

ENVIRONMENTAL REQUIREMENTS FOR WORK PROPOSED IN THE WESTERN GRID

PROJECT NAME: Western Grid Line Maintenance

The scope on the contract would include the following works;

- Bird guard installation
- Bird nest removal
- Anti-climb device installation
- Tower label installation
- Steel member replacement
- Hardware repair & replacement
- Conductor stringing & repair
- Conductor & hardware sampling
- Installation of aviation spheres
- Tensioning of staywires
- Removal of soil on foundation caps

The contractor is required to develop an Environmental Management Plan which meets requirements as well as all the relevant applicable legislation they conform to. Eskom Transmission in no way assumes the contractors legal responsibilities. The contractor remains accountable for the quality and the execution of his/her Environmental Management programme for his/her employees and appointed contractor employees.

1.1 ENVIRONMENTAL MANAGEMENT

Note 1: In the event of any perceived conflict between the “environmental laws” and the contract documents, the Contractor shall, prior to commencing the work, refer such conflict to the Project Management Team for clarification.

Note 2: Environmental protection shall include, but not be limited to, noise pollution, gaseous emissions, noxious and/or offensive odours, liquid waste collection and solid waste separation and collection.

1.1.1 Duty of Care

The contractor is required to appoint an environmental representative with appropriate training to conduct the following:

- Internal Environmental Inspections and Assessment
- Waste recording and reporting
- Environmental toolbox talks
- Compliance to the Contractors Environmental Management Plan
- Environmental Housekeeping
- Presence during Grid Inspections and project meetings

ENVIRONMENTAL REQUIREMENTS FOR WORK PROPOSED IN THE WESTERN GRID

The contractor must comply with the Environmental Management Plan for the project. All legal requirements must be complied with. Any work that requires permits and authorisations from the environmental authorities must be obtained prior to commencement of work.

1.1.2 Spillages of Chemical Substances

The contractor must report all spillages within 24 hours of occurrence to the Grid environmental advisor, further complete a flash report indicating the severity of the spill. The contractor is required to have access to oil spill kit and have suitably trained staff to use it. Records must be kept of all Environmental incidents. Inventory must be kept for all chemicals kept and planned for the project. Vehicles identified with any oil leaks or excessive exhaust fumes will not be allowed onsite. All vehicles must be registered and road worthy. All loads entering the site must be firmly secured and all speed limits and access controls must be adhered to. The contractor and all sub-contractors are required to have an oil spill kit onsite for the duration of the project, and further access to the service provider accredited as a hazardous waste clean-up contractor in the event of a emergency.

1.1.3 Fire hazard

Staff rest areas must be supplied with extinguishes onsite. The contractor is required to have own access to water for the fighting of fires in the event of an incident. The contractor is required to have emergency contact numbers for fire services. The contractor must ensure that there are defined and set smoking areas. Staff are required to conduct their own emergency evacuation exercises and record all events at least a year.

1.1.4 Dust and noise

Dust mitigation will only be required where stockpiles are created. The contractor is required to implement a dust mitigation plan to limit any movement of dust onto live equipment or be a hindrance to traffic and pedestrians. The location of the stockpiles must agreed upon with the project management and site, in order to limit the use of water to wet the stockpile and limit the impact of wind on the stockpile.

1.1.5 Environmental incidents

All environmental incidents must be reported to the contractor's environmental representative for recording and reporting. The contractor must conduct the investigation within 24 hours of the incident and the clean up process must be initiated with the same time frame.

The contractor is responsible for the appointment of an appropriate and relevant service provider for the incident reported. All records must be kept on the Environmental File. All environmental incidents must be reported to the Grid Environmental Advisor within 24 hours of occurring. Relevant Eskom documents will be forwarded to the successful contractor upon award of tender. The contractor is required to have a telephonic list of pest controllers, waste management service providers, animal trappers and removers, in order to address any animal nuisance that may occur during the project.

ENVIRONMENTAL REQUIREMENTS FOR WORK PROPOSED IN THE WESTERN GRID

1.1.6 Herbicide application

Not Applicable, however should a need develop through the course for the project. A registered pest control Officer must be used for any herbicide application.

1.1.7 Waste management

The contractor is required to get written permission from the local legal landfill which must state that they will be allowed to use the facility for their prescribed waste streams. The contractor must keep a copy of the permit for the landfill used on file. The contractor must have a list of all the possible waste it will generate during the project, including sewage, oil chemical containers etc. Onsite all waste must be separated into General and Hazardous waste streams and the landfill identified for the disposal of these waste streams. Appropriate waste reciprocals must be kept for Hazardous Waste and General Waste. All waste must be recorded in a daily register and the monthly disposal must be reported to the contractor environmental representative and the Grid Environmental Advisor. Any waste material where considered in excess or not fit for re-use onsite must be disposed of at a registered landfill site. The contractor is required to have a waste management plan clearly stating how waste will be managed for the duration of the project. Where portable toilets are used, the contractor is required to have proof from the service provider that waste is allowed to be dumped as the relevant Municipal waste water treatment works, and further disposal certificates must be available for the sewage disposal. The contractor is required to list all the waste planned for recycling and reuse. Records of these scrapped material must be kept and tracked to the end destination of the scrapping service provider. All Metals and oil that are recycled must be accounted for in waste records.

All waste must be stored onsite in demarcated areas and all disposals must be recorded and reported. Proof of disposal must be kept on SHEQ file, Only accredited qualified contractors must be used for waste removal and disposal.

1.1.8 Water Environments

Based on the landscape of the sites where work is proposed, no water courses will be impacted on. The contractor is required to prevent any chemicals from entering the stormwater system. Supply own drinkable water to contractor staff, no washing of cars will be allowed onsite. The contractor will be required to supply own water for construction as well. The contractor is required to keep records of water purchased or supplied. The contractor is required to have proof of government permits and authorisation where water is abstracted from a private borehole, and Eskom borehole, river, dam or any other catchment water source.

1.1.9 Existing environment

The site has an established footprint. Water for human consumption and construction activities must be supplied and transported to site by the contractor.

ENVIRONMENTAL REQUIREMENTS FOR WORK PROPOSED IN THE WESTERN GRID

The contractor is responsible for all waste generated as a result of the project. Records must be kept of disposal and reported to the Grid Environmental Advisor end of every of month. Attendance registers must be kept of staff attending the toolbox talks in which the Environmental Management system proposed by the contractor is discussed among staff.

The contractor must ensure that sub-contractors and suppliers to the project are aware of the Environmental Management Plan and comply with the contractors EMS system. The contractor must ensure that staff have a rest area during work hours, toilet and kitchen amenities are made available for all contractor staff. All storage areas, parking areas, staff rest areas, must be agree with the Project Manager, Eskom substation and the contractor. Records of these arrangements must be kept on file.

The contractor is further responsible for all subcontractors and suppliers to the Principal contractor. Records of environmental induction must be kept of regular subcontractors entering a site.

1.1.10 Environmental Induction

Upon approval of the Contractor Environmental file, the contractor is required to attend the Eskom Environmental Induction. The Induction will cover the risks associated with the proposed project and the mitigation the contractor is required to comply with. The contractor is required to keep staff informed during the progress of the project on Environmental Risks and the significant environmental aspects.

The contractor is required to do the following interventions through the course of the project.

- Contractor induction of staff prior to the commencement of work
- Toolbox talks that cover the contractor EMP,
- Waste Management training for staff
- Have training record of all Environmental record on staff on file,
- Keep staff up to date on the Contractor Environmental Management System.

1.1.11 Environmental Communication:

The contractor is required to have a communication process to explain how complaints will be managed. Complaints from both Eskom and site representatives and any third party affected by the contractor during project activity must be recorded and updated regularly on a complaints register. The report must be forward to the Eskom Project Manager to track progress.

1.1.12 Chemical Storage

The contractor is required to have an appointed Hazardous Chemical Co-ordinator. This individual must be adequately trained to do the following:

- keep an inventory of all chemicals kept during the project lifecycle.
- keep record of all MSDS of chemicals stored onsite.
- Contractor is required to install chemical storage facilities as per the Construction Regulations or similar thereto in order to ensure safety of staff and the protection of the natural environment.
- Records must be available of awareness to site staff of the chemical storage facilities and process.

ENVIRONMENTAL REQUIREMENTS FOR WORK PROPOSED IN THE WESTERN GRID

1.1.13 Environmental Management File

The contractor is required to submit an Environmental file and provide objective evidence to the Contractor Assessment Protocol. The file is required at least 2 weeks before the commencement of work on site. The file must align with the requirements stipulated in the Pre work assessment form that will be provided to the contractor by the Project Manager. Once reviewed the contractor is required to provide evidence of outstanding requirements and thereafter arrangements for Environmental induction will conclude. The contractor is required to have the Environmental Representative and the supervisor with team available for the Environmental Induction. The contractor will not be allowed to commence with work, without confirmation that the Environmental induction has taken place.

The contractor is required to keep records and details of all chemical inventories. The contractor is required to submit a consolidated Environmental Management File with signed and approved environmental documentation. The Environmental Management File is required to be updated throughout the duration of the project with records attained through the course of the project. A hardcopy of all documents, records, waste manifests, and arrangements with service providers shall be handed over to Eskom on closing of the project. The contractor is required to do the handover as per the construction Safety File handover 240-1010201174. The contractor is required to keep on record all internal training of staff regarding their Safety and Environmental file.

Training records for

- Fire fighting
- Oil/chemical spill cleanup
- Chemical Management (storage and transport)
- Emergency preparedness
- Environmental Representative for the contractor

1.1.14 Rehabilitation

The contractor is required to have a contingency in place to address any damage caused to private property, Eskom property or to the natural environment. The contractor will be required to employ the services of a suitably qualified specialist in the event of damage to the natural environment. The contractor is required to ensure that a rehabilitation plan is compiled and agreed upon with the relevant government authority and Grid Departments. This plan includes addressing damage to third party property. A suitably qualified person/representative with the relevant insight into the subject matter i.e. (damage to plants would require input from a qualified botanist), will be required to compile the plan. Rehabilitation. All incidents of this nature must be reported to the Grid Environmental Advisor within 24 hour period.

1.1.15 Emergency Preparedness

The contractor must develop an Environmental Emergency Preparedness Plan that covers the following Environmental concerns

- Chemical and oil spills

ENVIRONMENTAL REQUIREMENTS FOR WORK PROPOSED IN THE WESTERN GRID

- Wildlife interaction (snakes, insects in the work place)
- Fire in the workplace
- Asbestos exposure
- Incorrect disposal of Hazardous Waste
- Burst Sewage and water mains
- Damage to protected vegetation and private land

The contractor must provide evidence of staff training in Emergency Preparedness and readiness. The contractor must have an established record system and implementation of Emergency drills / exercises relating to the above emergencies.

1.1.16 Environmental sign off

The Eskom project manager is required to put in place an activity schedule which includes meeting schedules, grid project audits and inspections. The sign off per site is only possible once there is proof of attendance of meetings and contractor audit reports have been discussed and the findings identified have been discussed, understood by all stakeholders and addressed by the contractor.

Compiled: Environmental Manager

Transmission Western Grid

021 915 9278

0866640872

franciA@eskom.co.za
