supports; and after rain.
- by the competent person contemplated in sub regulation (1), in order to pronounce the safety of the excavation to ensure the safety of persons, and those results are to be recorded in a register kept on site and made available to an inspector, client, client's agent, contractor or employee upon request;
- Cause every excavation which is accessible to the public or which is adjacent to public roads or thoroughfares, or whereby the safety of persons may be endangered, to be:
- Adequately protected by a barrier or fence of at least one metre in height and as close to the excavation as is practicable; and
- Provided with warning illuminates or any other clearly visible boundary indicators at night or when visibility is poor

Upon entering an excavation, the requirements of General Safety Regulation 5 of the Act shall be observed:

33 DUST & NOISE

The Contractor shall monitor dust and noise caused by mobile equipment, generators and other equipment during construction. Factors such as wind can often affect the intensity to which these impacts are experienced.

To ensure that noise does not constitute a disturbance during construction activities, all construction work shall occur between specific working hours. This must be stipulated in the contract.

Mitigation measures to be implemented as required / agreed upon with the Project Manager/ Project Environmental Control Officer/Advisor.

Dust suppression measures must be in place to reduce the dust caused by the movement of heavy vehicles. All dust road in use should be watered a minimum of twice a day.

34 HOUSEKEEPING

The Principal Contractor / Contractor to ensure that:

- Housekeeping is continuously implemented;

- Materials & equipment are properly stored;
- Scrap, waste & debris are removed regularly;
- Materials placed for use are placed safely and not allowed to accumulate or cause obstruction to free flow of pedestrian and vehicular traffic;
- Waste & debris not to be removed by throwing from heights but by chute or crane;
- Construction sites in built-up areas, adjacent to a public way, are suitably and sufficiently fenced off and provided with controlled access points to prevent the entry of unauthorized persons;
- A catch platform or net is erected above an entrance or passageway or above a place where persons work or pass under, or fence off the danger area if work is being performed above such entrance, passageway, or place so as to ensure that all persons are kept safe in the case of danger or possibility of persons being struck by falling objects.
- An unimpeded work space is maintained for every employee;
- Every workplace is kept clean, orderly and free of tools etc. that are not required for the work being done materials;
- As far as is practicable, every floor, walkway, stair, passage and gangway is kept in good state of repair, skid-free and free of obstruction, waste and materials;
- The walls and roof of every indoors workplace is sound and leak-free;
- Openings in floors, hatchways, stairways and open sides of floors or buildings are barricaded, fences, boarded over or provided with protection to prevent persons from falling.

35 ERGONOMICS

Ergonomic factors need to be considered during all stages of construction. Lifting heavy loads, and repetitive work, while synonymous with construction, are to be considered a high risk and mechanical aids and the hierarchy of control are to be considered and applied. Heavy componentry, confined workspaces and installation requirements are to be considered and mitigated where possible. Where a design issue exists, the client is to be approached to consider alternatives. Method statements, HIRA and DSTIs are to include ergonomic and health issues.

36 SPEED RESTRICTIONS, SIGNAGE AND PROTECTION

The Principal Contractor shall ensure that all persons in its employ, all Contractors, and all those that are visiting the site are aware and comply with the site speed restriction(s).

Separate vehicle and pedestrian access routes shall be provided, maintained, controlled, and enforced. Signage shall be provided and should comply as per OHS Act and the South African Road Traffic legislation with specific reference to Manual 13.

37 ACCESS SCAFFOLDING

Access Scaffolding shall be erected, used and maintained safely in accordance with Construction Regulation and SA Bureau of Standards Code of Practice, SANS 1085 entitled, "The Design, Erection, Use & Inspection of Access Scaffolding.

Every contractor using access scaffolding, shall ensure that such scaffolding, when used, complies with the safety standards incorporated for this purpose into these Regulations under section 44 of the Act.

Detailed consideration shall be given to all scaffolding to ensure that it is properly planned to meet the working requirements, designed to carry the necessary loadings and maintained in a sound condition. It shall also be ensured that there is sufficient material available to erect the scaffolding properly.

The contractor shall ensure that all scaffolding work operations are carried out under the supervision of a competent person who has been appointed in writing and that all scaffold erectors, team leaders and inspectors are competent to carry out their work.

The Contractor shall ensure that all contractors that erect scaffolding are in compliance to SANS 10085-1 and have on site a copy of SANS 10085-1 as amended.

- The Contractor shall ensure that all contractors that make use of scaffolding have on site a copy of SANS 10085-1 as amended.
- The Contractor shall ensure that all contractors ensure that all scaffolding is in compliance to SANS 1008-1.

NB The Contractor shall ensure that a notice board containing the names and contact details of their Scaffolding erectors and scaffolding inspectors are clearly displayed and securely fixed to

their scaffolding.

38 PLANT AND MACHINERY

38.1 Construction Vehicles & Mobile Plant

“Construction Plant” includes all types of plant including but not limited to, fixtures, fittings, implements, equipment, tools and appliances, and also anything which is used for any purpose in connection with such plant cranes, piling rigs, excavators, road vehicles, and all lifting equipment etc.

The Principal Contractor shall ensure that all such plant complies with the requirements of the OHS Act 85/1993, Driven Machinery Regulations and Construction Regulations. The Principal Contractor and all relevant contractors shall inspect and keep records of inspections of the construction plant used on site. Only authorized/competent persons are to use machinery under proper supervision. Appropriate PPE and Clothing must be provided and maintained in good condition at all times. No unsafe or dangerous machinery, equipment, plant or tools may be brought onto, allowed or used on the construction site.

Construction Vehicles and Mobile Plant shall be inspected by a competent person prior to being allowed on a project site and suppliers of hired vehicles, plant and equipment will be required to comply with this specification as well as the Act and Regulations.

38.2 Explosive Powered Tools (EPT)

No contractor shall use or permit any person to use an explosive powered tool, unless—

- a) It is provided with a protective guard around the muzzle end, which effectively confines any flying fragments or particles; and
- b) The firing mechanism is so designed that the explosive powered tool will not function unless—
 - It is held against the surface with a force of at least twice its weight; and
 - The angle of inclination of the barrel to the work surface is not more than 15 degrees from a right angle
 - Provided that the provisions of this sub regulation shall not apply to explosive powered tools in which the energy of the cartridge is transmitted to the bolts, nails or similar relevant objects by means of an intermediate piston which has a limited distance of travel.

The Contractor or user shall ensure that:

- Only cartridges suited for the explosive powered tool and the work to be performed are used;
- The explosive powered tool is cleaned and examined daily before use and as often as may be necessary for its safe operation by a competent person who has been appointed;
- That the safety devices are in proper working order prior to use;
- When not in use, the explosive powered tool and the cartridges are locked up in a safe place, which is inaccessible to unauthorised persons;
- The explosive powered tool is not stored in a loaded condition;
- A warning notice is displayed in a conspicuous manner wherever the explosive powered tool is used;
- The issuing and collection of cartridges and nails or studs is—
- Controlled and done in writing by a person having been appointed in writing; and
- Recorded in a register and that the recipient has accordingly signed for the receipt thereof as well as the returning of any spent and unspent cartridges.
- No contractor shall permit or require any person to use an explosive powered tool unless such person has been—
- Provided with and uses suitable protective equipment; and
- Trained in the operation, maintenance and use of such a tool.

38.3 Fire Extinguishers and Fire Fighting Equipment

The Principal Contractor and relevant Contractors must ensure all appropriate measures are taken to avoid the risk of fire shall provide adequate, regularly serviced firefighting equipment located at strategic points on site, specific to the classes of fire likely to occur. The appropriate notices and signs must be posted up as required. The fire equipment contemplated in previous paragraph is inspected by a competent person, who has been appointed in writing for that purpose, in the manner indicated by the manufacturer thereof and a sufficient number of workers are trained in the use of fire-extinguishing equipment.

38.4 Concrete Works

The Principal contractor must ensure that all practicable measures are taken to prevent the uncontrolled collapse of new or existing structures or any part thereof, which may become unstable or is in a temporary state of weakness or instability due to the carrying out of construction work. No structure must be loaded in a manner which would render it unsafe. Principal contractor

must ensure that the beneficiaries received proper PPE when working with cement.

The Principal contractor must ensure he has detailed method statement and safe work procedures approved by the principal agent before commencement of all the concrete activities.

38.5 Lifting Machines and Tackle (where and if required)

The Principal Contractor and all Contractors shall ensure that lifting machinery and tackle is inspected before use and thereafter in accordance with the Driven Machinery Regulations and the Construction Regulations (section 20). A competent lifting machinery and tackle inspector need to be appointed in writing and must inspect the equipment daily or before use, taking into account that:

- All lifting machinery and tackle have a safe working load clearly indicated;
- Regular inspection and servicing are carried out;
- Records are kept of inspections and of service certificates;
- There is a proper supervision in terms of guiding the loads that includes a trained banksman to direct lifting operations and check lifting tackle;
- The tower crane bases have been approved by an engineer;
- The operators are competent as well as physically and psychologically fit to work and in possession of a medical certificate of fitness to be available on site.

38.6 Brick Works

The Principal Contractor must ensure approved method statement for brick work is in place before commencement of the activity.

The Principal Contractor must ensure that all employees are trained in mixing cement in the correct quantities.

All employees required to mix cement must wear dust masks to prevent exposure to cancer from inhalation of dust.

All mixing equipment must be inspected before use, and the inspection recorded in a register.

Good housekeeping practices must be practiced at all times, to ensure a trip free and clean workplace.

Employees required to lift heavy cement or sand bags must be trained in proper material lifting practices.

When brickwork is done at night, the site supervisor must ensure that there is adequate provision made for lighting.

38.7 Electrical Installations and Works

Electrical installation work (by definition: "installation work" means

- (a) the installation, extension, modification or repair of an electrical installation;
- (b) the connection of machinery at the supply terminals of such machinery; or (e) the inspection, testing and verification of electrical installations for the purpose of issuing a certificate of compliance; shall be carried out by competent persons, and controlled by a competent person (Registered Person) that has been appointed to do so in writing, in accordance with Electrical Installation Regulations and the Electrical Machinery Regulations.

Temporary electrical installations shall be inspected at least once per week by a competent person and a record of the inspections kept in the Occupational Health & Safety File.

The Contractor shall ensure that:

- existing electrical services are located and marked before construction commences and during the progress thereof. Where this is not possible, workers with jackhammers etc. are to be protected against electric shock by the use of suitable protective equipment like insulated handles, rubber mats etc.
- electrical installations and -machinery are sufficiently robust to withstand working conditions on site.
- all electrical machinery used on site is inspected before start-up on a daily basis by a competent person and that a record of the inspection is kept in the Occupational Health & Safety File.

A system of control shall be established in order that no unauthorized person can energize a circuit, open a valve, or activate a machine on which people are working or doing maintenance, even if equipment, plant or machinery is out of commission for any period, thus eliminating injuries and damage to people and equipment as far as is reasonably practicable.

Physical/mechanical lock-out systems shall be part of the safety system and included in training. Lockouts shall be tagged and the system tested before commencing with any work or repairs. This lock-out procedure shall be adhered to by all Contractors on site.

39 HAZARDOUS CHEMICAL AGENTS(HCA) 2021

Notice R 11266 in GG 44366 or 31 March 2021

The contractor shall provide to the client the Safety Data Sheets (SDS) and a HCA register for all hazardous substances that he brings on site, including quantities.

- ☐ 14B:1 (d) an Contractor must—
 - ☐ (i) ensure that an HCA that is used, handled or stored at the workplace is correctly labelled;
 - ☐ (ii) ensure that a container labelled for an HCA is used for only the use, handling or storage of that HCA;
 - ☐ (iii) as far as is reasonably practicable, ensure that when an HCA is transferred or decanted at the workplace, from its original container into a destination container, the destination container is correctly labelled for that HCA;
- ☐ .
- ☐ The contractor shall store and dispose of hazardous or combustible materials according to applicable regulations. Storage areas shall be clearly marked. The contractor shall provide the required approved fire fighting systems.
- ☐ The work practices and procedures that must be followed for the use, handling, storage, transportation, spillage and disposal of an HCA, in emergency situations, as well as for good housekeeping and personal hygiene;
- ☐ An employer must, as far as is reasonably practicable—
 - ☐ (a) not issue any used personal protective equipment to an employee, unless the relevant protective equipment is decontaminated and sterilised;
 - ☐ (b) provide separate containers or storage facilities for personal protective equipment when not in use; and
 - ☐ (c) ensure that all personal protective equipment not in use is stored in only the place provided therefor.
- ☐ The contractor shall clean and dispose of any spillage in accordance with local regulations. The spillage areas shall be safe and clean.
- ☐ The contractor shall take the necessary storage and disposal precautions to prevent any spillage from hazardous materials and more specifically from fuel, grease and oil. No drainage is allowed in the sewer system.

- When a spillage occurs in the contractor's areas, the contractor shall immediately notify the clients' sitemanager and take all necessary actions to contain and dispose of such spillage at his own expense.

The Principal Contractor and other relevant Contractors shall provide the necessary training and information regarding the use, transport, and storage of HCA. The Principal Contractor shall ensure that the use, transport, and storage of HCA are carried out as prescribed by the HCA Regulations. The Contractor shall ensure that all hazardous chemicals on site have a Safety Data Sheet (SDS) on site and the users are made aware of the hazards and precautions that need to be taken when using the chemicals. The First Aiders must be made aware of the SDS and how to treat HCA incidents appropriately.

Where flammable liquids are being used or stored, this must be done in a manner which would not cause a fire or explosion hazard.

The Principal Contractor shall have Safety Data Sheets (SDS) readily available for flammable, hazardous and toxic chemical substances and materials brought onto site and shall ensure that his employees are trained in these SDS's. Proof of communication must be recorded.

Flammable, hazardous or toxic chemical substances may not be stored in empty food or drink containers. Empty flammable, hazardous and toxic containers must be disposed of in a safe manner, which will prevent further use of such a container.

Asbestos Abatement Regulations. 2020 Government Notice R1196 in GG 43893

Disposal of asbestos

21. An employer or self-employed person must, as far as is reasonably practicable, ensure that—

(a) all asbestos waste is placed in containers that will prevent exposure during handling;

(b) the premises, structure or area are thoroughly checked to ensure that all asbestos waste intended for disposal has been removed;

(c) all vehicles, reusable containers or any other similar articles, which have been in contact with asbestos waste, are cleaned and decontaminated after use in such a way that such vehicles, containers or similar articles do not cause a hazard inside or outside the workplace concerned;

(d) a document is obtained from the asbestos disposal site, contemplated in subregulation (e), for

all asbestos waste removed from the workplace; all asbestos waste is disposed of only on sites specifically designated for this purpose in terms of the Environment Conservation Act, 1989, and the National Environmental Management: Waste Act, 2008;

(e) all persons involved in the collection, transport and disposal of asbestos waste, who may be exposed to that waste, are provided with suitable personal protective equipment;

(f) the drivers of vehicles carrying asbestos waste are provided with written instructions on safety precautions and emergency procedures; and

(g) where the services of a contractor for the transport and disposal of asbestos waste are used, the contractor complies with the provisions of these Regulations.

Asbestos clearance certificate

22. Following the completion of type 2 or type 3 asbestos work, an approved inspection authority must—

(a) conduct a thorough visual inspection of the relevant work area;

(b) conduct air sampling to ensure compliance with the clearance indicator;

(c) ensure that all asbestos waste has been removed in accordance with the requirements of regulation 21; and

(d) issue a written declaration for the purpose of clearance certification.

40. USE & STORAGE OF FLAMMABLES

The contractor shall ensure that—

- Where flammable liquids are being used, applied or stored at the workplace concerned, this is done in such a manner which would cause no fire or explosion hazard, and that the workplace is effectively ventilated: Provided that where the workplace cannot effectively be ventilated.
- Every employee involved is provided with a respirator, mask or breathing apparatus of a type approved by the chief inspector, and Steps are taken to ensure that every such employee, while using or applying flammable liquid, uses the apparatus supplied to him or her;
- No person smokes in any place in which flammable liquid is used or stored, and such contractor shall affix a suitable and conspicuous notice at all entrances to any such areas prohibiting such smoking;
- Flammable liquids on a construction site is stored in a well-ventilated reasonably fire

resistant container, cage or room and kept locked with proper access control measures in place;

- An adequate amount of efficient fire-fighting equipment is installed in suitable locations around the flammable liquids store with the recognized symbolic signs;
- Only the quantity of flammable liquid needed for work on one day is to be taken out of the store for use;
- All containers holding flammable liquids are kept tightly closed when not in actual use and, after their contents have been used up, to be removed from the construction site and safely disposed of;
- Where flammable liquids are decanted, the metal containers are bonded or earthed; and
- No flammable material such as cotton waste, paper, cleaning rags or similar material is stored together with flammable liquids.
- Stored in a locked well-ventilated reasonably fire-resistant container, cage or room conspicuously demarcated as “Flammable Store – No Smoking or Naked Lights”;
- the flammables store to be constructed of two-hour fire retardant walls and roof and separated from adjoining rooms or workplaces by means of a two-hour fire retardant fire wall;
- All electrical switches and fittings to be of a flameproof design;
- Any work done with tools in a flammables store or work areas to be of a non-sparking nature;
- The flammable store to be designed and constructed to, in the event of spillage of liquids in the store, to contain the full quantity + 10% of the liquids stored;
- A sign indicating the capacity of the store to be displayed on the door;
- Containers (including empty containers) to be kept closed to prevent fumes/vapours from escaping and accumulating in low lying areas;
- Welding and other flammable gases to be stored segregated as to type of gas and empty and full cylinders.

41. OCCUPATIONAL HEALTH AND SAFETY BUDGET

GUIDELINE OCCUPATIONAL HEALTH AND SAFETY BILL OF QUANTITIES (OHS BOQ)

Item No	Short Description	Unit	Quantity	Rate	Amount
1.	Occupational Health and Safety:				
1.1	General safety obligations				R -
1.1.1	Mandatory Signage / Road signs	Sum			
1.1.2	Safety Poster including Acts & Regulations	Sum			
1.1.3	Safety office / shed or container	Month			
1.1.4	Allowance for toilets (Gender specific)	Each			
1.1.5	Lay down & storage areas	Sum			
1.1.6	Employee eating area	Sum			
1.1.7	Hand washing & sanitizing stations	Sum			
1.2	Safety Planning				R -
1.2.1	Safety file and Risk Assessment	Sum			
1.2.2	Health and safety plan	Sum			
1.3.6	Medical assessment of employees (Entrance & Exit) & Vaccines for employees working within sewer	Sum			
1.3.7	Fall Protection Plan	Sum			
1.3.8	Traffic Management Plan	Sum			
1.3	Safety Personnel				R -
1.3.2	Construction safety officer (Full time)	Month			
1.4	OHS Training				R -
1.4.1	Safety Representative Training	Each			
1.4.2	First Aid Training	Each			
1.4.3	Construction vehicle operators	Each			
1.4.4	Working at Heights training	Each			
1.4.5	Fire fighting training	Each			
1.5	Personal Protective Equipment (PPE)				R -
1.5.1	Work overalls - Reflective Conti suits (Min 2 pairs each)	Each			
1.5.2	Safety Shoes	Each			
1.5.3	Gum Boots	Each			
1.5.4	Hardhats	Each			
1.5.5	Reflective vests	Each			
1.5.6	Ear Plugs (100's)	Box			

1.5.7	Ear Muffs	Each			
1.5.8	Full body Safety Harness (Double lanyard)	Each			
1.5.9	Life Lines	Each			
1.5.10	Dust / Cloth Masks (100s)	Box			
1.5.11	Eye protection (Safety Glasses)	Each			
1.5.12	Hand Protection (Gloves) 100pcs	Bulk			
1.5.13	Barricade Netting (1 x 50m)	Sum			
1.5.14	Edge protection material & equipment	Sum			
1.5.15	Fire Extinguishers (9kg)	Each			
1.5.16	First Aid box (GR3 kit). Including refill kits required.	Each			
1.5.17	Spill kit (120litre)	Each			
1.5.18	Lock out items (locks, tags,safes, etc..)	Sum			
1.5.19	Emergency air siren	Each			
1.5.20	Rescue equipment	Sum			
1.6	SUB TOTAL				R
					-
1.7	VAT 15%				R
					-
1.8	TOTAL				R
					-