

1.0 Fire Management Plan

The intent of a Fire Management Plan (FMP) is to provide fire safety requirements to ensure that the construction and operation of the Komsberg Substation upgrades, which are defensible from wildfire and, in turn, do not represent a significant threat of ignition source for the surrounding native habitat.

It must be noted that during extreme fire conditions, there are no guarantees that a given structure will not burn. Precautions and mitigating measures identified in this plan are designed to reduce the likelihood that fire would impinge upon the proposed structures as well as minimise the impact of fires if they do occur. This FMP does not guarantee that fire will not occur in the area or that fire will not damage property or cause harm to persons or their property.

The proposed Komsberg Substation upgrades will rely heavily on the co-operation and proactive participation between managers, employees and contractors to maintain a high level of fire safety awareness at all times.

This management plan is also a reflection of the substation's commitment towards the constant safeguarding of employees against fire hazards, whilst complying with the requirements of the Fire Safety Act (Act No. 6 of 2002) and Occupational Health and Safety Act (Act No. 85 of 1993).

1.1 Fire and Maintenance of Access Roads for a Substation Facility

- A primary access and escape route will be visible and known to all who visit the facility and will be controlled by a security gate.
- There will be other dedicated secondary gravel roads leading to/from the project site to/from the primary access.
- There will be more than one (1) vehicular access gate leading into the project site.
- An escape route map with safe gathering points needs to be visible at all the entrance gates/construction camps for anyone to familiarise themselves with upon entry (and will be provided prior to construction once the final facility layout and building plans have been approved by the appropriate department/authority).

1.2 Fire Safety Act, 6 of 2002

A copy of the fire safety act is to be available at the facility for everyone's easy access purposes.

1.3 Principles of Fire Safety

The aims of implementing measures to limit the incidences and spread of fire are:

- To ensure the safety of people, minimising loss of life and injury.
- To minimise loss of and damage to property and possessions.
- To minimise the negative impact on the environment.
- To safely and effectively extinguish fire when needed

1.4 Requirements in Terms of the South African Bureau of Standards (SABS)

From a fire safety point of view, all buildings erected within the boundaries of South Africa must comply with the SABS 0400:1990- The application of the National Building Regulations. The following



requirements are appropriate and can be adapted for planning and design of buildings. Any building must be so designed, constructed and equipped that in case of fire:

- The protection of occupants or users therein is ensured and that provision is made for the safe evacuation of such occupants or users.
- The spread and intensity of such fire within such buildings and the spread of fire to any other building will be minimised.
- Adequate means of access and equipment for detecting, fighting, controlling and extinguishing such fire are adopted.

1.5 Management Commitment

It will be the responsibility of managers to:

- Enforce such measures as may be necessary in the interest of the preservation of employee's safety including safety against fire.
- Permit employees to perform work only once the precautionary measures are put in place.
- Provide the necessary supervision to staff to ensure that precautionary measures are maintained.
- Ensure that the staff are adequately trained in fire procedures.
- Ensure that all staff are informed regarding their scope of authority.
- Ensure that the FMP is reviewed and updated regularly to meet the projects needs at that particular point in time.
- Ensure that the firefighting equipment is regularly serviced.
- Make sure that the FMP forms part of the facility induction which will be made compulsory for each new member to the facility to attend.

1.6 Employees' Contribution to Fire Management

The successful implementation of the FMP will require the full co-operation of every employee.

In this regard it will be expected of every employee to:

- Take care of the fire detection and fire protection systems and equipment.
- Carry out any lawful order given to him/her and obey the fire procedures laid down, or authorised thereto, by Mainstream in the interest of health and fire safety.
- Report any situation which may cause fire to the supervisor and/or Health and Safety Representative.
- Be able to make recommendations to the relevant Health and Safety representative who will take the recommendation into consideration and if agreed upon then implemented.

Co-operation will be expected from any other Contractor or subcontractor to ensure that any duty or requirement imposed on Mainstream, as the employer, through legislation, is complied with.

1.7 Fire Prevention/Control

The following preliminary measures will be taken to try and prevent and/or control fires on site:

- Smoking and open flames will be prohibited in areas near flammable and/or combustible materials.
- Fire-Fighting equipment will be sufficiently available on site and must comply with the relevant legislation.
- All equipment will be serviced annually and pressure tested every five (5) years.



1.8 Response

The facility must at all times have emergency numbers readily available to all employees and staff. These include the fire department as well as emergency care numbers to make sure that fires are quickly extinguished when they occur and that the victims (if any) are medically treated and taken to a nearby hospital or clinic if needs be.

The staff will be trained to use the fire-fighting equipment for small fires that can be contained but alternatively if the fire cannot be contained, the appropriate authorities must be contacted to assist in extinguishing the fire.

If the fire cannot be contained, workers must evacuate the site in an orderly manner led by a trained Health and Safety representative.

During construction phase, fire protection measures like placing fire extinguishers on site are compulsory before any hot work can commence or where any flammable substances are present.

During operation phase, fire protection equipment like Fire Extinguishers will be situated at carefully selected locations for easy access during an emergency.

1.9 Management Plan

The following will form the key elements of the FMP:

- Legal Compliance
 - A work place that is safe and without risk to the health and safety of employees in compliance with the requirements of the Occupational Health and Safety Act (Act No. 85 of 1993) and its regulations as well as the Fire Safety Act (Act No. 6 of 2002).
- Fire hazard identification and risk assessment
 - Identify any fire hazards and risks and then determine the extent and impact.
 - Endeavour to eliminate fire hazards and develop control measures to contain the fires.
- Fire Safety, Health and Environmental Proficiency
 - Ensure that employees are conversant with the potential fire hazards and the precautionary measures required with respect to these hazards through regular awareness training.
 - Incorporate and discuss Fire Safety into the daily Toolbox talks.
- Written Safe Work Procedures
 - Develop written safe work procedures for all fire high risks and provide the necessary training to employees if needs be.
- Training and Education
 - Include the fire management plan in all Health and Safety training and assessments and provide the necessary training and awareness to all categories of employees.
 - Provide awareness and training to all new employees including temporary employees and contractors on site.
- Prevention
 - Suitable preventative measures against exposure to hazards are an integral part of daily activities.



- Personnel protective equipment must be provided for the protection of employees when necessary.
- Corrective and/or fire preventative measures must be put in place.
- Elimination of Fire Incidents
 - The elimination of fire incidents, including injuries on duty to which employees and the public can be exposed to will be achieved through the proper investigation of any fire incidents. Factors which cause any fire incidences will be determined and then corrective and preventative measures will be developed and implemented in liaison with all relevant stakeholders.
- First Aid Kit
 - A first aid kit will be available on site which will contain all the necessary medication (e.g. pain medication) and equipment to pre-treat any fire injury depending on the magnitude of the injury. If the injury is too severe, the victim must be taken to the nearest hospital or clinic to be treated by professionals and not treated on site.
 - There will be a sufficient number of employees trained in first aid medical assistance in case of small controllable fire incidents occurring on site.
- Machinery, Plant and Equipment
 - All mechanical equipment will be safeguarded in order to protect the health and safety of persons that must be exposed to such equipment.
 - Regular maintenance of all equipment (including firefighting equipment) and inspections will be recorded.
 - Only equipment that is safe and in working condition will be used by the employees. Equipment is to be inspected every day before use.
- Sub-Contractors
 - Sub-contractors will sign an agreement with the Developer to ensure their compliance with the FMP.
 - Sub-contractors will work according to the Health and Fire Safety standards.

