

# DISTRICT COUNCIL OF KIMBA

# BROAD ACRE BURNING PERMIT CONDITIONS

PERMIT CONDITIONS TO ASSIST IN THE PRACTICE OF SAFE: BROAD ACRE STUBBLE BURNING; WINDROW BURNING & STUBBLE DUMP BURNING



www.kimba.sa.gov.au council@kimba.sa.gov.au This information has been developed by the District Council of Kimba to assist local landowners with guidance for Broad Acre Burning.



# LOCAL PERMIT GUIDELINES FOR THE 2023/24 FIRE DANGER SEASON

The Bushfire Danger Season for the Kimba District is from the 1st November 2023 to the 15th April 2024.

#### **PERMIT GUIDELINES**

- Permits will be issued from the 1<sup>st</sup> Monday in February 2024 and burning will not be undertaken with a Fire Behaviour Index of 25 or greater, except for the following:
  - a) Permits required for CFS Training
  - b) Other at discretion of Fire Prevention Officer.
- 2. Length of permits will be issued at the discretion of the authorised officer (to a maximum four (4) weeks as per the above).
- 3. Burning is not to be commenced until a physical copy has been received.
- 4. The time for lighting of fires for **burning off** be no earlier than **10am** or later than **9pm**, day light saving time or at the discretion of the authorised officer. **N.B:** Time restrictions for narrow stubble row burning will not be enforced as landowners need to manage this type of burn at the appropriate time with the appropriate weather conditions.
- 6. That these permits are issued only for burning grasses, stubble and heaps of grass type litter.
- 7. Burning is prohibited on Saturdays, Sundays and Public Holidays during Fire Danger Season.
- 8. The issue of permits for grain dryers exempt the condition of the Fire & Emergency Services Regulations 2005 Section 33(5)(a)(c)(d).
- 9. The users of Allora Field Bin Dryers may be exempt of Section 33(5)(a)(c)(d) of the Fire & Emergency Services Regulations 2005, by the endorsement on their permit by the Fire Prevention Officer providing that a minimum of 400 Litres of water connected to an engine driven pump on a mobile unit is at hand and the operator on site.
- 10. That a minimum of 400 Litres of water connected to an engine driven pump on a mobile unit is at hand and the operators on site and a further 1,000 Litres of water be available in the paddock area where burning is to occur. Minimum of two (2) able bodied persons available onsite during the burn.
- 11. All other permit conditions applied to Permits must be adhered to.

#### PERMIT NOTIFICATION

The following must be notified of the intention to light a fire. The notification must include the name of the permit holder, the permit number, the location (i.e. Section and Hundred) and time of lighting.

- The District Council of Kimba Administration Office 8627 2026 each and every day, at least two hours prior to lighting a fire for the burning of grass, stubble or heaps of material. Administration staff will then notify Region 6 of the burn off.
- 2. Department of Environment and Water if burning within one kilometre of a national park (phone 0477 241 775 and leave a message if office unattended)
- 3. Your neighbours

NOTE: Any Permit issued may be revoked at any time by an Authorised Officer if conditions are considered too dangerous for burning off operations. SA Police will be notified of any breaches to permit conditions or burning without an appropriate permit.

#### **Authorised Permit Officers:**

Alex Cant: 0407 088 084	Brian Cant: 0427 275 012
Brad Woolford: 0428 766 665	Brett Zibell: 0427 274 096

# **SCOPE**

These Broad Acre Burning Permit Conditions applies to whole paddock:

- Broad acre burning;
- Burning windrows;
- Burning stubble dumps / piles;

on private land within the District Council of Kimba.

It does not apply to the following types of burning practices:

- hazard reduction burning
- native vegetation burning for ecological purposes
- private burning of vegetation, commonly referred to as pile burning

# INTRODUCTION

Broad acre stubble burning is the farm management practice that produces the greatest fire risk every summer and autumn if not carefully planned and implemented with caution.

Weather conditions conducive to burning continue after the Fire Danger Season (FDS) has finished and restrictions on the use of fire under the *Fire and Emergency Services Act*, 2005 no longer apply, unless a Total Fire Ban is declared. Although there are no legislative conditions out side of the Fire Danger Season to adhere to, many stubble burning activities are conducted inappropriately increasing the risk of bushfire and the likelihood of fires escaping into unburnt neighbouring land.

This document serves as a guide to the farming community to assist in the practice of safe broad acre stubble burning throughout the entire year.

The following sections outline the process and resources recommended to plan for and conduct a safe broad acre burn.

# **STRUCTURE**

# PLANNING YOUR BURN

This section explains what you should do before commencing your burn. The elements covered include:

- Appropriate Weather Conditions
- Permits during the FDS
- Fuel Break Preparation
- Native Vegetation Considerations
- Firefighting Resources
- Communication
- Smoke Management

# **BURN PLAN - SAFE LIGHTING AND BURNING**

This section covers the following topics:

- Lighting Equipment and Methods
- Stubble Characteristics and Fire Behaviour
- Safe Practice Burn Methods

- Monitor the Burn
- Monitor the Weather Conditions
- When the Burn is Complete
- Patrol the Burn Area

# PLANNING YOUR BURN

# PERMITS DURING THE FIRE DANGER SEASON (FDS)

Historically the FDS commenced on 1<sup>st</sup> November and concludes on 15<sup>th</sup> April each year. These date may be altered due to seasonal conditions at the discretion CFS Chief Officer.

The Fire & Emergency Services Act 2005 states no person shall light or maintain a fire in the open air during the fire danger season, unless it is subject to the restrictions imposed by the Act. These restrictions include the issuing of a Schedule Nine Permit by an Authorised Officer. Although the Schedule Nine Permit does provide minimum requirements for plant, equipment and personnel, the Fire & Emergency Services Act allows for Authorised Officer to impose additional requirement as they see fit. These Broad Acre Burning Permit Conditions are in addition to the conditions defined on the permit and must be adhered to.

To obtain a Schedule Nine Permit, persons wishing to light & maintain a fire in the open air must contact:

- Local Permit Officers: (refer to Local Permit Guidelines)
- CFS Region 6: 8683 0633

The issuing of Broad Acre Burning Permits will commence on or after the first Monday in February each year and no burning will be allowed on Saturday, Sundays or Public Holidays, unless there are exceptional circumstances and approval is obtained from an authorising officer of Council or the CFS.

# APPROPRIATE WEATHER CONDITIONS

Weather forecasts are important when planning a broad acre burn. The measurement of actual weather conditions at the burn site prior to lighting and during a burn is imperative to keep abreast of unfavourable changes. Wind speed is an important factor in achieving a complete and consistent burn but it also a major factor in fire escape due to spotting that may occur ahead of the fire front. A maximum wind speed and the Fire Behaviour Index (FBI) can indicate when a broad acre burn has potential to become uncontrollable.

#### **Broad Acre Burn Objectives**

The objectives of burning stubble are to reduce crop residue, weed seed and snails. A successful burn occurs under weather conditions that produce a complete and consistent burn. Burns that are patchy or incomplete leave areas of residue, weed seed and snails. The aim is to burn when combinations of weather parameters produce a burn that is consistent, or in the case of windrow and stubble dump burns, complete and can be stopped by fuel breaks and easily extinguished with water.

#### **Weather Forecast**

On the day before you plan to burn access the Bureau of Meteorology website for the **MetEye<sup>TM</sup>** weather forecast and warnings for your local area – <a href="www.bom.gov.au/australia/meteye/">www.bom.gov.au/australia/meteye/</a>. This will provide a general view of the weather conditions to expect in the coming two days. If the weather is forecast to be unfavourable (where there is potential for the fire to escape) for the day of your planned burn **or the day after**, the burn should be postponed until more favourable conditions are forecast.

# **Total Fire Ban Days**

Severe, Extreme or Catastrophic fire danger rating days can still be declared outside of the FDS and, as a consequence, CFS will declare a Total Fire Ban. Any burning is **NOT** permitted on days declared a Total Fire Ban unless you have a <u>Schedule 10</u> permit issued under the *Fire and Emergency Services Act, 2005*. If a Total Fire Ban has been declared for the following day and you don't have a permit, the fire must be fully extinguished by midnight. On the day of the Total Fire Ban the burnt area must be inspected regularly to ensure there are no flare ups. Stubble dump burns are hard to extinguish completely and will need to be monitored closely.

# Actual Weather - "In the Paddock"

Site specific weather conditions must be obtained prior to lighting and if unfavourable the planned burn should be postponed. Measure the weather conditions at least every 2 hours during the burn to keep abreast of any unfavourable changes; specifically wind speed and direction and to a lesser degree temperature and relative humidity. A handheld weather meter is required with wind speed to be measured and averaged over a 10 minute period.

# Wind Speed and Spotting Potential

Wind speed is an important factor influencing the success and potential failure of a broad acre burn.

Moderate winds 20 - 29km/h can move debris resulting in greater potential for spotting over fuel breaks through movement of embers ahead of the fire front. It is recommended **NOT** to burn when the wind speed, averaged over 10 minutes, **exceeds 19km/hr**. Be aware of gusty wind conditions as embers can be picked up and transported increasing the potential for spotting issues.

If wind speed is too low, 5 km/h or less, fire spread will not be consistent and burn objectives will not be met. However, light winds, between 10 - 18 km/h, produce a consistent and complete burn with the fire being easier to control within fuel breaks with water.

DO NOT Burn When FBI is forecast to 33 or above, as per Upper Eyre Peninsula Bushfire Management Committee Permit Issuing Guidelines.

#### **FUEL BREAK PREPARATION**

Prior to conducting a burn, a 5 metre wide fuel break must be established around the perimeter of the area to be burnt to reduce the risk of fire escaping. This also applies to paddocks containing windrows and stubble dumps.

A bare earth fuel break is desirable as it is efficient at stopping the forward spread of a fire however, this is not always possible. In the case that a fuel break cannot be bare earth then the 5m break must be sufficiently disced, ploughed or harrowed so as to break up the vegetation to provide a boundary where a fire will stop. Roads or tracks or rocky and sandy areas with minimal vegetation can act as a natural fuel break. Where paddocks abut vegetation ensure the firebreak is sufficient to prevent the burn from spotting into it.

Fuel breaks are effective as long as the fire is not spotting.

# **NATIVE VEGETATION CONSIDERATIONS**

If your burn area contains scattered trees and/or remnant vegetation you will need to adhere to the guidelines outlined in the Native Vegetation Council Information Sheet: *Stubble Burning - Protection of scattered trees and remnant vegetation*, which is available from the Department of Environment and Water (DEW) website <a href="https://www.environment.sa.gov.au">www.environment.sa.gov.au</a>.

# FIREFIGHTING RESOURCES

It is important to plan for appropriate resourcing of a broad acre burn so that it can be easily controlled minimising fire escape potential. All equipment must be maintained to a fully operational standard at all times.

The appropriate amount of resources (**minimum 2 persons** and equipment) must be readily available during and after the burn. Be aware that fire escape potential is influenced by a number of factors and can occur at any time during a burn. It is recommended **NOT** to attempt to burn any more area, windrows or stubble dumps than can be controlled by the number of able bodied people and resources.

# Able Bodied People (Minimum 2)

An able bodied person is a person who is competently able to drive a vehicle and operate a pump and hose.

More able bodied people are required when any of the following conditions are present to counter act increased fire escape potential:

- Temperature is >30°C
- Relative Humidity is <30%
- Stubble fuel load exceeds 4 tonnes per hectare
- Stubble height exceeds 15cm
- Windrow height exceeds 15cm
- Stubble residue is present beneath stalks in between windrows
- If the planned burn area is greater than 50 hectares
- In excess of 3 stubble dumps are planned to be burnt at the one time

The able bodied person(s) must be present at the burn site from the time the fire is lit to the time it is completely extinguished.

#### **Water Resources**

The following water equipment must be available at the burn site when whole paddock broad acre burn, windrow/s or stubble dump burning occurs:

- Minimum of 400 litres of water connected to an engine driven pump on a mobile unit that is at hand
- A further **1000** litres of water be available in the paddock area where burning is to occur.

# Farm Fire Unit(s)

Well maintained and fully operational Farm Fire Unit(s) must be in the burn area until confident the fire will not escape. Farm Fire Units and operators must conform to and follow the Farm Fire Unit Joint Guidelines (www.cfs.sa.gov.au). Activate the amber rotating beacon on your farm fire unit prior to starting the burn operation.

# **Personal Safety Equipment**

Safety equipment must be provided and used appropriately, including a fully equipped first aid kit and plenty of drinking water. Appropriate protective clothing and eye wear must be worn during the burn operation as per the Farm Fire Unit Joint Guidelines, where practical.

#### COMMUNICATION

The following authorities must be advised immediately (minimum 2 hrs) prior to burning:

- Local Council: 08 8627 2026
- Department of Environment and Water if burning within one (1) kilometre of a national park (phone 0477 241 775 and leave a message if the office is unattended)

All neighbouring landholders and occupiers must be notified of your intention to burn 2 - 24 hours prior to conducting the burn.

Communicate your burn plan to the able bodied persons assisting in the burn operation. It is important to ensure that everyone knows the type of stubble and composition, the lighting and burn method, their role(s) in the operation and understanding of contingency plans should the weather change and/or the fire become uncontrollable.

At all times ensure there is immediate access to a UHF CB radio and/or a fully charged mobile phone that has full service coverage in the burn area. The mobile phone should be carried on the person at all times. If relying upon a UHF CB radio, there must be a responsible adult at the other end who can call "000".

If you lose control of your burn, call "000" immediately.

#### SMOKE MANAGEMENT

Do not burn if there are large amounts of green fuels as this will cause a smoke management problem.

Wind direction is a contributing factor to smoke causing adverse effects on sensitive sites, such as hospitals, schools, vineyards etc. Note whether or not there are any sensitive sites nearby and ensure the wind direction is such that it will not cause smoke to impact on them.

If the area to be burnt is adjacent to a main road and smoke could blow over the road and possibly impair the vision and safety of drivers, approved signing (as shown) indicating "SMOKE HAZARD" must be placed on both sides of the road before the burn area is reached by vehicles. To prevent the need for signing, make sure the wind direction directs smoke away from main roads.

Some burning of windrows or stubble dumps may occur at night as there is generally less wind and conditions are more favourable.

# **BURN PLAN - SAFE LIGHTING AND BURNING**

# LIGHTING EQUIPMENT AND METHODS

There are a number of unique home-made equipment and lighting methods that are constructed and used to light stubble burns. Safe work practices must be followed with respect to such devices and methods and it is the responsibility of the land manager to operate devices and execute lighting safely. A commercially constructed drip torch is recommended as it is purpose built with safety features to prevent unnecessary malfunction and injury.

# STUBBLE CHARACTERISTICS AND FIRE BEHAVIOUR

Consider the type of stubble, height of stubble, fuel load, whether it's a whole paddock, windrow or stubble dump burn and modify your burn technique to account for the differences. Added caution must be taken when burning

on calm or near calm days as fires often tend to create their own wind / vortex, resulting in whirly winds that can cause fires to become out of control.

# **Stubble Type**

Burning different types of stubble will produce variations in fire behaviour. Cereal, canola and legume stubble exhibit differences in composition, density, stalk dimension and oil content, which affects fire spread and intensity.

SMOKE HAZARD

# **Stubble Height**

The resultant height of stubble after harvest can vary every year, farm to farm, across the State. In terms of fire behaviour, it is well known that grasses 10cm or less is a much lower risk as there is a lower flame height and the easier a fire will be controlled. Fuel height influences flame height; the longer the standing stubble the higher the flame height will be and the more difficult a fire will be to control. More people are to be in attendance if the stubble height is more than 15 centimetres.

# Stubble Fuel Load

Fuel load influences flame length, flame depth and fire intensity. Increased stubble fuel loads occur due to high rainfall throughout the growing season and modern farming practices through retaining stubble. Sparse stubble with bare ground will produce a narrow fire of less intensity than a fire in continuous, heavy stubble, which will cover more ground and burn with more intensity. A heavy fuel load will have more debris that could spot ahead of the fire especially in higher wind speeds. Embers landing on heavy stubble have more chance of ignition than embers landing on sparse stubble. More people and equipment must be available for a burn if the stubble fuel load is greater than 4 t/ha.

#### Whole Paddock vs Windrow

Whole paddock burning and windrow burning operations also create different fire behaviours with fuel load either spread over a whole paddock or concentrated in wide or narrow rows. Windrow burns can often turn into whole paddock burns due to the inter-row stubble catching alight. This occurs when the windrow height is greater than 15 centimetres and/or there is retained stubble on the surface in between rows.

# **Stubble Dump**

A stubble dump burn produces different fire behaviour to that of whole paddock or windrow burns. A stubble dump is a pile of crop residue that is produced during harvest as opposed to the residue being spread across the paddock or concentrated in rows behind the harvester. A stubble dump can burn and smoulder for days due to the concentration and compaction of material. Such burns need to be monitored for longer as rekindling can occur at any time and embers can be blown with unfavourable winds many days after the burn increasing the potential of fire escape to unwanted areas.

# SAFE PRACTICE BURN METHODS

There are stubble burning methods that can be used to control the direction and rate of burning to match the wind strength. This ensures the fire can be controlled should unpredictable and unfavourable weather conditions arise. The methods for windrow burning differ to whole paddock burning due to the characteristics of windrows. The requirements prior to lighting a stubble dump are different to whole paddock and windrow burning. Examples of each burning method are provided as a guide to safe practice.

#### Whole Paddock Burn Method

Following is a recommended burn method that incorporates safe practice for burning a whole paddock.

#### Establish a Protective Burn Break

First light the fire on the leeward side of the land to establish a protective break of 20m – 50m. It is recommended to light a spot every 10m along the leeward edge, which will make the initial fire easy to manage. The spots will flank out and join up with moderate fire behaviour compared to lighting a strip of fire along the leeward edge.

If the area to be burnt is on hilly land then burn downhill where possible. Burning up a steep incline, even against the wind, is always dangerous practice.

#### Light the Flank and Windward Sides

Once a protective break is established light part way up each flank – a length of about 10 - 20m up each side. Then lighting from the windward side of the land can be undertaken. The flank fires will join with the leeward fire and the windward fire will meet up with it, producing a technically safe burn.

#### Windrow Burn Method

Following is a recommended burn method that incorporates safe practice for burning windrows.

#### **Consider Fuel Type**

Lupin and Canola windrows can be burnt with the wind due to less crop residue in the stubble, however a light cross wind is ideal. Wheat windrows, especially if yields were between 2 - 2.5t/ha, are harder to contain to the windrows so avoid burning or burn into the wind under cooler conditions. Avoid burning barley stubbles as the extra leaf residue makes it difficult to contain the fire to the windrows.

#### Establish a Protective Burn Break

In the first instance burn the outside two laps of the paddock before lighting the remainder of the paddock. Take care to contain the fire to the windrows. Consideration should be given to harvesting low to reduce the risk of fire spreading into adjacent stubble.

# **Light Remaining Windrows**

Light up remaining windrows approximately every 200m under a light cross wind as it will fuel the fire to the soil surface. If burning into the wind a second able bodied person is required with a farm fire unit to extinguish the downwind fire. Do not light up and burn any more than the available resources can control.

# **Stubble Dump Burn Method**

The following recommendations need to be followed to ensure safe stubble dump burning.

#### Stubble Dump Size

The larger the pile of stubble the harder it will be to achieve a complete burn and to extinguish. It is recommended that the size of a stubble dump does not exceed a height of 0.5 meters and a diameter of 1.5 meters.

#### Establish a Protective Burn Break

As with windrows, stubble dumps are surrounded by standing stubble +/- residue on the surface. In addition to the 5m fuel break around the paddock containing the dumps there must be a 20 - 50m burnt or cleared area constructed around each pile. Extra vigilance and personnel must be employed if planning to burn around a pile to construct the fuel break.

No stubble dumps are to be burnt within 25 metres of a boundary fence.

# Light a Stubble Dump

It is recommended to first light one stubble dump and monitor how it burns. If it appears to be burning consistently and not producing too much smoke, then continue lighting a few more piles.

If it produces too much smoke and does not completely combust easily do not continue lighting and wait for more favourable conditions or spread out the pile to increase the amount of air available for combustion.

It is recommended **NOT** to light more stubble dumps than what can be managed with the resources on hand. More people and resources are required if you plan to burn more than 3 dumps at a time.

#### MONITOR THE BURN

Always monitor the burn. If the burn area adjoins other stubble paddocks, be vigilant for spot fires and make sure gates are open to ensure quick response. Windrow burns may spot or creep into surrounding standing

stubble and residue, it is important to constantly monitor what is burning to ensure containment of the fire to the windrow. Stubble dumps are high and burn hot due to the amount of compacted fuel. An unfavourable wind change may pick up burning embers and distribute them on surrounding fuel causing unwanted spot fires.

#### MONITOR THE WEATHER CONDITIONS

By regularly measuring the weather conditions at the burn site (2 hourly or when you suspect conditions are changing) you will be abreast of unfavourable changes in wind direction and speed. If the wind speed and direction changes considerably cease lighting and make every effort to ensure the perimeter is safe.

# WHEN THE BURN IS COMPLETE

When a whole paddock burn is complete always make sure there is no active fire for at least 20 metres into the burnt area. In comparison, when a windrow burn is complete, all active fire is extinguished to prevent re-ignition and accidental lighting of the intervening standing stubble. Stubble dump burns will need to be spread out and then extinguished to prevent smouldering and potential rekindling.

#### PATROL THE BURN AREA

Regularly patrol the burn area for a number of days after the operation is completed to guard against rekindling. This patrolling is especially important if the following day is a forecast Total Fire Ban. In the case of burning stubble dumps the burn area and burnt piles must be monitored closely for a longer time period due to the difficulty of extinguishing them completely.

# A SAFE BROAD ACRE BURN IS YOUR RESPONSIBILITY

It is the burn operator's responsibility to ensure that their broad acre burn is conducted safely and contained within the burn area. Every effort must be made to follow the recommendations to ensure the burn will not impact on surrounding land or become uncontrollable.

# CHECKLIST FOR PLANNING A BROAD ACRE BURN

#### 1. Ensure the weather conditions are appropriate for a safe burn.

- Review a weather forecast for day of and day after your burn.
- Unfavourable forecast postpone the burn.
- Total Fire Ban Day postpone the burn or plan to extinguish completely before midnight.
- Hand held weather meter needs to be at the burn site.
- Measure weather conditions "in the paddock" prior to and 2 hourly during the burn.

#### 2. DO NOT burn when:

• FBI 33 and above

#### 3. Prepare a 5m wide fuel break around the burn area.

- Bare earth is desirable as most effective.
- Disced, ploughed or harrowed break sufficient.
- Roads, tracks, rocky and sandy areas devoid of vegetation sufficient.
- Must be able to stop the forward spread of the fire.

#### 4. Native Vegetation Considerations

- For burn areas containing trees or remnant vegetation.
- Consult DEWNR website for protection information.
- Put in appropriate fuel breaks as directed.

#### 5. Arrange for extra able bodied people if:

- Min 2 persons on site when burning
- Temperature is >30°C.
- Relative Humidity is <30%.
- Stubble fuel load exceeds 4 tonne per hectare.
- Stubble height exceeds 15cm.
- Windrow height exceeds 15cm.
- Stubble residue is present beneath stalks in between windrows.
- If the planned burn area is greater than 50 hectares.
- In excess of 3 stubble dumps are planned to be burnt at the one time.

# 6. Plan for the following water resources to be available during and after the burn:

 Minimum 400 litres of water connected to an engine driven pump with a further 1000 litres available in the paddock

#### 7. Plan for Farm Fire Unit(s) to be available during and after the burn.

- Well maintained and fully operational.
- Conform to Farm Fire Unit Joint Guidelines.
- Amber rotating beacon activated during burn operation.

#### 8. Ensure personal safety equipment is adequate, present at the burn site and includes:

- First aid kit fully equipped for burns.
- Plenty of drinking water.
- Protective clothing.

# 9. Notify the following 2 – 24 hours prior to conducting the burn:

- Local Council: 08 8627 2026
- DWENR: 08 8648 1883 (if burning within 1 km of a national park)
- Neighbouring landholders and occupiers.

# 10. Ensure mobile phone and/or UHF CB radio are present and working at the burn site.

- Mobile is fully charged and operational at burn site.
- Responsible adult at other end of UHF CB radio.

#### 11. Be aware of smoke production and wind direction and make sure:

- Fuel moisture has decreased sufficiently.
- Large amounts of green fuels are not present.
- Wind direction is such that sensitive sites nearby will not be impacted.
- Correct signage is used if smoke will impact a main road.

# BURN PLAN CHECKLIST – SAFE LIGHTING AND BURNING

# 1. Articulate a Burn Plan and communicate to extra people who will be attending.

- Area and type of stubble to be burnt.
- Stubble composition whole paddock, windrow, stubble dump.
- Stubble height and expected fire behaviour.
- Fuel load and expected fire behaviour.
- Appropriate and safe lighting device commercially constructed drip torch recommended.
- Burn method.
- Role(s) of extra able bodied person(s) in the operation.
- Contingency plans.

#### 2. Whole Paddock Burn Method

- Establish a protective burn break 20 50m on leeward side of burn area.
- Light 10 20m up flanks from leeward edge.
- Light from the windward edge.
- DO NOT burn any more than what the available resources can control.

#### 3. Windrow Burn Method

- Consider fuel type, fuel load and composition and choose appropriate weather conditions.
- Establish a protective burn break by burning the outside 2 laps of the paddock first.
- Take care to contain fire to the windrows.
- Light remaining windrows every 200m under a light cross wind.
- DO NOT burn any more than what the available resources can control.

#### 4. Stubble Dump Burn Method

- Maximum size of pile 0.5m high and 1.5m diameter.
- Establish a 20m burn or cleared area around each pile DO NOT burn the fuel break area if extra personnel are not present.
- DO NOT burn a pile within 25m of a boundary fence.
- Light a test pile to see if it will burn consistently and completely.
- Spread stubble dump out if incomplete combustion.
- DO NOT light more stubble dumps than what the available resources can control.

#### 5. Always Monitor the Burn

- Open gates into adjacent paddocks.
- Be vigilant for spot fires and extinguish as they occur.
- Be aware that fire intensity varies depending on what is being burnt.

#### 6. Always Monitor the Weather Conditions

- Measure weather conditions 2 hourly.
- Keep abreast of unfavourable changes in average wind speed.

#### 7. When the burn is complete make sure:

- Whole Paddock Burn no active fire in burn area for 20m.
- Windrow Burn all active fire extinguished.
- Stubble Dump Burn spread out pile and then extinguish completely.
- All fire must be completely extinguished by midnight if Total Fire Ban declared for the following day.

#### 8. Regularly patrol the burn area for days following the burn.

- Especially on the day of a Total Fire Ban.
- Prevent rekindling of stubble dumps and/or windrows.

Remember, it is the burn operator's responsibility to ensure that the broad acre burn is adequately resourced, conducted safely and contained within the burn area.