

UGL REGIONAL LINX



BUSHFIRE AND VEGETATION MANAGEMENT

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CRN CM 501

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Document Control

Function	Position	Name	Date
Approver	A&E Manager	Lucio Favotto	24.01.2022

Revision	Issue Date	Revision Description
1.2	26.11.2021	UGLRL Operational Standards Template applied
2.0	10.12.2021	First approved and issued UGLRL version
3.0	24.01.2022	Issued for publish to intranet and webpage.

Summary of changes made from previous version

Section	Summary of change
All	This document is based on the previous rail infrastructure maintainer (RIM). Full revision history is available on request from UGLRL

Chapter 1 Introduction

C1-1 Purpose

This manual describes procedures for the management of the bush fire hazard within the rail corridor on the CRN network.

The procedures cover:

- Bush fire hazard management
- Hazard reduction work
- Hot work during total fire bans

The procedures for hazard management and hazard reduction work apply to infrastructure maintenance staff and contractors.

The procedures for hot work during total fire bans apply to all UGLRL CRN staff and contractors.

C1-2 Context

The manual is part of UGLRL CRN's engineering standards and procedures publications.

More specifically, it is part of the Civil Engineering suite that comprises standards, installation and maintenance manuals and specifications.

Manuals contain requirements, processes and guidelines for the management of structures, geotechnical and right of way assets and for carrying out examination, construction, installation and maintenance activities.

The manual is written for the persons undertaking installation and maintenance activities.

It also contains management requirements for the Civil Maintenance Engineer, Area Manager and Superintendents needing to know what they are required to do to manage transom installation on their area, and project managers needing to know what they are required to do to manage the renewal activity their teams are undertaking.

Throughout this manual reference is made to the following levels of Engineering Authority:

- Principal Civil Engineer
- Civil Maintenance Engineer
- Area Manager
- Superintendent
- Supervisor

These are general descriptors only. For an explanation of the positions in the UGLRL CRN organisation that perform these functions, refer to CRN Engineering Manual CRN CM 001 "Civil Technical Competencies and Engineering Authority"

C1-3 References

C1-3.1 Acts of parliament and regulations

Protection of the Environment Operations Act 1997 No 156

Protection of the Environment Operations (Clean Air) Regulation 2013

Rural Fires Act 1997 No 65

Rural Fires Regulation 2008

C1-3.2 Australian and International standards

Nil.

C1-3.3 CRN documents

CRN CM 001 – Civil Technical Competencies & Engineering authority

CRN CM 203 – Track Inspection

UGLRL CRN Safety Management System

UGLRL CRN Environmental Management System

C1-3.4 Other documents

Rural Fire Service Bushfire Environmental Assessment Code for NSW.

C1-4 Definitions

Bush Fire Danger Period

The period from 1 October to 31 March in the following year, unless extended by the Rural Fire Service Commissioner.

Total Fire Ban

Ban on lighting of fires in the open air, or the conduct of fire inducing activities imposed by the Minister for Emergency Services, in accordance with Section 99 of the Rural Fires Act 1997, 1997. Further explanation is provided in Chapter 8 of this manual.

Hot Work

Work that has the potential to cause a fire. This includes structural welding, rail welding or oxy gas cutting or heating, rail grinding and any other heat or spark producing operation. In this circumstance Hot Work is not to be confused with other uses of the terminology, such as “Work in High Temperatures” for which there are regulatory requirements regarding prolonged heat exposure etc.

Hot Work Authority

Formal approval mechanism for Hot Work to be undertaken in a Total Fire Ban. This is not to be confused with Hot Work Permits.

Hot Work Permit

Formal approval mechanism for Hot Work to be undertaken at any time in confined spaces or in the presence of flammable gases.

Authorised Officer

UGLRL CRN officer with the authority delegated by this manual to authorise Hot Work on CRN infrastructure in Total Fire Bans. This authority cannot be delegated beyond the Authorised Officer. Normal arrangements will, however, apply during holiday and call-out relief, where the relieving officer assumes the delegations of the Authorised Officer.

Nominated Site representative

Person, normally a UGLRL CRN employee, who is nominated to control the Hot Work on the worksite. This person may nominate him/herself or be nominated by others but must be on site for the Hot Work.

Local Authority

The council for the Local Government area.

Local Fire Control Officer

Person responsible for the control and co-ordination of the activities of the Rural Fire Service in the rural fire district for which he or she is appointed as fire control officer.

Environmental Assessment

This is the assessment required for all “activities” that are likely to have an impact on the environment such as manual clearing or burning off.

Asset Protection Zone

Primarily provided to protect human life, property and highly valued public assets and values. Covers existing habitable buildings and existing major buildings including farm sheds, industrial and business structures adjacent to bush fire hazard.

Strategic Fire Advantage Zone

Includes land that is mapped or described as a strategic fire advantage zone in the local bush fire management plan or if the work is within 500 metres of an Asset Protection Zone. Provides a balance between life and property and protection of the environment.

Chapter 2 Management Requirements

C2-1 Bush Fire Hazard Management

The Area Manager shall ensure there are systems in place for the management of the bush fire hazard on the CRN rail corridor.

Bush fire hazard management tasks are:

- Provision of input to the District Bush Fire Risk Management Plans relevant to the CRN network
- Implementation of the relevant requirements of Bush Fire Risk Management Plans, including hazard reduction works
- Compliance with legislative controls on burning off during the bush fire danger period
- Compliance with legislative controls on hot work during total fire bans
- Response by civil maintenance staff to bush fire incidents
- Maintaining records of hazard reduction activities on the CRN network

C2-2 Hot Work Authority

The Manager Infrastructure Maintenance is the Authorised Officer for the issue of Hot Work Authorities in accordance with the procedures in this manual.

Chapter 3 Competencies

NOTE: These competencies may enable activities to be carried out in other manuals. For a comprehensive list of all activities that are covered by a given competency see CRN CM 001.

To carry out this work	You need these competencies
Supervise Burning off	AHCILM509 - Plan burning activities for natural and cultural resource management
Issue a Hot Work Authority	Authorised Officer
Act as fire watch for hot work during a total fire ban	Trained in the use of firefighting equipment

Chapter 4 Vegetation Management

Weed control shall be undertaken where required to eliminate or control weed growth on operating lines to allow maintenance of track condition.

UGLRL CRN co-operate with statutory bodies and adjacent landholders in the elimination of noxious plants.

Herbicides shall only be selected and used by appropriately qualified agronomists and technicians in consultation with UGLRL CRN environmental staff and in accordance with UGLRL CRN Environmental policies.

Chapter 5 Bush Fire Hazard Management

C5-1 General

Bush fires pose a threat to rail infrastructure and operations and to the security of adjoining landowners. The CRN corridor and associated activities shall be managed in order to:

- Implement UGLRL CRN's commitment to being a good neighbour to adjacent land owners (people, land, property, operations)
- Conform with Legislative requirements
- Minimise the risks associated with bush fires
- Safeguard customers, staff, estate and operations

C5-2 Duty to Prevent Bush Fires

UGLRL CRN is required to take any practicable step to prevent the occurrence of bush fires on, and to minimise the danger of the spread of a bush fire on, or from:

- Any land vested in or under the control or management of UGLRL CRN
- Any highway, road, street, land or thoroughfare, the maintenance of which is the responsibility of UGLRL CRN

The District Bush Fire Management Committee may advise a person on whom this duty is imposed of any steps that are necessary for its proper performance.

C5-3 Bush Fire Risk Management Plans

The Area Manager shall manage fire hazards on CRN property in consultation with District Bush Fire Management Committees. Emphasis is to be given to those measures that prevent fires or reduce the spread of fires.

UGLRL CRN staff should:

- Attend meetings of the local Rural Fire Brigades that affect their Track Length or Area
- Contribute to the compilation of data for the District Bush Fire Risk Management Plan
- Ensure that any Asset Protection and Strategic Fire Advantage zones are identified, and that any hazard reduction works deemed appropriate for UGLRL CRN managed land are included in the Bush Fire Risk Management Plan

C5-4 Firefighting Staff and Equipment

Superintendents shall ensure that appropriate trained staff and equipment are available to fight fires and assist in hazard reduction when required.

It is expected that staff will fight small fires only i.e. grass fires or smouldering sleepers/bridge timbers caused by sparks from hot work

C5-5 Lighting of Camp Fires

Lighting of camp fires of any type for any purpose, including cooking or heating, shall be protected in such a way as to comply with the provision of the Regulation during Bush Fire Danger Periods, viz the fire is lit at a site surrounded by ground that is clear of all combustible matter for a distance of at least 2 metres.

No such fires are to be lit during the periods of Total Fire Bans.

C5-6 Response to Bush Fire Incidents

Staff shall take appropriate action to contain any bush fires on the rail corridor and to report fires.

The response to bush fires shall be managed in accordance with the UGLRL CRN Incident Management Framework

Inspections of infrastructure shall be carried out in accordance with the requirements of Post Irregularity Examination in CRN Engineering Manual CRN CM 203 “Track Inspection”.

Chapter 6 Bush Fire Danger Period

The Bush Fire Danger Period generally extends from 1 October to 31 March in the following year. It may be extended – early commencement, late finish – by issue of a notice by the Commissioner NSW Rural Fire Service.

All staff and contractors performing work that has the potential to cause a fire are to comply with the requirements for the effective management of the bush fire hazard on the rail corridor.

During the bush fire danger period, no burning off can be done without notification to the local fire control officer.

During this period UGLRL CRN does not require a Fire Permit for burning off. However staff must not light a fire, or continue with burning off already in progress, when the local fire control officer has issued a notice that no permits will be issued for fires to be lit in an area because of the seriousness of bush fire danger. Additionally staff must not light a fire in any fire district unless the local rural fire control officer and officer in charge of the local fire station has been advised.

The issue of a notice by the local fire control officer preventing burning off does not stop aluminothermic welding or other types of naked flames provided all the required precautions are fully observed i.e. the site is cleared of all combustible materials for a distance of at least 2 metres and any fire or smouldering materials are completely extinguished before leaving the site.

Chapter 7 Fire Hazard Reduction

C7-1 General

UGLRL CRN is required to maintain a tidy property by the most economical means

UGLRL CRN personnel and contractors shall ensure that there is no waste and litter left behind following work activities.

Areas identified as requiring hazard reduction work based on a risk assessment should be communicated to the local District Bush Fire Management Committee and included in the District Bush Fire Risk Management Plan.

On unfenced lines where the adjacent landholder usually has use of the railway land, fuel hazard reduction is only to be carried out when requested by and with the co-operation of the user.

C7-2 Environmental Considerations

Before undertaking any fire hazard reduction works in the rail corridor the potential impacts on the environment shall be considered.

Manual clearing of fuel and burning off excess fuel can have significant impacts on vegetation communities as much of the native vegetation on the rail corridor is protected by legislation.

If hazard reduction works are proposed the potential impacts on the environment must be assessed in accordance with the requirements of UGLRL CRN Environmental procedures.

If the proposed works are in native vegetation and involve controlled burning of an area identified in a District Bush Fire Management Plan, a streamlined assessment process can be undertaken using UGLRL CRN "Bush Fire Hazard Reduction Work Instruction" which is based on the Rural Fire Service Environmental Assessment Code.

Seek advice from your environmental officer in the early planning stage of hazard reduction works.

C7-3 Hazard Reduction Works

Hazard reduction work shall only be carried out if:

- The work is carried out in accordance with a bush fire risk management plan that applies to the land
- There is a bush fire hazard reduction certificate in force in respect of the work and the work is carried out in accordance with any conditions specified in the certificate
- The work is carried out in accordance with the provisions of a bush fire code applying to the land specified in the certificate

The Manager Infrastructure Maintenance is the issuing authority for bush fire hazard reduction certificates on CRN property.

Any proposed hazard reduction which does not comply with the above requirements must comply with the requirements for an environmental assessment in accordance with the Environmental Planning and Assessment Act 1979.

The fire danger ratings should be regularly reviewed and the programs adjusted accordingly to ensure that priority is given to the correct areas.

UGLRL CRN staff may enter cooperative arrangements with adjacent landholders for cutting firebreaks and/or burning off.

C7-4 Hazard Reduction on Leased Land

Where Railway land is leased, it is the responsibility of the lessee to manage bushfire hazards on the land and staff shall inform the lessees that they are to implement any hazard reduction works identified in the District Bush Fire Risk Management Plan.

It is usually the lessee's responsibility to remove flammable materials from the leased area. When in doubt, the actual lease document should be checked and appropriate action taken to ensure any hazard is reduced.

If the lessee cannot be found, the responsibility for hazard reduction work rests with UGLRL CRN personnel.

Lessees of Railway land are subject to the complete provisions of the Rural Fires Act 1997 and its associated regulations and the applicable environmental legislation in the same way as a private land owner.

C7-5 Working of Rural Fire Brigades on Railway Land

Rural Fire Brigades do not have the authority to enter onto Railway land to make firebreaks, either mechanically or by fire, without permission, but once the written authority is given, the Brigade may carry out the function specified. The approval does not extend to the actual running lines without the express supervision of competent staff.

Authority for the Brigade to enter Railway land is given by UGLRL CRN by the issue of the prescribed form, "Permit to Enter Railway Land" – see Appendix 1.

Section 33 of the Rural Fires Act provides that members of the Rural Fire Brigades cooperating with UGLRL CRN have the same immunities from legal proceedings as UGLRL CRN staff.

Rural Fire Brigades do not have an automatic authority to enter Railway land to fight an out of control fire and authority must be given by UGLRL CRN staff.

C7-6 Firebreaks

Firebreaks shall be provided in potential fire hazard areas identified as providing a critical role for the management of wildfire in the District Bush Fire Risk Management Plan.

Where provided, firebreaks shall be at least two (2) metres wide with a cross break cut at 500 metre intervals.

Where firebreaks can be established by the practice of annually mechanically clearing the property or maintaining a "mown" standard of growth, this is considered an acceptable alternative, provided the growth cannot in any way be classed as a fire hazard.

C7-7 Burning Off

C7-7.1 General

Burning off is an activity under the Environmental Planning and Assessment Act 1979 and the impact of this activity on the environment must be assessed.

In accordance with the requirements of the Protection of the Environment Operations Act, hazard reduction in some local government areas may only be undertaken by mechanical methods unless approval is obtained for burning off from the Department of Environment and Climate Change (DECC) or local council. On the CRN network, this applies to the local government areas listed in Table 1.

Local government areas where burning of vegetation requires approval (from "Protection of the Environment Operations (Clean Air) Regulation 201")		
Queanbeyan City	<i>Gwydir</i>	Orange City
Armidale Dumaresq	<i>Hay</i>	<i>Richmond Valley</i>
Bathurst Regional	Junee	Tamworth Regional
Bland	Leeton	<i>Tumut Shire</i>
<i>Boorowa</i>	<i>Lismore City</i>	<i>Tweed</i>
<i>Bourke</i>	City of Lithgow	<i>Upper Lachlan Shire</i>
<i>Brewarrina</i>	Liverpool Plains	Uralla
<i>Cooma-Monaro Shire</i>	Mid-Western Regional	<i>Warrumbungle Shire</i>
Coonamble	Narrabri	Wellington
Dubbo City	Narromine	

Note (Red italics – councils on CRN non- operational lines)

Table 1 - Local government areas where burning of vegetation requires approval

Where UGLRL CRN has the authority to remove excessive growth on its property by burning off, this will be done in co-operation with local bush fire brigades and adjacent landholders.

Burning off is prohibited during periods of Total Fire Bans and on declared 'No Burn Days'. No Burn Days are declared by the Department of Environment and Climate Change when the potential for smoke pollution is very high.

C7-7.2 Extinguishing Fires

If a fire is burning on any Railway land at any time during a Bush Fire Danger Period staff are to take all possible steps to extinguish the fire, and if necessary call for assistance, without leaving the fire unattended.

C7-7.3 Notifying Others of Burning Off

A Notice of Intention to "Burn Off" on Railway land or burn a firebreak must be given to the occupiers (or the owners) of adjacent land, the local fire control officer and, if applicable, the National Parks and Wild Life Service or the Forestry Commission, 24 hours prior to commencing burning activities.

The Notice is a written or oral notice that includes particulars of the location, purpose, period and time of the fire that is proposed to be lit. This must be given at all times during the year.

C7-7.4 Information to be given to Local Councils

During the Bush Fire Danger Period, local fire control officers may issue Notices prohibiting burning off.

To assist local Councils in distributing these Notices, the Area Manager is required to provide each Council in their area with a map showing each length and the names and addresses of personnel to whom the Notices are to be forwarded.

On receipt of a Notice, burning off operations must cease immediately.

C7-7.5 General Principles for Burning Off

Under the Rural Fires Act, the person who actually lights the fire is responsible for the consequences. On the rail corridor the responsibility for lighting fires for burning off rests with the

person who issued the prescribed notices to adjacent landholders and other parties. It is his/her duty to actually light the fire. Any breach of the Rural Fire Act is his/her responsibility.

The steps to be observed prior to burning off are:

- Undertake appropriate Environmental Impact Assessment. Consult your environmental officer at the start of the planning phase of the works who can advise if the vegetation to be burnt is native and the correct approval process to follow
- Clear around all buildings, posts, signal troughing, bridges, etc
- Be satisfied that the undergrowth will burn
- Check the available weather forecasts that suitable conditions can be reasonably expected
- Issue notices to prescribed persons (see Section C7-7.3)
- Inform local Rural Fire Brigades
- Ensure adequate fire control equipment is available and works
- Ensure that notice has not been issued by the local fire control officer preventing burning off
- Ensure that a Total Fire Ban is not in place
- Proceed with the burn

C7-7.6 Practice of Burning Off

Having established the firebreaks and notified the prescribed persons, burning off operations can commence, subject to weather conditions.

Staff should keep adequate equipment for controlling burning off operations and providing firebreaks. Equipment such as pumps and sprays shall be regularly tested.

Adequate equipment to control the burning off operation shall be available on the site, prior to commencing the burn. This is to include fire fighting beaters, knapsack sprays and mobile water units.

Burning off shall not commence if the Fire Danger Rating is above the allowable limit or is not recommended on the basis of the Weather Forecast.

Burning off is not to be carried out in high winds, irrespective of the amount of preparatory work that has been performed.

Patch burning is to be carried out as soon as possible after completion of the establishment of firebreaks and when the grass is sufficiently dry, bearing in mind that fires are to be lit so that the burning will be from the firebreak towards the rail track on flat ground.

Burning off on embankments should commence from the top and continue down the embankment, and similarly down cutting faces.

On completion of the work for the day, the utmost care is to be taken to see that all stumps, fence posts, smouldering logs, old sleepers, (only where lit as approved) etc., which may have become ignited during burning off are extinguished and staff must not leave the location until this has been done.

If the water supplies for the day's work have been exhausted and none is left for use on the smouldering logs, earth is to be placed on the latter until the fire is completely extinguished so to prevent the possibility of fire recommencing, or sparks being blown to adjacent properties.

Care shall be taken to protect trees and ornamental shrubs when burning off is carried out, particularly at stations where there are gardens.

Any flammable growth or rubbish adjacent to bridges and buildings shall be removed by chipping and herbicides and the area close to these facilities burnt off immediately if it is sufficiently dry to do so.

Growth must be chipped away from signal troughing before fires are lit in the vicinity.

Burning off under or adjacent to overhead wires shall be controlled to avoid damage to the wires.

C7-7.7 Assistance to Landholders to Burn Off

UGLRL CRN staff may enter cooperative arrangements with adjacent landholders for burning off.

A landholder, if he enters railway land to assist in burning off, is not to be allowed to actually light any fire.

When advice is received that an adjacent landholder intends to burn off, UGLRL CRN staff are to inspect the area on completion of the burn.

C7-8 Reporting

The Area Manager shall maintain records of hazard reduction activities on the CRN Network.

UGLRL CRN is required to provide an annual report to the Rural Fire Service Commissioner on its hazard reduction activities. The report is to be submitted to the RFS Commissioner within 3 months of the end of the financial year.

The report is to include details of the extent of implementation of any scheme for the reduction of bush fire hazards on land in its area set out in a bush fire risk management plan that applies to the land.

Chapter 8 Total Fire Bans

C8-1 General

This chapter details the response by UGLRL CRN to the imposition of Total Fire Bans. It applies to work by UGLRL CRN and its contractors.

UGLRL CRN is required to comply with the Total Fire Ban. No fire or naked flame of any type is allowed in the open air, except as exempted in Section C8-4 “Exemption to a Total Fire Ban”.

The conduct of hot work in the open air in accordance with the exemption is subject to compliance with the requirements in Section C8-5.

C8-2 Method of declaration

The State is divided into twenty one Fire Areas. Fire Areas are based on local government area boundaries. Fire Areas relevant to CRN are shown in the map in Figure 1 and also listed in Table 2 in Appendix 2.

A Total Fire Ban is imposed on the basis of Fire Areas.

C8-3 Method of notification

Superintendents are responsible to arrange monitoring of the imposition of Total Fire Bans.

If rail workers are in any doubt, they should contact the nearest Rural Fire Service Fire Control Centre, Regional Bush Fire Control Officer, Police Station or Fire Station.

Information is also available from the Rural Fire Service:

- Telephone: 1800 NSW RFS (1800 679 737)
- Website: www.rfs.nsw.gov.au

C8-4 Exemption to a Total Fire Ban

Gazetting of a Total Fire Ban under Section 99 of the Rural Fires Act includes several schedules which give exemptions. Schedule 5 “Services & Utilities – Essential Repairs/Maintenance” is relevant to work on CRN infrastructure.

Schedule 5 states:

“Fire lit, maintained or used by, or under the authority of, a provider of energy, telecommunications, water, transport or waste removal/disposal services, in connection with the urgent and essential:

- *Repairs*
- *Maintenance*

of facilities or equipment required for the continuation of the supply or provision of power, light, heat, cooling, refrigeration, communication, water, transport or sewerage provided that:

- *The fire is lit and maintained in a manner which will prevent the escape of fire, sparks or incandescent or burning material from the site of the works;*
- *Adequate fire fighting equipment is provided at the site of the works to prevent the escape or spread of the fire.”*

C8-5 Hot Work authorisation

No hot work is to be carried out on CRN infrastructure during a total fire ban period unless a **Hot Work Authority** has been issued

The authority is documented on the Hot Work Authority form. The form is in Appendix 3.

A Hot Work Authority can be issued only by the Authorised Officer responsible for the affected asset or property – see Appendix 4 for the schedule of Authorised Officers.

Hot Work within the CRN corridor but not on UGLRL CRN managed infrastructure (e.g. work on station platforms) is not covered by the requirement to obtain Hot Work Authority as outlined in this manual.

A Hot Work Authority can only be issued for work meeting the requirements of the “schedule”.

Hot Work is only allowed to restore damaged facilities to allow trains to run where there is no other alternative practical solution. Hot Work may include welding, cutting rails, steel bridge repairs and similar fire or spark inducing activities required to repair track following derailments, misalignments or other major system failures. It also includes equipment used to repair rail failure and damage to bridges or any other irregularities that must be repaired if trains are to continue running.

The exemptions under Section 99 of the Act **MUST NOT** be used to grant approval to burn off, weld, grind rails, repair bridges or to do any other work that requires a naked flame **WHEN TRAIN WORKING IS NOT AFFECTED**.

If the work is not essential for the restoration of services, this exemption does not apply. Rail grinding and non urgent rail defect repair, for instance, are not essential work under this exemption.

Whilst the exemptions generally apply to emergency work only, an exemption may be given for closedowns and major possessions to do Hot Work that is essential for the continuance or restoration of services. Every effort should be made to schedule/reschedule Hot Work during closedowns to periods when there is no Total Fire Ban.

The Authorised Officer has the authority to issue a Hot Work Authority for work not strictly complying with the above definitions of “essential”, based on a risk assessment of the work. The assessment needs to include the risks associated with not doing the work as well as those involved in doing the work. The risks may include financial as well as safety risks. For example, undertaking Hot Work to correct a potential misalignment location, may present a lower risk than not doing the work. It would be expected, however, that all other avenues of protection of the site would be explored before making the decision to issue an authority.

The Hot Work Authority will list special conditions applying to the site work.

The Hot Work Authority must be held on site for the duration of the work.

A separate Hot Work Authority is required for each period when a total fire ban is in force.

The Hot Work Authority is non-transferable and only valid on the day indicated and at the location designated on the Authority.

A separate Hot Work Authority may also be required for individual works on a Total Fire Ban day if the nature of the work is different at different sites.

C8-6 Issuing a Hot Work Authority

To apply for a Hot Work Authority a Superintendent or Supervisor shall:

1. Establish the work to be undertaken.
2. Determine whether alternative methods are available to do the work.
3. Establish and assess the risks associated with undertaking the work.
4. Determine the risk mitigation strategies.
5. Inform the local Fire Control Officer prior to commencing work (he has no authority to control or stop the work) and invite him to supply Rural Fire Service staff and equipment as he desires.
6. Compile a Hot Work Authority.

7. Nominate a Site representative.
8. Contact the Authorised Officer and give details of the work to be conducted and the track kilometre location as soon as is practical. This should be done as far in advance as possible. It is, however, recognised that some work will require quick assessment and approval and this can be achieved over the phone.

Before issuing a Hot Work Authority, the Authorised Officer shall:

1. Assess the work and determine whether it is essential for the continuance or restoration of train services.
2. When deemed essential, determine if a Hot Work Authority can be issued, based on a risk assessment of the type of work, the nature of the worksite and prevailing weather conditions and the risk mitigation strategies proposed.
3. Specify the special conditions to be enforced.
4. Issue the Hot Work Authority to a Nominated Site representative on the worksite. In an emergency situation, or when facilities are not available for transmittal of forms for approval and action, the authority can be issued verbally with the issue of an Authority Number.
5. In these circumstances the Authorised Officer needs to complete sufficient information on a duplicate form to identify the work and document the assessment and approval. The Authorised Officer shall sign the Hot Work Authority and write the Authority Number in the appropriate space.

As soon as is practical, the Nominated Site representative's copy and the Authorised Officer's copy shall be attached together in order to demonstrate that the approval process has been appropriately conducted.

The Authorised Officer shall make sure that a process is in place that meets the requirements of the standard for timely contact, and for traceability of Hot Work Authority approvals.

6. Instruct the Nominated Site representative to monitor weather conditions and to stop work if conditions become too adverse e.g. high wind.
7. Item 5 needs to be repeated for each change of Nominated Site representative – this applies particularly during Closedowns but may occur at times during a single shift operation.

The Authorised Officer reserves the right not to issue an Authority if such an officer considers the risk too severe to allow Hot Work procedures to be undertaken.

The Authorised Officer's instructions shall be strictly enforced for the duration and cool down period on all hot work.

C8-7 Precautions to be taken when a Hot Work Authority is issued

The following mandatory conditions shall be enforced by the Authorised Officer:

- Inclusion of the details of the Hot Work Authority in the pre-work briefing
- Clear the site of combustible material for at least 5 metres in all directions from the work, or make the material non-combustible for the duration of the hot work e.g. by use of water, fire retardants, wet tarpaulins
- Suitable fire fighting equipment shall be available directly at the site as determined by the Authorised Officer, but in no case shall it be less than:
 - A minimum of three knapsack sprays (or equivalent portable extinguishers) with a minimum capacity of 16 litres each filled with water and ready for use, and

- A serviceable mobile water tank (or equivalent) filled with water, with hoses connected and pump running, placed within 10 metres of the work site. The quantity of water is to be sufficient for the work being undertaken
- One person shall be appointed as a Fire Watch. The Fire Watch shall perform no other duties whilst the hot work is being undertaken and shall be briefed on the areas to check during and after the hot work

Although not mandatory, the following equipment and process are further examples of risk reduction strategies that can be adopted:

- Protective barriers such as spark/flash screens should be placed around the hot work to intersect any sparks or flame
- The area 10m each side of the track adjacent to the hot work should be doused with water prior to starting work

Once started, hot work **MUST** cease if:

- The wind speed increases
- The fire fighting equipment breaks down
- The amount of water available reduces below a level sufficient to effectively fight a fire
- Spot fires occur which require the use of the tanker

After Hot Work has been completed,

- An inspection shall be carried out by the fire watch person to ensure that there are no fires or smouldering material and that any fires found have been extinguished
- The local Fire Control Officer should be informed

C8-8 Records

A copy of Hot Work Authority forms is to be retained for audit purposes for a minimum of 3 years.

Appendix 1 Permit to Enter Railway Land

PERMIT TO ENTER RAILWAY LAND

RURAL FIRES ACT, 1997

Locations:..... Kilometrage from to
Kilometrage from to

Dates: From:.....
To:.....

Mr/Ms., officer of a Rural Fire Brigade, is hereby authorised to enter upon Railway land at the above location and on the above dates and in order to exercise his/her functions conferred or imposed under the Rural Fires Act 1997, Division 3.

If you are a Captain, Deputy Captain, Group Captain or Deputy Group Captain of a Rural Fire Brigade this permission extends to any person acting under your authority.

Signed.....
Position.....
Company.....

Appendix 2 NSW Fire Areas

The NSW fire areas applicable to the CRN network are:

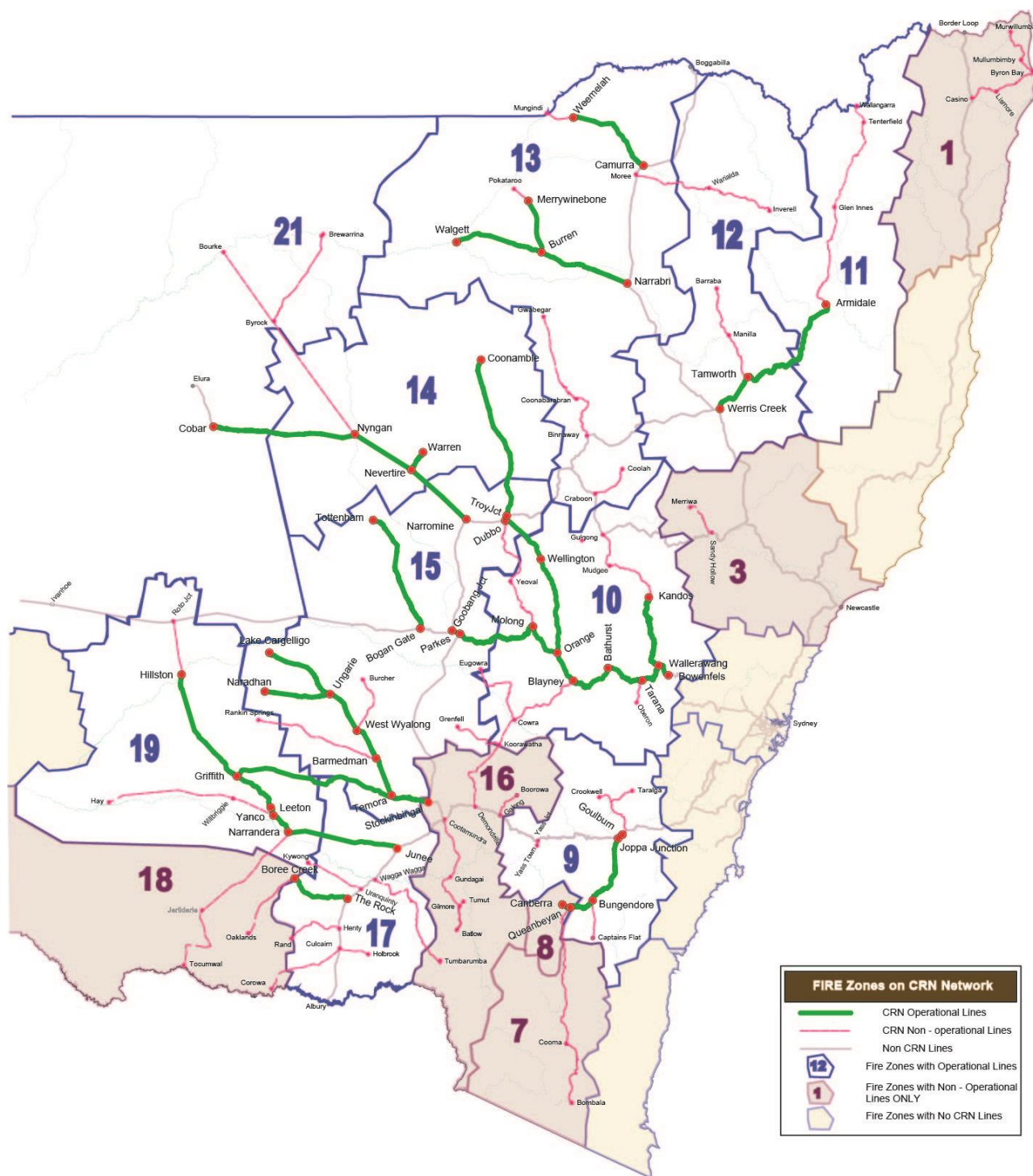


Figure 1 – NSW Fire areas

Local Government Areas with CRN Infrastructure		
1. Far North Coast Byron Lismore Richmond Valley Tweed	11. New England Armidale Dumaresq Guyra Glen Innes/Severn Tenterfield	17. Eastern Riverina Coolamon Greater Hume Junee Lockhart Wagga Wagga
2. North Coast (No CRN)	Uralla Walcha	
3. Greater Hunter Upper Hunter	12. Northern Slopes Gwydir Inverell	18. Southern Riverina Berrigan Conargo Corowa Jerilderie Urana
4. Greater Sydney Region (No CRN)	Liverpool Plains Tamworth Regional	
5. Illawarra Shoalhaven (No CRN)	13. North Western Moree Plains Narrabri	19. Northern Riverina Carrathool Griffith Hay Leeton Narrandera
6. Far South Coast (No CRN)	Walgett Warrumbungle	
7. Monaro Alpine Bombala Cooma Monaro Snowy River	14. Upper Central West Plain Bogan Coonamble Gilgandra Warren	20. South Western (No CRN)
8. ACT	15. Lower Central West Plains Bland Dubbo Forbes Lachlan Narromine Parkes Temora Weddin Wellington	21. Far Western Bourke Brewarrina Cobar
9. Southern Ranges Greater Queanbeyan Upper Lachlan Yass Valley Greater Argyle		
10. Central Ranges Bathurst Regional Blayney Cabonne Cowra Lithgow Mid Western Regional Oberon Orange	16. Southern Slopes Boorowa Cootamundra Gundagai Harden Tumbarumba Tumut Young	

Table 2 – NSW Fire Areas

Appendix 3 Hot Work Authority Form

Total Fire Ban Hot Work Authority			Form HWA_1
			Page 1 of 2
1	Site Location: _____	Date: ____/____/____	Authority No. _____
2	Description of work to be carried out under this Authority		
3	What spark or fire causing equipment is to be used?		
4	Is the local Fire Control Officer supplying staff and equipment? YES / NO		
5	List the firefighting equipment to be laid out on site		
6	Name of Nominated site representative		
7	The following special conditions are to be observed 		
Authorisation			
8	This Authority is valid from _____ am/pm on ____ / ____ / ____ to _____ am/pm on ____ / ____ / ____.		
9	Authorised Officer	Print Name _____	Signature _____
10	Authority received by Nominated site representative	Signature _____	
11	The following requirements are to be confirmed prior to the commencement of work by the Nominated Site Representative issued with the Authority. Nominated Site Representative to initial each box.		CONFIRMED
11.1	Have details of this Authority been included in pre-work briefing?		
11.2	Have combustible materials been removed or made non-combustible for a distance of 5 metres from the work area?		
11.3	Have knapsack sprays (minimum 3) been filled with water, checked and laid out ready for use?		
11.4	Is the mobile water tank filled with water and fire pump running?		
11.5	Has the fire watch been organised?		
11.6	Is the wind direction and speed satisfactory for the work to be done?		
11.7	Have all special conditions been observed?		
11.8	Has the Local Fire Control Officer/ Fire Brigade Officer been notified?		

Total Fire Ban Hot Work Authority		Form HWA_1
		Page 2 of 2
12	The following requirements are to be monitored during the work by the Nominated Site Representative issued with the Authority. Nominated Site Representative to write Yes or No in each box.	YES/NO
12.1	Did the wind speed increase?	
12.2	Did any fire fighting equipment break down?	
12.3	Did the amount of water available reduce below a level sufficient to effectively fight a fire?	
12.4	Did spot fires occur which required the use of the tanker?	
12.5	Did hot work cease?	
13	The following requirements are to be confirmed at the completion of work by the Nominated Site Representative issued with the Authority. Nominated Site Representative to initial each box.	CONFIRMED
13.1	Has an inspection been carried out by the fire watch?	
13.2	Have all fires and smouldering material been extinguished?	
13.3	Has the local Fire Control Officer been informed of completion of work?	

Appendix 4 Schedule of Authorised Officers

Area	Authorised Officer
CRN	Manager Infrastructure Maintenance