

Kriel Power Station 11KV Kingbird Line Construction Project

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	Kingbir	d Line	Constru	iction Pro	oject		

Project Reference

Number:

319403-Kriel/Ash Water Return

(AWR) 11kV Kingbird Line

Area of Applicability: Kriel Power Station

Functional Area: Contractor OHS

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Initials and Surname
SHE Manager

Initials and Surname
Engineer Prof Electrical

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ESKOM KRIEL POWER STATION PROJECT MANAGER:

The discipline/contract manager is responsible for managing the contract with the Principal Contractor and ensures that this SHE specifications conditions are met. The project manager also ensures that the Principal Contractor's SHE plan is approved prior to commencement of work. He must ensure that all the Statutory and Eskom Kriel Power Station's requirements are adhered to by Principal Contractor and (if applicable) their sub-contractors at all times. Where a sub-contractor is appointed on site by the Principal Contractor such appointment must be done in conjunction with the SHE Responsible Manager/Officer.

ESKOM KRIEL POWER STATION: PROJECT HEALTH AND SAFETY MANAGER:

The responsibility of the Health and Safety Manager/Practitioner is to provide assurance, as well as advice, assist and support to the Project /Site Manager in the management of the health and safety issues on the project. The SHE Manager/Practitioner will also be responsible for assisting in the development of site and project specific SHE Specifications and ensuring that SHE specification are issued with enquiry documents and that the Contractors' SHE plans are evaluated and recommendations are specified. He/She will be responsible for auditing.

ESKOM KRIEL POWER STATION PROJECT MANAGER:

The site manager is a delegated responsible person appointed in terms of the OHS Act by the Section 16(2) delegated responsible person. He is responsible for the overall management of the project onsite and is accountable to the Discipline/Contract Project Manager.

ESKOM KRIEL POWER STATION PROJECT ENGINEER/ DESIGNER: Luthando Puza

The designer is the person responsible for ensuring that technologies, designs, and their application provide for SHE-compliant assets during and after their construction.

The project engineer with the assistance of the project SHE Officer is responsible for the development of the SHE specifications for the project and the overall management of the project design application as well as for ensuring the management of the compliance of the completed works with the design during and after construction on site in conjunction with the project supervisor and under the auspices of the project manager.

ESKOM KRIEL POWER STATION ENVIRONMENTAL MANAGER:

The responsibility of the Environmental practitioner is to provide assurance, advice, assist and support to the Eskom Kriel Power Station Site Manager in the management of the environmental issues on the project which includes ensuring compliance to the Record of Decision (ROD) and the Environmental Management Plan (EMP)



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1. Introduction

Eskom Kriel Power Station 's responsibility and commitment is to ensure a safe working environment is in line withits Safety, Health, Environmental and Quality Policy, along with legislative obligations.

This SHE specification is Eskom Kriel Power Station minimum requirements which are required to be met for thespecific project and for the duration of the project period by Principal contractor.

The contractor is expected to develop a SHE plan which meets these requirements as well as all the relevant applicable legislation they conform to.

Eskom Kriel Power Station in no way assumes the contractor's legal responsibilities. The contractor is andremains accountable for the quality and the execution of his/her health and safety programme for his/her employees and appointed contractor employees.

This SHE specification reflects minimum requirements and should not be construed as all encompassing.

Where requirements listed are already in place, then the organisational requirements must be taken cognisance of and listed in the respective SHE plans. If there are any additional Eskom Kriel Power Station ador legislative requirements listed in the SHE specification, then these must be addressed.

2. Supporting Clauses

2.1 Scope

This SHE specification lists the legislative and Eskom Kriel Power Station requirements and where applicable, any requirements pertaining to Local Authorities / Municipal by-laws / Environmental legislation that must be met by the Principal Contractor.

2.1.1 Purpose

This document will provide a standardised approach to the implementation of SHE specifications throughout the Kriel Power Station 11KV Kingbird Line construction project

2.1.2 Applicability

This SHE specification is applicable to the Kriel Power Station 11KV Kingbird Line construction project

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2.2 Normative/Informative References

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

2.2.1 Normative

- [1] Basic Conditions of Employment Act No 75 of 1997.
- [2] Occupational Health and Safety Act and Regulations No 85 of 1993.
- [3] National Environmental Management Act 107 of 1998.
- [4] National Road Traffic Act 93 of 1996.
- [5] 32-37 Eskom Substance Abuse Procedure.
- [6] 32-136 Contractor Health and Safety Requirements
- [7] 240-62196227 Life- saving Rules
- [8] 32-95 Environmental, Occupational Health and Safety Incident Management Procedure
- [9] 32-727 SHEQ Policy
- [10] 32-418 Working at Heights Procedure
- [11] 240-62946386 Vehicle and Driver Safety Management Procedure
- [12] 32-520 Risk Assessment procedure
- [13] Plant Safety Regulations.

2.2.2 Informative

- [1] Tobacco Products Control Act 83 of 1993 (Updated 2011.05.19)
- [2] SANS 1186 Symbolic Safety Signs
- [3] Constitution of the Republic of South Africa No 108 of 1996



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Definition	Explanation
Appointed contractor	Means a contractor appointed by the principal contractor
Baseline risk assessment	(32-520) baseline operational risks refer to the health and safety risks associated with all standard processes and routine activities in the business
Business unit (BU)	(32-296) means any defined unit within the Eskom Kriel Power Station environment, operating as a business under a particular cost-centre number. In the context of this document and interms of health and safety, any reference to a BU includes a defined unit within any Eskom Kriel Power Station division and its subsidiaries
Client	(OHS Act) Eskom Kriel Power Station representative (Internal – Asset Owner), also referred to as the contract administrator/custodian or agent or project manager (as defined in the contract). He/she is the person responsible for ensuring that the works or services are executed in terms of the contract, as well as adherence to legislation pertaining to the contract.
Competent person	(OHS Act) means any person having the knowledge, training, experience, and qualifications, specific to the work or task being performed, provided that, where appropriate, qualifications and training are registered in terms of the South African Qualifications Authority Act, 1995 (Act No. 58 of 1995)
Contractor	(OHS Act) means an employer as defined in section 1 of the Act who performs contracted work and includes principal contractors
Construction work	 Any work in connection with a. the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure. b. the construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or the moving of earth, clearing of land, the making of excavation, piling or any similar civil engineering structure or type of work.
Consultant	means a person providing professional advice
Controlled disclosure	controlled disclosure to external parties (either enforced by law or discretionary)
Duty of care to the environment	(32-136) anybody who causes or has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing, or recurring. If such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, such person must minimise and rectify such pollution or degradation of the environment
Employee	(OHS Act) means, subject to the provisions of subsection (2), any person who is employed by or works for an employer and who receives or is entitled to receive any remuneration or who works under the direction or supervision of an employer or any other person



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Definition	Explanation
Employer	(OHS Act) means, subject to the provisions of subsection (2), any person who employs or provides work for any person and remunerates that person or expressly or tacitly undertakes to remunerate him/her, but excludes a TES (ex labour broker) as defined in section 1(1) of the Labour Relations Act 1956 (Act No. 28 of 1956)
Environment	 (32-94) means: a. the land, water, and atmosphere of the earth; b. micro-organisms and plant and animal life; and c. any part or combination of (a) and (b) and the interrelationships among and between them, and the physical, chemical, aesthetic, and cultural properties and conditions of the foregoing that influence human health and well-being
Environmental Management plan	A detailed plan of action prepared to ensure that recommendations for enhancing or ensuring positive impacts and limiting or preventing negative environmental impacts are implemented during the life-cycle of a project. This Environmental Management Plan should preferable form part of Eskom Kriel Power Station 's Environmental Management System
Eskom Kriel Power Station requirements	Eskom Kriel Power Station requirements flowing from directives, policies, standards, procedures, specifications, work instructions, guides, or manuals
Fall protection plan	(OHS Act) means a documented plan of all risks relating to working from an elevated position, considering the nature of work undertaken, and setting out the procedures and methods to be applied in order to eliminate the risk
Hazard	(OHS Act) means a source of, or exposure to, danger
Hazard identification	(OHS Act) means the identification and documenting of existing or expected hazards to the health and safety of persons, which are normally associated with the type of construction work being executed or to be executed
Health and safety file	(OHS Act) means a file or other record in permanent form, containing the information required in relation to the contract.
Health and safety plan	(OHS Act) means a document plan that addresses hazards identified and includes safe work procedures to mitigate, reduce, or control hazards identified
Health and safety specification	(OHS Act) means a document specification of all health and safety requirements pertaining to associated to a contract, so as to ensure the health and safety of persons.
Health and safety requirements	means comprehensive health and safety requirements for a contract, project, site, and scope of work. This specification is intended to ensure the health and safety of persons, both workers and the public, and the duty of care to the environment. The health and safety requirements must be specific to each contract, project, site, and scope of work
Lifesaving Rules	(240-62196227) a rule that, if not adhered to, has the potential to cause serious harm to people



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Definition	Explanation
Medical Certificate of fitness	(OHS Act) means a certificate valid for one year, issued by an occupational health practitioner, issued in terms of the regulations, whom shall be registered with the Health Professions Council of South Africa
Medical surveillance	(OHS Act) means a planned programme or periodic examination (which may include clinical examinations, biological monitoring, or medical tests) of employees by an occupational health practitioner or, in prescribed cases, by an occupational medicine practitioner
Method statement	(OHS Act) means a written document detailing the key activities to be performed in order to reduce, as reasonably as practicable, the hazards identified in any risk assessment
Organisation	may be defined as a group of individuals (large of small) that is cooperating under the direction of executive leadership in accomplishment of certain common objects
Pre-job meetings	(34-227) means a meeting that is held prior to the commencement of the day's work and that is attended by all the relevant employees associated with the work task
Principal contractor	(In the text of this document) Means an employer, as defined in section 1 of the OHS Act, who intends to tender for or has signed a contract with Eskom Kriel Power Station for services rendered.
Provincial director	(OHS Act) means the provincial director as defined in Regulation 1 of the General Administrative Regulations under the Act
Responsible Manager	Is a Manager of a department, section or operating/business unit who has been appointed as part of the Eskom Kriel Power Station authority process with the aim to assist theapplicable 16(2) assigned person in executing his/her duties in terms of the Occupational Health and Safety Act
Risk assessment	(OHS Act) means a programme to determine any risk associated with any hazard at a construction site in order to identify the steps needed to be taken to remove, reduce, or control such hazard.
Site	means an Eskom Kriel Power Station department, unit, complex, building, specific project, worksite, or the site where agents, clients, principal contractors, contractors, suppliers, vendors, and service providers provide a service to Eskom Kriel Power Station, directly or indirectly
Service provider	any private person or legal entity that provides any service(s) to Eskom Kriel Power Station forcompensation
Subsidiary	(32-94) an enterprise controlled by another (called the parent) through the ownership of greater than 50% of its voting stock
Supplier	(32-1034) means a natural or legal person who renders a service and may include thefollowing current or potential supplier vendor, contractor, consultant
Task	(34-227) a segment of work that requires a set of specific and distinct actions for its completion



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Definition	Explanation
Toolbox talks	(34-227) where the team leader, after conducting pre-task planning, shares all the tasks at hand and discusses task allocation, the identified risks, and the control measures with all his/her team members on site before commencing a specific task and documenting the agreed strategy. (This shall be done to ensure common understanding of the tasks, risks, and control measures required.)
The Act	(OHS Act) means the Occupational Health and Safety Act No. 85 of 1993, as amended, and the Regulations thereto
Visitor	any person visiting a workplace with the knowledge of, or under the supervision of, an employer.

2.4 Abbreviations

Abbreviation	Description
AIA	Approved Inspection Authority
BU	Business Unit
CE	Chief Executive
CR	Construction Regulations of the OHS Act
COID Act	Compensation for Occupational Injuries and Diseases Act
DMR	Driven Machinery Regulations
DEL	Department of Labour (Inspection and Enforcement services – Provincial office)
EAP	Employee Assistance Program
EP	Emergency Preparedness
ERfW	Environmental Regulations for Workplaces
GAR	General Administrative Regulations
GSR	General Safety Regulations
HCS	Hazardous Chemical Substances
LDV	Light Vehicle
LoG	(COID) Letter of Good Standing
MSDS	Material Safety Data Sheets
NEMA	National Environmental Management Act
OHS Act	Occupational Health and Safety Act and Regulations, 85 of 1993
SACPCMP	South African Council for the Project & Construction Management Professions



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Abbreviation	Description
AIA	Approved Inspection Authority
BU	Business Unit
CE	Chief Executive
SABS	South African Bureau Standard
SANS	South African National Standard

2.5 Roles and Responsibilities

2.5.1 Commitment

Visible commitment is essential to providing a safe work environment. Managers, supervisors and employees at all levels must demonstrate their commitment by being proactively involved in the day to day operations, in particular the Occupational Health and Safety aspects of any project. Legislation requires that each employee must take reasonable care of themselves and their fellow workers, from management level down to the lowest employee level.

2.5.2 Principal contractor

Shall:

- 1. Carry out all duties as listed in section 8, 9 and 10, the various other regulations that form part of the OHS Act and Regulation 7 of the Construction Regulations.
- 2. The principal contractor must notify the provincial director of the Department of Labour in writing of all construction work
- 3. Carry accountability and responsibility for the safety and health of their employees and their appointed contractors within their working area, as contemplated by section 37(2) of the OHS Act;
- 4. Shall keep a record of all employees including the appointed contractor employees, including date of induction, relevant skills and licenses and be able to produce this list at the request of the Eskom Kriel Power Station Project Manager.
- 5. Ensure that all their 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.



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- 6. Ensure that the minimum legislative, regulatory and Eskom Kriel Power Station SHE requirements are complied with on all work sites.
- 7. Give the Eskom Kriel Power Station project managers and line managers / responsible managers their full participation and cooperation.
- 8. Compile a SHE (health and safety) file where all relevant health and safety records must be kept for each work site.
- 9. The principal contractor must hand over a consolidated (to include any appointed contractors files) health and safety file to the Eskom Kriel Power Station project manager on completion of the project. This is to include all drawings, designs, lists of materials used and other applicable information about the completed project, as well as the list of appointed contractors, the agreement, and the type of work completed.
- 10. The principal contractor must provide the project manager with a certified copy of his/her Compensation Commissioner's valid letter of good standing before the commencement of work and any future renewal letters obtained during the project for record-keeping purposes.
- 11. Appoint competent staff to perform the project work and ensure that all employees are trained in the health and safety aspects relating to such work and that the employees understand the hazards associated with all other work being carried out on the project.
- 12. Ensure that all employees are conversant with all relevant work procedures and that they adhere to such procedures. Co-ordinate the activities of all the appointed contractors in the interests of safety and health;
- 13. Stop his /her employees and any appointed contractors if project work is not in accordance with the health and safety plan or if such work poses a threat to the health and safety of persons or a risk of degradation to the environment.
- 14. Appoint full-time competent employees in writing to supervise the performance of all specified work throughout the contract period.
- 15. Ensure that the supervisor or manager do not supervise work on any site other than the site for which such supervisor has been appointed for.



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- 16. Appoint a full or part time safety officer or construction safety officer (registered with SACPCMP) in writing and also submit His/ Her validation registration certificate.
- 17. Not victimise or dismiss employees, by virtue of the employee's divulging health and safety information or suspecting such information has been divulged, in the interests of health and safety requirements.
- 18. Follow a process of disciplinary action if any of their employees or their appointed contractor employees has transgressed any of the requirements of the health and safety specification, safety and health plans, site rules or any other requirements.
- 19. Ensure that all appropriate precautions are taken to protect persons (visitors, members of the public, and other contractors) present at work or in the vicinity of a construction site against all risks that may arise from such site.
- 20. Before the commencement of any work, conduct risk assessments which shall include public safety. This should be done by a competent person appointed in writing with a view to identify hazardous and potentially hazardous work operations.
- 21. Ensure that pre-task risk assessments are conducted and documented daily and prior to the starting of any new task, irrespective of whether it is a repetitive task or not.
- 22. Take prime responsibility for all aspects of environmental management associated with the project activity for which they are responsible.
- 23. Prior to having pre-employment and periodic medicals fitness examinations conducted, person/man job specifications must be compiled and handed to the occupational health practitioner.
- 24. Ensure that pre-employment, periodic and exit medicals are carried out on their employees. Medical assessments must be conducted by a registered Occupational Health Practitioner. During the pre-employment medical, where employees will be required to work at heights, they will also be required to undergo the required employee physical and psychological fitness examinations.
- 25. Ensure, prior to the commencement of construction work, that all persons involved in the project work, as well as the appointed contractors, have received a health and



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safety induction training session. Similarly, ensure that all visitors to site undergo the site's induction training (Kriel Power Station)

- 26. Ensure, prior to the commencement of construction work or contracted work, that all their employees involved in the project work, as well as the appointed contractors, have received task-specific training.
- 27. Issue risk-based personal protective equipment (PPE) as a measure of last resort to their employees, inspect such equipment regularly and ensure recipients of PPE are trained in the proper use, care and where necessary, the maintenance of PPE;
- 28. Erect their own site camp, temporary buildings, storage areas, toilets, fencing, and any other structure as may be required. Any such structures shall be positioned and erected in compliance with any instructions from the Eskom Kriel Power Station project manager and the relevant site safety and fire prevention requirements;
- 29. On completion of the work remove all structures erected by them, and where required by law rehabilitate the environment.
- 30. Where performing work with the environment, ensure that minimal damage is done and that where an Environment Management Plan is in place, then adhere to the plan.
- 31. Respect the rights of land owners/lessors and the preservation of their registered activities;
- 32. Must have a substance abuse program which must be in line with the requirements of the OHS Act.
- 33. Ensure that no alcohol or other intoxicating substances are brought on to, or remains on the work sites.
- 34. Ensure that all equipment and tools used comply with OHS Act requirements with respect to condition, use, care, storage, maintenance, and the management of these;
- 35. Ensure that all incidents are reported and investigated timeously by competent incident investigators.



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- 36. Establish health and safety committees, hold such committee meetings on all sites, and ensure that appointed contractors participate in their health and safety meetings.
- 37. Chair their own health and safety committee meetings and record such meetings.

2.5.3 Contractor site supervisor or Contract Supervisor

Must:

- 1. Be competent to perform the required supervisory tasks;
- 2. Ensure their employees and all appointed contractors comply with the required statutory and Eskom Kriel Power Station project requirements;
- 3. Inspect all work done to ensure adherence to Eskom Kriel Power Station 's standards and specifications
- 4. Conduct follow-up inspections to ensure findings are closed out and preventative action is in place.
- 5. Discuss all SHE related problems with the relevant contractor management timeously in the first instance and thereafter the Eskom Kriel Power Station project manager in the second instancerelating to procedure requirements, non-conformance's identified, corrective actions, audits and inspection schedules.
- 6. Ensuring that quality records are maintained in accordance with legislative and Eskom Kriel Power Station requirements;
- 7. Continual liaison between the principal contractor, and employees.
- 8. Ensures that employees are aware of latest standards, procedures, work instructions and safety regulations issued by Eskom Kriel Power Station:
- 9. Conduct site Inspections for compliance to SHE requirements and compiles the relevant inspection reports.
- 10. Submit the observation reports to the relevant management.
- 11. Have meaningful participation in the project statutory health and safety committee meetings.
- 12. Participate in incident investigations.
- 13. Participate in the principal contractor's emergency preparedness planning.
- 14. Ensure that own employees and are competent to perform the tasks assigned.
- 15. Assist the principal contractor with the handing over process, in particular the SHE file and relevant documentation.



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2.5.4 Employees

Must:

- 1. Be responsible for their own safety and health and that of their co-workers;
- 2. Co-operate with their employer to meet all of the employer's as well as legislative and Eskom Kriel Power Station requirements;
- 3. Familiarise themselves with their responsibilities during induction and awareness training sessions, some of which are:
 - a. familiarising themselves with their workplaces and safety and health procedures;
 - b. working in a manner that does not endanger them or cause harm to others;
 - c. ensuring that the work area is kept tidy;
 - d. reporting all incidents and near misses;
 - e. protecting fellow workers against injury by performing job observations;
 - f. reporting unsafe acts and unsafe conditions;
 - g. reporting any situation that may become dangerous; and
 - h. carrying out lawful orders and obeying safety and health rules;
- 4. Who become aware of any person disregarding a safety notice, instruction, or regulation, immediately report this to the person concerned. If the person persists, stop that person from working, and report the matter to contractor management and/or Eskom Kriel Power Station 's project manager or supervisor immediately.
- 5. Not damage alters, remove, render ineffective, or interfere with anything that has been provided for the protection of the site or for the health and safety of persons this includes any guarding of machinery or equipment.
- 6. Obey any safety signs and adhere to any site demarcation at all times.
- 7. When entering or leaving the site, do so via the official designated access/departure routes. Where reflective jackets/bibs are required to be worn, wear them.
- 8. Be subjected to any disciplinary action, if having transgressed any of the requirements of the health and safety site rules, Eskom Kriel Power Station requirements, company requirements, or legislative requirements.
- 9. Avoid any act that may endanger their own health and safety or that of fellow employees, members of the public, or visitors who may be affected by their acts and/or omissions at work.
- 10. Have the right to obtain proper information from their employer regarding health and safety risks and measures related to the work processes.
- 11. Use facilities placed at their disposal and not misuse anything provided for their own protection or that of others.
- 12. Have the right to remove themselves from danger when they have good reason to believe that there is an imminent and serious danger to their health and safety and have the duty to inform their supervisor immediately of such danger.



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- 13. Report to their supervisor (in the first instance), the principal contractor (in the second instance), and/or the Eskom Kriel Power Station project manager, any substandard acts and/or conditionsthat have come to their attention and that have not been rectified or acted on by their contractor management timeously.
- 14. Have the right and the duty at any workplace to participate in ensuring healthy and safe working conditions, to the extent of their control, over the equipment and methods of work adopted.
- 15. Maintain the surrounding area of the work site in a neat and tidy condition.
- 16. Have meaningful participation in regular health and safety meetings.
- 17. Have the right to refuse to perform or continue to perform any task/job on the grounds of health, safety, and environmental concerns.
- 18. When given instructions, understand the instructions and be permitted to clarify those instructions.

2.5.5 Contractor Health and Safety officer

- 1. Promote a SHE culture within the organisations involved in the project / contract.
- 2. The contractor's safety and health officer shall assist in the control of all health and safety-related matters on the sites.
- 3. Be involved in the developing the project SHE plan and SHE policy.
- 4. Be in constant liaison and cooperate with Eskom Kriel Power Station 's SHE professionals responsible forproviding them with a health and safety service.
- 5. Ensure that this SHE specification is adhered to by his/her principal contractor.
- 6. Conduct audits and inspections of all work sites for the duration of the project.
- 7. Be involved in the organisations incident investigations when required.
- 8. Participate in the organisation's statutory and non-statutory health and safety committees meetings.
- 9. Conduct organisational, site and visitor induction training.
- 10. Stop any employee from performing construction work which is not in accordance with the principal contractor's health and safety plan which poses a threat to the health and safety of persons.
- 11. Ensure that no alcohol or other intoxicating substances are brought on to, or remains on, the premises / work sites and that no employee remains on site if he/she is under the influence. Furthermore, report such instances to contract management.
- 12. Make themselves available and ensure co-operation of employees under their control to undergo breathalyser and drug testing while entering and/or being on any Eskom Kriel Power Station work site by Eskom Kriel Power Station .
- 13. Carry out frequent behaviour observations of employees under their control at least monthly.



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3. Specification

3.1 Project Scope of work

Build a 9.8km Kingbird 11kV line from Kriel MTS MV feeder bay to Ash Water Return (AWR). Install shield wire on structures not crossing HV lines.

Adhere to the Construction Holding Point below:

Geo-Tech Soil nomination for foundations. It shall be done by a Prof Civil Engineer appointed by the contractor and submitted for approval to the Eskom Kriel Power Station 's Civil Engineer/Engineering Manager concerned.

- Provide test results for all concrete works done on the line.
- Arrange with the responsible Design Engineer to approved purchased hardware.
- Arrange with the responsible Design Engineer to approve all structure assembly.
- Provide test results for all conductor test joints.
- Provide resistivity test results for the tower footing, before commencing with stringing of the shield wire.

Provide proof load test for all permanent stays.

A copy of the scope of works must be retained by the contractor.

3.2 Legal Compliance

3.2.1 Section 37(2) (Legal) Agreement

A section 37(2) agreement must be signed between Eskom Kriel Power Station project manager and the principal contractor at the time of awarding the contract and a CR, regulation 5(1) (k) appointment with Eskom prior to commencing with the construction work on site.

The original copy of the section 37(2) Agreements must be retained by the contractor and a copy retained by the responsible project manager.

A copy of all the agreements must form part of the respective contractor's SHE files.



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3.2.2 Hazardous work by children (Child Labour)

The constitution of the Republic of South Africa, in the "Bill of Rights" is clear on the rights of children, especially when it comes to:

- 1. being protected from exploitative labour practices;
- 2. not to be required or permitted to perform work or provide services that
 - i. are inappropriate for a person of that child's age; or
 - ii. place at risk the child's well-being, education, physical or mental health or spiritual, moral or social development; and the Basic Conditions of Employment Act, Chapter six Section 43 "Prohibition of employment of children". Before resorting to the use of child labour, due consideration must be given to the rights of thechild in terms of the constitution. Where work is being performed which is not prohibited in terms of the constitution, then such work must be conducted in terms of the OHS Act "Regulations on Hazardous Work by Children in South Africa" with emphasis on paragraph 2 Purpose and Interpretation. Eskom Kriel Power Station does not condone the use of child labour and therefore all effort must be exercised and child labour should not be used.

3.2.3 OHS Act

The principal contractor shall have an up-to-date copy of the OHS Act and regulations which will be available to all employees.

3.2.4 Legislative compliance

The principal contractor and all appointed contractors will comply with all the legislation pertaining to this project being:

- The Constitution of the Republic of South Africa (particularly Section 24 of the Bill of Rights).
- Occupational Health and Safety Act 1993 (Act 85 of 1993) and its Regulations.



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- National Environmental Management Act 1998 (Act 107 of 1998).
- Environment Conservation Act 1989 (Act 73 of 1989).
- National Water Act 1998 (Act 36 of 1998).
- Civil and Building Work Act.
- National Road Traffic Act 93 of 1996.
- Compensation for Occupational Injures and Diseases Act.
- SANS Standards –Contractor shall use the relative standards applicable to the project.



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3.3 Eskom Kriel Power Station Requirements

The principal contractor shall, before commencement of the project ensure that all their employees are familiar with the relevant Eskom Kriel Power Station, SHE documentation that is applicable to project

3.4 Construction Professional Registration

The principal contractor shall be registered in their respective levels as professionals in terms of the requirements of the SACPCMP.SHE professionals (Construction Safety Officer/ Construction Safety Management) must be registered as CHSO/ CHSM professionals with the SACPCMP for the purposes of this project, and the valid certified copy of registration shall be submitted with the SHE tender returnables/ projects file during construction activities.

3.5 CR 5(5) - MANDATORY APPOINTMENT- CONSTRUCTION HEALTH & SAFETY AGENT

Where a construction work permit is required as contemplated in regulation 3(1), with specific reference to this project Eskom has appointed a competent registered health and safety agent in writing to act as its representative, without derogating from his or her health and safety responsibilities or liabilities, thus the duties that are imposed by these Regulations upon a client, apply as far as reasonably practicable to the agent so appointed.

3.6 THE APPLICATION OF A CONSTRUCTION WORK PERMIT (GG 41839 GNR 850 (published 17 August 2018))

The Chief Inspector, in terms of section 27(1) of the OHS Act and by virtue of the powers delegated by the Minister, has, under section 40 of the OHS Act, granted an exemption from the Construction Regulations 3(1), "The Application for a Construction Work Permit".

Due to the value of the construction works of the Kriel Power Station 11kv Kingbird Line Construction Project, The Client (Eskom Kriel PS) in the Mpumalanga Province, shall ensure that, at least 30 days before that work is to be carried out, apply to the provincial director in writing for a construction work permit to perform construction work.

Application for a Construction Work Permit. The exemption supersedes Government Notice 641 of 24 July 2015. This exemption will be reviewed in four years (2022), and it is applicable to all construction work carried out from 7 August 2018.

The principal contractor is expected to comply with all the permit application requirements where applicable as per the Annexure1 of the Construction Regulations 2014 and the Eskom permit requirements checklist as issued by the Client CHS Agent

The principal contractor shall not commence with any construction work until a site- specific permit certificate with the permit number has been issued by the Chief Inspector, Department of Employment & Labour.

The site permit number shall be conspicuously displayed as part of the construction board at the construction site.



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3.7 Notification of Construction Work

The principal contractor must where applicable notify the relevant provincial director of the Department of Labour of the intention of carrying out any construction work as defined in Construction Regulation 4 of the Act. The notification form of construction work is listed as an annexure to the construction regulations of the OHS Act. A copy of the notification letter sent to the DEL shall be forwarded to the Project Manager on the same day as sent to the DEL. A copy of theletter and their approval must be kept in the SHE file.

3.8 SHE Policy

SHE policy is a statement of intent and a commitment by the organisation's CE and senior management in relation to the relevant SHE roles and responsibilities, the achievement of their strategic objectives, values of integrity, customer satisfaction, excellence, and innovation.

The principal contractor, if already not in place, will be required to compile an organisational SHE policy in line with their SHE responsibilities. The policy shall incorporate COVID 19 statement of company top management commitment. The policy must be signed by the organisation's CE or the appointed assistant to the CE OHS Act Section 16(2) and with datesand next review dates. The policy must be displayed in a prominent place within the workplace. A copy of the policy must be filed in the contractor SHE files and attached as an annexure in the SHE Plan.

3.9 COID

The principal contractor shall be registered with an appropriate employment compensation commissioner and have available a valid letter of good standing (LoG) from such commissioner with the relevant nature of business for the scope of services. The obligation lies with the contractors to ensure that the LoG remain valid throughout the contract period. Acopy of the LoG must be filed in the contractor SHE files.

3.10 Costing for SHE within the Project

The costing for SHE must be itemised based on the overall scope of the project (i.e.) Training, provision of PPE, safety equipment purchases etc.

3.11 Statutory Appointments

For the duration of the project, the principal contractor shall appoint competent employees who will meet the requirements of the OHS Act. Where appointments are made, contractors shall ensure that the appointees have been suitably trained and or informed of their responsibilities before getting them to accept such appointment by signing the appointment letters. The relevant statutory appointments shall be made in accordance with the requirements of the OHS Act which includes the requirement of a competent person being appointed in the relevant roles.



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The statutory appointments shall be fully signed by the employer and appointees and should include but not limited to the following:

- OHS Act Construction Regulation 8(8) Construction Supervisor
- OHS Act Construction Regulation 8(7) Assistant Construction Supervisor
- OHS Act Construction Regulation 8(5) Construction Health and Safety Officer
- OHS Act General Administrative Regulation 9(2) Incident Investigator
- OHS Act Section 19 (3) Health and Safety Committee Member
- OHS Act, Section 17 Health and Safety Representative.
- OHS Act Construction Regulations 13(1)(a) Excavation supervisor
- OHS Act Construction Regulation 9(1) Risk Assessor
- OHS Act Construction Regulation 10(1) Fall Protection Plan developer
- OHS Act: Construction Regulations 23(1)(d)(i) Construction Vehicle and Mobile Plant Operator
- OHS Act: Construction Regulations 24(c) Electrical Installations and Machinery
- OHS Act: Construction Regulations 28(a) Stacking and Storage Supervisor
- OHS Act General Safety Regulation 13(a)- Ladder inspector
- OHS Act: Construction Regulations 29(h) Firefighting Equipment Inspector
- OHS Act General Safety Regulations 3(4) First Aider

NOTE: The actual appointments shall be communicated to the Employers Health and Safety Manager/Practitioner on site and shall include a copy of the appointment letter, a curriculum vitae, and relevant certificates of competence for the proposed role.

3.12 Principal Contractor Competencies

The Principal Contractor shall ensure that adequate and competent staff is employed to manage SHE matters on site, including all the competency requirements as per the tender requirements. The Principal Contractor shall ensure persons appointed in the following positions, have the following SHE related training as a minimum requirement:



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Construction Manager Required Competencies as a minimum:-

- An accredited Honours degree/ BSc / B-Tech qualification/ National Diploma in the Built Environment field of study with a minimum of three years applicable practical experience in construction management.
- The South African Qualifications Authority (SAQA) verifiable certified copy of technical relevant qualifications.
- Proof of valid SACPCMP registration certificate as a Construction Manager (copy shall be certified within 3 months from the time and date of the tender closing).

Construction Supervisor & Assistant Construction Supervisor Required Competencies as a minimum: -

- Three years applicable experience in construction management.
- General Health and Safety course.
- OH&S Act and Regulations course, as applicable (latest version of the Act and Regulations).
- Incident Investigation.
- Construction Regulations, GNR 84 of February 2014
- Basic fire fighting
- Root Cause Analysis Technique training.
- Hazard Identification and Risk Assessment training.
- Job Observations Training.
- Attended an accredited supervisor's safety course.
- Rigging awareness training.
- Rigging competency training (red sealed rigger) for Supervisors that will be supervising rigging activities.
- ORHVS training and authorization, and
- Working at Heights training.
- Rigging competency training (red sealed rigger) for Supervisors that will be supervising rigging activities.

Construction Safety Officer (CR 8(5) Appointee) Required Competencies: -

- B-Tech or National Diploma in Health and Safety Management or Environmental Health and proof of registration by SACPCMP.
- HIRA training.
- Root Cause Analysis Technique training (RCAT).
- OH&S Act & Construction Regulations training.



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- ORHVS awareness training as and when required by the contract scope of works.
- Working at Heights training.
- Construction Regulations, GNR 84 of February 2014.
- HAZMAT training
- Basic fire fighting
- Rigging awareness training.
- Including any other training as may be deemed necessary by the Client's SHE Training Procedure.

The Contractor shall ensure that all the above minimum training requirements are attended by each appointed individual before commencement of work on site to ensure proper supervision and compliance.

NB: - All copies of certificates shall be certified within 3 months from the time and date of the tender closing and during SHE File submission).

3.13 Construction Health & Safety Officer Ratio

The Contractor must, after consultation with the Client, and having considered the size of the project, the degree of danger likely to be encountered r the accumulation of hazards or risks on the site, employ the services of Full-time Construction Safety Officers during its term of contract. The Contractor shall ensure that there is at least one (1) full-time Construction Safety Officer on site for every 1 - 30 employees on site.

The Principal Contractor shall ensure that each of its Contractors has a full-time Construction Safety Officer appointed for its employees for every 1-30 employees and part thereof.

The CVs of all the Contractor's appointees shall be subjected to acceptance by the Client's Project Manager/ Pr CHSA/ SHE Manager / Officer, before appointing such a person for the project. Any changes in appointments shall be communicated at least 3 days in advance to the Client's Project and OHS Manager and SHE Officers, the proposed appointees shall be reviewed and accepted by the Client before the appointments are finalised.

The PC shall ensure that there is always a Construction Safety Officer and Contractor' Construction Supervisors on site as long as there are employees working on site, regardless of the number of employees working on site.

The PC shall ensure that there is sufficient Safety and Supervisor's coverage on each shift work, weekend work, overtime work, emergency work, or whenever work needs to be done on site. The Client's OHS Department and Project Manager shall decide whether the number of safety officers and supervisors are sufficient or not for the above mentioned working plan



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3.14 Eskom's Kriel Life Saving Rules

- 1. Eskom Kriel Power Station views health and safety in high esteem and encourages that any organization who performs work for Eskom Kriel Power Station in Eskom Kriel Power Station adopt the same view.
- 2. Five Life-saving rules have been developed that will apply to all Eskom Kriel Power Station Employees, agents, consultants, and **contractors**. Failure to adhere to these rules by any Eskom Kriel Power Station employee or employee of a Principal Contractor will be considered a serious transgression. These rules are being implemented to prevent serious injury or death of any employee.
- 3. This contractual work will be performed on Eskom Kriel Power Station premises (including every of any product), therefore the rules **shall be obeyed** by any contractor and their employees.

The rules are:

RULE	DESCRIPTION OF RULE
	OPEN, ISOLATE, TEST, EARTH, BOND, AND/OR INSULATE BEFORE TOUCH
Rule 1	(That is plant, any plant operating above 1000 V)
	HOOK UP AT HEIGHTS
	Working at height is defined as any work performed above a stable work surface or where a person puts himself/herself in a position where he/she exposes himself/herselfto a fall from or into.
	BUCKLE UP
	No person may drive any vehicle on Eskom Kriel Power Station business and/or on Eskom Kriel Power Station premises:
	Unless the driver and all passengers are wearing seat belts.
	BE SOBER
Rule 4	No person is allowed to be under the influence of intoxicating liquor or drugs while onduty
	PERMIT TO WORK
	Where an authorization limitation exists, no person shall work without the requiredpermit to work with regards to Plant Safety Regulations, Operating Regulations for high voltage systems, Hot Work permits etc. shall be acquired prior work activities.

Eskom Kriel Power Station will take a stance of zero tolerance on these rules. Non-compliance to a Life Saving rule will be considered serious misconduct and will lead to serious disciplinary action, which may include dismissal.

This is to ensure that **every person** who works on or visits an Eskom Kriel Power Station returns **home safelyto his or her family.**

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3.15 Substance Abuse

- Alcohol and substance abuse poses a significant threat to any business, more so in industrial incidents and the driving of vehicles. Eskom Kriel Power Station is therefore, entitled to take reasonable steps to ensure that intoxicated persons are identified and prevented fromentering Eskom Kriel Power Station.
- 2. General Safety Regulation 2A is clear on the legal stance regarding intoxication.
- 3. The alcohol and drug permissible level is 0%.
- 4. Principal contractor shall comply with Eskom Kriel Power Station 's procedure 32-37 ("Substance Abuse Procedure"), taking in to account that this is an Eskom Kriel Power Station Life-saving Rule number 4: BESOBER"), this means anyone entering the Eskom Kriel Power Station will be subjected to ad hoc alcohol testing.
- 5. Contractors are encouraged to compile their own manual and to carry out regular alcohol testing of their own employees. The legislative alcohol level is deemed to be zero.
- 6. Test records must be treated as "Confidential" and filed in the employees' personal file.

3.16 Contractor organisational Structure

Principal Contractor Organogram

The principal contractor must provide an organisational organogram related to this project, depicting all the levels of responsibility from the CE down to the supervisors responsible for the project. List the relevant positions held, names of appointees and legal appointments with legal OHSA references.

This organogram must be kept up to date, with company CEO signature and dates and filed in the project SHE files at execution stage.

3.17 Risk assessment (refer to 32-520)

It is a legal requirement in terms of Section 8 (2)(d) of the OHS Act for an employer to carry out risk assessments, to establish which risks and hazards are attached to the health and safety of persons due to any work which is performed, any article or substance which is, handled, stored, transported. A risk assessment is defined as an identification of the hazards present in an organisation and an estimate of the extent of the risks involved, taking into account whatever precautions are already being taken.

It is essentially a three stage process:

- identification of all hazards;
- evaluation of the risks;
- Measures to control the risks.



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Risk assessments are required to be maintained. This means that significant changes to a process or activity, or any new process or activity should be subjected to a risk assessment and that if new hazards come to light during the work process, then these should also be subjected to risk assessments. Risk assessments for long term processes should be periodically reviewed and updated. Method statements or written safe work procedures are an effective method as information and record of the way jobs / tasks must be performed.

Daily or issue based or task specific or on the job risk assessments must be conducted at the place where work is to be performed/ conducted to allow managers and employees to assess any inherent risks that could have been overlooked during the initial risk assessment or any changes that might have occurred in a period of absence. For example if a job / task is extended over a day or halted due to inclement weather.

Guidelines for actual steps involved in a job/task specific risk assessment are:

- Each activity is listed;
- Specific hazards are identified and listed against each activity; for client summary risk assessment, refer Appendix A attached from page 44 of this specifications.
- The magnitude of each risk is rated as Low. Medium or High;
- All known documentary and supervisory controls are listed. For instance: What safe work procedures exist for ladders;
- The relevance, effectiveness and sufficiency of these controls are assessed;
- In the event of insufficient or deficient controls for the particular activity, steps to be taken to rectify this shall be recorded, and safe working procedures drawn up;
- Persons responsible for implementing and supervising the task shall be identified, nominated and duly assigned:
- Persons responsible for monitoring the task and carrying out the planned job observation must be nominated;

3.18 Safe work procedures / method statements

Method statements / written safe work procedure are control measures used to prevent an incident from occurring during the execution of the project. A written safe work procedure/ method statements provide guidance how to execute the task safely. A safe working procedure should be written when:-

- a. Designing a new job or task;
- b. Changing a job or task;
- c. Introducing new equipment or substances; and

The safe working procedure should identify:

- d. The supervisor for the task or job and the employees who will undertake the task;
- e. The tasks that are to be undertaken that pose risks;



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- f. The equipment and substances that are used in these tasks;
- g. The control measures that have been built into these tasks;
- h. Any training or qualification needed to undertake the task;
- i. The personal protective equipment to be worn;
- j. Actions to be undertaken to address safety issues that may arise while undertaking the task.

3.19 Construction Sites

- The contractor must develop a fire safety procedure for the construction site prior to commencing work. The procedure must take into consideration the size of the site/s, the type of work performed and amount of combustible materials. Cognisance of OHS Act CR 29 must be made.
- 2. It must be developed in conjunction with Eskom Kriel Power Station Fire Risk Management requirements and all other applicable Regulations. All workers entering and working in the construction site need to be trained in fire safety and any duties they are required to perform.
- 3. A suitable fire warning system for alerting site personnel of fire shall be provided, and capable of being heard in all areas of the site.
- 4. Appropriate portable extinguishers must be available on the construction site and be readily available at the location.
- 5. Storage of combustible and flammable liquid in the construction site is not permitted unless stored in approved flammable cabinets or outdoors away from the buildings.
- 6. Site Smoking Restrictions must be enforced. No open flames are permissible and where hot work is performed, the work areas must be cleared of any combustibles prior to commencement of work.

3.20 Fire Equipment and maintenance

- 1. All firefighting equipment's that have been provided shall:
 - a.Be clearly labelled
 - b.Conspicuously numbered
 - c. Entered in a register
 - d.Inspected monthly by a competent person
- 2. Tested and serviced at recommended intervals by an accredited supplier
- 3. Results entered in the register and signed by competent person.



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3.20.1 Refuelling at the construction site

With the exception of construction vehicles and mobile equipment, before a machine is refuelled, the motor must be stopped. Refuelling shall take place at designated safe areas and appropriate warning signs installed. Suitable drip trays must be used to prevent spillage at the filling nozzle.

3.21 First Aid and Equipment

- 1. The requirements of the OHS Act GSR 3 must be observed.
- 2. First aid appointments must be made to meet the requirements, this includes construction sites. Appointees must be trained to level 2. It is good practice for all employees to be trained to at least level 1.
- 3. When appointing employees for work sites, cognisance must be taken into account the type of work performed, the distance teams are working apart and the terrain to be covered if an emergency should arise.
- 4. A list of emergency numbers must be displayed on the notice boards and made accessible for all employees.
- 5. Principal Contractor must ensure that his /her employees are familiar with the emergency numbers.
- 6. Contractors shall have one first aid box for the first 5 persons and thereafter one for every 50 or team of workers on site or part thereof, taking into account the type of work performed and the distance between teams.
- More first aid boxes shall be provided in accordance with the risk assessment. Boxes
 must be available and accessible for the immediate treatment of injured persons at the
 workplace.
- 8. For offices, signs indicating where the first aid box or boxes are kept as well as the name and contact details of the First Aider of such first aid box or boxes shall be erected.
- 9. The Principal Contractor and appointed contractor shall ensure that alternative arrangements be made for incidents occurring after working hours.



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3.21.1 Boxes and equipment

The following is a list of minimum contents of a first aid box:

- Item 1: Wound cleaner/antiseptic (100ml).
- Item 2: Swabs for cleaning wounds.
- Item 3: Cotton wool for padding (100 g).
- Item 4: Sterile gauze (minimum quantity 10).
- Item 5: 1 Pair of forceps (for splinters).
- Item 6: 1 Pair of scissors (minimum size 100 mm).
- Item 7: 1 Set of safety pins.
- Item 8: 4 Triangular bandages.
- Item 9: 4 Roller bandages (75 mm X 5 m).
- Item 10: 4 Roller bandages (100 mm X 5 m).
- Item 11: 1 Roll of elastic adhesive (25 mm X 3 m).
- Item 12: 1 Non-allergenic adhesive strip (25 mm X 3 m).
- Item 13: 1 Packet of adhesive dressing strips (minimum quantity, 10 assorted sizes).
- Item 14: 4 First aid dressings (75 mm X 100 mm).
- Item 15: 4 First aid dressings (150 mm x 200 mm).
- Item 16: 2 Straight splints.
- Item 17: 2 Pairs large and 2 pairs medium disposable latex gloves.
- Item 18: 2 CPR mouth pieces or similar devices.

A content check list must be available with all boxes and boxes shall be checked on a regular basis, kept clean and dust free.

3.22 SHE Communication Systems

Principal Contractor/s must develop a communication strategy outlining how they intend to communicate SHE issues to their staff, the mediums they will employ and how they will measure the effectiveness of their SHE communication. Below is a brief on how communication should take place. Where project meetings are conducted on site, SHE shall be included as a standing agenda point and minutes of these meetings shall be available on site at all times. Minutes of meeting must be compiled and filed in the relevant SHE files. All employees shall have access to these minutes. Attendance register shall be kept for all the health and safety meetings.



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3.22.1 Statutory Health and Safety Committees

- 1. The principal contractor shall establish statutory health and safety committee in terms of Section 19 of the OHS Act, Act.
- 2. The Committee shall meet to discuss SHE issues concerning the current work being performed, training, upcoming work and SHE requirements, incidents and lessons learned specific SHE problems, safety performance, action plans and other relevant SHE issues. Listed below is a preferred agenda.
- 3. SHE representatives for a workplace shall be members of the relevant workplace safety committees (Refer to Section 19 (2) (a) of the OHS Act).
- 4. The number of persons nominated by employer must not be more than the Health and Safety Representatives on that specific statutory health and safety committee. (Refer to Section 19(2)(c) of the OHS Act)
- 5. A statutory health and safety committee meeting shall be held at least 3 monthly (where medium to high risk work is involved, more frequent if required), and all appointed members of the committee shall attend the meeting.
- 6. Statutory health and safety committees may make recommendations to the principal contractor and the project manager and the Inspector at DEL.
- 7. All health and safety committees shall discuss all projects related OHS Act Section 24 and 25 incidents and other notified serious incidents.
- 8. Health and safety committees shall follow up on incident investigation recommendations and shall keep record of all recommendations made by the committee.
- 9. Statutory health and safety committees may make recommendations for the revision of current standards, procedures and practices.
- 10. The principal contractor shall ensure that statutory and non-statutory health and safety committees carry out their duties.
- 11. The chairperson of the health and safety committees shall be selected and appointed by the contractor. The appointed chairperson must be competent to chair meetings and be able to make informed decisions.

3.22.2 Non-statutory health and safety committees

- 1. Where there are large worksites, then non-statutory sub-committee must be established within that worksite to assist with the communication of health and safety related matters between the statutory health and safety committee and the workplace.
- 2. The duties and responsibilities of the non- statutory health and safety committees will be the same as the statutory safety committee



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3.22.3 Agenda

- 1. The following serves as the guide for the SHE Committee meeting agenda.
- List of agenda items:
- Matters arising from previous minutes
- Matters arising from Contractor's SHE meetings.
- Audit results and feedback
- Review Health and Safety Representative Inspection Reports
- Review
 - o Incident investigation reports
 - Non-Conformances
 - Announcements (near miss/injury/damage)
 - Follow up on recommendations made by the employer in incident investigation reports
- Accident Prevention Safety Promotion
 - Planned Job Observations
 - SHE Training
 - Protective clothing and equipment
 - Incident Announcements / Recall
 - Forthcoming High hazard activities.
- Non-conformances.
- Housekeeping.
- Work permits.
- Work procedures.
- Hazardous materials / substances.
- Fire Prevention
- Occupational Hygiene Assessments, Health Risks and Actions
- Security
- Construction vehicles and mobile equipment
- Rules, Instructions
- Public Safety
- Environmental Management
- Emergency Preparedness



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3.22.4 Minutes and action items for all health and safety committee meetings

- 1. Minutes and record of action items shall be kept of all health and safety committee meetings.
- 2. Action column with target dates and responsible person shall be clearly visible on theminutes and shall be completed during the meeting.
- 3. Statutory health and safety committee meeting minutes and record of action items shallbe kept for the duration of the project or a minimum period of three years.
- 4. Non–statutory health and safety committee meeting minutes shall be kept for the duration of the project or a minimum period of 12 months.
- 5. All other meeting minutes where SHE is on the agenda, shall be kept for a minimum period of 12 months.
- 6. The original copy of the minutes and record of the action items must be signed by thechairperson.
- 7. The relevant project manager and principal contractor shall endorse the relevant minutes with his/her recommendations and return the minutes to the relevant contractors chairperson within 14 calendar days of the meeting.

3.22.5 Toolbox talks / Daily team talks / pre job meetings

- 1. A meeting must be held prior to the commencement of the day's work with all relevantpersonnel associated with the work task in attendance. The job, relevant procedures, associated hazards, safety measures, i.e. the task risk assessments shall be discussed. Each employee who attends the briefing shall sign an attendance list of that pre-job brief form undertaking that they have an understanding of the tasks, risks and control measures required.
- 2. Where possible, tool box talks can be included in the pre-job brief meetings. If this does not occur, then weekly tool box talks must be conducted. The toolbox talk topicswill be based on SHE issues pertaining to the construction site and or the project. Thetopic contents shall be in writing. Attendance registers with the topic listed shall be kept.

3.23 SHE Training

- 1. The principal contractor, when making a bid for this project shall provide a breakdown list of the SHE training requirements and the costing of such requirement.
- 2. The scope of training includes but is not limited to the type of work being performed and the relevant procedures. Additional to the requirements, will be that the principal contractor must have the appropriate qualifications, certificates and employees should always be under competent supervision.



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- 3. Where legislative and Eskom Kriel Power Station recommended appointments are made, the relevant training shall be given to those appointees prior to the acceptance of those appointments.
- 4. When there is an amendment to the Acts and/or to the regulations, SHE specification and SHE plan, all affected staff shall undergo the applicable refresher training.
- 5. Appropriate time must be set aside for training (induction and other) of all employees.
- 6. Records of all training and qualifications of all contractor employees must be kept on the SHE file.

3.23.1 Induction training

- 1. The principal contractor shall ensure that all his / her employees have undergone the Eskom Kriel Power Station Safety Contractor Management induction training prior to commencing work onsite.
- 2. Attendance registers must be completed of any induction training given, which must indicate that they have received and understood the induction training.
- 3. Prior to attending the induction training, all employees must undergo a preemployment medical examination and found fit for duty. A copy of the certificate of fitness must be kept in the SHE file on site for the duration of the project.

3.23.2 Site specific induction training

The principal contractor shall ensure that all his / her employees undergo site specific work induction with regard to the approved project SHE plan, general hazards prevalent on the construction site, construction risk assessment, rules and regulations, and other related aspects.

3.23.3 Visitors to site induction

- 1. Visitors to the site shall be required to undergo and comply with the principal contractor's site-specific safety induction prior to being allowed access to site.
- 2. All visitors must remain in the care and custody of a person (host) who has been properly inducted. No visitors are permitted to undertake any work onsite, of any nature.

3.23.4 General training

The principal contractor will be required to ensure that before an employee commences workon the project, the respective supervisor informs the employee of his scope of authority, the hazards associated with work as well as the control measures to be taken. This will include man-job specifications, the discussion of any task procedures or hazardous operational procedures to be performed by the employee. The Principal Contractor is to ensure that the supervisor has satisfied himself that the employee understands the hazards associated with any work to be performed by conducting task/job observations.

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3.24 Excavations, trenches, and ground openings

The Principal Contractor and its Sub-contractors shall comply with the following requirements:

- Digging, excavation, or driving a peg, pile, or spike into the ground by the contractor may not commence without written authorization from the client's/agent's representative.
- Prior to commencing work on any excavation or trench, the Principal Contractor and or its Sub- contractors shall determine the location of all underground installations, that is, sewer, telephone, water, fuel, electric, etc. Overhead hazards shall be assessed and dealt with prior to commencement of work.
- Adequate precautions shall be taken by the contractor to prevent slumping of excavations, as well as to prevent rocks and loose material falling onto workers.
- All excavations done by the contractor are to be clearly demarcated and barricaded to prevent accidental access.
- Only solid barricading will be used in areas where a fall hazard is present. Solid barricading and/or hole covers shall be provided around all holes or openings to prevent any person being injured as a result of a fall. Danger tape may only be used as a pre-warning to make the solid barricading more visible and to prevent persons from coming close to the danger area
- Barricading must be placed as close as reasonably possible to the excavation.
- If an excavation or trench endangers the stability of buildings or walls, shoring, bracing, or underpinning will be provided. Excavations and trenches that are adjacent to backfilled excavations or trenches, or that are subject to vibrations from railroad traffic, road traffic, blasting in open-cast mining, or the operation of machinery (for example, shovels, cranes, trucks), must be secured by a support system, shield system, or other protective system (that is, sheet pile shoring, bracing).
- Where it is impracticable to provide fixed guard railing, effective removable barriers shall be provided at all unguarded openings in guard railings or floors, and these shall be maintained in position at all times until the hazard no longer applies.
- Warning signs and flashing warning lights at night shall be displayed in suitable positions to warn any persons approaching the area of the location and extent of any excavation.
- No material to be within 3 m of the excavation edges.
- All excavations must be on register and inspected daily before work commences and after inclement weather by the contractor's appointed competent person, declared safe, and his/her findings noted in the said register. The Employer may review the said register on a predetermined frequency not exceeding seven (7) days.
- While work is being performed in an excavation, there shall be a supervisor at all times.
- Every twelve meters, there shall be an escape ladder in all excavations.
- Requirements in CR regulation 13 of the OHS Act shall apply as well.
- No work shall commence in an excavation, unless the excavation has been declared safe by the competent person.

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3.25 Barricading (guarding of excavations, and trenches)

- The Principal Contractor and its Sub-contractors shall ensure that:
- In areas where the restriction or prevention of unauthorized persons/members of the public/passers-by is required, the barricading requirements shall be adhered to;
- Requirements for barricading (if risk assessments require more stringent mitigation measures, then those stringent measures shall apply):
- The name and contact detail of the person and contractor company responsible for the barricading shall be posted on the actual barricading.
- All barricading shall be of the rigid type.
- All openings and edges must be barricaded with solid barricading to withstand an impact of atleast 100 kg.
- Physical barriers to prevent persons falling into openings.
- Contractors must pre-plan the delivery of floor grating, stair treads, landings, and handrails to ensure safe access and protection for persons working on structures. No danger tapes are allowed for barricading purposes.
- The contractor's barricading standard must accompany the SHE plan.

3.26 Permit to work

The Principal Contractor and its Sub-contractor's must adhere to the approved Eskom permit-to-work system to control identified high-risk activities. There will be only one permit-to-work system (Eskom) on the construction site.

If the type of work requires that contractors must be trained, competence-assessed, and authorized in writing to perform the duties of an authorized or responsible person as contemplated in the applicable Eskom regulations, for example:

- i. Operating Regulations for High-voltage Systems;
- ii. Plant Safety Regulations;
- iii. Hot work;

The Employers representative is to provide more details on the permit-to-work system for the specific work to be conducted by the principal contractor.

Note: No construction work shall commence or carried out without an authorized Construction Work Permit as require by CR regulation 3(1).

3.27 Cutting, welding, and hot work

The Principal Contractor and its Sub-contractors shall ensure compliance to the GSR regulations, regulation 9, with regards to all welding, flame cutting, soldering and similar operations.

When welding or cutting work is performed, an adequate number of approved fire extinguishers shall be provided by the contractor. The contractor shall provide a thirty-minute fire watch after the operations have ended to ensure that no fire starts.

Furthermore, the Principal Contractor and its Sub-contractors shall ensure that prior to any such activities taking, it complies with the Employers permit-to-work requirements for Hot-work activities.

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3.28 Contractor Site Establishment

- 1. Principal contractor's site facilities should be managed at all times.
- 2. Prior to establishing a project site, a site plan is required to be drawn listing position of all buildings, amenities, storage and stacking areas.
- 3. The appropriate colour coding anddemarcation of storage and stacking areas must be carried out.
- 4. Where, working in the field and material is stored at the work sites, then proper stacking and storage shall be carried out.
- 5. When compiling the site plan, cognisance must be taken to the establishment of the site camp, ablution facilities and dining area in relation to one another and away fromstacking and storage areas.

3.28.1 Construction vehicle safety

- 1. It is the responsibility of the driver to ensure:
 - a. Their passengers wear seat belts whilst the vehicle is in motion.
 - b.Comply with all traffic road rules, safety, direction and speed signs.
 - c. Ensure that vehicle loads are properly secured prior to moving off.
 - d.Ensure that vehicles are not overloaded.
- 2. No drivers or operators may text, talk on cell phones or two way radios whilst driving, unless a hands free kit is used.
- 3. All drivers of construction vehicles are to have valid medical fitness certificates.
- 4. Each Project site that is enclosed by demarcation will have system/ process to managevehicle access to site.
- 5. Contractor must maintain their vehicles in a roadworthy condition and a vehicle licensemust be valid at all times.
- 6. Drivers of light vehicles must avoid stopping or parking in the vicinity of machines. Atleast 30 (thirty) meters must be left clear between such a vehicle and such a machine
- 7. Contractor vehicles can be subject to inspections by the Client's representative. Vehicles which are not roadworthy will not be permitted to be used on the project.
- 8. Drivers/operators shall be responsible for the travel-worthiness of all loads conveyed by them. Precautions shall be taken to secure all loads properly. Loads projecting from vehicles shall be securely loaded.



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3.29 Site De-establishment

The Principal Contractor shall comply with the requirements as stipulated in the Employers Site De- establishment Plan and Kriel Power Station EMP.

3.30 Contractor's site facilities

- The Principal Contractor and its Sub-contractors shall adhere to all the site rules and stipulated by the client. The following basic safety rules are to: be adhered to at all times:
- Only approved hard hats with chain strips and safety glasses may be worn.
- Only steel-toe/safety-toe work boots shall be allowed to be worn in the construction areas.
- No high-heeled shoes will be allowed on any construction site.
- Additional eye protection shall be worn when job-specific hazards dictate.
- Hearing protection shall be worn when entering all operations areas and areas posted as hearing protection areas or when using equipment that produces noise levels in excess of 85 decibels.
- Respiratory protection shall be worn when performing tasks that dictate the need for such equipment.
- Good housekeeping practices shall be continually maintained, and work areas left in a clean and safe condition at the end of each shift, Good House Keeping Audits shall be conducted on a weekly and monthly basis, records be kept on SHE files.
- Smoking policy shall be developed and implemented across site: smoking is permitted in designated areas only.
- Risk assessment will determine the need for fall protection when working from height.
- Only trained, certified personnel shall operate motorized equipment.
- Ladders must be properly constructed and kept in good repair. Ladders shall be the proper length and type for the task. All ladders shall be identified and registered.
- Compressed gas cylinders must be stored and used in the upright position and properly secured at all times; protective caps shall be in place when cylinders are not in use, and gauges shall be removed prior to transportation of cylinders.
- All guards for personnel or equipment protection shall be kept in place and shall not be modified or tampered with.
- Employees shall not walk or work under suspended loads.
- Equipment must be shut off and parking brakes engaged when the equipment is being lubricated, refuelled, or adjusted.
- All excavations must meet Construction Regulations requirements and must comply with the project minimum standards for barricading, and adequate access and egress must be provided for excavations.
- Lockout/tag-out procedures must be followed when performing work on piping, mechanical equipment, electrical services, etc. that has the potential for the release of stored hazardous energy.



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- Take into consideration areas that require a permit to work.
- Access to safety equipment must be kept clear at all times. A clear area must be maintained around fire hydrants at all times.
- All safety and warning tags and/or signs shall be observed.
- Posted speed limits must be observed.
- All incidents/injuries, no matter how minor, must be reported to the client/agent and recorded in writing.
- Consider a crane's rated capacity when engaging in lifting work.
- Obtain the necessary permits.
- All contractors must provide their own bins on site, which must be utilised for all waste as per the site EMP.
- Illegal drugs, alcohol, firearms, or other dangerous substances shall not be allowed on the project. Reporting for work under the influence of an illegal drug, alcohol, or other dangerous substance is not permitted.
- All contractors' employees must undergo full medical examination prior to any work on site.
- Do not use cellular phones in areas where cellphone usage is prohibited, e.g. While working onsite, When driving etc.
- When walking through the site or to personal work areas, use recognised thoroughfares. Do not take short cuts or walk on uneven ground surfaces.
- Vehicles and traffic rules refer to the section on "CONSTRUCTION VEHICLES AND MOBILE PLANT" for requirements.
- All fire extinguishers shall be:
- Clearly labelled;
- Conspicuously numbered:
- Entered in a register;
- Inspected monthly by a competent person;
- Tested and serviced at recommended intervals by an accredited supplier;
- Results must be entered in the register and signed by a competent person; and
- No open or unattended fires are allowed within the construction site.

3.31 Access control to construction site

The Principal Contractor in collaboration with the Kriel Power Station Employers representative will ensure that proper access control is in place and functional at all times on and off the construction site.

All security requirements shall be highlighted at the induction given by the Employers representative.

The Principal Contractor and its Sub-contractors are to strictly adhere to all security requirements on the premises as laid down by the Employer.



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3.32 Construction vehicles and mobile plant

- The Principal Contractor and its Sub-contractors shall ensure that:
- All motor vehicles operated by contractors within the area shall, in all respects, comply with the Road Traffic Ordinance and Road Traffic Act. Designated drivers shall be in possession of a driver's licence, valid for the class of vehicle.
- The driver's licence shall be kept by the person so authorised, and he/she shall produce such card on request.
- All drivers of construction vehicles and mobile plant are to have medical certificates of fitness to determine physical and where applicable psychological fitness.
- The speed limit within the bounds of the construction site is 40 km/h or as indicated by the Kriel Power Station Traffic Management Plan.
- No drivers or operators may talk on a cellphone or two-way radio while driving, unless a hands- free kit is used.
- It is the responsibility of the driver to ensure that:
- He/she and his/her passengers, at all times, wear seat belts while the vehicle is in motion:
- He/she complies with all safety, direction, and speed signs;
- Vehicle loads are properly secured and loaded onto vehicles; and
- Vehicles are not overloaded.
- All requirements with regard to the transportation of tools/equipment/material and persons on the back of construction vehicles must be adhered to:
- All contractor employees must not be transported on the back of construction vehicles.
- Tools, equipment, and material are to be secured in a separate compartment, in order to prevent movement.
- Fixed and firmly secured seats with seat belts adequate for the number of passengers being transported and SABS approved.
- Construction vehicles are to be fitted with rollover bars as per SANS standards.
- The driver and all passengers are to be seated with seat belts fastened while the vehicle is in motion.
- The Principal Contractor shall ensure that its employees and those of its Subcontractors do not:
- Ride on the back of elevators, cranes, or any other mobile plant equipment.
- Leave vehicles unattended with the engine running; and
- Park vehicles in unauthorized zones/areas.
- The Principal Contractor shall be solely responsible for the safety and security of any
 of its vehicles (including private vehicles) on the premises.
- The Principal Contractor shall attach identification markers on all of its vehicles that are permitted to enter the site. Mine permit access procedure shall be taken into account as well.
- A current maintenance logbook is required for all cranes and large plant equipment and shall be available for inspection at any time. The logbook shall be located in the cabin of the crane or plant equipment.
- The Principal Contractor is to ensure that visibility (for example, switching on of lights, reflectors, barricades equipped with lights, etc.) is enhanced on all construction vehicles and mobile plant in order to identify the location of the vehicles or plant.



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- The Principal Contractor must maintain its vehicles in a roadworthy condition and have a valid licence. These vehicles shall be subject to inspection by the client's/agent's representative. Vehicles that are not roadworthy will not be allowed onto the site.
- In the event where the Principal Contractor and its Sub-contractor do not own the equipment, the Principal Contractor is still responsible for ensuring that all conditions are complied with by all of its Sub-contractors or hire companies.
- Drivers/operators shall be responsible for the travel-worthiness of all loads conveyed by them. Precautions shall be taken to lash all loads properly. Loads projecting from vehicles shall be securely loaded, and 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.
- All servicing and repairs must be carried out by the contractor in a designated area.
 Note, that any incident occurring as a result of servicing or repairs will not be considered as work related, as indicated in the document 32-95.
- All waste from servicing must be disposed of in accordance with environmental legislation.
- Every mobile machine whose vision is impaired when reversing must have a siren/hooter that sounds when the machine is reversing. This includes trucks, cranes, loaders, etc.
- Operators have great difficulty in seeing light vehicles behind their machines. Drivers
 of light vehicles must avoid stopping or parking in the vicinity of machines. At least 30
 (thirty) meters must be left clear between such a vehicle and such a machine.

3.33 Housekeeping and Order

- 1. Principal contractor shall maintain a high standard of housekeeping within their sites and vehicles for the duration of the project.
- 2. Prompt disposal of waste materials, scrap and rubbish is essential.
- 3. All packaging material including boxes, pallets, crates, etc. to be removed from the work area immediately.
- 4. On completion of his / her work, the contractor is responsible for clearing his / her workarea of all materials, scrap, temporary buildings and building bases to the satisfaction of the client.
- 5. In cases where an inadequate standard of housekeeping has developed, compromising safety and cleanliness, anyone has the responsibility to bring it to the attention of the principal contractor in the first instance and the Eskom Kriel Power Station project/site manager in the second instance.



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- 6. The Eskom Kriel Power Station Project/Site Manager has the right to instruct the principal contractor to cease work 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 a stoppage.
- 7. The principal contractor shall carry out regular safety/housekeeping inspections (at least weekly) to ensure maintenance of satisfactory standards. The principal contractor shall document the results of each inspection and shall maintain records for viewing.

3.20.1 Stacking

- 1. Adequate care must be taken by the contractor to ensure that storage and stacking iscarried out correctly and safely.
- 2. Correct stacking must be carried out, heavy and bulky on the bottom, light and small on top.

3.34 Workplace Signage and Colour Coding

- 1. Symbolic safety signage shall be displayed where it is required by legislation.
- 2. All symbolic safety signage shall conform to the requirements of SANS standard 1186.
- 3. Signs shall be positioned to be seen from most positions within the work sites.
- 4. All signage must be clear at all times and be replaced timeously when worn out.
- 5. Contractors establishing sites must erect a company sign at their site offices to reflect the name and contact details of the: Construction Supervisor; Health and Safety Manager/Practitioner; First Aider; Health and Safety Representative and Evacuation warden.
- 6. The location of every first aid box; fire extinguisher and emergency exit is to be clearlyindicated by means of a sign.
- 7. Contractors shall provide signage where work is conducted and where unauthorised entry is prohibited and/or where alerting and cautioning passers by to be aware of potential dangers.
- 8. The meanings of the appropriate symbolic signage must be discussed during induction training and toolbox talks.

3.22 Tools and Equipment

1. Principal Contractor shall ensure that all tools and equipment are listed on an inventorylist, be regularly inspected at least monthly or as required by legislation and risk assessments. The equipment should be numbered or tagged so that it can be properlymonitored and inspected.

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- 2. Where applicable, tools and equipment must have the necessary approved test or calibration documentation prior to being brought onto the project and the records shall form part of the SHE file. Maintenance calibration shall be undertaken in terms of the manufacturer's requirements.
- 3. All fuel driven equipment must be properly maintained in accordance with the manufacturer's recommendations and legal requirements.
- 4. Eskom Kriel Power Station reserves the right to inspect tools or items of equipment brought to site by the principal contractors for use on this project.
- 5. Should Eskom Kriel Power Station personnel find any item that is inadequate, faulty, and unsafe or in anyother way unsuitable for the safe and satisfactory execution of the work for which it is intended, the Eskom Kriel Power Station personnel shall advise the contractor in writing and the contractorshall forthwith remove the item from site and replace it with a safe and adequate substitute.

3.22.1 Hand tools

- 1. All hand tools (hammers, Fire beaters, Spades, chisels, spanners, etc.) must be recorded on a register and inspected by the construction supervisor on a monthly basisas well as by users prior to use.
- 2. Tools with sharp points in toolboxes must be protected with a cover.
- 3. All files and similar tools must be fitted with handles.
- 4. No make shift tools are permissible on the project.

3.23 Ladders

- 1. Ladders used shall conform to the requirements of GSR 13A and used in terms of GSR6.
- 2. The appropriate head protection, with chin strap shall be worn by employees workingfrom a ladder or with climbing irons.
- 3. All metal parts to be in good condition, no cracks.
- 4. Non-slip devices must be in good condition and no paint to be on wooden ladders
- 5. The working at heights risk assessment must indicate the use of ladder working atheights.
- 6. Employees using a ladder shall be suitably trained in the use, care and maintenanceof such.
- 7. The correct fall protection equipment shall be worn and used whilst climbing up,working from and climbing down ladders.
- 8. A detailed inspection of all ladders shall be conducted monthly by a competent personand every time prior to climbing by employees using such ladders. The inspection check lists must be filed in the site SHE files.



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3.24 Auditing

3.24.1 Compliance and Approval of principal contractor SHE plan

The Principal Contractor's SHE Plan will be audited against compliance checklist so as to verify compliance to the requirements of the Eskom Kriel Power Station SHE specifications. Once there is compliance only then will the principal contractors, SHE plans be approved by Eskom Kriel Power Station. The implementation of the SHE Plan shall be assessed / audited by Eskom Kriel Power Station personnel on a regularbasis. This will include physical conditions evaluation.

3.24.2 Eskom Kriel Power Station, SHE audits.

Eskom Kriel Power Station shall evaluate all contractors' SHE performance on an ongoing basis against the legal, Eskom Kriel Power Station requirements, SHE specification and the contractors SHE plans.

Note: Eskom Kriel Power Station reserves the right to conduct unannounced audits on contractors.

There will be monthly audits conducted by Eskom Kriel Power Station on the principal contractor/s. These audits shall be attended by the contractor's site manager or his representative.

If there are any findings / non-compliance identified as serious in these audits, an activity willbe stopped for that specific Principal Contractor. Refer to section on "Work Stoppage" in this SHE Specification.

3.24.3 Contractor audits

Principal Contractors are required to conduct internal audits on the implementation of their SHE Plan on a monthly basis or when the scope of work changes. A summary of the findingsand the proposed corrective actions shall be submitted to Eskom Kriel Power Station project manager within oneweek after completion of the audit.

3.25 Smoking

The national smoking policy must be observed, and smoking is permitted in designated areasonly (Eskom Kriel Power Station Smoking Procedure 32-36).

3.26 Cellular Phones

The national requirements regarding the use of cellular phones must be observed, in particular when driving and or operating mobile equipment and or machinery.

3.27 Occupational Health, Hygiene and Rehabilitation

Principal contractor is required to develop an Occupational Health, Hygiene and Rehabilitationprogram. The program is intended to ensure that the risks to health are identified and controlled.

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3.27.1 Medicals

Note: Eskom Kriel Power Station will only accept medical surveillances conducted by an Occupational Health Practitioner who holds a qualification in occupational health.

- 1. Principal contractors must ensure that their employees have a medical surveillance program whereby their employees undergo entry, periodic and exit medical fitness examinations.
- 2. In order for the appropriate medical examinations to be conducted, each employee must have a man job specification, which must indicate the description of work, list of hazards and potential occupational exposure limits, physical hazards and required physical attributes.
- 3. Medical fitness certificates shall be renewed annually for employees who are workingon site. This shall be maintained until completion of the project.
- 4. The principal contractor shall provide a documented process for managing those employees who are issued with a conditional certificate of fitness.

3.28 Working at Heights

3.28.1 General Requirements

Persons may only work from a fall risk position if a site-specific fall protection plan is in placeand correctly implemented and consists of the following:

- 1. All appointments for the fall protection plan developer and implementer are in place.
- 2. Baseline risk assessment, which is specific and incorporates the working at height risk assessment, as well as the site-specific risk assessment, has been completed for thework to be conducted.
- 3. Safe working procedure/task analysis and work instructions, approved by a competent person, are in place.
- 4. A fall rescue plan, along with necessary equipment and trained rescuers, is in place.
- 5. Appropriate training, as determined by the risk assessment, has been provided.
- 6. Appropriate height safety equipment and personal protective equipment have been issued to the individual.
- 7. There are equipment inspection procedures and up-to-date inspection records.
- 8. Individuals are medically fit to work at height, and records of this are kept.

A drop zone shall be established with appropriate warning signs and barricading, warningpersonnel below of workers above and potential falling objects.



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Every employer shall ensure that work at height is:

- 1. properly planned;
- 2. appropriately supervised; and
- 3. Carried out in a manner that is, as far as is reasonably practicable, safe and that itsplanning includes the selection of work equipment.

3.29 Personal Protective Equipment Requirements

- 1. The Principal contractor must provide a detailed programme that includes the issuing,maintenance and replacement of PPE for all his employees on site.
- 2. All contractors shall comply with the requirements of GSR 2 of the OHS Act.
- 3. The risk based PPE matrix must be compiled detailing the types of PPE that is required to be issued to employees performing the respective tasks.
- 4. Principal contractor shall ensure that their visitors wear and use the correct PPE whilston worksites.
- 5. Where PPE is required and visitors are not in possession of, then it is the individualcontractor's responsibility to provide the PPE.
- 6. All PPE purchased and used by all contractor employees including visitors mustcomply with the relevant SANS standards.
- 7. Where deemed as a requirement, then high visibility vests shall be worn.

3.30 Incident Management

Principal contractor to report all incidents, to the Eskom Kriel Power Station project manager within 24 hoursusing the Eskom Kriel Power Station flash report

All incidents shall be investigated in terms of OHS Act General Administrative Regulations 8 and 9, using Eskom Kriel Power Station Procedure 32-95 as a reference, and where injuries as contemplated in sections 24 and 25 have been sustained, be reported to the Department of Labour.

Principal Contractor shall use the standard General Administrative Regulation Annexure 1 "Recording of an Incident" form for all incident investigation reports. The objective of incidentinvestigation should not only be a legal requirement but should establish why and how the incident occurred and find out the real root cause of the incident and to decide on precautionary measures that are required to address the root cause to prevent any further recurrences of the same or similar incidents.



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3.31 Emergency Management

The art of emergency preparedness and response is to minimise the effects of any emergencyand to restore normal activities as soon as practical. The contractor must familiarise themselves with the Eskom Kriel Power Station Kriel Power Station emergency response plan and procedure. Periodic emergency drills must be undertaken to test the effectiveness of the plan. This must be recorded and provided on request.

3.32 Non-Conformance and Compliance

- 1. Any non-compliance to any health and safety requirement in this SHE specification issubject to discipline in terms of the Eskom Kriel Power Station Procurement and Supply Management Procedure.
- 2. The procedure for the issuing and closing off of non-conformance reports shall be strictly adhered to.
- 3. Contractor project management must monitor the close out non-conformances issued,in not doing so; any recommendations made may not be implemented.
- 4. Where non-conformances are issued by Eskom Kriel Power Station then one of the close-out steps of the procedure will be for the offender to be called by the responsible project manager to explain the non-conformance issued and what plan is in place to prevent a recurrence of the non-conformance.
- 5. Should the contractor fail to provide adequate PPE to their employees for the tasks being performed and/or to visitors; failure to enforce the wearing of such PPE will be viewed as a transgression of the legislative and Eskom Kriel Power Station requirements.

3.33 SHE File

- 1. A SHE file means a file or other record in permanent form, containing the information about the safety and health management system during construction and all information relating to the post-construction phase after handover to the client, so thatthe client can maintain the works in a healthy and safe way.
- 2. Principal contractor is required to keep a SHE file on the project site. Contractors maykeep additional files at their head office as additional records. The SHE file shall be available on request for audit and inspection purposes.
- 3. The SHE file shall consist of the requirements in terms of the project's safety specification, the contractor's safety and health plans.
- 4. The sequence of filing the documentation must be kept in the same sequence as listed in this SHE specification, SHE plan and site specific OU requirements.
- 5. Each record shall be separated by partitions to afford easy identification and access. Each partition must be labelled.



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3.34 Work Stoppage

- Any person may stop any activity where an unsafe act or unsafe condition that
 poses or may pose an imminent threat to the safety and health of an individual
 or create a risk of degradation of the environment. This includes any unauthorised
 work or serviceperformed by, or legally or contractually non-compliant acts or
 omissions by, any contractor contracted to work at that site.
- 2. Work stoppages that are initiated due to SHE concerns, non-compliance, or poor performance related to the contractor's works or services shall not warrant any financial compensation claim lodged against Eskom Kriel Power Station where the contractor has not metthe requirements defined legally or contractually.

3.35 Hours of Work

The requirements of the Basic Conditions of Employment Act, Chapter Two "Regulation of Working Time" must be adhered to. All contractors are required to maintain an accurate recordof time worked by each employee.

3.35.1 Normal work

All work conducted on site shall fall within the legal requirements in accordance with the BasicConditions of Employment Act. Contractors will notify their Eskom Kriel Power Station project manager of any work that needs to be performed after hours according to the agreed arrangements.

3.35.2 Overtime

When overtime is required to be performed, the appointed contractors shall inform the principal contractor of such action. The principal contractor shall inform the Eskom Kriel Power Station project manager of such function. Contractors shall be aware of the effects of human fatigue and regulate overtime accordingly. The baseline risk assessment must be reviewed to include the management of overtime work.

3.36 Omissions from Safety and Health Requirements Specification

By drawing up this SHE specification Eskom Kriel Power Station has endeavoured to address the most critical aspects relating to SHE issues in order to assist the contractor to adequately provide for the health and safety of employees on site.

Should Eskom Kriel Power Station not have addressed all SHEQ aspects pertaining to the work that is being executed the contractor needs to include it in the SHE plan and inform Eskom Kriel Power Station of such issueswhen signing the contract.

3.37 Contract Sign-Off

On completion of the project, the principal contractor shall close out his/her project documentation and SHE file and forwards such to the Eskom Kriel Power Station project manager.

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ANNEXURE A - Project Summary Risk Assessment

Business Unit:	Kriel/Ash Water Return (AWR) 11kV Kingbird Line		Ref: 319403	Next Review Date (every 2 years):				
Date: 31 August 2023	Kriel/Ash Water Return (AWR) 11kV Kingbird Line							
Refer to Occupational I	Health and Safety	Risk assessment pro	ocedure 32-520					
List activity	Hazard Identification	Associated risk	What are the possible consequences ?	Control Owner				
List specific activities to be performed taking into consideration the equipment to be used, the personnel involved in the task.	Anything with potential to cause of harm. Note: A hazard can pose more than one risk.	A chance that injury, ill health or damage could occur as a result of uncontrolled hazard.	Consider the worst-case scenario without controls?	Person allocated the responsibility for implementing the agreed controls				
1.Driving motor vehicle (travelling to and from site)	Driving on a gravel and tarred road	Driving above speed limit and colliding with an animal,	fatality	Principal contractor				
	Obstructions on the roads (people, animal, trucks)	Third party colliding with employee Vehicles, Domestic and stray animals on the road	lost time injury	Principal contractor				
	Driving in inclement weather conditions and bad terrain	Not adjusting speed to weather conditions while driving None adherence to Safety Following distance	Fatality	Principal contractor				
	Overloading	vehicle rolling over or overturning	lost time injury	Principal contractor				
	Long Distance/hours driving	Fatigue due to working long hours and lifestyle habits,	medical injuries	Principal contractor				

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	Commuting between sites	Travelling with unknown case of COVID 19 infected person in one vehicle	d	fatality/ occupationa disease	ıl	Principal o	contrac	ctor
2. Access To Kriel Power Station	Unruly Customers	Angry/unsatisfied customer/ poor communication channels		lost time inju	ıry	Principal o	ontrad	ctor
	Community Unrests			lost time injury		Principal contractor		ctor
3. Working in the field and /or near the existing container structures.	Working in hot weather conditions	direct and indirect contact with Sun UV rays, and objects		Skin Cancer/Hea stroke	t	Principal of	ontrad	ctor
	Insects (bees, wasps, scorpions, spiders	insects bites on visible exposed skins and other routs of entry		Allergic read i.e pain, redness or fainting. Possible fata		Principal o	contrac	ctor
	Snakes	Snake bites				Principal contractor		
	uneven terrein	slips, trips and fall	l	lost time inju	ıry	Principal of	ontrac	ctor
4. Work at Height (stringing of conducter, intallation of equipment	Fall From Height	Fall from Height o Suspended at height	r	Near miss		Principal of	ontrad	ctor
and dismantling of equipment); Working in	Contact with electricity	Burns /injuries		fatality		Principal of	ontra	ctor
Close Proximity to live apparatus	Defective Ladders	Ladder breaking causing a fall		lost time inju	ıry	Principal of	ontra	ctor
(Transmission subtation and existing line steuctures)	Operating under power lines/live structures	Electrical contact	al contact lost time injury		ıry	Principal contractor		ctor
5. Lifting and rigging (crane operating,planitng of poles, installing equipment and dismantling of equipment, loading and offloading)	Use of Faulty lifting Equipment	loss of load,flying objects		lost time inju	ury	Principal o		
	Crane overload	Striked by a falling object	g _	lost time inju	ıry	Principal of	ontrac	ctor
	Exposure to vibration	Carpal tunnel syndrome whole boy vibration	n	Carpal tunne syndrome whole boy vibration	el	Principal o	ontrad	ctor

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6. Excavation: Manual(digging by hand) and mechanical (using rock driller	Awkward movement/poor body posture	Back, shoulder neck, feet injuries/discomfor	t	medical inju	ries	Principal of	contrac	tor
diesel auger and TLB) Drilling of holes.	Dust	Respiratory track irritation, eye irritation and fatigue		dust inhalati	ion	Principal o	contrac	tor
7 Compacting	noise	exposure to excessive noise		Noise induc hearig loss	ed	Principal of	ontrac	ctor
	Awkward posture	Back, shoulder neck, feet injuries/discomfor	t	Muscular- Skeletal Disorder		Principal of	ontrac	tor
	Dust	inhalation of dust		Respiratory tract irritation and respiratory diseases		Principal contractor		
8 Civil works	Awkward posture	Upper body streto and in uncomfortable position	h	Muscular- Skeletal Disorder		Principal of	ontrac	tor
	Spillage of Oil, Petrol, Diesel, Thinners, Paint vapours etc	nhalation of vapours, skin irritation, slip, trips and falls	6	respiratory a cardiovascu disorders ar injuries	ılar	Principal o	contrac	tor
	poor house keeping	slips trips and fall		injuries		Principal of	ontrac	tor
9. Storage of flammable material	Poor Body posture when handling material	Sprain ,dislocation and cut by injuries		medical treatment		Principal of	contrac	tor
10 Movement of people onsite	Mishandling material/ objects	Sruck by injuries first aid tratmen		nent	Principal of	ontrac	ctor	
	electric contact (people), contact by lifting machine/hand tools	Electrocution,structural damage	ct	injury or fata	ality	Principal o	ontrad	rot
11 Manual Material Handling	low hanging conductors	contact with electricity		fatality		Principal of	ontrac	ctor
g	Shared structures (MV & LV in one structure)			lost time inju	ury	Principal o	contrac	not