

## **C4.2 OCCUPATIONAL HEALTH AND SAFETY ACT 1993: HEALTH AND SAFETY SPECIFICATION**

### **CONTENTS**

#### **C4.2.1 INTRODUCTION**

#### **C4.2.2 SCOPE**

#### **C4.2.3 GENERAL OCCUPATIONAL HEALTH AND SAFETY PROVISIONS**

#### **C4.2.4 OPERATIONAL CONTROL**

#### **C4.2.5 MEASUREMENT AND PAYMENTS**

ANNEXURE 1: MEASURING INJURY EXPERIENCE

ANNEXURE 2: EXECUTIVE SHE RISK MANAGEMENT REPORT

ANNEXURE 3: LIST OF RISK ASSESSMENTS

#### **C4.2.1 Introduction**

In terms of the Construction Regulation 4(1) (a) of the Occupational Health and Safety Act, No. 85 of 1993 and Government Gazette No. 43257, 29 April 2020, Disaster Management Act (57/2002): Occupational and Safety Measures in Workplaces COVID-19 (C19 OHS) 2020, **Thembisile Hani Local Municipality**, as the Client, is required to compile a Health & Safety Specification for any intended project and provide such specification to any prospective tenderer.

The Client's further duties are as listed below and in the **Construction Regulations, 2014**. This specification has as objective to ensure that Principal Contractors entering into a Contract with the **Thembisile Hani Local Municipality** achieve an acceptable level of OH&S performance. This document forms an integral part of the Contract and Principal and other Contractors should make it part of any Contracts that they may have with Contractors and/or Suppliers.

Compliance with this document does not absolve the Principal Contractor from complying with minimum legal requirements and the Principal Contractor remains responsible for the health & safety of his employees and those of his Mandataries.

#### **C4.2.2 Scope**

Development of a health & safety specification that addresses all aspects of occupational health and safety as affected by the abovementioned contract work, including addressing all COVID-19 related issues.

The specification will provide the requirements that Principal Contractors and other Contractors will have to comply with in order to reduce the risks associated with the abovementioned contract work that may lead to incidents causing injury and/or ill health, to a level as low as reasonably practicable.

#### **C4.2.3 General Occupational Health & Safety Provisions**

- a) Hazard Identification & Risk Assessment (Construction Regulation 7).
- b) Government Gazette No. 43257, 29 April 2020, Disaster Management Act (57/2002): Occupational and Safety Measures in Workplaces COVID-19 (C19 OHS) 2020

a. Risk Assessments

Annexure 3 of Construction Regulation 7 and Annexure A of Government Gazette No. 43257 (29 April 2020) contains Risk Assessment headings that have been identified as possibly applicable to the abovementioned contract work are listed below. The information is, by no means, exhaustive and is offered as assistance to Contractors intending to tender.

Based on the Risk Assessments, the Principal Contractor must develop a set of site-specific OH&S rules that will be applied to regulate the OH&S aspects of the construction, with strict adherence to safety as per the COVID-19 Regulations. The Risk Assessments, together with the site-specific OH&S rules must be submitted to the Employer before mobilisation on site commences.

Despite the Risk Assessments listed in Annexure 3 of the Construction Regulation 7 and Annexure A of Government Gazette No. 43257 (29 April 2020), the Principal Contractor is required to conduct a baseline Risk Assessment and the aforesaid listed Risk Assessments must be incorporated into the base-line Risk Assessment. The baseline Risk Assessment must further include the Standard Working procedures (SWP) and the applicable Method Statements based on the Risk Assessments with additional controls for COVID-19.

All out-of-scope work must be associated with a Risk Assessment.

b. Review of Risk Assessments

The Principal Contractor is to review the Hazard Identification, Risk Assessments with additional controls for COVID-19 and SWP's at each Production Planning and Progress Report meeting should be aligned to the Risk Assessments to contain and prevent possible spread of the COVID-19 in construction areas as the Contract work develops and progresses and each time changes are made to the designs, plans and construction methods and processes.

The Principal Contractor must provide the Client, other Contractors and all other concerned-parties with copies of any changes, alterations or amendments as contemplated in above.

c. List of Risk Assessments

- Clearing and Grubbing of the area/site
- Site establishment including:
  - Office/s
  - Secure/safe storage for materials, plant and equipment
  - Ablutions
  - Adequate supply of wash basins
  - Cleaning materials
  - Disinfecting work areas with sanitizers
  - Restricted access control for pedestrians and vehicles
  - Sheltered eating area
  - Maintenance workshop
  - Vehicle access to the site
- PPE with specific requirements for COVID-19
- Social distancing

- Meeting requirements
- COVID-19 training
- Medical screening
- Emergency planning for COVID-19 outbreak
- Dealing with existing structures
- Location of existing services
- Installation and maintenance of temporary construction electrical supply, lighting and equipment
- Adjacent land uses/surrounding property exposures
- Boundary and access control/public liability exposures (NB: the employer is also responsible for the OH&S of non-employees affected by his/her work activities)
- Health risks arising from surroundings as well as own activities and from the environment e.g. threats by dogs, bees, snakes, lightning, etc.
- Exposure to noise
- Exposure to vibration
- Protection against dehydration and heat exhaustion
- Dealing with HIV/Aids and other diseases
- Use of portable electrical equipment including:
  - Angle grinder
  - Electrical drilling machine
  - Skill saw
- Excavations including:
  - Ground/soil conditions
  - Trenching
  - Shoring
  - Drainage of trench
- Loading and offloading of trucks
- Aggregate/sand and other materials delivery
- Manual and mechanical handling
- Lifting and lowering operations
- Driving and operation of construction vehicles and mobile plant including
  - Trenching machine
  - Excavator
  - Bomag roller
  - Plate compactor
  - Front end loader
  - Mobile cranes and the ancillary lifting tackle
  - Parking of vehicles and mobile plant
  - Towing of vehicles and mobile plant
- Use and storage of flammable liquids and other hazardous substances
- Layering and bedding
- Backfilling of trenches
- Use of explosives
- Protection from overhead power lines

- As discovered by the principal contractor's hazard identification exercise
- As discovered from any inspections and audits conducted by the client or by the principal contractor or any other contractor on site
- As discovered from any accident/incident investigation.

c) Legal Requirements

All Contractors entering into a Contract with the **Thembisile Hani Local Municipality** shall, as a minimum, comply with the:

- Occupational Health & Safety Act and Regulations (Act 85 of 1993). A current, up-to-date copy of the OHS Act must be available on site at all times.
- Regulations for Hazardous Biological Agents
- Dept. of Employment and Labour – Checklist for inspection at workplaces during COVID-19 Lockdown
- Amended Disaster Management Act 2002: Sect 27(2) dated 16 April 2020
- Construction Sector short term plan for immediate reaction of Construction Work: COVID-19 Rapid Response Task Team (18 April 2020)
- Guidelines of the National Institute for Occupational Health and Communicable Diseases taken into consideration
- Compensation for Occupational Injuries & Diseases Act (Act 130 of 1993). The principal Contractor will be required to submit a letter of Registration and "good-standing" from the Compensation Insurer before being awarded the Contract. A current, up-to-date copy of the COID Act must be available on site at all times.
- Where work is being carried out on mines' premises the Contractor will have to comply with the Mine Health & Safety Act and Regulations (Act. 29 of 1996) and any other OH&S requirements that the mine may specify. A current, up-to-date copy of the OHS Act must be available on site at all times.

d) Structure and Responsibilities

i. Overall Supervision and Responsibility for OH&S

\* It is a requirement that the Principal Contractor, when he appoints Contractors (Sub-contractors) in terms of Construction Regulations 7 he includes an OHS Act Section 37(2) agreement: "Agreement with Mandatory" in his agreement with such Contractors.

\*Any OH&S Act (85/1993), Section 16(2) appointee/s as detailed in his/her/their respective appointment forms

\*A full time Safety Officer

\*A full time Manager to screen each worker every morning and after lunch break. To also address employee or workplace representative concern and to keep them informed and, in any workplace in which a health and safety committee has been elected, consult with that committee on the nature of the hazard in that workplace and the measures that need to be taken

ii. Further (Specific) Supervision Responsibilities for OH&S

The Contractor shall appoint designated competent employees and/or other competent persons as required by the Act and Regulations. Below is a list of identified appointments and may be used to select the appropriate appointments for the current contract:

Ref. Section/Regulation in OHS Act

Batch Plant Supervisor	(Construction Regulation 6(1))
Construction Vehicles/Mobile Plant/Machinery Supervisor	(Construction Regulation 21)
Demolition Supervisor	(Construction Regulation 12)
Drivers/Operators of Construction Vehicles/Plant	(Construction Regulation 21)
Emergency/Security/Fire Coordinator	(Construction Regulation 27)
Excavation Supervisor	(Construction Regulation 11)
Explosive Powered Tool Supervisor	(Construction Regulation 19)
Fall Protection Supervisor	(Construction Regulation 8)
First Aider	(General Safety Regulation 3)
Fire Equipment Inspector	(Construction Regulation 27)
Hazardous Chemical Substances Supervisor	(HCS Regulations)
Incident Investigator	(General Admin Regulation 29)
Ladder Inspector	(General Safety Regulation 13A)
Lifting Equipment Inspector	(Construction Regulation 20)
Materials Hoist Inspector	(Construction Regulation 17)
OH&S Committee	(OHS Act Section 19)
OH&S Officer	(Construction Regulation 6(6))
OH&S Representatives	(OHS Act Section 17)
Person Responsible for Machinery	(General Machinery Regulation 2)
Stacking & Storage Supervisor	(Construction Regulation 26)
Structures Supervisor	(Construction Regulation 9)
Suspended Platform Supervisor	(Construction Regulation 15)
Working on/next to Water Supervisor	(Construction Regulation 24)
Welding Supervisor	(General Safety Regulation 9)

The appointments must be in writing and the responsibilities clearly stated together with the period for which the appointment is made. This information must be communicated and agreed with the appointees. Copies of appointments must be submitted to the **Thembisile Hani Local Municipality** together with concise CV's of the appointees.

The Principal Contractor must, furthermore, provide **Thembisile Hani Local Municipality** with an organogram of all Contractors that he/she has appointed or intends to appoint and keep this list updated on a weekly basis.

Where necessary, or when instructed by the **Thembisile Hani Local Municipality** or an Inspector of the Department of Labour, the Principal Contractor must appoint a competent OH&S Officer subject to the approval of the Thembisile Hani Local Municipality.

In addition **Thembisile Hani Local Municipality** may require that a Traffic Safety Officer be appointed for any project.

iii. Designation of OH&S Representatives

Where the Principal Contractor employs more than 20 persons (including the employees of other Contractors (sub-contractors) he has to appoint one OH&S Representatives for every 50 employees or part thereof. General Administrative Regulation 6 requires that the appointment OR election and subsequent designation of the OH&S Representatives are executed in consultation with Employee Representatives or Employees. OH&S Representatives have to be designated in writing and the designation must include the area of responsibility of the person and term of the designation.

iv. Duties and Functions of the OH&S Representatives

The Principal Contractor must ensure that the designated OH&S Representatives:

- Conduct a minimum monthly inspection of their respective areas of responsibility using a checklist and report thereon to the Principal Contractor;
- Perform medical screening for each worker every morning when they enter construction site and after lunch break. If a worker presents with COVID-19 symptoms, or advises the employer of these symptoms, the employer must:
  - 1) Not permit the worker to enter the workplace or report for work; or
  - 2) If the worker is already at work immediately –
    - g) Isolate the worker, provide the worker with FFP1 surgical mask and arrange for the worker to be transported in a manner that does not place other workers or members of the public at risk either to be self- isolated or for a medical examination or testing; and
    - ii) Assess the risk of transmission, disinfect the area and the worker's workstation, refer those workers who may be at risk for screening and take any other appropriate measures to prevent possible transmission.
  - 3) Ensure that the worker is tested or referred to an identified testing site;
  - 4) Place the employee on paid sick leave in terms of section 22 of the BCEA or make application for an illness benefit in terms of clause 4 of the Directive issued on 25 March 2020 on the COVID-19 Temporary Relief Scheme under regulation 10(8) of the Regulations promulgated in terms of section 27(2) of the Disaster Management Act; and
  - 5) Ensure that the employee is not discriminated against on the grounds of having tested positive to COVID-19 in terms of section 6 of the Employment Equity Act 1988 (Act No.55 of 1998).
- Undertake symptom screening measures of persons other than the employees entering the site;
- Ensure that there are adequate facilities for the washing of hands with soap and clean water;
- Ensure that only paper towels are provided to dry hands after washing – the use of fabric towelling is prohibited;
- The workers wash their hands and sanitize them regularly while at work;
- The workers interacting with the public are instructed to sanitize their hands between each interaction with public;
- Make sure that surfaces that workers and members of the public come into contact with are routinely cleaned and disinfected;

- Provide each of its employees, free of charge, with a minimum of two cloth masks, which comply with the requirements set out in the Guidelines issued by the Department of Trade, Industries and Competition, for the employee to wear while at work and while commuting to and from work;
- Make sure that all workers wear masks in the workplace and that workers are informed, instructed, trained and instructed as to the correct use of the cloth masks;
- Arrange the workplace to ensure that there is a distance of at least one and a half meter between workers and members of the public or between members of the public; and
- Display notices advising persons other than employees entering the workplace or site of the precautions they are required to observe while in the workplace and/or on site.

OH&S representatives must be included in accident/incident investigations. OH&S representatives must attend all OH&S committee meetings.

v. Appointment of OH&S Committee

The Principal Contractor must establish an OH&S Committee consisting of all the designated OH&S Representatives together with a number of management representatives that are not allowed to exceed the number of OH&S representatives on the committee and a representative of the Client who shall act as the chairman without a vote. The members of the OH&S committee must be appointed in writing.

The OH&S Committee must meet minimum monthly and consider, at least, the following Agenda:

1. Opening & Welcome
2. Present/Apologies/Absent
3. Minutes of previous Meeting
4. Matters Arising from the previous Minutes
5. OH&S Reps Reports
6. Incident Reports & Investigations
7. Incident/Injury Statistics
8. Other Matters
9. Endorsement of Registers and other statutory documents by a representative of the Principal Contractor
10. Close/Next Meeting

vi. Training and Competence

The contents of all training required by the Act and Regulations shall be included in the Principal Contractor's OH&S plan. The Principal Contractor shall be responsible for ensuring that all relevant training is undertaken. Only accredited Service Providers shall be used for OH&S training. The Principal Contractor shall ensure that his and other Contractors' personnel appointed are competent and that all training required for doing the work safely and without risk to health, has been completed before work commences. The Principal Contractor shall ensure that follow-up and refresher training is conducted as the contract work progresses and the work situation changes. Records of all training must be kept on the OH&S file for auditing purposes.

e) Notification of Construction Work (Construction Regulation 3.)

The Principal Contractor must, where the Contract meets the requirements laid down in Construction Regulation 3, within 5 working days, notify the Department of Labour of the intention to carry out construction work and use the form (Annexure A in the Construction Regulations) for the purpose. A copy must be held on the OH&S File and a copy must be forwarded to the **Thembisile Hani Local Municipality** for record keeping purposes.

f) Public Health & Safety (Section 9 of the OH&S Act)

The Principal Contractor shall be responsible for ensuring that non-employees affected by the construction work are made aware of the dangers likely to arise from said construction work as well as the precautionary measures to be observed to avoid or minimise those dangers. This includes: Non-employees entering the site for whatever reason, the surrounding community and Passers-by to the site.

g) Public Health & Safety (Amended Disaster Management Act 2002: Sect 27(2) dated 16 April 2020)

The Principal Contractor shall be responsible to:

- Display notices advising persons other than employees entering the workplace or site of the precautions they are required to observe while in the workplace and/or on site;
- Undertake symptom-screening measures of persons other than the employees entering the site;
- Make sure that surfaces that workers and members of the public come into contact with are routinely cleaned and disinfected; and
- Arrange the workplace to ensure that there is a distance of at least one and a half meter between workers and members of the public or between members of the public.

h) Accommodation of Traffic

The contractor shall develop a Traffic Management Plan (to include Traffic Control Plans ("TCP") and Vehicle Movement Plans)

It is a condition of this contract that traffic is accommodated taking into account the provisions of the latest edition of the South African Road Traffic Signs Manual as modified to suit site conditions.

The Traffic Management Plan shall be communicated to stakeholders in Cradock community as follows: Large information sign at outside the entrances of the site will provide details of the project, including: Description of the Works, Duration of the Works, Proposed Start and End Dates of the Works, Contact details of the Site Manager.

The contractor shall pay specific attention to the accommodation of pedestrian traffic along the cross roads where the safety of pedestrians could be compromised as a result of the works.

Where pedestrians have to cross the site, the contractor shall ensure that the pedestrians are safeguarded and shall be able to cross the site without being endangered. The pedestrians should not be able to enter areas where works are taking place.



#### **C4.2.4 Operational Control**

Each construction activity shall be assessed by the Principal Contractor so as to identify operational procedures that will mitigate against the occurrence of an incident during the execution of each activity. This specification requires the Principal Contractor:

- to be conversant with Construction Regulations
- to comply with their provisions
- and include them in his OH&S plan where relevant.

##### **a) Emergency Procedures**

Simultaneous with the identification of operational procedures, the Principal Contractor shall similarly identify and formulate emergency procedures in the event an incident does occur. The emergency procedures thus identified shall also be included in the Principal Contractor's OH&S plan.

##### **b) Personal & Other Protective Equipment (Sections 8/15/23 of the OH&S Act and Amended Disaster Management Act 2002: Sect 27(2) dated 16 April 2020)**

The Contractor shall identify the hazards in the workplace and deal with them. He must either remove them or, where impracticable, take steps to protect workers and make it possible for them to work safely and without risk to health under the hazardous conditions.

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 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 Principal Contractor shall include in his OH&S plan the PPE he intends issuing to his employees for use during construction and the sanctions he intends to apply in cases of non-conformance by his employees. Conformance to the wearing of PPE shall be discussed at the weekly inspection meetings.

c) Accidents and Incident Investigation (General Administrative Regulation 9)

The Principal Contractor shall be responsible for the investigation of all accidents/incidents where employees and non-employees were injured to the extent that he/she/they had to be referred for medical treatment by a doctor, hospital or clinic. The results of the investigation shall be entered into an accident/incident register listed in paragraph 2.4.1.

The Principal Contractor shall be responsible for the investigation of all minor and non-injury incidents as described in Section 24(1)(b) & (c) of the Act and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future.

Reporting: The Principal Contractor shall provide the **Thembisile Hani Local Municipality** with copies of all statutory reports required in terms of the Act within 7 days of the incident occurring.

d) Checking, Reporting and Corrective Actions

1. Monthly Audit by Client (Construction Regulation 5)

The Thembisile Hani Local Municipality will conduct monthly audits to ensure that the Principal Contractor has implemented and is maintaining the agreed and approved OH&S plan.

2. Other Audits and Inspections by the Thembisile Hani Local Municipality.

The Thembisile Hani Local Municipality reserves the right to conduct other ad-hoc audits and inspections as deemed necessary. This will include site safety walks.

3. Contractor's Audits and Inspections

The Principal Contractor is to conduct his own monthly internal audits to verify compliance with his own OH&S management system as well as with this specification.

4. Inspections by OH&S Representative's and other Appointees

OH&S 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.

5. Recording and Review of Inspection Results

All the results of the above-mentioned inspections shall be in writing, reviewed at OH&S committee meetings, endorsed by the chairman of the meeting and placed on the OH&S File.

#### **C4.2.5 Measurement and Payment**

Payment for the contractor's obligations in respect of the Occupational Health and Safety act and Construction Regulations shall be made through three payment items described below. The three payment items together shall include full compensation for all personnel (including a dedicated full time Construction Safety Officer), cost

and incidentals in respect of compliance with the enforcement of the Health and Safety Specifications, which shall include for the compilation, presentation, implementation and maintenance of the Health and Safety Plan as contemplated. In tendering rates for the three items the contractor shall ensure that the sum of the amounts for the three items shall not be less than one percent (1%) of the Tender Amount.

Item	Unit
<b>C1.1 Contractor's initial obligations in respect of the Occupational Health and Safety Act and Construction Regulations.....</b>	Lump Sum

The full amount will be paid in one instalment only once: -

- The contractor has notified the Provincial Director of the Department of Labour in writing of the project.
- The contractor has made the required initial appointments of employees and sub-contractors.
- The client has approved the contractor's Health and Safety Plan.
- The contractor has set up his Health and Safety File.

Item	Unit
<b>C1.2 Contractor's time related obligations in respect of the Occupational Health and Safety Act and Construction Regulations.....</b>	Month

The tendered monthly amount shall represent full compensation for that part of the contractor's General obligations in terms of the Occupational Health and Safety Act and the Construction Regulations which are mainly a function of time. This includes inter alia payment of all costs for the appointment of all staff contemplated in the construction regulations and the transport of employees on site. Payment will be monthly only after payment for Item B1.1 has been made.

Item	Unit
<b>C1.3 Submission of the Health and Safety File .....</b>	Lump Sum

The tendered lump sum shall represent full compensation for the contractor meeting all his obligations in respect of the Occupational Health and Safety Act and the Construction Regulations and for the preparation and submission of his Health and Safety File complete as envisaged on this specification to the Client's satisfaction.

This amount will be paid only once the contractor has met all his obligations in respect of the Occupational Health and Safety Act and the Construction Regulations and has submitted his Health and Safety File complete as envisaged on this specification to the Client's satisfaction.

#### **The OH&S File (Construction Regulation 7)**

As required by Construction Regulation 7, the Principal Contractor and other Contractors shall each keep an OH&S file on site. The following list is not exhaustive and shall only be used as a guide:

- Notification of construction work (Construction Regulation 4)
- Latest copy of OH&S Act (General Administrative Regulation 4)
- Copy of Construction Regulation 2014
- Copy of Project Safety Specification
- Proof of registration and good standing with COID Insurer (Construction Regulation 4(g))
- Induction Training Manual

- Induction training Attendance Register
- Tool Box talks Manual
- Tool Box talks Attendance Register
- PPE Issue Register
- Legal appointments (Include CV's' ID's and Proof of competencies)
- Medical Fitness Certificates (Issued by an occupational health practitioner) for all site workers including Managers \_Include ID's and Next of kin details (Construction Regulation 4)
- OH&S plan agreed with the Client including the underpinning risk assessment/s, safe work procedures, and method <sup>[L]</sup><sub>[SEP]</sub> statements (Construction regulation 7)
- OHS Structure / Organogram
- OHS Policy
- Evacuation / Emergency preparedness procedure
- Emergency Contact Numbers
- Traffic Management Plan
- Fall Protection Plan
- Copies of OH&S committee and other relevant minutes
- Designs/drawings
- A list of Contractors (sub-contractors) including copies of the agreements between the parties and the type of work being done by each Contractor (section 37(2))
- Appointment/designation forms Registers as follows:
- Accident/Incident registers (Annexure 1 of the General Administrative Regulations)
- OH&S representatives' inspections register
- Construction vehicles and mobile plant inspections by controller<sup>[L]</sup><sub>[SEP]</sub>
- Daily inspection of vehicles, plant and other equipment by the operator/driver/user
- Excavations inspection<sup>[L]</sup><sub>[SEP]</sub>
- Explosive powered tool inspection, maintenance, issue and returns register (incl. cartridges and nails)<sup>[L]</sup><sub>[SEP]</sub>
- Fall protection inspection register
- Hand Tools register
- PPE use register<sup>[L]</sup><sub>[SEP]</sub>
- First aid box contents<sup>[L]</sup><sub>[SEP]</sub>
- Fire equipment inspection and maintenance
- Hazardous chemical substances record<sup>[L]</sup><sub>[SEP]</sub>
- Ladder inspections<sup>[L]</sup><sub>[SEP]</sub>
- Lifting equipment register
- Machinery safety inspection register (incl. machine guards, lock-outs etc.)
- Stacking and storage inspection
- Inspection of vessels under pressure
- Inspection of work conducted on or near water
- All other applicable records including safety officer reports.

## ANNEXURE 1: MEASURING INJURY EXPERIENCE

Injury experience has traditionally been measured by the use of a disabling injury frequency rate, the so-called "DIFR". The DIFR is calculated by multiplying the number of disabling injuries by 1 million and dividing by the number of man-hours worked.

Lately the DIFR has been replaced internationally with a DIIR: disabling injury incidence rate. The only difference between the two rates are that the 10 million in the calculation is replaced with 200 000. (200 000 purported to be the number of hours and average person works in a lifetime.)

The use of the two rates above has proved to be somewhat problematical as they are open to manipulation and disabling injuries are often "hidden" by returning the injured employee to the workplace so as not to lose a shift and therefore having to register a disabling injury.

The Construction Industry recently decided to promote the use of a new frequency rate based on the number of compensation injury claims as these are more difficult to hide or manipulate because the reporting of compensable injuries is a legal requirement.

The industry is hoping that adoption of this new measurement of injury experience will enable the industry to monitor itself as far as work related injuries are concerned.

Below follows an explanation of this new rating system.

### COMPENSATION INCIDENCE FREQUENCY RATE (CIFR)

#### FORMULA

No. of Compensation Claims X 200 000

\*220 man hours X No. of Employees

#### DEFINITIONS

No. of Compensation

Claims:       **The number of claims lodged with the COID insurer for the period under review**

**200 000:**       The fixed factor to align the rate with other rates used internationally

Man-hours Worked

Include:       \*       Hourly Paid Employees  
                  \*       Sub-contactors (No. of Employees X \*220 each)  
                  \*       Staff (No. of Employees X \*220 hours each)

**220 man-hours:**       The \*average number of hours worked by one employee in one month in the Construction industry.

\* Overtime, absence on leave or sick leave, unrecorded after hours time worked by senior and middle management factored into this average.

**No. of Employees:**   The actual or average number of employees employed for the period under review.

## ANNEXURE 2: EXECUTIVE SHE RISK MANAGEMENT REPORT

The SAFCEC OH&S committee recently developed the following report in an attempt to standardise on reporting and assist contractors in obtaining a clear picture of their SHE Risk Management performance. It is hoped that clients will also accept this standardised report. Your comments/suggestions for improvement is invited.

### EXAMPLE ONLY: ALL INFORMATION IS FICTITIOUS

XYZ construction

#### \*SHE RISK MANAGEMENT REPORT

PERIOD JANUARY TO MARCH 2002

\*(SHE = Safety, Health & Environment)

### 1. Introduction

We hope that this new format of quarterly SHE Risk Management reporting will provide a clear picture of the company's performance as far as occupational health & safety is concerned.

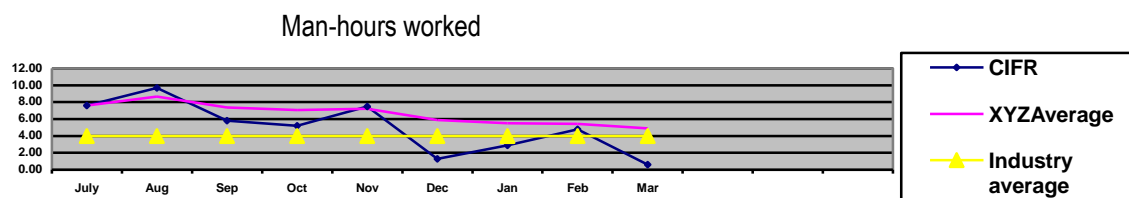
The first quarter of 2002 generally reflected an improvement in injury experience and shows a decline in the number of injuries. Although Building was the only division where there was an increase in compensation claims, figures are still well down from the average 2001 figures. A sub-contractor experienced one fatality.

All divisions are eagerly awaiting the final implementation in May of the new electronic SHE Management system that will make the tools to implement the SHE programme available to all management and supervisory staff.

### 2. Incident Statistics

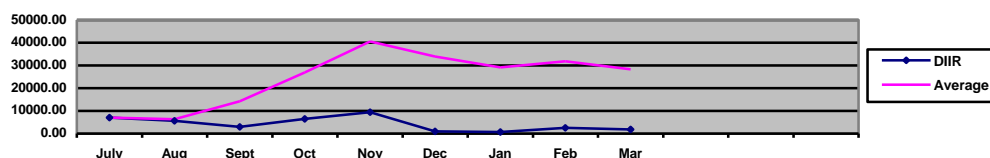
#### 1.1 Compensation Incident Frequency Rate (CIFR)

$\text{CIFR} = \frac{\text{Total No. of Claims against the Workmen's Compensation Fund}}{\text{Man-hours worked}} \times 200\,000$



#### 1.2 Disabling Injury Incidence Rate (DIIR)

$\text{DIIR} = \frac{\text{No. Disabling Injuries}}{\text{Manhours worked}} \times 200\,000$



#### 1.3 Other Major Incidents

Three other major incidents were experienced in the period under review:

- 1.3.1 A major trench collapsed at Job. 00123: XYZ Head Office, Bochum: No personnel injured, extensive damage to foundations: 3 days delay.
- 1.3.2 A concrete dumper ran away when its brakes failed. It smashed into the glass façade of the building on Job 00332: McDonalds, Polokwane. The driver jumped off and was not injured. Cost of damage to façade: R45 000.
- 1.3.3 A storage hut on Job 00567: BP Petrol Station, Swartruggens was demolished by fire when the night watchman made a fire inside the storage hut which contained concrete vibrators and levelling machines. Cost of replacing the hut and machines: R30 000

### 3. RISK AREAS

The following items of concern need priority consideration by management:

- 3.1 New employees must undergo pre-employment medical examinations to:
- protect XYZ from claims at a later stage
  - ensure that only healthy persons are employed
  - prevent injuries and illness in the workplace
  - enhance XYZ image
- 3.2 Vehicle drivers and plant operators must be instructed to inspect their vehicles daily before start-up using the prescribed checklists to ensure that these are safe to operate and in good condition.

### 4. AUDITS

- 4.1 Three SHE audits were conducted in February and March by XYZ:

Job 00432:	Gillooly's Mall	Compliance: 56%(*)
Job 00786:	Cullinan Head Office	Compliance: 83%(****)
Job 00589:	Cleveland Station	Compliance: 76%(***)

### 5. TRAINING

One hundred and forty two employees, representing 7% of employees, attended nine training courses. \* Our objective is to train 5,5% of employees quarterly.

Month	No. of Employees Trained	Course	Source
January	26	Induction	Internal
	15	OH&S Reps	Consultant
	3	Crane Drivers	External
February	23	Induction	Internal
	17	OH&S Reps	Consultant
March	43	Induction	Internal
	9	OH&S Reps	Consultant
	3	Bomag Rollers	Supplier
	3	First Aiders	St. John's

### 6. LEGAL ISSUES

- 6.1 An inspector of the Department of Labour issued an improvement notice on Job 00987: Gillooly's Mall. The notice requires that all scaffolding comply with the SABS standards for the Erection and Maintenance of Access Scaffolding (SABS 085). This is currently being attended to and the inspector will return on 15 April 2002 to ascertain if the notice has been complied with.

## **7. OCCUPATIONAL AND OTHER HEALTH MATTERS**

### **7.1 HIV Aids**

The proposed SAFCEC clinic will soon be operational and we will then be able to send our employees who have tested positive to the clinic for counselling and eventual treatment when necessary

The mobile clinic saw and tested fifty employee volunteers at 3 sites this month. Eighteen of them tested positive.

### **7.2 Tuberculosis**

The mobile clinic will be calling at Gillooly's Mall and Cleveland Station on 15 and 16 October respectively to screen employees for TB.

### **7.3 Noise**

All suspected noise pollution areas have been tested and the results are awaited. Employees working in areas testing over 85dBa will be issued with suitable hearing protectors.

## **8. ENVIRONMENTAL MEASURES**

Inspectors from the Botswana Department of the Environment visited Djwaneng and inspected the site and yard. They gave it a "clean bill of health" and advised that we should increase the dust control measures by spraying roads three times per day instead of the present twice per day.



### ANNEXURE 3: LIST OF RISK ASSESSMENTS

- \* Clearing & Grubbing of the Area/Site
- \* Site Establishment including:
  - Office/s
  - Secure/safe storage for materials, plant & equipment
  - Ablutions
  - Sheltered eating area
  - Maintenance workshop
  - Vehicle access to the site
- \* Dealing with existing structures
- \* Location of existing services
- \* Installation and maintenance of temporary construction electrical supply, lighting and equipment
- \* Adjacent land uses/surrounding property exposures
- \* Boundary and access control/Public Liability Exposures (NB: the Employer is also responsible for the OH&S of non-employees affected by his/her work activities.)
- \* Health risks arising from neighbouring as well as own activities and from the environment e.g. threats by dogs, bees, snakes, lightning etc.
- \* Exposure to noise
- \* Exposure to vibration
- \* Protection against dehydration and heat exhaustion
- \* Protection from wet & cold conditions
- \* Dealing with HIV/Aids and other diseases
- \* Use of Portable Electrical Equipment including
  - Angle grinder
  - Electrical drilling machine
  - Skill saw
- \* Excavations including
  - Ground/soil conditions
  - Trenching
  - Shoring
  - Drainage of trench
- \* Welding including
  - Arc Welding
  - Gas welding
  - Flame cutting
  - Use of LP gas torches and appliances
- \* Loading & offloading of trucks
- \* Aggregate/sand and other materials delivery
- \* Manual and mechanical handling
- \* Lifting and lowering operations
- \* Driving & operation of construction vehicles and mobile plant including
  - Trenching machine
  - Excavator
  - Bomag roller
  - Plate compactor
  - Front end loader
  - Mobile cranes and the ancillary lifting tackle
  - Parking of vehicles & mobile plant
  - Towing of vehicles & mobile plant

- \* Use and storage of flammable liquids and other hazardous substances
- \* Layering and bedding
- \* Installation of pipes in trenches
- \* Pressure testing of pipelines
- \* Backfilling of trenches
- \* Protection against flooding
- \* Gabion work
- \* Use of explosives
- \* Protection from overhead power lines
- \* As discovered by the Principal Contractor's hazard identification exercise
- \* As discovered from any inspections and audits conducted by the Client or by the Principal Contractor or any other Contractor on site
- \* As discovered from any accident/incident investigation.