

# GENERIC RULES AND MINIMUM REQUIREMENTS FOR LANDOWNERS in MPUMALANGA 2023

AMENDED SPECIFICALLY FOR THE MKHONDO FIRE PROTECTION ASSOCIATION AND ITS WARDS

## (Gert SIBANDE DISTRICT MUNICIPALITIES)

These rules and minimum requirements are to be adhered to by all landowners in Mpumalanga on whose land a fire may start or spread from. These rules and minimum requirements are applicable in terms of the National Veld & Forest Fire Act 101 of 1998, chapter 4 & 5.

The purpose of these generic rules is to be used by the District Municipalities to put by-laws in place.

The whole of the Mpumalanga province has been identified as having a high fire risk (CSIR, March 2010) and therefore the provisions of the National Veld and Forest Fire Act, no 101, of 1998 are applicable to all landowners.

### EQUIPMENT AND STAFFING:

**Table 1: MINIMUM REQUIREMENTS FOR LANDOWNERS, NATURE CONSERVATION AREAS, COMMERCIAL FARMERS AND CANE GROWERS:**

- **Note: Any landowner without the full recommended equipment or staff requirements must have access to the necessary minimum resources from neighbours, in writing (neighbour agreement) – such equipment and resources must be available as required.**

Property Size ha	Bakkie Min 200 litres or	Water tanker Min 1000 litres	Water tanker Min 2000 litres	Rake Hoes	Beaters	Knapsacks Min 15 litres	Drip Torch	Cell phone	Hand held radio	Mobile Radio	First Aid Kit	Fire Fighters	Crew Leaders Owner/Fire Boss
Less than 10ha	**				1	1						1	
11 - 25	1*	0	0	1	4	2	0	1	0	0	1	2	1
26 - 100	1	0	0	2	5	3	0	1	0	1	1	4	1
101 - 500	1	1	0	5	10	4	1	1	1	1	1	9	1
501 - 1000	1	1	0	10	15	10	1	1	2	1	2	10/20*	1
1001 - 4000	2	0	2	15	20	10	2	1	4	2	2	15/30*	3
4001 – 10 000	2	2	1	20	40	20	3	1	4	2	5	25/40*	3/4*
10 000 +	3	3	2	20	40	20	3	1	5	2	5	30/50*	4/5*
Timber processors/ sawmiller, charcoal plants	1	1	0	4	4	2	0	1	0	0	1	4/10*	1/2*
Contractors	1	1	0	5	5	5	2	1	2	1	1	10	1

\*ACCESS TO RESOURCES WITHIN 30 MINUTES

\*\* Minimum 30m hose pipe

**Table 2: MINIMUM REQUIREMENTS FOR FORESTRY**

Property Size ha	Bakkie Sakkie Min 200 litres	Water Tanker Min 2000 litres	Water Tanker Min 4000 litres	Rake Hoes	Beaters	Knapsacks Min 15 litres	Drip Torch	Cell phone	Handheld radio	Mobile radio	First aid kit	Fire Fighters	Crew Leaders, landowners or Fire Boss	Recommended Aerial Resources access to
0 - 500	1	1	0	10	10	10	2	2	2	1	1	10/20*	1	No air support
501 - 1000	2	2	1	20	20	15	2	2	3	1	2	15/30*	2	Chopper
1001 – 5000	2	2	1	30	40	20	3	2	4	2	2	25/50*	3	Chopper 2 <sup>nd</sup> call Fixed wing
5001 +	3	2	2	60	80	40	4	4	6	4	4	40/100*	3/3*	Chopper, Fixed wing or multiple aircraft

\*ACCESS TO RESOURCES WITHIN 30 MINUTES

Contact your FPA to arrange for group discount on equipment orders

## PROTECTIVE CLOTHING:

Table 3: MINIMUM REQUIREMENTS FOR PROTECTIVE CLOTHING

	Leather Boots (no steel tips)	Leather gloves	Balaclavas	Fire helmet	fighter	T-shirts	100% cotton overall
Landowners	yes	yes	****	****		****	yes
Commercial farmers	yes	yes	****	****		yes	yes
Nature conservation areas	yes	yes	****	****		yes	yes
Timber processors / sawmillers & charcoal plants	yes	yes	yes	yes		yes	yes
Fire contractors	yes	yes	yes	yes		yes	yes
Forestry	yes	yes	yes	yes		yes	yes
ESKOM contractors	yes	yes	yes	yes		yes	Yes

\*\*\*\* Recommended

Contact you FPA to arrange for group discount on PPE orders

## TRAINING REQUIREMENTS OF STAFF:

Table 4: MINIMUM REQUIREMENTS FOR TRAINED PERSONEL PER CATEGORY

	Basic Fire Fighting	Crew leader / Landowner	Prototeams	Fire Boss/ Landowner	Incident Commander
Landowners	yes	yes		****	
Commercial farmers	yes	yes		yes	****
Nature conservation areas	yes	yes		yes	****
Timber processors, sawmillers and charcoal plants	yes	yes	yes	yes	
Fire contractors	yes	yes	yes	yes	****
Forestry	yes	yes	yes	yes	yes
ESKOM contractors	yes	yes	yes	yes	ESKOM – ORHVS 1/2/3

\*\*\*\* Recommended.

Contact your FPA to arrange for group training sessions

## FIRE BREAKS:

Table 5: MINIMUM REQUIREMENTS FOR FIREBREAKS

	20 m Fire breaks	Internal Fire breaks	Strategic breaks
Less than 10ha	Refer to diagram 2		
Landowners	yes	****	
Commercial Farmers	yes	yes	
Nature Conservation areas	yes	****	****
Timber processors, sawmillers and charcoal plant			****
Fire Contractors			
Forestry	yes	yes	yes
ESKOM power lines	Refer to diagram 1		

\*\*\*\* Recommended

### MINIMUM REQUIREMENTS FOR FIRE PREVENTION FOR TIMBER PROCESSORS, SAWMILLERS AND CHARCOAL PLANTS

#### Burning of Waste

- Burning of waste must take place with an approved incinerator.

#### Minimum Requirements

- Firebreaks around timber stacks – as per local circumstances per sawmill, minimum of 20m – [wider where surrounding risks necessitate such wider firebreaks.](#)
- Immediate access to [full flow high volume or stored](#) water and pressure pumps;
  - minimum water capacity of 20 000 litre tank with 2-3 fire taps and lay flat hoses, long enough to reach all corners of the property;
  - minimum of 3 fire-fighting nozzles;
  - approved water wetting agents.

- Mobile water of minimum 1000 litres, must be available **at all times** (Bakkie Sakkie or Water Cart);
- When the FDI reaches **ORANGE**, charcoal ovens **to be** shut down

**MINIMUM REQUIRMENTS FOR FIRE PREVENTION UNDER ESKOM POWER LINES (ESKOM ref: TGL 41-334)**

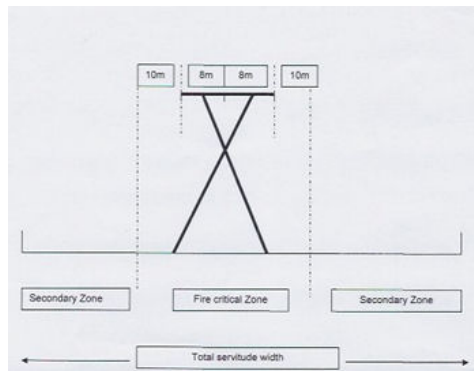
No burning under Eskom power lines may be done without an agreement with Eskom to do so.

As a general rule, landowners must report all fires under power lines or threatening power lines to Eskom so that the necessary arrangements can be made to safeguard the lines.

**Table 6: ESKOM TABLE SHOWING THE COMMON SERVITUDE WIDTHS FOR EACH VOLTAGE CATEGORY**

Voltage Lines	Servitude total width	Ground clearance from centre poles on both sides	Safe distance to trees outside servitude width
132kV	31/36m	6.3m	3.8m
220kV	47m	6.7m	4.2m
275kV	50m	7.2m	6 m
400kV	55 – 65m	8.1m	10 m
533kV DC	30m	8.6m	6.1m
765kV	80m	10.4m	8.5m

**Diagram 1: TYPICAL CROSS SECTION OF POWERLINE**



**Diagram 2: PROTECTING YOUR PROPERTY**



**Burning Period Guidelines:**

- No burning operations will be allowed between 1 June and 31 October without the member reporting a controlled fire to the FPA / FireHawk Detection Centre.
- **Firebreak Burning Period:** firebreaks should be completed / in place by end of July each year – the FPA Exco may extend or reduce this period with at least 14 days prior notice of any change as per weather conditions for the current season.
- **Slash Burning Period:** no burning of harvest residue after 31 May of each year **without a Special Burning Permit**. The FPA Exco may extend or reduce this period with at least 14 days prior notice as per weather conditions for the current season.
- All burning operation will be managed strictly according to the forecasted and actual FDI, irrelevant of rainfall actuals.
- All neighbours must be informed of the intention to burn:

- Notification on the Ward WhatsApp group will suffice provided the controlled burn reference number is provided.

#### Fire breaks between neighbours

- All members are to prepare fire breaks where there is a risk of veld fires on his or her side of the common boundary with the adjoining land; note that this refers to neighbours and not to boundaries within the owner's land. The firebreak need not follow the common boundary if the neighbour agrees to locate it elsewhere. This offers the flexibility needed to adjust for problems such as terrain. **A recommended 10 m firebreak on each side of the boundary must be established.**
- Dimensions of firebreak to be agreed between the neighbours. **The firebreak width agreed to must be able to reasonably stop a fire on an average adverse weather day.**
- The break must be reasonably free of all inflammable material and must not cause erosion.
- The break must be made annually, where possible these breaks must consist of a two 10m breaks (one on each side of the boundary) which can be alternated annually
- This will allow the break to be burnt earlier as flammable material would have build up in the alternate break that was not burnt the previous year.
- This practice will allow the area burned to rest for a year between burns.

#### Member's duties when preparing firebreaks

The following are the steps to be taken by members when they intend to burn firebreaks:

- The owner intending to burn must consult with the neighbour to find a suitable date for both to be present to burn the firebreak. If the member cannot obtain agreement, then he or she may simply give 14 days' written notice of the intention to burn.
- The Act requires the neighbour to burn his or her firebreak on the same day as agreed or notified, to be present or have an agent present, and have sufficient fire fighters available to prevent the spread of the fire.
- No burning operations will be allowed between 1 June and 31 October without the member reporting a controlled fire to the FPA / FireHawk Detection Centre.
- **Firebreak Burning Period:** firebreaks should be completed / in place by end of July each year – the FPA Exco may extend or reduce this period with at least 14 days prior notice of any change as per weather conditions for the current season.
- No burning of firebreaks if the actual FDI exceeds 55 in the yellow – access the FireWeb platform for FDI updates.
- The member must comply with the listed Rules and Minimum Requirements before the burning of firebreaks commences.
- The FPA is to be notified before burning operations commence on the day of burning – utilize the FireHawk App. to report a controlled burning operation / obtain a burning reference number.
- The FPA is to be notified of any uncontrolled spread at the site where firebreak is being burnt.
- The FPA is to be notified when the burning operation is completed in the specific area where the permit was issued for – utilize FireHawk App.
- Special Permits can be considered on merit.

#### **BURNING OF ANY HARVEST RESIDUE**

##### Pre-burning procedures:

- Verify the Fire Danger Index (FDI) for the day and the forecast for the next 48 hours. Check the local FDI. Consider labour availability over weekends and try to avoid burning before a pay weekend. When using a contractor, it remains the responsibility of the landowner to ensure that staff, their training, protective clothing and equipment on site comply with the minimum standards.
- **Slash Burning Period:** no burning of harvest residue after 31 May of each year without Special Burning Permission within the Ward. The FPA Exco may extend or reduce this period with at least 14 days prior notice as per weather conditions for the current season.

##### Post-burning Procedures:

- Mopping up: the entire fire line must be adequately contained. All smouldering embers must be extinguished with water and/or fire retarding foam.
- A minimum 1.5 m fire control line must be created along the entire perimeter of the burn. **The fire control line width must be increased if the circumstances dictate that a minimum control line width will not suffice.**
- Harvest residue burns require patrol if the FDI forecast is in the **ORANGE** or **RED**. A minimum of 2 fire fighters with knapsacks and at least 40 litres of water per unit must be maintained at the site for 24 hours after the burn. Each fire fighter must also have a fire beater. **A thermal scanner is recommended to identify hot spots. Identified hot spots must be managed.**
- In the case of the area burned consisting of slash and heavy fuels the team must be increased to 4 persons with equipment and a method of communication with the ops room and strike team.
- The team must be visited twice a day by the fire team.
- This presence must be in place for a minimum of 48 hours, or the duration of the high fire index.

#### **Regulations of burning of Harvest residue after September of each year:**

- Special Burning Permission rules will apply;
- 5-day forecast should not exceed FDI 55 Yellow;
- The member must have a Special Burning Permission Reference number.
- Slash burning recommended for Gum compartments (extra precaution for Pine compartments is recommended).
- **Special Burning Permission requirement: any post fire discing operations to secure the burnt area and surrounds must be completed the day following the burn.**

## **GUIDELINES FOR NATURE CONSERVATION/CARA AREAS**

- Resources should be adequate to cope with any eventuality which may arise as a result of the application of fire under **ORANGE** FDI conditions.
- Any burning activity on any given area should be applied with due regard to the description of the block / management area taking physical factors such as topography, position of roads and existing firebreaks / trace lines into consideration. These factors should also take into account fuel load as well as the age of the fuel load which in turn would dictate the intensity of the fire. Weather conditions must also be taken into account as it influences fire intensity.
- Veld type should also be taken into account with regard to the objectives for the burn.
- Point ignition burning, or patch mosaic burning should be considered as an option. However, the question of applying fire under extreme FDI conditions will in certain instances be relevant. 'Extreme' implies High FDI conditions.
- Season is an important factor as well as whether to burn in the dry season or after the first rains. Here again the management objectives and veld type will to a large extent govern when fire is applied.
- A matrix of blocks or management areas should be compiled for planning, monitoring, record keeping and control purposes
- No burning shall take place without the necessary permit.
- **All neighbours must be informed of the intention to burn:**
  - All neighbours to give written consent and be notified on the day of the burn;
  - Notification on the Ward WhatsApp group will suffice provided arrangements with neighbours have been made in advance;
- There should also be agreement between neighbours on the width and type of firebreak, i.e. burnt or graded, and its condition, i.e. effectiveness as a firebreak that must be in place prior to the burning operations commencing.
- Firebreaks must be adequate to ensure safe burning operations and in place prior to the commencement of the planned burn – at least 10m wide break must be in place:
  - The firebreak may not be created during the burning operation.
- Consult Safety & Danger Document V2 Sep 2011 before operating in Conservation Areas
- **Rain in the Ward should be more than 12.5 mm in total for one shower;**
  - FDI 3-day average forecast for the should not exceed 55 Yellow;
- Resource requirements as per the FPA Minimum Requirements
- Burning recommended for late afternoons.

## **BURNING of FIREBREAKS and or CONSERVATION AREAS on SATURDAYS and PUBLIC HOLIDAYS**

- **Burning Permission rules apply;**
  - **All requirements as above must be adhered to;**
  - **Burning operations and mopping up must be concluded by 17:00;**
  - **All neighbours must be in agreement, should assist or be on standby to assist.**
  - **Start of burning operation and close of burning operations must be reported on the FireHawk App.**
- 
- Arrangements to obtain Special Permits should be made in advance with the respective Ward Officer.

## **MINIMUM REQUIRMENTS FOR CONTRACTORS**

### **Burning Contractors**

#### **The contractor must:**

- Be a registered business within the field of Fire Management
- Minimum qualifications for a contractor: Fire Boss 1 or IC type 5
- Crew leader qualifications: Crew leader type 1 or 2
- These qualifications must be certified
- The rest of the team must be qualified in Basic fire fighting
- Proof of Public Liability Insurance to the value of R20 million is recommended
- 4 x 4 Bakkie with bakkie sakkie not less than 500 litres is recommended
- 1 x High lift jack
- 1 x DCP 2.5kg fire extinguisher
- 1 x Handheld FDI weather kit
- Emergency contact detail list for the appropriate area

**Table 7: Requirements for Grass Cutting Contractors**

Lawn Mowers	Bakkie Sakkie Min 200 litres or fire tender	PPE for job at hand	Basic fire fighting training	Fire beater	Knapsack Min 15 litres	DCP - fire extinguisher min 2.5kg	5l water containers	Emergency contact list	Emergency kit, cell phone and Supervisor	Basic tool kit	FDI - actuals plus forecast for relevant day	Relevant signage	Public liability Insurance
Unit	*For every 5 units	All	All	1	1	1	1	Yes	Yes	1	Yes	Yes	Yes

\*Access to within 5km radius

**Requirements before initiating a back burn to protect property**

- **Ensure that an anchor point is in place;**
- **If possible, consult with the land owner, Ward Officer and or FPO;**
- **Initiating a back burn on community property should be done with the authority of the FPO;**
- **Sufficient resources viz. equipment and staff must be on site to manage the back burn.**

**Ward Officers**

SOP Guidelines:

- Ward Officers must know the rules and regulations of the FPA and Act 101;
- Ward Officers must not call for assistance from the FPO unless:
  - the suspected perpetrator must be clearly identifiable;
  - either the Ward officer or member is prepared to present themselves in court.
- Community Farms / Property:
  - Identify the Chief of the Community;
  - Request that the FPO assist with fire awareness;
  - Ensure that the firebreaks adjacent to these properties are in place and wider / more effective;
  - Follow the requirements to initiate a backburn.

**Annexure A  
Burning Guidelines**

Criterion	Types of Burn or Fuel					
	Land Management		Firebreaks	Harvest Debris	Cane	Waste
	Conservation / CARA	High Intensity	Generally May to 30 July	Generally NO burning from <b>1<sup>st</sup> June – 31<sup>st</sup> October</b>		
Locality (Currently, for UFPFA, default is Regional forecast)	local forecast	local forecast	Local forecast	local forecast	local forecast	local forecast
FDI 14:00 Forecast	55	70	55	55	55	45
Wind Speed 14:00 – km/hr – Average	15	20	15	15	20	15
Fuels	Knee, waist height or more	> 4 tonnes/ha	N/A	Light, Medium or Heavy	N/A	What type
Age of fuel	1, 2 or more years	N/A	1, 2 or more years	N/A	N/A	N/A
Resources	As per FPA rules	Specialised, as per FPA rules	As per FPA rules	As per FPA rules	As per FPA rules	As per FPA rules
Defensible space	N/A	> 50 metres	N/A	N/A	2 metres	2 metres
Neighbours	Phone (Unless otherwise legislated by Local Municipality By-laws)	Written and phone (Unless otherwise legislated by Local Municipality By-laws)	Written and phone (Unless otherwise legislated by Local Municipality By-laws)	Phone (Unless otherwise legislated by Local Municipality By-laws)	Phone (Unless otherwise legislated by Local Municipality By-laws)	Phone (Unless otherwise legislated by Local Municipality By-laws)
Monday	Permit can be issued	<b>SPR</b>	Permit can be issued	Permit can be issued	Permit can be issued	Permit can be issued
Tuesday	Permit can be issued	<b>SPR</b>	Permit can be issued	Permit can be issued	Permit can be issued	Permit can be issued
Wednesday	Permit can be issued	<b>SPR</b>	Permit can be issued	Permit can be issued	Permit can be issued	Permit can be issued
Thursday	Permit can be issued	<b>SPR</b>	Permit can be issued	Permit can be issued	Permit can be issued	Permit can be issued
Friday	Permit can be issued	<b>SPR</b>	Permit can be issued	Permit can be issued	Permit can be issued	Permit can be issued
Saturday	<b>SPR</b>	<b>SPR</b>	<b>SPR</b>	<b>SPR</b>	Permit can be issued	Permit can be issued
Sunday	<b>SPR</b>	<b>SPR</b>	<b>SPR</b>	<b>SPR</b>	Permit can be issued	Permit can be issued
Public Holiday	<b>SPR</b>	<b>SPR</b>	<b>SPR</b>	<b>SPR</b>	Permit can be issued	Permit can be issued
<b>SPR = Special permission and permit required in advance from the Ward Officer</b>						