KUSILE POWER STATION

EMPLOYER'S HEALTH, SAFETY AND ENVIRONMENTAL REQUIREMENTS SCHEDULE

Part 3
Annexure X.9
Rev 4_0121

Note to Tenderers: Any documents, as required by the attached Tender Returnables, are prepared and submitted with the Tender. [1]

Note to Tenderers: A Safety, Health, and Environmental (SHE) Plan specified under Sub- Clause 5.1, which is representative for the Tendered Works, are prepared and submitted with the Tender.[1]

Note to Tenderers: Method Statements and Risk Assessments are prepared and submitted with the Tender.[1]

Note to Tenderers: An Organogram which is representative for the Tendered Works, is prepared and submitted with the Tender. [1]

Note to Tenderers: Curriculum Vitae (CV's) of the Construction Supervision, proposed for the Tendered Works, are submitted with the Tender. [1]

Note to Tenderers: A List of Subcontractors proposed for the Tendered Works is prepared and submitted with the Tender. [1]

Note to Tenderers: A labor histogram representative for the Tendered Works, is prepared and submitted with the Tender. [1]

Note to Tenderers: An equipment histogram, representative for the Tendered Works, is prepared and submitted with the Tender. [1]

Note to Tenderers: A laydown and material management system representative for the Tendered Works, is prepared and submitted with the Tender. [1]

[1] Note to Tenderers in block outline (such as this one) in the Employer Policies and Procedures are for information only and/or describe information required for the tender. These notes are relevant only at tender stage and are not included in a contract resulting from the tender

INTRODUCTION
Contractors are required to submit the following Information during the Tender process:

1.0	SAFETY & HEALTH		
1.1	Provide a current copy of your Company Safety and Health Policy (signed by CEO)	N/A ☐	Attached
1.2	Provide the name and CV of your Corporate (Head Office) Safety and Health Manager(s) **Name** / **Competencies (CV)**		
1.3	What is the status of the person detailed in 1.2 above?	Consultant	Employee
1.4	Please provide baseline Hazard Identification & Risk Assessment for works to be performed at the Kusile Power Station:	Attached	N/A
1.5	Provide SHE Plan for the Kusile Power Station Project (roles & responsibility, generic organogram w/ SHE appointments, SHE programs/plans, applicable systems implementation (NOSA, OHSAS):	Attached	N/A
1.6	Provide copies of your Company **procedures** for the following:		
	• Safety and Health Training Matrix	Attached ☐	N/A
	• Safety & Health Method Statement Methodology (in addition, provide a sample of method statement)	Attached ☐	N/A
	• Safety & Health Risk Assessments Methodology (in addition, provide a sample of risk assessment)	Attached ☐	N/A
	• Medical Surveillance Procedure for Employees	Attached ☐	N/A
	• Incident Investigation Procedure	Attached ☐	N/A
	• General Safe Work Procedures (PPE, working at heights, trench & excavation, confined space, lock-out, etc.)	Attached ☐	N/A
	• Equipment Inspections (mobile, electrical, fall protection, fire extinguishers, ladders, rigging, etc.)	Attached ☐	N/A
	• Hazardous Chemical Management Procedure	Attached ☐	N/A
	• Occupational Hygiene Program	Attached ☐	N/A
	• If working at heights in scope of work, include fall protection plan	Attached ☐	N/A
1.7	Please provide the following statistics for the last 3 years		
1.8	Has your company or individuals employed by your company been issued with a prohibition notice for failing to comply with Safety and Health Legislation from the Department of Labour within the past five years?	YES	NO
	If Yes, give details (year of prohibition, length of prohibition, nature of prohibition)		

	2018 Year 1	2019 Year 2	2020 Year 3
Fatal Accidents			
Lost Time Accidents **including occupational diseases			
Medical Treatment Injuries			
Hours worked			
Total Recordable Incident Rate (TRIR)			
Lost Time Incident Rate (LTIR)			

1.9	Does your company subcontract any work?	YES	NO
1.10	Does your company have a system for qualifying subcontractors? **Please Provide**:	YES	NO
1.11	Describe your arrangements for ensuring your subcontractors have required standards of competence as your employees?		☐
1.12	Does your Organization have a written drug free workplace program that includes drug & alcohol testing? **Please submit:**		☐ **Pre-Assignment** **Attached** ☐ **Random** **Attached** ☐ **Post Accident** **Attached** **Suspicion** **Attached** ☐
1.13	Provide letter of good standing (workers compensation ID #) from workers compensation commission? **Note: No Letter of Good Standing may result in Disqualification**		**Attached**

2.0	**ENVIRONMENTAL**		
2.1	Who is the person with overall responsibility for environmental issues within your Company? Eskom Holdings SOC Limited	☐ ☐	☐ ☐ ☐
2.2	Please attach Company's written Environmental Policy Statement (signed by CEO).	YES	NO
2.3	Do you have a documented Environmental Management System? Please attach proposed EMP for Kusile Power Station works	YES ☐ YES	NO ☐ NO ☐
2.4	Please attach index of your EMS and procedures.		**Attached**
2.5	Which of your activities do you consider have the most impact on the environment at the Kusile Power Station?	☐	☐
2.6	Has your Company been served with an environmental enforcement notice within the last five years?	YES	NO
2.7	If you have answered **YES** to the above, please provide full details on each incident and, where relevant, actions taken to prevent recurrence on a separate sheet of paper and attach it to this questionnaire		**Attached**
2.8	Is your company a member, certified, recognized by any of the following: ISO 14001, OHSAS 18001, NOSA, etc.? If **YES**, please provide details	YES	NO

SAFETY, HEALTH AND ENVIRONMENTAL REQUIREMENTS SCHEDULE

1. DEFINITIONS

Any capitalised word, as applicable, have the meaning (in the following order of precedence) as defined in:

- the Conditions of Contract;
- this Schedule;
- the ROD (c.f. Part 3, section 11)
- the Occupational Health and Safety Act 85 of 1993 ("OH&S Act") and the applicable regulations promulgated under the OH&S Act and in particular the Construction Regulations 2003 ("Construction Regulations").

References in this Schedule to the "Project Health and Safety Requirements" includes all the health and safety requirements as provided for in this Schedule (including those provided for in the Kusile Site Health, Safety and Security Manual (referenced in paragraph 12 below) or otherwise under the Contract, including all requirements under the applicable Laws.

2 INTRODUCTION

Although the provisions of this Schedule typically only refer to the *Contractor*, compliance herewith is also required from Subcontractors. The *Contractor* remains responsible for compliance with the requirements of this Schedule by Subcontractors and shall ensure that each Subcontractor complies with the requirements hereof at all times and as applicable. Without derogating from his obligations and responsibilities under the Contract, the *Contractor* ensures that the requirement to comply with the provisions of this Schedule is included in all Subcontracts involving activities at the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site) and / or activities otherwise covered by this Schedule. Failure by the *Employer* or *Project Manager* to enforce compliance with the requirements of this Schedule does not relieve the *Contractor* from any responsibility or obligation whether under the Contract or under applicable Law.

The *Employer* requires that the management of safety, health and environmental issues are to a standard of excellence aligned with world class best practices.

The *Contractor* carries prime accountability and responsibility for the health, safety and welfare of the *Contractor's* Personnel. No health, safety and welfare requirements specified by or imposed on the *Employer* (whether under the Contract or under applicable Law) shall be construed or operate, as between the *Employer* and the *Contractor*, to reduce the *Contractor's* accountability and responsibility for the health, safety and welfare of the *Contractor's* Personnel.

The *Contractor* is responsible for adequately informing the *Contractor's* Personnel of all relevant information of this SHE Schedule and the *Contractor's* SHE Plan.

The *Contractor* takes prime responsibility for all aspects of environmental management associated with the Works and activities he is responsible for under the Contract.

The requirements of this schedule is not considered to be exhaustive and the *Employer* reserves the right to add, delete or modify conditions where it is considered to be appropriate in this Schedule.

Where additions, deletions or modifications are made to this Schedule, the *Project Manager* advises the *Contractor* of the change. The *Contractor* is solely responsible for informing the *Contractor's* Personnel of these changes. The *Employer* or the *Project Manager* are not responsible for any failure caused by a Subcontractor not receiving a notification or failing to act upon such notification.

3 EMPLOYERS CARDINAL RULES

Without derogating from any other requirements under the Contract, the *Employer* has identified 5 Cardinal Rules which require special attention and management over and above what is required under this schedule. These rules are:

Rule	Description
1	Open, isolate, test, earth, bond, and/or insulate before touch
2	Hook up at height
3	Buckle up
4	Be sober
5	Ensure you have a permit to work

Where any matter dealt with in this Schedule is also dealt with under applicable Laws, the two are intended to be mutually explanatory and supplementary, the one to the other. In case of conflict or difference between this Schedule and the applicable Laws the more onerous provision prevails, unless otherwise instructed by the *Project Manager*.

There is zero tolerance for failure to comply with the Project Health and Safety Requirements at the Project Site (and at other places, if any, as may be specified under the Contract as forming part of the Site). Any person who is, or appears to the *Project Manager* to transgress the Project Health and Safety Requirements may be required to leave and/or refused access to the Project Site (and at other places, if any, as may be specified under the Contract as forming part of the Site). If such person is *Contractor's* Personnel, the *Contractor* takes necessary steps against such person (including disciplinary action, where appropriate, and the removal of the person from the Project Site (or from other places, if any, as may be specified under the Contract as forming part of the Site).

Without limiting or derogating from the *Project Manager's* rights above, the *Project Manager* may, where he considers appropriate, issue a personal transgression notice ("Personal Transgression Notice") to any *Contractor's* Personnel who transgress or fail to comply with the Project Health and Safety Requirements. The Personal Transgression Notice procedure encompasses a three-stage warning process as follows:

4 GENERAL REQUIREMENTS

<table>
<tr><th>Non-material Transgression</th><th>Material Transgression</th></tr>
<tr><td>First offence:
Written warning</td><td rowspan="3">First and final notice

Contractor's Personnel permanently removed from the Project Site (and at other places, if any, as may be specified under the Contract as forming part of the Site).</td></tr>
<tr><td>Second Offence:
Written warning and *Contractor's* Personnel not allowed onto the Project Site (and at other places, if any, as may be specified under the Contract as forming part of the Site) for a period of three days.</td></tr>
<tr><td>Third offence:
Final warning issued and *Contractor's* Personnel permanently removed from the Project Site (and at other places, if any, as may be specified under the Contract as forming part of the Site).</td></tr>
</table>

The *Contractor* complies with the Occupational Health and Safety Act 85 of 1993 ("OH&S Act") and all applicable regulations promulgated under the OH&S Act and in particular the Construction Regulations 2003 ("Construction Regulations"), all as amended from time to time. The *Contractor* furthermore complies with applicable South African National Standards or International Standards and with *Employers* Policies and Procedures.

It is the duty of the *Contractor* and his Subcontractors to ensure that they are familiar with all applicable Law and these requirements.

The *Contractor* compiles and maintains an up to date legal register listing all applicable Law and standards as part of his SHE File.

5 CONTRACTOR'S SHE POLICY AND PLAN

The *Contractor* and each Subcontractor each have a SHE Policy that is duly signed by an authorised signatory concerning the protection of the health and safety of *Contractor's* Personnel and others in and about the execution of the Works, including a description of his organisation and the arrangements for carrying out and reviewing such policy.

A copy of the SHE Policy shall be provided as a tender returnable. Tenderers shall furthermore supply method statements containing sufficient detailed information to demonstrate compliance to this Schedule.

Copies of the Subcontractors SHE Policies are provided as and when Subcontractors are appointed.

The *Contractor* prominently displays a copy of the policy in the workplace where the *Contractor's* Personnel normally report for service.

The *Contractor* develops a suitable and sufficient SHE Plan for the execution of the Works. This is submitted to the *Project Manager* for approval within 56 days of the Commencement Date, but in any event not less than 28 days before mobilisation of the first *Contractor's* Personnel at the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site).

Upon approval by the *Project Manager*, the SHE Plan is implemented by the *Contractor*. The *Contractor* does not allowed to commence any Construction Work until the SHE Plan has been so approved. The *Project Manager's* approval of the SHE Plan does not, however, relieve the *Contractor* of any responsibility under the Contract.

5.1 SHE Plan Requirements

The *Contractor's* SHE Plan demonstrates the management process and procedures that are adopted to ensure compliance to these requirements.

These management processes identifies each construction activity, the foreseeable internal and external hazards, the specific precautions and controls that are necessary to ensure that the Works proceed safely and without risks to health or to adjacent operations

The SHE Plan further demonstrates the *Contractor's* commitment to safety, health and environmental requirements and, as a minimum includes the following elements:

- Compliance to this schedule
- The *Contractor* SHE Policy. (OH&S Act section 7)
- Indication of Competent Supervision (CV's to be included). (Construction Regulation 6 (1))
- Documented proof of assessment of competencies of appointed persons Persons (e.g.: scaffold erectors, riggers etc)
- Duties and safety responsibilities of all appointed persons.
- Selection, placement and training procedures, including induction and ongoing training in 'Basic Safe Work' and Occupational Health & Safety training for newly hired or promoted supervisors. (OH&S Act section 8(2)(i))
- Occupational Health & Safety communications and meetings, including daily safe task instructions and project SHE meetings.
- Assessment and management procedure for their Subcontractors, including audit requirements for SHE Plans. (Construction Regulation 5)
- Safety awareness promotions.

- Occupational Health and Safety Workplace Environment controls, including provision for monitoring employee exposures to noise, dust, etc. (Hazardous Chemical Substances Regulation 4)
- Personal Protective Equipment procedure and rules. (OH&S Act section 8, General Safety Regulation 2)
- Control of dangerous and hazardous substances. (Hazardous Chemical Substances Regulations)
- System of hazard identification and risk control, such as Risk Assessments, Daily Safe Task Instructions and Communications. (OH&S Act section 8, Construction Regulation 7)
- Inspection and maintenance of plant, tools and equipment prior to introduction to the Project Site (and to other places, if any, as may be specified under the Contract as forming part of the Site) and regularly thereafter. (Construction Regulation 21)
- Accident and incident reporting, recording, investigation and analysis, which ensure that corrective action, are taken and this action is communicated to report initiators. (General Administrative Regulations 8 & 9)
- Medical and first aid arrangements. (General Safety Regulation 3)
- Evacuation and emergency planning arrangements; (Construction Regulation 27 & Environmental Regulations for Workplaces 9)
- Substance abuse policy and procedure and programme. (General Safety Regulation 2A)
- Workers welfare facilities. (Construction Regulation 28)
- Daily site safety inspections and audits processes.
- Letter of good standing with a compensation insurer. (Construction Regulation 5 (3) (f))
- Identification of Environmental Aspects, their associated impacts, mitigation measures and management thereof

The *Contractors* SHE Plan is reviewed from time to time (and in any event as and when required by the *Project Manager*) to ensure that it fully addresses all the issues and complies with these requirements to the satisfaction of the *Project Manager*.

6 APPOINTMENTS AND SUPERVISION

The *Contractor* ensures that all his appointees are made aware of their accountabilities and responsibilities in terms of their appointment and that they advise and assist these appointees in the execution of their duties.

The *Contractor* provides and keep up to date an outline organogram and a list of names and contact telephone numbers of all appointments as required from the table below.

The *Contractor* keeps a record of all *Contractor's* Personnel, indicating their date of induction, relevant skills and licenses, and be able to produce this list at the request of the *Project Manager.*

The *Contractor* ensures that the performance of all specified work is supervised throughout the duration of the Contract by a sufficient number of competent appointed representatives of the *Contractor*, who have experience in the type of work specified.

No work commences and / or continues without the presence of an appointed Construction Supervisor or appointed Assistant Construction Supervisor during execution of the Works. These supervisors are fluent in the language for communications as defined under the Contract.

In determining the number of appointed competent supervisors, the nature and scope of work being performed is taken into consideration and consented to in writing by the *Project Manager.* The required appointed Construction Supervisor (Construction Regulation 6(1)) does not leave the Project Site during working hours unless there is a sufficient number of appointed competent Assistant Construction Supervisor/s (Construction Regulation 6(2)) to assist with supervision.

Appointment letters and competency certificates of the persons appointed as Construction Supervisors or Assistant Construction Supervisors in terms of Construction Regulation 6(1) or 6(2) are signed by persons who are suitably qualified and duly authorised to the satisfaction of the *Project Manager*. Relevant training certificates and proof of experience of assignees are submitted with the SHE Plan.

In determining the number of appointed competent Construction Health and Safety Officers to the number of employees, the nature and scope of work being performed is taken into consideration. Unless otherwise approved by the *Project Manager* a minimum average ratio of 1 Construction Health and Safety Officer to 50 employees is applied. Similarly, unless otherwise approved by the *Project Manager* all Construction Health & Safety Officers is available for health and safety meetings and participates fully in all activities outlined in this Schedule and in the *Contractors* SHE Plan. Furthermore, only full-time Health & Safety Officers are appointed and does not have other duties, unless otherwise approved in writing by *Project Manager.*

The *Contractor* ensures that the following appointments are made in writing, as applicable:

OH&S Act Reference	Appointment	Note
16(1)	Chief Executive Officer	a
16(2)	Persons assigned functions to assist the Chief Executive Officer (if required)	
17	Health and Safety Representative	b
19	Health and Safety Committee Member (if there are 2 or more H&S reps there will be a H&S committee)	

OH&S Act Reference	Appointment	Note
-	Chairperson of Health and Safety Committee	
GSR 3	First Aiders	
GSR 5(1)	Person that pronounces & certifies a confined space safe for the duration of work being conducted (applicable for confined spaces)	
DMR 17(2)	Goods Hoist Inspector	
GAR 9(2)	Incident / Accident Investigator	
DMR18(11)	Lifting Machinery Operator (Appointment or Permit)	
DMR18(5)	Lifting Machinery Inspector	
DMR 18(10)(e)	Lifting Tackle Inspector	
EMR 9	Portable Electrical Equipment Inspector	
VUP 10	Portable Gas Container Inspector	
VUP 13(1)(b)	Pressure Vessels Inspector	
Lifts, Escalators & Passenger Conveyor Regulations (6)(1)	Competent Person to examine and maintain lift, escalator or passenger conveyor	
HCS 3(3)	Hazardous Chemical Substances Co-coordinator	
Asbestos Regulation 21	Person registered as an Asbestos Contractor (Asbestos AIA) by the Department of Labour	
CR 4(1) (c)	Appointment of the *Contractor* by the Employer	

CR 5(3) (b)	Subcontractors Appointment by the *Contractor*	
CR 6(1)	Construction Supervisor appointed by the *Contractor's* OH&S Act Section 16(2) assignee	c
CR 6(2)	Assistant Construction Supervisor appointed by the *Contractor's* OH&S Act Section 16(2) assignee	c
CR 6(6)	Construction Health and Safety Officer	d
CR 7(1)	Person to Compile Risk Assessments	
CR 8(1)(a)	Competent person to compile Fall Protection Plan	
CR 10(a)	Person to supervise Formwork and Support Work	
CR 11(1)	Person to supervise Excavation Work	
CR 12(1)	Demolition Work Supervisor	
CR 12(11)	Responsible Person in the use of Explosives & development of the method statements	
CR 15 (1)	Suspended Platform Supervisor	
CR 15(8)(c)	Competent Person to conduct Performance Test of Suspended Platforms	
CR 14(2)	Scaffolding Supervisor	
CR 17(1)	Material Hoist Inspector	
CR 18(1)	Batch Plant Supervisor	
CR 19(2)(b)	Explosive Powered Tool Inspector	
CR 19(2)(g)(i)	Person responsible for issuing & collection of Explosive Powered Tools cartridges & nails or studs	
CR 21(1)(j)	Construction Vehicle and Mobile Plant Inspector	
CR 22 (e)	Temporary Electrical Installation Controller	
CR 26 (a)	Stacking and Storage Supervisor	
CR 27 (h)	Fire Fighting Equipment Inspector	
-	Emergency Planning Co-coordinator	
-	Fire Official	
-	Environmental Officer	

Notes to the appointments listed above:

Number	Notes
a	Section 16(1) creates a legal presumption, and therefore no appointment is required. The *Contractor* provides the full names, contact telephone number and business address of the Chief Executive Officer.
b	Required Competencies: • General health and safety training • Health and Safety Representative Training • Hazard identification and Risk assessment Training • Incident investigation and root cause analysis
c	Required Competencies: • Three years applicable experience in construction management • General Health and Safety course • OH&S Act and Regulations or Mine Health and Safety Act and Regulations course, as applicable (latest version of the Act and Regulations) • Incident Investigation and Root Cause Analysis • Hazard Identification and Risk Assessment Training • Job Observations training • Attended an accredited supervisor's safety course If the Commencement date precedes the date of issue of this Schedule (rev **4**), the *Contractor* has a period of three months to comply with the above competency requirements; except to the extent required by applicable Law in which case immediate compliance is required.

Number	Notes
d	Typical Qualifications: • National Diploma in Safety Management or Environmental Health or; • A recognised safety certification (minimum: of 2 weeks training) (e.g. SAMTRAC/Modern SHEQ Management course) and registration and accreditation from a recognised Health and safety professional body Typical Competencies: • OH&S Act and regulations (latest version of the Act and regulations); • COID Act (latest version of the Act); • Incident investigation and root cause analysis; • Hazard identification and Risk assessment Training; • H&S Auditing; • Environmental recognised course; • Emergency Preparedness coordination training
e	The *Contractor* appoints and provide a full time, suitably qualified and competent Environmental Officer (EO) for the duration of the Contract, with a minimum average ratio of 1 EO per 500 employees

Tenderers must provide examples of Contractor's Personnel considered appropriate for the required appointments and, where possible, details of intended appointees, with the Tender.

The actual appointments are communicated to the *Project Manager* for approval at least 28 days before mobilisation of the first *Contractor's* Personnel at the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site) and includes a copy of the appointment letter, a Curriculum Vitae and relevant certificates of competency for the proposed role.

Where the Works are carried out on areas governed by the Mine Health and Safety Act 29 of 1996 or other Law applicable to mining activities, the appropriate equivalent appointments and assignments are made as required.[1]

7 INDUCTION AND TRAINING

All *Contractor's* Personnel undergoes induction as provided for and required under ANNEXURE X.6, *Personnel, Accommodation and Industrial Relations* before commencement of work on the Project Site (or on other places, if any, as may be specified under the Contract as forming part of the Site), and is renewed annually. Appropriate time is set aside for training (induction and other) of all *Contractor's* Personnel.

Additionally, all *Contractors'* Personnel undergoes Eskom's Passport Induction Training before commencement of work on the Project Site (or on other places, if any, as may be specified under the Contract as forming part of the Site). This training is arranged by the *Contractor*, with the *Employer* approved service provider at the *Contractor's* cost and is renewed annually.

Visitors to the site are required to undergo and comply with the Project Visitor health, safety and environmental induction requirement prior to being allowed access to site.

All visitors remains in the care and custody of a person (host) who has received a full induction.

Acknowledgement of receiving and understanding the induction is signed by all persons receiving this induction.

Prior to induction all *Contractors* Personnel undergoes a pre-employment medical examination and is confirmed fit for duty, in accordance with paragraph 8.6 Medical Surveillance Programme. This examination is arranged by the *Contractor* at the *Contractor's* cost. A copy of the certificate of fitness is presented for permanent record at the induction centre and kept at the *Contractor's* Project Site office as a permanent record.

Personnel are responsible for their own health and safety and that of their co-workers within their work area. They are made aware of their responsibilities during induction and awareness sessions which include:

- Familiarising themselves with their workplaces and health and safety procedures.
- Working in a manner that does not endanger them or cause harm to others.
- Keeping their work area tidy.
- Reporting all incidents / accidents / occupational ill-health and near misses.
- Protecting fellow workers from injury.
- Reporting unsafe acts and unsafe conditions.
- Reporting any situation that may become dangerous.
- Carrying out lawful orders and obeying health, safety and environmental rules.

The *Contractor* ensures that all *Contractors* Personnel undergoes general work induction with regard to the approved SHE Plan, general hazards prevalent on the Project Site (and prevalent at other places, if any, as may be specified under the Contract as forming part of the Site), construction Risk Assessment, Kusile Site Health, Safety and Security Manual and other related aspects.

The Contractor shall ensure that all Contractor's Personnel undergo specific work induction with regard to the approved SHE Plan. The Contractor shall ensure that Contractor's Personnel are informed of and understand of the work to be performed, the specific hazards prevalent to the work performed and the control measures required to mitigate such risks.

Evidence of training skills and competencies shall form part of the Contractor's submission as required under the Work Co-ordination Process (refer Part 3 Section 4). Proof of job specific induction signed by inductor and trainee shall be submitted as part of the Work Co-ordination application.

The *Contractor* ensures that all *Contractor's* Personnel working on the Project Site (or on other places, if any, as may be specified under the Contract as forming part of the Site) are adequately trained in the type of work / tasks to be performed. This training extends to include relevant procedures, hazard identification and risk assessment. *Contractor's* Personnel have the appropriate qualifications, certificates and tickets, and work under competent supervision. Copies of records of appropriate training and qualifications for all *Contractors'* Personnel are kept and maintained.

When there is an amendment to an Act, Regulation, Kusile Site Health, Safety and Security Manual, *Contractor's* SHE Requirements Schedule and/or SHE Plan, all affected staff undergoes the relevant re-training.

8 OCCUPATIONAL HEALTH, REHABILITATION AND HYGIENE

8.1 Compensation for Occupational Injuries and Diseases

The *Contractor* submits, and ensures that each Subcontractor submits evidence of current registration and a Letter of Good Standing with the Compensation Fund or, with a licensed compensation insurer. This is renewed as and when required so as to remain valid for the duration of the Contract.

8.2 Employee Health and Wellness Programme

The *Contractor* submits details of his Employee Health and Wellness Programme as part of his SHE Plan which includes a Medical Surveillance Program and an Employee Assistance Program as detailed below:

8.3 Employee Assistance Programme

Where Contractors or Subcontractors do not have Employee Assistance Programme (EAP) service providers, the *Employer's* EAP service provider, is available to provide assistance. All arrangements are made by the *Contractor*. All costs in this respect is borne by the *Contractor*.

Contact details are: ICAS – Tel. No.: 0800 611 059.

8.4 HIV / Aids Awareness Programme

An HIV/AIDS Awareness programme is implemented by the *Employer*. This includes voluntary counselling and testing (VCT) of individuals, HIV/AIDS awareness training and access to ongoing support for affected individuals. The *Contractor* ensures that the *Contractor's* Personnel are aware of this programme.

8.5 Occupational Hygiene

Identification: The *Contractor* identifies the occupational stressors which could include exposure to chemical and biological hazards, noise, dust, vibration, heat, etc., to which any person may be exposed as a result of his work activities.

Risk assessment: Once the occupational stressors have been identified the risk is assessed in accordance with statutory requirements, including the nature of the stressor, the work process, the exposure severity and duration, possible adverse effects etc.

Control measures: The *Contractor* provides details of all control measures that are implemented to eliminate or reduce exposure to occupational stressors. Where mechanical means are employed he provides details of how these are maintained to ensure that they operated at maximum efficiency.

Monitoring: The *Contractor* provides and adheres to effective monitoring procedures. These procedures include the planning, carrying out and recording of the results of the measurement programme. This is to confirm the effectiveness of the implemented control measures and the results are made available to the *Project Manager* on request.

8.6 Medical Surveillance Programme

The *Contractor* ensures that all *Contractor's* Personnel are registered on a medical surveillance programme appropriate to their occupational exposures and in possession of a valid medical health certificate. The certificate of fitness is also required to be relevant to the type of work (risk based) that the employee will be performing. The *Project Manager* only accepts medical surveillances conducted by Registered Occupational Health Practitioners who hold valid qualifications in occupational health.

The *Contractor* ensures that all *Contractor's* Personnel have undergone pre- entry medical examination before starting work on Project Site (or on other places, if any, as may be specified under the Contract as forming part of the Site). An exit medical examination is done by all *Contractors'* Personnel before leaving the Project Site (or other places, if any, as may be specified under the Contract as forming part of the Site). The pre-entry and exit medicals, are as a minimum, be to the standard of what is referred to as 'Red Ticket' medical fitness certification, similar to that which is used at South African mines.

The certificate is issued before the employee commences work and is presented at induction. If the *Contractor* does not provide proof of valid certificates of fitness for a

Contractor's Personnel, then such *Contractor's* Personnel is not permitted access to the Project Site (or such other places, if any, as may be specified under the Contract as forming part of the Site).

The certificate is renewed annually (for personnel who are not office bound including drivers) and once every 3 years (for personnel who are office bound). Exit medicals are conducted immediately prior to the termination of the employee's engagement at the Project Site (or at such other places, if any, as may be specified under the Contract as forming part of the Site) unless otherwise advised by the *Project Manager*.

All *Contractor's* Personnel are issued with the required medical records to prove medical status at the time of exiting the Project Site (or such other places, if any, as may be specified under the Contract as forming part of the Site).

The *Contractor* provides a documented process for managing those *Contractor's* Personnel who are issued with a conditional certificate of fitness.

In instances where sick leave is taken for a period of one week or more, the *Contractor* submits a declaration signed by the *Contractor's* Personnel in question indicating that she or he did not suffer any illness or injuries which occurred in the period of absence, which may affect his ability to work on the Project Site (or at such other places, if any, as may be specified under the Contract as forming part of the Site).

8.7 Emergency Care

A list of site emergency numbers is posted adjacent to all telephones and in every office.

The *Contractor* ensures that *Contractor's* Personnel are familiar with the emergency numbers and also are provided with stickers, with the emergency numbers printed on, to place inside their hard hats.

The *Contractor* has one first aid box to cover the first 5 persons on the Project Site (and at other places, if any, as may be specified under the Contract as forming part of the Site) and thereafter one for every 50 or team of workers, or part thereof.

Additional first aid boxes are provided if the risks and / or distance between work teams or workplace requirements require it (it shall be available and accessible for the treatment of injured persons at that workplace).

Prominent notices or symbolic signs compliant with SABS 1186 are displayed in prominent places in the workplace, indicating where the first aid box or boxes are kept as well as the name and contact details of the First Aiders.

9 EMERGENCY PREPAREDNESS AND RESPONSE

9.1 Emergency Response Plan

The *Contractor* develops his own emergency response plan for both work areas and office areas and submit this plan to the *Project Manager* for approval. The plan is amended as required by the *Project Manager*. The *Contractor* ensures that all *Contractors'* Personnel are aware of and trained in the execution of the emergency plan.

Periodic emergency drills will be undertaken by the *Employer* or *Project Manager*. The *Contractor* also initiate his own emergency drills, with the co-operation, and subject to the approval of the *Project Manager*. Details of such drills are recorded and such records are made available on request.

The *Contractor* is responsible for ensuring that his emergency plan is reviewed annually, and after every incident which caused the emergency plan to be activated. Any changes made are briefed to all persons affected and the information provided to the *Project Manager.*

9.2 Fire Safety

Refer also to part 3 ANNEXURE X.5, *Site Facilities and Services*

The *Contractor* developS fire safety and evacuation procedures for any area under his control prior to the commencement of any work thereon. The procedure takes into consideration the size of the area, types of work being done (e.g. cutting, welding, grinding, etc.), amount of combustible materials present etc. It takes in account of any hot work permit arrangements and all other applicable fire and evacuation procedures. All *Contractor's* Personnel entering and working on the Project Site, and other places, if any, as may be specified under the Contract as forming part of the Site, are trained in fire safety and emergency evacuation and any other duties they are required to perform e.g. Fire Warden.

Existing fire management systems in buildings are maintained during construction whenever possible. Any changes are approved by the *Project Manager* before implementation.

9.2.1 Fire Safety Plan

The *Contractor* prepares a Fire Safety Plan which includes:

a. The designation and organisation of *Contractor's* Personnel to carry out fire safety duties, including fire watch service, if applicable.

b. Emergency procedures used in the case of fire, including:

- method of sounding the fire alarm;
- notifying the fire department;

- instructions to Contractor's Personnel;
- firefighting procedures;
- evacuation routes;
- location of assembly points, and
- integration with existing emergency procedures.

c. The control of fire hazards in and around buildings.

d. Maintenance of firefighting facilities.

e. Display in strategic places a site plan which illustrates the assembly points, locations of means of raising the alarm and extinguisher media. A plan is drawn up for each area under the *Contractors* control and where appropriate, includes office and welfare facilities.

9.2.2 Fire Alarm Shut-down

The *Contractor* informs the *Project Manager* of all fire alarm shut-down requests in writing 7 days prior to any part of a fire alarm system being shut down.

When this is required the *Contractors* develops alternative procedures, as approved by the *Project Manager*, to follow during a fire alarm shutdown.

10 WORK STOPPAGE

The *Project Manager* is entitled to stop the execution of the Works and issue non-conformance notices for health, safety or environmental violations. Any non-conformances / findings / observations found during audits / inspections is, where practicable, raised, discussed and resolved with the *Contractor*.

The conditions that can lead to work stoppages include but shall not be limited to:

- Management of change: This is when there are changes to the work environment (e.g. management / supervisory changes) and / or construction work (e.g. modifications to the design) at any phase of the construction period, and / or amendments with regards to the Employers rules and regulations and / or legislative amendments;
- Unsafe acts / behaviours by Contractor's Personnel;
- Unsafe conditions resulting from unforeseen hazards, changes in working procedures, unexpected weather conditions and malicious acts of vandalism.

In the event of unsafe conditions being identified by any person, the process to be followed shall be:

- The Project Manager shall be informed immediately.
- The work activity shall be stopped immediately and conditions made as safe as possible as an interim measure.
- The affected workforce shall be removed from the work area and the Contractor shall correct the health and safety deficiencies by allowing only the people in the area that are competent to make the area safe.
- The Contractor shall ensure that no other work is being performed in the area during this time. The area shall be barricaded and a sign placed with the wording “Unsafe Area – Authorized Access Only”. Where necessary guards shall be posted to prevent entry.
- The Project Manager shall review the affected parts / sections of the SHE Plan with the purpose of providing additional SHE information to the Contractor to enable the establishment of a safe working environment.
- The Contractor shall revise the relevant sections in the SHE Plan to accommodate the changes.
- The Project Manager shall review the revised provisions in the SHE Plan to ensure they are adequate and approve it before the work activity is commenced. The work activity / work area shall be subject to additional monitoring in the initial stages to ensure that safe conditions remain.

Before the workforce is allowed back in the area, the Contractor shall ensure:

- The area is re-inspected by the Contractor’s Health and Safety Officer and Construction Supervisor who shall note corrective actions taken;

Declare the area safe for work by signing off on the “work stoppage” notice issued by the Project Manager.

11 HAZARD AND RISK MANAGEMENT

11.1 The Kusile Site Health, Safety and Security Manual philosophy is “Zero Harm to People and the Environment”

Refer also to Part 3 Section 4, *Project Site Regulations*

11.2 Hazard Identification

The Contractor shall identify hazardous and potentially hazardous work operations. He

shall demonstrate that work hazards, work activity risks and the mitigating measures have been considered in his risk assessments. Activity based risk assessments shall be carried out by competent persons.

The Contractor shall provide work task risk assessments and examples of work methodologies to the Project Manager, at least 56 days prior to site establishment to allow for the Project Manager to review them.

The Contractor shall provide work task method statements and / or written safe work procedures to the Project Manager, at least 56 days prior to mobilisation of the first Contractor's Personnel at the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site).

11.3 Specific Health and Safety Hazards

In complying with the requirements of Regulation 4(1)(b) of the Construction Regulations, the specific known health and safety hazards pertaining to the environment and physical conditions that the Contractor may be exposed to in performing his work on the Project Site (or on other places, if any, as may be specified under the Contract as forming part of the Site) are listed under paragraph 20.

The Employer and the Project Manager will make all reasonable efforts to ensure that the information provided is complete and correct. However, the Contractor shall make his own assessment of the hazards and risks associated with the work under the Contract for which he is responsible.

Without derogating from any other requirements under the Contract, the work shall not be executed at the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site) until the Project Manager has reviewed the Contractor's Risk Assessment and Method Statements as required under the Work Co-ordination Process.

The Contractor shall on a daily basis and for every task to be performed, conduct a pre-task risk assessment with all Contractor's Personnel involved with the task(s). The pre-task risk assessment shall form the basis of the daily pre-job briefings / tool box talks prior to the start of work. Proof of communication as well as confirmation that it was received and understood by all will be noted on a standard form, which shall be kept at the job site during the job execution. The completed signed pre-task risk assessment form shall be filed in the Contractor's Health and Safety File.

12 PROJECT GENERAL HEALTH, SAFETY AND SECURITY RULES

The Contractor and each Subcontractor shall be bound by and shall comply with the requirements of the Kusile Site Health, Safety and Security Manual (refer part 3, section 9.1) and shall comply with all such rules and regulations (in addition to those detailed in this Schedule and the Kusile Site Health, Safety and Security Manual) as may be prescribed by the Project Manager from time to time in connection with the Safety, Health and Environmental requirements. The Contractor shall procure that each Sub-contractor and all Contractor's Personnel comply with all such rules and regulations.

13 INCIDENT INVESTIGATIONS

The Contractor shall report all incidents and accidents including near miss incidents, first aid, medical treatment, lost time incidents (disabling injuries & fatalities); OH&S Act Section 24 and 25 incidents; electrical contact; major equipment damage; chemical spillage and other Environmental Incidents to the Project Manager within 24 hours of them occurring or, before the end of the work shift.

For any incident (near miss, first aid, medical) that had contravened any of the Statutory Requirements, Employer's Cardinal Rules, as well as Lost Time incidents, the Contractor's Representative (including the Subcontractor's Representative, if applicable) may be required to present to the Employer at his Sanhill offices, Johannesburg the incident and the mitigation measures that would be implemented to prevent a recurrence and the implementation of a deadline for all corrective actions to be implemented.

If it is found that the Contractor or their Subcontractors are not reporting incidents, then steps (which may include disciplinary action) shall be taken against the line management of the Contractor and /or Subcontractors.

A comprehensive and detailed investigation report shall be submitted to the Project Manager within 3 (three) days of the incident taking place for review and comment.

The Contractor shall ensure that all accidents / incidents are investigated by a competent person and are discussed at the relevant SHE committee meeting.

The Employer reserves the right to participate in any accident / incident investigation if the accident / incident is directly linked to any activity related to the Works.

Case studies shall be compiled for all near misses, lost time incidents and fatalities and cascaded as lessons to be learnt across the Project.

The Contractor shall keep at his Project Site Office a record of all accidents and incidents reported in the form of the OH&S Act Annexure 1 investigation form as referenced in the OH&S Act. (Incident Investigation Report).

The Employer reserves the right to conduct an independent investigation of any accident and / or incident reported by the Contractor or Subcontractors over and above their own investigations. The Contractor and Subcontractors shall co-operate fully with the investigation and implement any additional improvement measures.

Investigations shall begin as soon as practicable after the incident / accident has occurred.

Where applicable and with appropriate authorisation (when required), photographs shall be taken of the scene of the incident as well as any equipment involved. Interviews with witnesses shall be conducted as soon as possible after the incident occurred whilst it is still fresh in their memory and if necessary followed up later to determine if further information was recalled.

The Contractor shall investigate all incidents immediately and supply to the Project Manager a written report within 3 days, unless otherwise specified by Project Manager, which shall include:

- Date, time and place of incident;
- Description of incident;
- Root causes of incident/accident;
- Type of injury and/or (if any);
- Medical treatment provided (if any);
- Persons involved;
- Loss or damage sustained (if any);
- Names and contact details of witness/s;
- Description of corrective action to prevent a recurrence (with clear deadlines and persons identified for taking remedial action).
- All corrective actions shall be closed out within 1 month of the date of the incident, unless otherwise required by the Project Manager.

14 REPORTING AND MEETINGS

Refer to part 3 section 2, *Programme, Progress Reporting and Meeting Requirements*

15 RECORD KEEPING

Refer to part 3 section 2, *Programme, Progress Reporting and Meeting Requirements*

The Contractor shall keep and maintain a SHE File at his Project Site Office in which records of this Schedule and the SHE Plan shall be kept in accordance with the requirements of the OH&S Act.

All information required in this Schedule and SHE Plan shall be recorded in the SHE file for the duration of the Contract.

The Contractor shall also record in the SHE File:

- Information about removal or dismantling of installed plant and equipment;
- SHE information about equipment cleaning and maintenance programmes;
- Nature, location and markings of services;
- List of as-built drawings.

The SHE File shall be handed over to the Project Manager on completion of the last of the Defects Notification Periods and prior to the issue of the Performance Certificate.

16 AUDITS

16.1 Approval and Compliance of the Contractor SHE Plan

SHE Audits may be carried out un-announced by the Project Manager or the Employer.

The Contractor's SHE Plan may be audited against a compliance checklist by the Project Manager or other Employer's Personnel to confirm compliance with the requirements of the Contract

Implementation of the SHE Plan may be assessed by the Project Manager or other Employer's Personnel by conducting a systems and physical conditions evaluation of the SHE Plan delivery.

16.2 Subcontractor Approval and Compliance

The Contractor shall require his Subcontractors to provide information for approval by the Project Manager covering their proposed activities as part of the overall SHE Plan. These shall include as a minimum:

- Risk Assessments;
- Method Statements;
- Permits-to Work;
- Safe working procedures.

The Contractor shall review the Subcontractors submission and how it fits within the Contractor's SHE Plan. The documentation shall be submitted to the Project Manager for approval.

16.3 Contractor SHE Performance Evaluation Compliance

The Project Manager may audit the Contractor SHE performance on an ongoing basis.

16.4 Internal Audits

The Contractor shall conduct his own internal audits on Contractor's Personnel for the implementation of their SHE Plan on a monthly basis or when the scope of work changes.

A summary of the findings and the corrective actions shall be submitted to the Project Manager on completion of the audit. The final report shall be submitted within one week after completion of the audit.

The Contractor shall provide an audit non-conformance tracking matrix identifying responsibilities for close out of non-conformances. This shall be reviewed with the Project Manager on at least a weekly basis to ensure close out of audit non-conformances.

16.5 Third Party Legal Compliance Verification Audits

If the Contractor has a third party legal compliance verification audit that is conducted on their activities at the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site), a copy of the findings and corrective actions shall be provided to the Project Manager. The report shall be provided within one week after the completion of the audit.

16.6 SHE Plan Audits

Audits may be conducted by the Project Manager or other Employer's Personnel on the Contractor's implementation of his SHE Plan. These audits shall be attended by the Contractor's Representative.

17 PERMIT TO WORK SYSTEM (PTW)

The Eskom Permit to Work System (PTW) specify and provide requirements for the application of compulsory health and safety standards and procedures for the safeguarding of Plant and persons. This system forms an integral part of the approval process for work under the Work Co-ordination Process.

The following Eskom Regulations shall be complied with:

- Eskom Plant Safety Regulations, GGR 0992;
- Eskom Operating Regulations for High Voltage Systems, ESKPVAEY6

18 WORK CO-ORDINATION PROCESS

The Work Co-ordination Process is the Employer's mechanism designed for monitoring and managing individual Works and Project Works activities. The application of the Work Co-ordination Process prevents any conflict occurring between individual Works activities, inter-contractor activities and / or intra-contractor activity.

The Work Co-ordination Process provides the management arrangements for reviewing, controlling and monitoring each Contractor and their individual work packages whilst they are present and working on the Project Site (or working at other places, if any, as may be specified under the Contract as forming part of the Site).

The Work Co-ordination Process identifies the complete SHE working requirements the Contractor will need to provide to the Project Manager to enable assessment of their procedure and controls. It is designed to allow the work to proceed without risk to the health and safety of Contractor's Personnel, other contractors operating in the vicinity, visitors, delivery personnel and Employer's Personnel.

The Work Co-ordination Process is a data collection vehicle requiring specific information to be provided by the Contractor to the Project Manager. All of the information provided will have an influence on the effective and safe delivery of a work package.

In the design of a work package, the Contractor has a responsibility through his SHE Plan to provide specific information.

This comprises:

- A safe system of work for the overall work package.
- Method Statements covering how individual work elements will be completed.
- Risk Assessments for each work element.

As part of the methodology for the delivery aspect, a Contractor has additional responsibility to provide work task data. This will include:

- Work package logistic details:
- Names forming the contractors work team/s
- Names of Subcontractors to be used and their work team/s;
- Work team competencies, skills and appointments;
- Proposed start day/time;
- Expected finish time for the day;
- Expected finish day / time for the overall work package (if not the same day);

- Location / zone of work package delivery.

Work Package delivery information:

- Permit requirements;
- Tools, plant and equipment to be used;
- Current certifications for the plant and equipment, where applicable;
- Non hazardous materials to be used including the material safety data sheet;
- Hazardous materials to be used including the current material safety data sheet.

Work Package management:

- Supervisory arrangements;
- SHE monitoring arrangements.

Work Package SHE requirements:

- Emergency Plan;
- First Aid arrangements;
- Fire fighting arrangements.

The Work Co-ordination Process operated by the Employer provides an assessment of the work package information against the overall work programme being carried out. It ranks each of the Contractors' activities and hazards against their individual SHE risk.

The Contractor shall submit his Work Co-ordination Package to the Project Manager at least 7 days prior to the work activity, unless as otherwise consented to by the Project Manager.

19 ENVIRONMENTAL MANAGEMENT

19.1 General Requirements Refer also to the following:

- Part 3 section 4,
- Part 3 section 5, *Project Site Facilities and Services*
- Part 3 section 10, *Environmental Management Plan*
- Part 3 section 11, *Record of Decision*

The Contractor shall comply with all relevant Laws, environmental legislation, regulations, and Employers Policies and Procedures

19.2 Site Establishment and Management

The Contractor shall produce a Contractor Yard layout plan detailing the position and environmental specifications for all buildings, vehicle wash areas, fuel storage areas, hazardous materials storage areas, drainage systems, cement storage areas and any other necessary infrastructure for approval by the Project Manager.

The Contractor shall ensure that there are adequate collection facilities for liquid run-off for any areas where there is a liquid pollution potential and that any vehicle maintenance is only carried out on surfaces that are easily cleaned and contained. Non-flammable, oil-resistant coverings shall be used to protect concrete surfaces from staining.

19.3 Fauna and Flora

All vegetation that requires removal from an area shall be determined and demarcated in conjunction with the Project Manager. Cutting and chipping shall be the method of vegetation clearance as opposed to using bulldozers.

There shall be no disturbing, injuring or killing of any fauna for any purposes. All areas shall be kept clean and tidy of all waste materials but particularly waste food products that will attract rodents and scavengers.

19.4 Herbicides

A herbicide register shall be compiled and maintained by the Contractor. A copy shall be provided to the Project Manager as part of the SHE File. The application of herbicides shall be in accordance with the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act No. 36 of 1947. Only Government approved and tested herbicides with a low environmental risk shall be used. Only registered pest control operators may apply herbicides on a commercial basis. All staff applying herbicides shall be trained in the application of herbicides.

19.5 Hazardous Materials / Chemicals Management

Prior to any Hazardous Chemical Substance (HCS) being brought onto the Project Site (or onto any other places, if any, as may be specified under the Contract as forming part of the Site)., the Contractor shall supply the Project Manager with the following:

- Material Safety Data Sheets (MSDS) for materials in accordance with the requirements of the OH&S Act - Regulations for Hazardous Chemical Substances;
- Purpose for using the hazardous substance;
- Proposed arrangements for safe storage;
- Proposed methods for handling / usage;
- Proposed method of disposal;
- Hazard communication / training plan.
- A copy of the assessment that shall fulfil the requirements of the HCS regulations
- Details of maintenance of control measures to ensure optimum efficiency.

The information shall be provided for the Work Co-ordination Process at least seven (7) working days prior to the expected delivery.
The Project Manager will review and may approve or reject the use of any hazardous chemical substance after receiving the above information.

19.6 Storage of Hazardous Substances

A register of Hazardous Substances and Material Safety Data Sheets shall be developed, maintained and kept at the Contractor's Project Site Office and shall be made available to the Project Manager. The associated assessments shall include all method statement submissions.

Without limiting the Contractor's responsibilities under applicable Legislation, work shall be conducted in such a manner as to ensure that:

- No substance, which can harm or is likely to harm the environment, is to be allowed to leak, spill or escape from any container or storage area.
- No oil or other effluent is permitted to escape into the drainage system and / or local storm water system.
- No oil or other effluent is permitted to escape into the ground and cause soil contamination.
- All powdered pollutants generated during execution of the works are contained to prevent air pollution.
- No sediment generated is permitted to escape into the drainage system and / or local storm water system.
- No harmful solids or liquids are permitted to spill from containers whilst in transit on the premises.

- All storage in drums and intermediate bulk containers shall be in accordance with the Kusile Site Health, Safety and Security Manual.
- All oil-based waste material shall be kept segregated and placed in sealed 200 litre drums, in accordance with the Kusile Site Health, Safety and Security Manual. This material shall be disposed of through a recognised oil recycling company.
- All water-based waste material shall be kept apart. Small amounts shall be collected and stored in 200 liter containers. Large amounts shall be pumped into a bulk tanker for disposal. Prior to disposal, all water-based material shall be sampled to allow analyses to be carried out.
- All bulk fuel storage shall be in accordance with the Kusile Site Health, Safety and Security Manual. No below-ground storage tanks will be allowed.
- All fixed facilities such as generators, compressors and transformers shall be situated within bounded facilities.
- All portable facilities such as portable generators shall be located on suitable portable bunds or drip trays.
- Spill kits shall be provided at all fixed facilities.
- All bunds and drip trays shall utilise oil absorbent booms.
- All bunds and drip trays shall be designed and operated such that no fauna can use the facility as a drinking trough.

19.7 Flammable and Combustible Materials

Proposals to store fuel and other flammable and combustible materials shall have written approval from the Project Manager. The volumes allowed to be stored will be dependent on the Kusile Site Health, Safety and Security Manual and SA Statutory Regulations.

All fuels shall be stored in a secure bounded area. Any volume greater than 40 litres shall be stored in a secure flammable / combustible materials store. Suitable precautions shall be taken to contain any spillage and / or leakage. Environmental absorbent material shall be readily available for controlling accidental spillages.

A plan of the proposed bounded area shall be provided to the Project Manager for approval prior to construction. This shall include details of containment and drainage.

Before a machine, plant and / or equipment is refueled, the motor shall be stopped. Refueling shall take place at designated safe areas and appropriate warning signs installed. Suitable drip trays shall be used to prevent spillage at the filling nozzle. Environmental absorbent material shall be readily available for controlling accidental spillages.

All fuel storage areas shall comply with the following minimum requirements:

- A risk assessment shall determine the health and safety measures and controls that shall apply.
- Storage shall be well clear of occupied buildings by a distance of at least 50 meters.
- Storage areas shall be kept free from all combustible materials.
- All danger signs shall be prominently displayed, i.e.:
    - Flammable Liquid;
    - No Smoking;
    - No Naked flames;
    - Appropriate Hazchem identification.

19.8 Explosives

Explosives shall not be brought onto the Project Site (or onto any other places, if any, as may be specified under the Contract as forming part of the Site) or be used without the written permission of the Project Manager.

The use of explosives shall only be permitted with an approved license.

The use of explosives shall only be permitted within the confines of a clearly defined and controlled Danger Area.

The use of explosives shall require a review of the Site emergency arrangements.

A specific method statement shall be provided for each blasting operation and as required under the Contract.

Explosives or detonators shall not be stored on the Project Site (or on any other places, if any, as may be specified under the Contract as forming part of the Site).

Detonators and other explosives shall never be carried or stored in the same container.

19.9 Water Management

Refer also to part 3 section 5, *Project Site Facilities and Services*

The Contractor shall develop a water management plan giving due consideration to water conservation and pollution prevention.

Any sanitary and welfare facilities utilised by the Contractor shall be regularly maintained such that there is no leakage or wastage of water.

Water recycling systems shall be used by the Contractor. This can include the introduction of grey water systems or recirculation water systems.

Any vehicle washing facilities shall be in accordance with the Kusile Site Health, Safety and Security Manual.

[An adequate supply of drinking water shall be made available for Contractor Personnel. Additionally, sanitary means for consumption (e.g. water fountains or individual drinking cups) shall be provided by Contractor for Contractor's Personnel.**]**[2]

19.10 Fire Hazards

Refer also to 84LPS012A, "Fire Protection for Contractor's Yards"

The Contractor shall ensure that staff are educated in fire prevention and will be held responsible to avoid the risk of fire. No fires shall be allowed on the Project Site (or on any other places, if any, as may be specified under the Contract as forming part of the Site) at any time without the express authorisation of the Project Manager.

19.11 Waste Management

Refer to part 3 section 5, *Project Site Facilities and Services*

19.12 Air, Dust and Noise Management

Refer also to part 3 section 4, *Project Site Regulations* and part 3 section 10,

Environmental Management Plan

The Contractor shall monitor air quality, dust and noise caused by Contractor's Equipment, generators and other equipment during construction. Factors shall be considered such as wind which can often affect the intensity to which these impacts are experienced.

To ensure that noise does not constitute a disturbance during construction activities, all construction works shall occur between specific working hours, all in accordance with the Contract.

Mitigation measures shall be implemented as required and agreed with the Project Manager.

Dust suppression measures shall be in place to reduce the dust caused by the movement of heavy vehicles and other sources.

Air quality control measures shall be in place to reduce the amount of air pollution caused by such things as silica in dust, vehicle emissions and other sources.

19.13 Environmental Incidents

Refer also to part 3 section 10, *Environmental Management Plan*

All environmental incidents such as pollution (air, water, land, noise, etc.), bird kills, animals killed, plants destroyed, public complaints etc. shall be reported to the Project Manager within 24 hours of such occurrence.

All environmental incidents occurring on the Project Site (or on any other places, if any, as may be specified under the Contract as forming part of the Site) shall be recorded, detailing how each incident was dealt with in an Environmental Incident register in accordance with the Kusile Site Health, Safety and Security Manual.

20 BASIC HAZARD IDENTIFICATION

The specific known health and safety hazards pertaining to the environment and physical conditions that the Contractor may be exposed to in performing his work on the Project Site (or on other places, if any, as may be specified under the Contract as forming part of the Site are listed below.

The Contractor shall however make his own assessment of, and satisfy himself with the hazards and risks associated with the Works.

20.1 Environmental Hazards

- Heat exhaustion
- Sunburn
- Insect bites and stings
- Snake bites
- Rodents
- Thunderstorms
- Wind

20.2 Construction Hazards

- Construction vehicles and equipment
- Noise
- Dust
- Smoke
- Vibration
- Slippery conditions
- Fire hazards
- Falling objects
- Open foundations, drains, trenches, sumps and manholes etc
- Hazardous chemicals, materials and gasses
- High pressure vessels and piping
- High temperature machinery and equipment
- Live electrical equipment and power supplies
- Rotating machinery and equipment
- Oil and chemical spillages
- Working at heights
- Confined spaces
- Sharp tools and objects
- Welding, grinding and cutting operations
- Blasting operations
- Overhead cranes
- Radiation
- Laser equipment

21 ESKOM SAFETY, HEALTH AND ENVIRONMENTAL POLICY



Safety, Health and Environment (SHE) Policy

Guiding principles by which we operate

- We are committed to safety, health and environmental excellence and will conduct business with respect and care for people and the environment and, in so doing, will ensure that adequate resources are available for SHE management.
- We will ensure that SHE is an integral part of our operations and that no operating condition, or urgency of service, can justify endangering the life of anyone or cause injury or damage to the environment.

Compliance to this policy and applicable regulations shall be the responsibility of every employee and contractor.

Thulani S Gcabashe
Chief Executive

Ehud Matya
Managing Director
Generation

Duncan Mbonyana
Managing Director
Corporate

Jacob Maroga
Managing Director
Transmission

Mongezi Ntsokolo
Managing Director
Distribution

Johnny Dladla
Managing Director
Key Sales & Customer Service

Steve Lennon
Managing Director
Resources & Strategy

Bongani Nqwababa
Finance Director

Brian Dames
Managing Director
Enterprises

Mpho Letlape
Managing Director
Human Resources

Eskom

With Energy, Anything is Possible

21 FORUMS FOR SHE COMMUNICATION

This section provides an outline of the different forums, where Project Site shall engage with the Contractor(s) on SHE issues. This also includes the frequency of the different forums as well as the mediums to be employed.

21.1 PROJECT KUSILE EXECUTIVE SHE COMMITTEE MEETING

The Executive SHE Committee shall meet to discuss health, safety and environment issues on a monthly basis and shall be attended by Contractor Senior Project Management and Site Management.

21.2 PROJECT SHE REVIEW MEETING (BEE SAFE)

The Project SHE Review Meeting will commence on a daily basis and shall be attended by Contractor Safety and Health Management.

21.3 GENERAL SHE WALK DOWN

The Project General SHE Walk Down will commence on a weekly basis and shall be attended by Contractor Management, Safety Practitioners and Safety & Health Representatives.

PART 3

SECTION 9.1

1. CONSTRUCTION VEHICLES & MOBILE PLANT

All motor vehicles operated by the Contractor's Personnel within the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site) shall, in all respects, comply with the Road Traffic Ordinance and Road Traffic Act.

Designated drivers shall be in possession of a current driver's license, valid for the class of vehicle they are permitted to operate. The driver's license shall be kept on the person and shall be produced on request.

The maximum speed limit within the bounds of the Project Site is 40 km/h. Additionally, the maximum speed limit within the bounds of the Project Site construction office and parking areas is 8 km/h.

No Contractor's drivers or operators may talk on cell phones or two way radios whilst driving under any circumstances. This includes the use of hands-free kits. All cell phones used by drivers shall be switched off before commencing a journey. Cell phone calls by drivers shall only be made when the vehicle is stationary, in a place of safety, and with the engine switched off.

It is the responsibility of the driver to ensure:

- They and their passengers wear seat belts whilst the vehicle is in motion. This applies to front and rear seat passengers.
- They comply with all safety, direction and speed signs.
- That vehicle loads are properly secured onto vehicles.
- Those vehicles are not overloaded and are within their safe working load limit.

Instructions for the transportation of tools/equipment/material & persons on the back of construction vehicles must be adhered to:

- No Contractor's Personnel are to be transported in the back of construction vehicles.
- Tools, equipment & material transported in vehicles shall be secured in order to prevent movement;

- Vehicles shall be provided with fixed & firmly secured seats and seat belts - adequate for the number of passengers being transported. Passengers in vehicles shall only be transported according to the number of seat belts present.

- The driver & all passengers shall be seated with seatbelts fastened whilst the vehicle is in motion

- Construction vehicles, such as bakkies, shall be fitted with roll over protection devices (e.g. roll bars) and approved by the Department of Road and Transport.

The Contractor shall ensure that the Contractor's Personnel do not:

- Ride on the back of elevators, cranes or other mobile plant equipment.

- Leave vehicles unattended with the engine running. Ignition keys shall be removed in all cases when the vehicle is left unattended.

- Park vehicles in unauthorised zones/areas or where parking will obscure other vehicle or pedestrian visibility.

The Project Manager reserves the right to search any vehicle on the premises or when entering or leaving the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site).

The Contractor shall be solely responsible for the safety and security of any of his vehicles (including private vehicles) on the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site).

The Contractor shall attach unique identification markers on all of their vehicles that are permitted to enter the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site).

A current maintenance logbook is required for all cranes and construction equipment which shall be made available for inspection at any time. The logbook shall be located in the cabin of the crane or construction equipment.

The Contractor shall ensure that visibility (e.g.: switching on of lights, reflectors, barricades equipped with lights, a buggie whip, etc.) is enhanced on all construction vehicles and mobile plant in order to identify the location of the vehicles or plant at all times. All construction vehicles when travelling on the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site) shall use headlights at all times.

Contractor must maintain vehicles in roadworthy condition and hold a valid vehicle license (DISC). Vehicles shall be subject to inspection by the Employer on random basis. Vehicles which

are found to be in an roadworthy condition shall not be permitted onto the project site.

In the event where the Contractor does not own the Equipment, the Contractor is still responsible for ensuring all conditions are complied with by all of their Subcontractors.

Drivers/operators shall be responsible for the travel-worthiness of all loads conveyed by them.

Precautions shall be taken to lash all loads properly and securely. Loads projecting from vehicles shall be securely loaded. In daytime a red flag and during darkness a red light or red reflective material shall be attached to the extreme end of such projecting material.

Every mobile machine shall have a “banksman” when reversing and be fitted with a siren/hooter alarm which sounds when the machine is reversing.

Drivers of all vehicles must allow appropriate travel distance between vehicles travelling in front of them and at no time shall “tailgating” be permitted.

2. HOUSEKEEPING

Refer also to part 3 section 4, *Project Site Regulations*

The Contractor is responsible for clearing his work area to the satisfaction of the Project Manager. A routine inspection of all work areas shall be undertaken daily to ensure that housekeeping standards are being maintained.

In cases where an inadequate standard of housekeeping has developed, compromising health, safety and cleanliness, all staff has the responsibility to bring it to the attention of the Project Manager. The Project Manager will have the authority to instruct the suspension of the relevant Works until the area has been tidied up and made safe. Neither additional costs nor extension of time to the Contract shall be allowed as a result of such work stoppage. Failure to comply will result in site cleaning by another cleaning contractor at the cost of the Contractor.

Leads, hoses, and extension cords shall be hung up (approximately 2.5m) with a non- conductive material, off all floors, stairways, and walkways. Leads, hoses, and cords are to be removed from the work area when the work is completed or when they are no longer intended to be used. Lead, hose, and cord “roll-ups” will be required if an excessive amount of equipment accumulates in a work area creating housekeeping or trip hazards.

Before storing any material, the Contractor must consult the Project Manager for allocation of a stacking area.

Nails and staples etc. protruding through timber and packaging shall be removed or bent over so as not to cause injury.

All packaging material including boxes, pallets, crates, etc. shall be removed from the work area

immediately.

Where such items as protruding rebar and anchor bolts create impalement or tripping hazard, they shall be properly protected and conspicuously marked.

The Contractor shall carry out regular safety / housekeeping inspections (daily) to ensure maintenance of satisfactory standards. The Contractor shall document the results of each inspection and shall maintain records for viewing.