



PROJECT

GEORGE MUNICIPALITY

PROPOSED ALTERATIONS TO WATER TREATMENT WORK BUILDING,
DENNEOORD GEORGE



ISHS

Date of survey: 10 FEBRUARY 2017

Document Compiled by:

Intergrated Safety and Health Systems (Pty) Ltd

86 Mitchell Street
George
6530

PO Box 3286
George Industria
6536

REVISION 1

Purpose of revision:	
Revised by:	
Designation:	
Signature:	
Date:	

REVISION 2

Purpose of revision:	
Revised by:	
Designation:	
Signature:	
Date:	

Copyright Disclaimer

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law.

CONTENTS

Title

Terms of Reference

Executive summary

Report

1. Hazard Identification and Risk Assessment

1.1 Objective of survey

1.2 Statutory requirements

1.3 HIRA Method

1.4 Results and Discussion

1.5 Conclusion

1.6 **Annexure 1**

Please find risk assessment template (Annexure 1) which can be used by the contractor to manage additional identified risks on site.

2. Specification

TITLE

The Hazard Identification and Risk Assessment of Occupational Health and Safety parameters on the premises of: **GEORGE MUNICIPALITY: PROPOSEDD ALTERATIONS TO WATER TREATMENT WORKS BUILDING, DENNEOORD, GEORGE**

TERMS OF REFERENCE

Integrated Safety and Health Systems (Pty) Ltd conducted a Health and Safety Risk Assessment based on proposed scope of works set out, approved architectural drawings and site visit.

EXECUTIVE SUMMARY

All construction activities can subject workers to levels of environmental stressors and safety factors, e.g. noise, fumes, revolving machinery, tools, moving vehicles etc., which permanently harm the health and physical wellbeing of persons at work and greatly reduce productivity. The Occupational Health and Safety Act of 1993, and its relevant regulations, require employers to conduct surveys of the actual situation at every site. Measurements must be taken and the identified problems addressed by the employer. Improved conditions ensure better worker morale, loyalty and greater productivity.

This assessment and observations were made at the above site under the conditions which prevailed on the date of the survey. Detailed conclusions are given in the relevant sections of this report.

SCOPE OF WORK

This project, the construction of the **GEORGE MUNICIPALITY: PROPOSED ALTERATIONS TO WATER TREATMENT WORKS BUILDING, DENNEOORD, GEORGE**, consists of the following elements:

The brief outline for the scope of work is as follows:

-) Demolition Work (Breaking down and removing brickwork)
-) Removal of Asbestos containing material (Roof covering, gutters, downpipes, barge boards, etc)
-) Removal of doors, windows, screens, etc
-) Installation of Standard "Wispeco" powdercoated aluminium windows
-) Installation of 0.47mm Thick ZincAL (AZ150) IBR sheeting fixed to purlins (purlins elsewhere) as per manufacturer's recommendations
-) Installation of "Everite Nutec" or equal and approved fascia and barge boards fixed to end of rafters

BELOW IMAGES OF EXISTING ELEMENTS SPECIFIC TO THE SITE.



LOCATION OF SITE AND ELEMENTS SPECIFIC TO THE LOCATION (MUNICIPAL BY-LAWS, WEATHER FACTORS, GEOGRAPHICAL FACTORS)

The site (old sludge centrifuge building) for the proposed alterations to existing water treatment works now electrical hv simulator is situated in 11th avenue Denneoord, George.

The positions and proposed alterations is indicated on the drawings provided by the client.

-) The Contractor shall ensure that no damage whatsoever is caused as a result of his operations or otherwise by his workmen in the areas adjacent to the site. The movement of plant and workmen shall be restricted to the construction areas and essential access routes. The Contractor's workmen will not be permitted in any area which may be designated by the Employer as "Restricted".
-) Special attention and consideration to internal Municipal Regulations should be strictly adhered to and all Procedures, PPE, Training, MSDS availability, Adherence and Emergency Actions and Plans of the facility should be adopted.
-) Hepatitis A&B shots are prescribed for all the labourers on site and highly recommended for all professionals on site, due to previous plant activities.
(if applicable)

- J Each service provider is responsible for providing Hepatitis A&B shots for their employees. **(if applicable)**
- J Contractor should consider the specific working environment concerning existing site conditions and follow strict hygiene protocols and encourage good hygiene practices for all workers on site.

HAZARD IDENTIFICATION AND RISK ASSESSEMENT

1.1 OBJECTIVE OF SURVEY

A HIRA (Hazard Identification and Risk Assessment) was conducted based on scope of works set out and site visit: **GEORGE MUNICIPALITY: PROPOSED ALTERATIONS TO WATER TREATMENT WORKS BUILDING, DENNEOORD, GEORGE**

The objective of this HIRA was to comply with statutory requirements, inform the client of the occupational health and safety risk factors to which persons will be exposed when performing Construction activities.

It must be noted that perceptions were used during the HIRA and is not a quantifying survey and should only be used as an indicator for risk areas.

1.2 STATUTORY REQUIREMENTS

Section 9(1) of the OCCUPATIONAL HEALTH and SAFETY ACT 1993 (Act no. 85 of 1993), requires inter alia that the employer shall establish as far as is reasonably practicable, what the hazards to the health and safety of persons are attached to any work which is performed, further establish what precautionary measures should be taken with respect to such work and he shall provide the necessary means to apply such precautionary measures. The construction regulations further requires that a baseline risk assessment for an intended construction work project be compiled and a suitable, sufficiently documented and coherent site specific health and safety specification for the intended construction work based on the baseline risk assessment to be prepared.

1.3 HIRA METHOD

During the survey the presence of occupational health stresses and safety factors (i.e. chemical, physical and ergonomically) were considered, the severity of the risk factor, the frequency of exposure to the risk factor and possibility of occupational decease or injury was assessed and weights allocated on a scale of 1 – 5. Each of these weights carries a certain point's value as follows.

CATEGORY	SEVERITY	FREQUENCY	POSSIBILITY
1	40	10	10
2	15	6	6
3	7	3	3
4	3	2	1
5	1	1	0,5

A risk profile of the hazard is obtained by the multiplication of weights awarded (i.e. Noise hazard: - sev 7x freq 6 x poss 3 = 126 substantial risk) and the classification is as follows:

More than 400	Very high risk	Consider stopping action
200 – 400	High risk	Immediate remedial action
70 – 200	Substantial risk	Remedial action required
20 – 70	Possible risk	Attention necessary
Below 20	Possibility of risk	Risk possible, but acceptable

1.4 RESULTS AND DISCUSSION

The HIRA was conducted for construction conditions based on proposed scope of works set out, proposed architectural drawings and site visit.

Activities are evaluated on the exposure to the following risk factors: **Chemical and Biological Hazards, Physical Hazards, Ergonomic Hazards and Behavioral Hazards**

The following risks classification was identified.

1.4.1 Very High Risk (Physical, Chemical, Biological Hazards) (400 +)

1. Working with Asbestos containing material
2. Working at heights
 - J Roof Work

1.4.2. High Risk (200 – 400 points) Physical, Chemical, Biological Hazards

1. Demolition activities
2. Unintentional Contact (Impalement, entrapment, collapse, collisions) with structures, plant and equipment, other vehicles and pedestrians (exposed v-belts, pulleys, chains, flammable liquids)
3. Transport of Labourers, work tools and equipment
4. Electrocution/Shock through existing services, Electrical Installations or use of electricity inter alia, electrical tools.
5. Improper use of tools/equipment; equipment not calibrated/serviced/inspected/load tested
6. Improper stacking of equipment/material;
7. Company Safety Culture and worker perception of risk (behavioral/horseplay)
8. Negligence of Sub Contractors.
9. Hotworks

1.4.3 Substantial Risk (70 – 200 points) Chemical, Biological, Physical and Ergonomic Hazards

1. Contact with:
 - J Fuels,
 - J Erosive substances
 - J Oils
 - J Ejected Particles

- J Fumes
 - J Dust
2. Contact with:
 - J Living things, or substances produced by living things,
 - J Bacteria,
 - J Viruses,
 - J Fungi
 - J Parasites
 3. Working With Concrete and Mortar (mixing,pouring,transport,dust)
 4. Loading and offloading of heavy Machinery/ Tools/ Equipment/ Materials
 5. Manual handling (lifting, carrying) heavy construction equipment and material
 6. Over Exposure to Weather conditions: - Temperatures – Hot, cold, rainy,windy conditions
 7. NIHL
 8. Fire Fighting

1.4.4 Possible Risk (20 – 70 points) Chemical, Biological, Physical and Ergonomic Hazards

1. Managing of visitors (site entrance and lack of site parameter fencing)
2. Construction Risk to public/ public disturbance
3. Housekeeping negligence (stacking and storage)
4. Contact with Existing services
5. Working outside normal working hours
6. Biological agents (existing sewerage lines)- if applicable

1.5 CONCLUSION

From the HIRA investigation, it was concluded that working with asbestos containing material and working at height are deemed as very high Risk activities. Contractor should consider pre-work risk assessments for these activities based on actual conditions, scope and possibilities. A registered asbestos contractor must be appointed for all asbestos related activities and strict adherence to the OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO. 85 OF 1993) ASBESTOS REGULATIONS, GNR.155 10 February 2002 must be implemented.

Competency of key personnel inclusive of induction and training of general workers derived from safe work procedures for Risks identified is of high importance. All prescribed regulation and industry standard practices must be implemented.

All Hazards identified must be controlled with relevant hierarchy of controls with the overall objective to maintain safety of workers, service providers and plant personnel on site.

The Contractor must ensure that all areas which are affected by the works are kept in a safe condition and demarcation of excavations, work, storage and waste areas should be implemented and maintained continuously.

Special consideration and attention should be devoted to the location and elements specific findings concerning the working environment and prescribed vaccinations, valid medical certificates, hygiene protocols and all other internal procedures of the facility and George Municipality.

Annexure 1

ADDITIONAL RISK ASSESSMENT

ASSESSED BY:	COMPANY:
DATE OF ASSESSMENT:	TEL/CELL:
AREA/ WORK SITE ASSESSED:	

INDICATE WORK TO BE DONE, ACTIVITIES/ PROCESSES, TODAY:				
INDICATE RISKS IDENTIFIED. INCLUDE WORKERS, VISITORS & THE PUBLIC WHO MAY BE AFFECTED BY WORK TO BE DONE, ACTIVITIES/ PROCESSES. <u>NB: ALL RISKS ARE TO BE TREATED AS HIGH RISKS.</u>	1. ADVERSE ENVIRONMENT	2. ASBESTOS	3. ASPHYXIATION (CO2, N2, ETC)	
	4. BURNS/SCALDS	5. COLLAPSE (e.g. SCAFFOLD/ FLOOR PLATES)		6. COLLISION
	7. CRUSHING	8. DROWNING	9. ELECTRICUTION	
	10. ENTANGLEMENT IN MOVING OBJECTS	11. ENTRAPMENT		12. EXPLOSION (IGNITION SOURCES)
	13. EXPOSURE TO PATHOGENS	14. EYE INJURY/STRAIN		15. FALLING FROM HEIGHTS (PERSONNEL)
	16. FIRE	17. HIGH PRESSURE INJECTION INJURY		18. IMPACT INJURY FROM FLYING OBJECTS
	19. INGESTION OF CHEMICALS/OILS	20. INHALATION OF DUSTS/POWDERS		21. INHALATION OF GASSES/FUMES
	22. INJURY FROM FALLING OBJECTS	23. MANUAL HANDLING INJURY e.g. BACK/ARM STRAIN		24. NOISE
	25. POLLUTION TO WATERCOURSE, AIR, LAND	26. REPETITIVE STRAIN INJURY		27. SAFETT EQUIPMENT FAILURE
	28. SKIN CONTACT WITH CHEMICALS/OILS/HBA'S	29. SKIN LACERATION INJURY		30. SLIPS/TRIPS
	31. OTHER (SPECIFY)			
(INDICATE RISK NUMBER ABOVE AND THEN IN DETAIL EXPLAIN THE STEPS TAKEN TO MINIMIZE RISK)				
RECORD THE NAMES OF PERSONNEL TO WHOM THE ABOVE RISKS HAVE BEEN DISCUSSED WITH.	<u>NAME</u>	<u>SIGNATURE</u>	<u>NAME</u>	<u>SIGNATURE</u>
ENSURE ALL PERSOONEL UNDERSTAND WHAT HAS BEEN DISCUSSED.				
PERSONNEL MUST SIGN TO ACKNOWLEDGE THAT THEY UNDERSTAND THE STEPS TO BE TAKEN.				

2.

OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION

TABLE OF CONTENTS

1. Introduction and Background

- 1.1 Background to the Pre-construction Health and Safety Specification
- 1.2 Purpose of the Pre-construction Health and Safety Specification
- 1.3 Implementation of the Pre-construction Health and Safety Specification
 - 1.3.1 Guide for the preparations of a typical H&S PLAN
 - 1.3.2 Audits by the Employer
 - 1.3.3 Variations

2 Pre-construction Health and Safety Specification

- 2.1 **Scope**
- 2.2 **Interpretation**
 - 2.2.1 Application
 - 2.2.2 Definitions
 - 2.2.3 Specific items pertaining to this contract.
- 2.3 **Minimum Administrative Requirements**
 - 2.3.1 Notification of Intention to Commence Construction Work
 - 2.3.2 Assignment of the CEOs' Responsibility For Health and Safety on Site
 - 2.3.3 Assignment of Contractor's Responsible Person to Supervise Health and Safety.
 - 2.3.4 Competency of Contractor's Responsible Person
 - 2.3.5 Compensation of Occupational injuries and Diseases Act (COICA) Act 130 of 1993
 - 2.3.6 Occupational Health and Safety Policy
 - 2.3.7 Health and Safety Organogram
 - 2.3.8 Preliminary Hazard Identification and Risk Assessment and Progress Hazard Identification and Risk Assessment

- 2.3.9 Health and Safety Representative(s)
- 2.3.10 Health and Safety Committee(s)
- 2.3.11 Health and Safety Training
 - 2.3.11.1 Induction
 - 2.3.11.2 Awareness
 - 2.3.11.3 Competency
 - 2.3.11.4 Medical Certificate of fitness
 - 2.3.11.5 Public and Site Visitor Health and Safety
- 2.3.12 General Record Keeping
- 2.3.13 Health and Safety Audits, Monitoring and Reporting
- 2.3.14 Permits
- 2.3.15 Lockout Systems - Electrical
- 2.3.16 Emergency Procedures
- 2.3.17 First Aid Box and First Aid Equipment
- 2.3.18 Accident / Incident Reporting and Investigation
- 2.3.19 Hazard and Potential Situations
- 2.3.20 Personal Protection Equipment and Clothing
- 2.3.21 Occupational health and Safety Signage
- 2.3.22 Contractors and Sub-contractors

2.4 Physical Requirements

- 2.4.1 Stacking of Materials
- 2.4.2 Speed Restrictions and Protection
- 2.4.3 Hazardous Chemical Substances (HCS)
- 2.4.4 Asbestos.
- 2.4.5 Fall protection
- 2.4.6 Excavation work.
- 2.4.7 Demolition work.

2.5 Plant and Machinery

- 2.5.1 Construction Plant
- 2.5.2 Vessels under pressure (Gas bottles including Operations)
- 2.5.3 Fire Extinguishers and Fire Fighting Equipment
- 2.5.4 Hot Works
- 2.5.5 Hired plant and Machinery
- 2.5.6 Lifting Machine and Tackle
- 2.5.7 General Machinery
- 2.5.8 Portable Electrical Tools / Explosive Power Tools
- 2.5.9 High Voltage Electrical Equipment
- 2.5.10 Electrical Installations and Works
- 2.5.11 Night Work
- 2.5.12 Transport for Workers
- 2.5.13 Scaffolding

2.6 Occupational Health

- 2.6.1 Occupational Hygiene
- 2.6.2 Welfare Facilities
- 2.6.3 Alcohol and Other Drugs

2.7 Confined Spaces

2.8 Copy of the Act and Regulations.

2.9 Other Acts and Laws that may apply

2.10 ACCEPTANCE OF CONDITIONS OF THESE SPECIFICATIONS

2.11 **INDEMNIFICATION**

3 Annexure B

Appointment of Contractor

1. INTRODUCTION AND BACKGROUND

1.1 Background to the Pre-construction Health and Safety Specification

The Construction Regulations February 2014 place the onus on the client to prepare a pre-construction Health & Safety Specification, highlighting all risks not successfully eliminated during design.

1.2 Purpose of the Pre-construction Health and Safety Specification

The purpose of the pre-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 pre-construction specification enables Tenderers to make adequate financial provisions in their tenders to cover the H&S requirements of the project and thereafter, for the Contractor and its sub-contractors to use as the basis for the preparation of the construction phase H&S plan.

The pre-construction specification sets out the basic requirements to be met by the Contractor and all sub-contractors 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.

1.3 Implementation of the Pre-construction Health and Safety Specification

This specification forms an integral part of the contract, and the Contractor is required to use it at pre-tender phase when drawing up its project-specific construction phase health & safety plan, to be **approved by the Client** or his appointed representative before commencement of construction work. The Principal contractor shall forward a copy of this specification to all Contractors at their bidding stage so that they can in turn prepare health & safety plans relating to their operations.

Note: It is still and will be the responsibility of every Professional consultant, contractor, sub contractor and services provider to make themselves conversant with the various Acts pertaining to their profession at all times.

This document does not purport to be an exhaustive canvassing of all issues and duties imposed by the Occupational Health and Safety Act, Act 85 of 1993 of Regulations governing the duties and obligations of a contractor performing duties i.t.o. an agreement with the client (Sect 37(2)). The various duties imposed on a contractor are more fully described in the OHS Act, Act 85 of 1993 and its regulations and the contractor should acquaint her/himself therewith before commencing with any work.

The Principal Contractor and Contractors shall provide and demonstrate to the Client competencies to carry out the work and a suitable and sufficiently documented Health & Safety Plan based on the Health & Safety specifications (a Proforma copy of the health and safety plan summarizing the items below (H&S Plan) and indicating the appointed risks assessors experience and qualifications, to be handed in with the tender documentation). The Client and or his appointed representative will discuss and negotiate the H&S Plan with the PC before giving final approval for implementation. The H&S Plan and file should include but is not limited to the following:

1.3.1 Guide for the preparations of a typical H&S PLAN

H&S Plan

- Project specific hazards identified,
- Safe work procedures and control measures,
- Letter of good standing from COID or FEM.

H&S FILE

- Description of project,
- Client appointment letter,
- Reporting of construction work to dept of labour,
- Letter of good standing with COID or FEM
- A general statement of health and safety principals and objectives,
- Management structure and objectives (organogram),
- H&S Plan,
- Traffic Management Plan
- Selection procedures and control of all sub-contractors with methods of communication and co-operation,
- Appointment of Construction Manager, subordinates and construction supervisor/s,
- Site specific risk assessments and review procedures and;
- Competency of risk assessor and appointment letter,
- Information & training arrangements,
- a list of all equipment and materials,
- Storage and distribution of materials on site,
- Control and disposal of waste,
- Provision of all facilities for staff and visitors,
- Provision and use of utilities, eg. Electricity and water,
- List of tasks to be performed, equipment and PPE to be used during construction process.
- H&S Specifications to be supplied to sub-contractors (a\if any is to be used),
- Site traffic control and rules (signage, flag person training, PPE etc) access control to and from construction site, (pedestrian and vehicle traffic control)
- First aid and Emergency (disaster recovery and contingency) plan,
- Environmental Control Programme.
- List of relevant prescribed appointments,
- List of inspection registers to be used.
- List of toolbox talks.

1.3.2 AUDITS BY THE EMPLOYER

- The Contractor shall permit the Employer to regularly audit, at an agreed interval, the implementation and maintenance of the approved health and safety plan and shall co-operate and provide all the required documentation, as may be required, in this regard.

1.3.3 VARIATIONS

- Should any variations be ordered or design amendments issued the Engineer shall inform the Contractor of all the associated potential hazards to ensure that the health and safety aspects of the work ordered are taken into account.

2. PRE-CONSTRUCTION HEALTH AND SAFETY SPECIFICATION

2.1 Scope

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

2.2 Interpretations

2.2.1 Application

This specification is a compliance document drawn up in terms of South African legislation and is therefore binding. It must be read in conjunction with the relevant legislation as noted **at point 2.8.**

The Client reserves the right to add or make changes to any Health and Safety Plan of a contractor as it sees fit.

This specification is not intended to over-ride, or in any way to amend, the statutory/regulatory documents and, in the event of there being any conflict, the legislation will take precedence.

2.2.2 Definitions

The definitions as listed in the Occupational Health & Safety Act 85/1993 and Construction Regulations (February 2014) shall apply to this H&S specification. More specifically, where used in this H&S specification, "Principal Contractor" means the Contractor, "Contractor" means sub-contractors to the Principal Contractor, and "Client" means the Employer or his/her duly appointed Agent

2.2.3 Specific items pertaining to this contract.

Tenderers attention is drawn to the information provided within the specification and the priced document regarding, but not limited to, the design and type of construction; the material specified; and the construction period in so far as they to be provided for in the contractors Health and Safety Plan.

2.3 Minimum Administrative Requirements

2.3.1 Notification of Intention to Commence Construction Work

On receipt of the Client's notification of award of the contract and, in any event before any construction work commences, the Principal Contractor shall notify the Provincial Director of the Department of Labour in writing of the intention to undertake construction work. Annexure A to the Construction Regulations must be used for that purpose. A copy of the completed notification must be forwarded to the Client and to the Engineer and a copy shall be attached to the H&S plan. The addresses of the nine Provincial Directors of the Department of Labour are given in Clause 1 of the General Administrative Regulations to the OHS Act

2.3.2 Assignment of the CEOs' Responsibility For Health and Safety on Site

In terms of Section 16 of the Act, the CEO's of the Client, the Engineer, the Principal Contractor and all other Contractors shall make the requisite assignments of their responsibilities in writing prior to commencement of work on site. It is noted that, in a large organisation, the CEO may decide to assign his responsibilities to a line manager who may in turn assign his responsibilities to another line manager and so on.

2.3.3 Assignment of Contractor's Responsible Persons to Supervise Health and Safety on Site

The Principal Contractor's CEO (or his duly assigned employee) shall appoint (in writing) one full time competent person as the construction manager with the duty of managing all the construction work on a single site, including the duty of ensuring occupational health and safety compliance, and in the absence of the construction manager an alternate must be appointed by the principal contractor. The construction manager to be registered with South African Council for the Project and Construction Management Professions (SACPCMP) A construction manager must (in writing) appoint construction supervisors responsible for construction activities and ensuring occupation health and safety compliance on the construction site. The Principal Contractor's and the Contractors' competent persons for the various roles shall fulfil the criteria as defined the Construction Regulations. Copies of these appointments, together with proof of competence of the individuals concerned, shall be attached to the H&S plan. Proof of competencies shall take cognisance of the definition of a "competent person" as set out in the Construction Regulations and may comprise CV's and written motivations/ recommendations by the persons' direct report.

2.3.4 Competency for Contractor's Appointed Competent Persons

Contractor's competent persons for the various risk management portfolios shall fulfill the criteria as stipulated under the definition of Competent in accordance with the Construction Regulations (February 2014). Proof of competence for the various appointments must be included in the health and safety plan.

Definition of "competent person" (expressed by Construction Regulations, 2014:) means a person who-

- (a) has in respect of the work or task to be performed the required knowledge, training and experience and, where applicable, qualifications, specific to that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of **the National Qualification Framework Act, 2000 (Act No.67 of 2000)**, those qualifications and that training must be regarded as the required qualifications and training;

No contractor may appoint a construction health and safety officer to assist in the control of health and safety related aspects on the site unless he or she is reasonably satisfied that the construction health and safety officer that he or she intends to appoint is registered with a statutory body approved by the Chief Inspector (**SACPCMP**) and has necessary competencies and resources to assist the contractor

2.3.5 Compensation of Occupational Injuries and Diseases Act 130 of 1993 (COIDA/ FEM)

The Principal Contractor shall submit a letter of good standing with its Compensation Insurer, to the client or his appointed representative, as proof of registration. Contractors shall submit proof of registration to the Principal Contractor before they commence work on site. (see 1.3.1)

2.3.6 Occupational Health and Safety Policy

The Principal Contractor and all other Contractors shall submit to the Client and to the Engineer, a copy of their organisation's H&S Policy signed by their Chief Executive Officer. Each policy must include a description of the organisation and state the H&S objectives and how they will be achieved and implemented by the organisation. Copies of these policies shall be attached to the H&S plan

2.3.7 Health and Safety Organogram

The Principal Contractor and all Contractors shall submit an organogram, outlining the Health and Safety Site management Structure including the relevant appointments/competent persons and shareholders. In cases where appointments have not been made, the organogram shall reflect the intended positions. The organogram shall be updated when there are any changes in the Site Management Structure. A copy shall be attached to the H&S plan.

2.3.8 Preliminary Hazard Identifications and Risk Assessment and Progress Hazard Identification and Risk assessment.

The contractor shall cause a hazard identification to be performed by **a competent person** before commencement of construction work, and the assessed risks shall form part of the construction phase health and safety plan submitted for approval by the Client. The risk assessment must include;

- a) A list of hazards identified as well as potentially hazardous tasks;
- b) A documented site specific risk assessment based on the list of tasks and associated hazards;
- c) Method statements and a set of safe working procedures to eliminate, reduce and/or control the risks assessed;
- d) A monitoring and review procedure of the risks assessment as the risks change

The Principal Contractor shall ensure that all employees and or Contractors are competent to perform the work and informed, instructed and trained by a competent person regarding any hazards, risks and related safe work procedures before any work commences and thereafter at regular intervals as the risks change and as new risks develop. Proof of this shall be kept on the H&S file.

The Principal Contractor shall be responsible for ensuring that all persons who could be negatively affected by its operations are informed and trained according to the hazards and risks and are conversant with the safe work procedures, control measures and other related rules (tool box talk strategy to be implemented). Posting appropriate signage regarding the dangers attached to the work and hazards identified must be posted at strategic places for everyone to see and be included in the method statement to be provided in the health and safety plan.

2.3.9 Health and safety Representative(s) (applicable when 20 or more persons are employed)

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. 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 Client may request the appointment of a Health and Safety Representative if there are less than 20 employees on the construction site.

2.3.10 Health and Safety committees (applicable when 50 or more persons are employed)

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. 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.

2.3.11 Health and Safety Training/Induction

2.3.11.1 Induction

The Principal Contractor shall ensure that all site personnel undergo a risk-specific health & safety induction training session before starting work. A record of attendance shall be kept in the health & safety file. All visitors to the site shall also receive risk-specific health & safety induction training and a record of such shall be kept. All employees to be informed, instructed and trained by a competent person regarding the hazards and work procedures as prescribed.

2.3.11.2 Awareness

The Principal Contractor shall ensure that, on site, periodic toolbox talk take place at least once per week. These talks should deal with risks relevant to the construction work at hand. A record of attendance shall be kept in the health & safety file. All Contractors have to comply with this minimum requirement. The contractor shall inform all residence and or members of the public, who may be affected by the activities and who will most likely be exposed to the hazards identified of all precautionary measures to be taken.

2.3.11.3 Competency

All competent persons shall have the knowledge, experience, training, and qualifications specific to the work they have been appointed to supervise, control, carry out. This will have to be assessed on regular basis e.g. periodic audits by the Client, progress meetings, etc. The Principal Contractor is responsible to ensure that competent Contractors are appointed to carry out construction work.

2.3.11.4 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.

2.3.11.5 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 record of these inductions/briefings shall be kept in the Project H&S File in accordance with the Construction Regulations. Appropriate H&S notices and signs shall be posted up, but this shall not be the only measure taken. . **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.**

2.3.12 General Record Keeping

The Principal Contractor and all Contractors shall keep and maintain Health and Safety (THE FILE) records to demonstrate compliance with this Specification, with the OHS Act 85/1993 , Construction Regulations (February 2014) and any other legislation applicable on site. The Principal Contractor shall ensure that all records of incidents/accidents, training, inspections, audits, etc, are kept in a health & safety file held in the site office. The principal Contractor must ensure that every Contractor opens its own health & safety file, maintains the file and makes it available on request. The Principal Contractor shall maintain an up to date register of each Contractor engaged in construction work on site giving the Contractors' name and the Responsible Persons' contact details and the number of employees on site. As these details may be subject to frequent change, the register must be updated at least weekly. The register is to be available for inspection

2.3.13 Health & Safety Audits, Monitoring and Reporting

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 or 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.

2.3.14 PERMITS

Construction Work Permit (Cr 3)

The construction work permit is only required if the project corresponds with the specification as indicated in the exemption from the Department of Labour of July 2015. This document must be kept on site in the Health and Safety File.

Permits may be required for certain activities and these are not limited to but may include the following:

- Use of Explosives and Blasting
- Work for which a fall prevention plan is required
- Removal of asbestos materials.
- Disposal of (old type) fire detectors with radioactive elements.
- Decanting/handling of Ammonia.

If and where applicable, the Employer will issue to the Principal Contractor, permits and log books (which log books shall thereafter be kept up to date by the Principal Contractor), for the following installations:

- Boilers
- MV switchgear and chambers/rooms
- MV switchgear outdoor yards
- Lifts

All of the above are to be documented in the H&S plan

2.3.15 Lockout Systems – Electrical (if applicable)

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.

2.3.16 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.

2.3.17 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).

2.3.18 Accident / Incident Reporting and Investigation

Injuries are to be categorized into first aid; medical; disabling; and fatal. The Principal Contractor must stipulate in its construction phase health & safety plan how it will handle each of these categories. When reporting injuries to the Client, these categories shall be used. All injuries shall be investigated by the Principal Contractor, with a report being forwarded to the Client forthwith. All Contractors have to report on the 4 categories of injuries to the Principal Contractor at least monthly. The Principal Contractor must report all injuries to the Client in the form of a detailed injury report at least monthly. The Client's agent must be informed forthwith of any recordable incident or accident.

2.3.19 Hazards and Potential Situations

The Principal Contractor shall immediately notify other Contractors as well as the Client's 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)

2.3.20 Personal Protective Equipment (PPE) and Clothing

The Principal Contractor shall ensure that all workers are issued (**free of charge**) and wear appropriate PPE ei, hard hats, safe Footwear, gloves, ear/ eye protection and overalls ect. Keep a record of the PPE issued, which must be signed by employees. The Principal Contractor and all Contractors shall make provision and keep adequate quantities of SABS approved PPE on site at all times. The Principal Contractor shall clearly outline procedures to be taken when PPE or Clothing is,

-) Lost or Stolen;
-) Worn out or damage

The above procedure applies to Contractors and their Sub-contractors, as they are all Employers in their own right.

The following items must be provided as a minimum requirement but shall not be limited to:

- Safety shoes and or gumboots with steel toes
- Overalls
- Eye protection,
- Approved and appropriate type Hearing protection when excessive noise is being generated,
- Approved and appropriate type of dust masks,
- Reflector vest.
- Rain suits (when working in rainy adverse weather)

2.3.21 Occupational health and Safety Signage

The Contractor shall provide adequate on-site OHS signage. Including but not limited to: 'Construction Site', 'no unauthorized entry', 'report to site office', 'site office', 'first aid facility', 'firefighting equipment' , 'mandatory ppe', Road traffic signage as per SARTM, Manual 13(where applicable), ect. Signage shall be posted at all entrances to site as well as on site in strategic locations e.g. access routes, entrances to structures and buildings, and other potential risk areas/operations (where and if applicable on the specific site and as directed by Client/ representative).

2.3.22 Contractors and Sub-contractors

The Principal Contractor shall ensure that all Contractors under its control comply with this Specification , the OHS Act of 1993, Construction Regulations (February 2014) , and all other relevant legislation that may relate to the activities directly or indirectly. The Contractor, when appointing other Contractors as 'Sub-contractors', shall mutatis mutandis ensure compliance and a section 37(2) agreements must be put in place.

2.4 Physical Requirements

2.4.1 Stacking of materials

The Principal Contractor and other relevant contractors shall ensure that there is an appointed staking supervisor and all materials, all equipment is stacked and stored safely in a demarcated area.

2.4.2 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. **(Please refer to baseline risk assessment report.**

2.4.3 Hazardous Chemical Substances (HCS)

The Principal Contractor and other relevant Contractors shall provide the necessary training and information regarding the use, transport, and storage of HCS. The Principal Contractor shall ensure that the use, transport, and storage of HCS are carried out as prescribed by the HCS Regulations. The Contractor shall ensure that all hazardous chemicals on site have a Material safety Data Sheet (MSDS) 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 MSDS and how to treat HCS incidents appropriately.

2.4.4 Asbestos

The Principal Contractor shall ensure that the Asbestos Regulations GNR.155 10 February 2002 are complied with in respect of roof sheeting and other asbestos containing materials that are required to be demolished and or removed. All the required approvals and permits to be obtained from the prescribed authorities. An approved Asbestos contractor to be used for the demolition process.

2.4.5 Fall protection

The Contractor must ensure that:

A competent person is appointed who is responsible for the preparation, implementation and maintenance of the Fall Protection Plans.

Risk assessment must include all work carried out elevated positions, which will include procedures, and methods used to address the risks identified per location.

Assessment by OHP for employee's physical and psychological fitness working at elevated positions is a must. A training programme for workers working at elevated positions and records thereof must be kept on file.

A procedure outlining the Inspection, Testing and Maintenance of fall protection equipment must be on file

The compliance of CR 10 and **List of applicable safety standards below applies.**

SANS NO.	Description
SANS EN 341	PPE against falls from height: Descender devices
SANS EN 353	PPE against falls from height: Guided type fall arrestors and a rigid anchorage line.
SANS EN 353-2	PPE against falls from height: Guided type fall arrestors on a flexible anchorage line.
SANS EN 354	PPE against fall from height: Lanyards.
SANS EN 355	PPE against falls from height: Energy absorbers.
SANS EN 358	PPE against falls from height: Work positioning.
SANS EN 360	PPE against falls from height: Retractable type fall arrestors.
SANS EN 361	PPE against falls from height: Full body harness.
SANS EN 362	PPE against falls from height: Connectors.
SANS EN 363	PPE against falls from height: Fall arrest systems.
SANS EN 795	PPE against falls from height: Anchor devices.
SANS EN 813	PPE against falls from height: Sit harness
SANS EN 397	PPE industrial safety helmets.

2.4.6 Excavation work.

A contractor must ensure that all excavation work is carried out under the supervision of a competent person who has been appointed in writing for that purpose; and evaluate, as far as is reasonably practicable, the stability of the ground before excavation work begins. Comply with the rest of these regulations.

2.4.7 Demolition work.

A contractor must appoint a competent person in writing to supervise and control all demolition work on site.

A contractor must ensure that before any demolition work is carried out, and in order to ascertain the method of demolition to be used, a detailed structural engineering survey of the

structure to be demolished is carried out by a competent person and that a method statement on

the procedure to be followed in demolishing the structure is developed by that person.

Comply with the rest of these regulations.

2.5 Plant and Machinery

2.5.1 Construction Plant and Machinery

"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 (February 2014). 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. The Client reserves the right to inspect any machinery, equipment, plant or tools at any time and prevents or prohibits its use, without any penalty to the Client and without affecting the contract in any way.

2.5.2 Vessels under Pressure (VUP) and Gas Bottles (when applicable)

The Principal Contractor and all relevant Contractors shall comply with the Pressure Equipment Regulations, including:

-) Providing competency and awareness training to the operators;
-) Providing PPE or clothing
-) Inspect equipment regularly and keep records of inspections
-) Providing appropriate firefighting equipment (Fire Extinguishers) on hand
-) **Provided the compressed air lance with a dead man's handle or similar device to ensure that it does not injure any one when it is dropped accidentally when under pressure.**

2.5.3 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;

2.5.4 Hot Works

A contractor must, in addition to compliance with the Environmental Regulations for Workplaces, 1987 and Construction Regulations 2014, ensure that- welding, flame cutting and other hot work are done only after appropriate precautions have been taken to reduce the risk of fire;

2.5.5 Hired Plant and machinery

The Principal Contractor shall ensure that any hired plant and machinery used on site is safe for use. The necessary requirements as stipulated by the OHS Act 85/1993 and Construction Regulations (February 2014) shall apply. The Principal Contractor shall ensure that operators hired with machinery are competent and that certificates are kept on site in the health & safety file. All relevant Contractors must ensure the same.

2.5.6 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 has a safe working load clearly indicated;
-) Regular inspection and servicing is 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.

2.5.6 General Machinery

The principal Contractor and relevant Contractors shall ensure compliance with the Driven Machinery Regulations , which include inspecting machinery regularly, appointing a competent person to inspect and ensure maintenance, issuing PPE or clothing, and training those who use machinery.

2.5.7 Portable Electrical Tools and Explosive Powered Tools

The Contractor shall ensure that use and storage of all explosive powered tools and portable electrical tools are in compliance with relevant legislation. The Contractor shall ensure that all electrical tools, electrical distribution boards, extension leads, and plugs are kept in safe working order and comply with SANS 100142 and all other relevant codes of good practices. Regular inspections and toolbox talks must be conducted to make workers aware of the dangers and control measures to be implemented e.g. personal protection equipment, guards, ect.

The Contractor shall consider the following:

-) A competent person undertakes routine inspections and records are kept;
-) Only authorized trained persons use the tools;
-) The safe working procedures apply;
-) Awareness training is carried out and compliance is enforced at all times;
-) PPE and clothing is provided and maintained
-) A register indicating the issue and return of all explosive round;
-) Signs to be posted up in the areas where explosive powered tools are being used.

2.5.8 High Voltage Electrical Equipment, underground, Overhead power lines (where and if required) and Electrical installations.

Care shall be taken when working close to, over or under high voltage reticulation power lines or cables. Underground services to be identified beforehand and the layout of such to be include in the contractors Health and Safety Plan. A safe work procedure be drawn up and included into contractors Health and Safety Plan.

2.5.9 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:

- J 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.
- J electrical installations and -machinery are sufficiently robust to withstand working conditions on site.
- J 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.

The guidelines and conditions provided in internal **Municipal Operating Regulations for low, medium and high voltage systems (EII/21/NT)** attached documents form an integral constituent of the Health and Safety Specifications. It is therefore a condition of acceptance that no Health and Safety Plan shall be complete unless all relevant elements of this document applicable to the above project have been included in the Health and

Safety Plan. (ALL Municipal Operating Regulations for low, medium and high voltage systems (EII/21/NT) apply)

2.5.10 Night Work and Working hours (where and if required)

All work shall be done during normal working hours, unless agreed otherwise in writing.

The Principal Contractor must ensure that adequate lighting is provided to allow for work to be carried out safely. Permission to be obtained from the Client to work at night.

2.5.11 Transport of Workers

The Principal Contractor and other Contractors shall not:

- J Transport persons together with goods or tools unless there is an appropriate area of section to store them and all loose tool and plant are tied down and secured;
- J Transport persons in a non-enclosed vehicle, e.g. truck; there must be a proper canopy (properly covering the back and top) with suitable sitting area. Workers shall not be permitted to stand or sit at the edge of the transporting vehicle.
- J Transport workers in bakkies unless they are closed/ covered and have the correct number of seats for the passengers.

2.5.12 Scaffolding (if applicable)

A contractor must appoint a competent person in writing who must ensure that all scaffolding work operations are carried out under his or her supervision and that all scaffold erectors, team leaders and inspectors are competent to carry out their work. A contractor using access scaffolding must ensure that such scaffolding, when in use, complies with the safety standards incorporated for this purpose into these Regulations under section 44 of the Act.

2.6 Occupational Health

2.6.1 Occupational Hygiene

The contractor shall ensure that suitable housekeeping is continuously implemented on each construction site, including provisions for the

- (i) proper storage of materials and equipment; and
- (ii) removal of scrap, waste and debris at appropriate intervals;
- (b) loose materials required for use, are not placed or allowed to accumulate on the site so as to obstruct means of access to and egress from workplaces and passageways;
- (c) waste and debris are not disposed of from a high place with a chute, unless the chute complies with the requirements set out regulation 12(6); and
- (d) 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 unauthorised persons.

2.6.2 Welfare Facilities

A 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:

- (a) at least one shower facility for every 15 workers;
- (b) at least one sanitary facility for every 30 workers;
- (c) changing facilities for each sex; and
- (d) sheltered eating areas.

A contractor shall provide reasonable and suitable living accommodation for the workers at construction sites which are remote from their homes and where adequate transportation between the site and their homes, or other suitable living accommodation, is not available.

2.6.3 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.

- 2. 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.
- 3. 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.

2.7 Confined Spaces

Means an enclosed, restricted, or limited space in which, because of its construction, locations or contents, or any work activity carried out therein, a hazardous substance may accumulate or an oxygen-deficient atmosphere may occur, and includes any chamber, tunnel, pipe, pit, sewer, container, valve, pump, sump, or similar construction, equipment, machinery or object in which a dangerous liquid or dangerous concentration of gas, vapour, dust or fumes may be present.

A confined space competent person must be appointed in writing.

A **confined space entry permit** system and safe work procedure must be provided containing at least the following:

- Identification of confined space
- Testing and evaluation of air quality
- Frequency of air quality testing
- Certification that the confined space is safe and will remain safe for the remainder of the work
- Shift
- Purging and ventilation requirements
- Isolation and lock out of confined space from all pipes, ducts and other communicating openings
- The provision of breathing apparatus where applicable

The provision of safety harnesses or similar equipment
Rescue, Evacuation and First aid and procedures

2.8 Copy of the Act and Regulations

Every employer with five or more persons in his employ shall have a copy of the Act and the relevant regulations readily available at the work place: Provided that, where the total number of employees is less than five, the employer shall, on request of an employee, make a copy of the Act available to that employee.

2.9 Other Acts and Laws that may apply

The contractors attention is directed to the following Acts that may be applicable and must be adhered to at all times. It is the contractor's responsibility to become conversant with the requirements applicable in these laws:

Compensation for Occupational Injuries and Diseases ACT 130 of 1993,

Mineral Act No. 50 of 1991,

Water Act No. 54 of 1956, and

Atmospheric Pollution Prevention Act No. 45 of 1965,

Occupational Health and Safety Act No. 85 of 1993,

Environmental Conservation Act No. 73 of 1989.

Hazardous Substances Act No.15 of 1973,

National Building Regulations and Building Standards Act No.103 of 1977,

National Environmental Management Act No. 107 of 1998,

National Road Traffic Act No. 93 of 1996,

National Water Act No. 36 of 1998,

Relevant By-laws.

SANS codes referred to by the Occupational Health and Safety Act and Regulations

Contract Documents

Basic Conditions of Employment Act (Act 75 of 1997)

2.10 ACCEPTANCE OF CONDITIONS OF THESE SPECIFICATIONS

) The contractor must provide a certified copy of his Public Liability insurance when signing this document.

I, _____ the Contractor, do hereby declare that _____ (Name of Company) acknowledge having read and understood the conditions contained in this legal document and furthermore we agree and accept to abide by the conditions and requirements of the act.

SIGNATURE CONTRACTOR: _____ DATE _____

SIGNATURE WITNESS _____ PRINT NAME: _____

AGENT ACTING ON BEHALF OF THE CLIENT:

NAME: _____ DATE _____

SIGNATURE: _____

SIGNATURE WITNESS _____ PRINT NAME: _____

2.11 INDEMNIFICATION

The Contractor hereby certifies that all contracting workmen recognize the inherent hazards that exist on the premises / property / site of _____ (Client detail and site address) and that the Contractor;

- **enters the property entirely at his/her own risk and therefore the Contractor waives any claim of whatsoever nature against _____, (Client) its employees, agents and/or mandatories in respect of any loss, damage and/or injury whether same is the result of any negligent act or omission on the part of _____ (contractor), it's employees, agents and/or mandatories or other independent Contractors or by a third person or by way of defective equipment or materials supplied by the company, and further the Contractor;**

- Hereby indemnifies _____ (Client), its employees, agents and/or mandatories against any claims from the Contractor's employees and/or from any other person, arising and being caused in the manner set out above.

**AGREEMENT WITH MANDATARY IN TERMS
OF SECTION 37(1) AND (2) OF OHS ACT 85
OF 1993**

CONSTRUCTION REGULATION 5(1) (k)

AGENT BEHALF OF: _____ (Name of Client)

PROJECT/SITE: _____ (Name & Address or Area)

PROJECT PERIOD: from _____ to _____

**AGREEMENT WITH MANDATARY IN TERMS OF SECTION
37(1) AND (2) OF OHS ACT 85 OF 1993**

DEFINITION OF MANDATARY

- includes an agent, a contractor or a subcontractor for work, but without derogating from his status in his own right as an employer or a user.

DEFINITION OF AGENT

- means any person who acts as a representative for a client in the managing the overall construction work.

SECTION 37(1)

(1) Whenever an employee does or omits to do any act which it would be an offence in terms of this Act for the employer of such employee or a user to do or omit to do, then, unless it is proved that-

(a) in doing or omitting to do that act the employee was acting without the connivance or permission of the employer or any such user;

(b) it was not under any condition or in any circumstance within the scope of the authority of the employee to do or omit to do an act, whether lawful or unlawful, of the character of the act or omission charged; and

all reasonable steps were taken by the employer or any such user to prevent any act or omission of the kind in question, the employer or any such user himself shall be presumed to have done or omitted to do that act, and shall be liable to be convicted and sentenced in respect hereof; and the fact that he issued instructions forbidding any act or omission of the kind in question shall not, in itself, be accepted as sufficient proof that he took all reasonable steps to prevent the act or omission.

SECTION 37(2)

The provisions of subsection (1) shall mutates mutandis apply in the case of a mandatory of any employer or user, except if the parties have agreed in writing to the arrangements and procedures between them to ensure compliance by the mandatory with the provisions of this Act.

ACCEPTANCE BY MANDATARY

In terms of the provisions of Section 37(2) of the Occupational Health and Safety Act 1993, and Construction Regulation 4(1) (c),

I, _____(Appointed 16(2) person) acting for
and on behalf of _____

_____ (Company / Close

Corporation/Enterprise/ Owner/User) undertake to ensure that the requirements and provisions of the Act and Regulations are complied with.

Print Name : _____.(Agent, Principal Contractor or Contractor)

Signature: _____ at _____.

Designation: _____ . Date: _____.

Mandatory- COIDA / Federated Employers Mutual

No.: _____.

Mandatory- Professional Indemnity Insurance no: _____.

CLIENT

Print Name: _____ . (Appointed 16(1)
person/Client/Agent of Client or Principal Contractor)

Signature: _____ at _____.

Designation: _____ Date: _____.