SERVICE STANDARD 5.1.5 PERSONAL PROTECTIVE EQUIPMENT AND PERSONAL PROTECTIVE CLOTHING

ITEM	DESCRIPTION		
Version Number	6.0		
SOPs	> SOP 5.1.5-1 Personal Protective Equipment and Personal Protective Clothing		
	SOP 5.1.5-2 Personal Protective Equipment and Personal Protective Clothing– Structural Firefighting		
	> SOP 5.1.5-3 Specialised Operations		
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1 Purpose

- 1.1 This Service Standard ensures that members engaged with various NSW RFS operational activities are provided with appropriate levels of protective clothing and equipment to align with the *Workplace Health* and Safety Act (2011).
- 1.2 This Service Standard and associated Standard Operating Procedures apply to operational environments (including, but not limited to fire grounds, incident grounds, community engagement activities) within which NSW RFS members work.
- 1.3 This Service Standard and associated Standard Operating Procedures covers both PPE and PPC issued personally to individual NSW RFS members, as well as PPE and PPC issued to a Rural Fire Brigade for member use in a broad range of operational environments.

2 Definitions

- 2.1 For the purpose of this service standard, the following definitions and acronyms apply:
 - a. **Australasian Fire Authority Council (AFAC):** the facilitator and custodian of contemporary fire and emergency service knowledge and practice for Australia and New Zealand.
 - b. **Dress Down:** The removal of jacket, goggles, helmet and/or gloves when away from hazards/ operational tasks to assist with managing heat stress.
 - c. **Flame Resistant:** a term used to describe a material that burns slowly or is self-extinguishing after removal of an external source of ignition.
 - d. **Incident Ground:** refers to any area of operational activity, e.g. firegrounds, motor vehicle accidents, air bases, assist other agencies, automatic fire alarm, etc.

- e. **NSW RFS Approved PPE/C:** PPE/C that has been assessed by the RFS and is deemed to meet the NSW RFS technical specifications and relevant International/Australian standards. These PPE/C items are supported by the NSW RFS for purchasing, issuing and the provision of consumables.
- f. **Personal Protective Equipment (PPE):** refers to equipment designed to mitigate the risk of injury from the physical, thermal and other hazards that may be encountered at an incident (including but not limited to, helmets, goggles, gloves etc.).
- g. **Personal Protective Clothing (PPC):** refers to protective clothing designed to mitigate the risk of injury from the physical, thermal and other hazards that may be encountered at an incident (including but not limited to, jackets, trousers, etc.).
- h. **PPE/C:** refers to the combination of Personal Protective Equipment and Personal Protective Clothing, which meets the NSW RFS Specifications and that has been approved by the NSW RFS.

3 Policy

- 3.1 Personal protective equipment (PPE) and personal protective clothing (PPC) are considered the 'last line of defense' (as stated in the Bush Firefighter Manual) and should always be utilised in conjunction with other controls such as safe work practices. Members should not undertake any activities unless they are using the appropriate PPE and PPC.
- 3.2 All personnel engaged with various NSW RFS operational and training activities must wear approved protective equipment/clothing (PPE/C) as appropriate for the task being undertaken and in line with training and operational doctrine.
- 3.3 The NSW RFS will only issue PPE/C that is suitable and appropriate for intended use and which is compliant with Australian Standards and NSW RFS specifications. Approved PPE/C must be worn in accordance with this Service Standard and associated SOPs. NSW RFS Approved PPE/C is not to be modified or changed in any way. PPE/C that is not certified to the relevant Australian or International standards must not be worn on any Incident Ground.
- 3.4 All approved NSW RFS PPE/C, with a reasonable or proper fit, are available to every member via the NSW RFS procurement system.
- 3.5 If members find that the standard sizing of the PPE/C is not suitable, they are able to organise through their District a 'made to measure' arrangement from the contracted supplier.
- 3.6 Garments worn underneath the PPE/C do not affect the PPE/C's compliance against Australian Standards however members should be aware the impact that additional layers of underclothing may have on their metabolic heat retention.
- 3.7 NSW RFS PPC ensemble that have the two tone high visibility reflective trim (lime/silver/lime) striping attached, meets the standards and requirements of the day/night hi-vis compliance for NSW RFS members working in high risk situations.
- 3.8 All PPE/C is to be worn as aligned to the training materials and SOPs related to each relevant activity.
- 3.9 Issuing of any PPE/C to members must be recorded against the individual member's record through the NSW RFS corporate system (SAP Inventory at time of publication).
- 3.10 NSW RFS members are eligible to receive a minimum of two sets of PPE/C relevant to the task that they undertake.
- 3.11 NSW RFS Headquarters (Logistics and Equipment) is to ensure that sufficient stock levels and appropriate supply chain is in place for PPE/C availability to members
- 3.12 NSW RFS Headquarters (Training and Doctrine) is responsible for the provision of educational and training materials to members regarding which PPE/C is available.
- 3.13 District Managers and Business unit managers are responsible for supply of PPE/C for their members; the oversight and monitoring of use of PPE/C; as well as ensuring their members have completed training in the correct use of PPE/C.
- 3.14 Where a member of the NSW RFS, including staff, has been issued PPE/C, they are to ensure that it is fit for purpose/ in clean, good working order and report results to their Brigade Officer/ Supervisor annually.
- 3.15 Individual members are responsible for the appropriate use, maintenance and storage of PPE/C as per NSW RFS requirements; to advise Brigade Officers/ Supervisor if any defects or damage occurs to PPE/C so that repairs or replacements can be made; and must not intentionally misuse or damage PPE/C.

- 3.16 Individual member's issued PPE/C must be returned to the Rural Fire Brigade/ Supervisor if the member resigns, is dismissed, or does not complete the course against which the PPE/C is issued.
- 3.17 Reference is made to relevant Fireground SOPs, Operational Protocol and specialist training materials for member information regarding when, where and how PPE/C should be worn.
- 3.18 Any Uniforms should be worn in line with other NSW RFS Service Standards such as SS 8.1.1
- 3.21 Up to date information for NSW RFS members to support this Service Standard and SOPs can be found on the NSW RFS Member website. This includes, full listing of available PPE/C and Care, Maintenance and Disposal Guides.

4 Related documents

- Work Health and Safety Act (2011)
- > Standards Australia
- SS 1.2.1 NSW RFS Ranking and Rank Insignia
- > SS 3.1.6 Operational Doctrine
- > SS 5.1.9 Respiratory Protective Equipment
- > SS 8.1.1 Uniforms for NSW RFS members
- > SS 8.1.3 Ceremonies and Events
- > NSW RFS PPE/C Specifications

5 Amendments

AMENDMENT DATE	VERSION NO	DESCRIPTION
1 September 1999	1.0	Initial release
1 May 2001	2.0	> Repeals and remakes SS 5.1.5 v1.0
		Clauses 2.4(a); 2.5(b); 2.6 heading; 2.7; 2.8;2.9;2.10;2.11(b);2.12. 5
13 June 2007	3.0	> Repeals and remakes SS 5.1.5 v2.0
		Update into new RFS format, previous clause 2.3 Overalls removed, previous clause 2.12 SLA 3 removed, addition of Appendix 1 Bush Fire Helmets, addition of Appendix 2, inclusion of previous SS 5.1.8 Protective as SOP 5.1.5-3
11 February 2010	4.0	> Repeals and remakes SS 5.1.5 v4.0
		> Reviewed to include utility shirt and to reflect current practices
22 September 2010	5.0	> Repeals and remakes SS 5.1.5 v4.0
		Clause 2.7 amended to clarify that only that only PPC/PPE approved by the NSW RFS may be purchased
16 March 2022	6.0	> Repeals and remakes SS 5.1.5 v5.0
		> Complete review

SOP P5.1.5-1

Personal Protective Equipment and Personal Protective Clothing

1 Purpose

1.1 This Standard Operating Procedure provides clear and consistent guidelines for appropriate levels of PPE/C and accessories for the NSW Rural Fire Service (NSW RFS) members.

2 Procedures

- 2.1 The following items of protective equipment and clothing are to be personally issued as they provide the maximum operational and dressing flexibility to handle the various activities that are undertaken by the NSW RFS:
 - a. Wildland/ bush fire jacket and wildland/ bush fire trousers;
 - b. Utility shirt;
 - c. Wildland/ bush fire helmet with neck protector;
 - d. Gloves;
 - e. Goggles;
 - f. Respiratory protection;
 - g. Firefighting boots;
 - h. Protective/ Flash hood;
 - Brimmed sunhat.
- 2.2 All PPE/C must be worn in line with relevant training materials and Fireground SOPs.

Wildland/ Bush Fire Jacket and Wildland/ Bush Fire Trousers

- 2.3 These items must be worn when attending incident grounds unless a higher level of PPE/C is worn.
- 2.4 The two-piece ensemble assists in allowing the NSW RFS member to be able to 'dress down', especially when fire fighters need to relocate away from the fireground or incident to manage their recovery from working in heat.
- 2.5 Name, rank, brigade and qualification badges where affixed should be sewn on using cotton thread only and be in the locations as follows:
 - a. Epaulettes: on shoulders;
 - b. Brigade name and qualifications: on or above the left hand pocket; and
 - c. Name and rank: on or above the right hand pocket.
 - d. Lettering shall be Navy/Dark blue with backgrounds to match the garment.
 - e. NOTE: No other markings are permitted to be made, sewn or attached to PPE/C unless authorised by the District Manager or relevant Director where member is staff.
- 2.6 Only garments that have the two tone high visibility reflective trim (lime/silver/lime striping) attached, may be worn on the incident ground or when undertaking any practical training or an intended task. This striping meets the requirements of the day/night hi-vis compliance. Districts shall provide each NSW RFS members with a minimum issue of two (2) sets of PPC.
- 2.7 Where the previously issued PPC meets the standard, it may still be used by NSW RFS members.

Utility Shirt

- 2.8 These shirts are to be worn in situations where there is a risk of sunburn.
- 2.9 They may be worn when undertaking any part of an intended task with the bush fire trousers, e.g. for community engagement, assisting other agencies or other non-fire events.

- 2.10 The Utility shirt may be worn under other PPC, in lieu of the undergarment shirt, however members must be mindful of heat build-up.
- 2.11 The utility shirt is to be worn in line with relevant training standards and Service Standards 8.1.1 and 8.1.3.

Undergarment shirt

2.12 The NSW RFS undergarment shirt should be worn under firefighting jackets. As an alternative, members should choose undergarments manufactured from natural fibres.

Helmets (All firefighting)

- 2.13 Helmet chin strap and neck protector must be affixed and retained when on the incident ground.
- 2.14 Additional approved accessories are available, however only accessories that are certified with the helmet under the Australian Standard are to be affixed. E.g. visor, torch bracket and torch.
- 2.15 Service Standard 1.2.1 Rank and Ranking Insignia details the colouring and reflective markings for all operational, non-operational, junior and cadet bush firefighting helmets and details the requirements for affixing names on helmets. No other markings are to appear on NSW RFS helmets.
- 2.16 The helmets will be supplied with stripes of lime fluorescent retro-reflective tape around the crown of the helmets. This tape is not to be removed, repositioned or obscured.
- 2.17 Names on helmets are optional if used, the name must be placed centrally across the back as low to the base as possible. Names are to be Helvetica Narrow Bold in reflective lettering.
- 2.18 Only light weight helmets are to be issued to juniors / cadets.
- 2.19 Helmets may be removed when fire fighters are relocated away from the fireground or incident to manage their recovery from working in heat.
- 2.20 Helmets should not be worn inside vehicles

Gloves

- 2.21 The NSW RFS provides a range of gloves to mitigate the risks faced across a variety of operations.
- 2.22 Gloves are to be worn in line with training while undertaking all firefighting activities or undertaking hazardous activities, e.g. fuelling of equipment etc.

Eye Protection

- 2.23 Appropriate eye protection, is to be worn in line with training where there is a risk of eye injury
- 2.24 Sealed eye protection such as googles or Full-Face Respirator, is to be worn in line with training where the NSW RFS Member is exposed to smoke or dust.

Respiratory Protection

- 2.25 Respiratory protective equipment must be considered in line with Service Standard 5.1.9.
- 2.26 Only Flame Resistant (FR) respiratory protection approved by the NSW RFS is to be issued and worn.
- 2.27 Respiratory protection must be worn in line with training when the NSW RFS member is exposed to hazardous levels of smoke, dust, or other respiratory hazards.
- 2.28 All NSW RFS appliances are to carry approved P2 respirators to provide sufficient stock for all seats.

Boots

- 2.29 Firefighting Boots must be worn when undertaking activities on the incident ground or other operational environments.
- 2.30 A range of boot makes and sizes are available to afford a reasonable fit in that both male and female sizes. Made to measure sizes are available.

Protective/ Flash Hood

2.31 This item is to be carried by NSW RFS members on the incident ground.

- 2.32 This hood should not be worn during 'normal' firefighting operations due to the high potential for heat stress.
- 2.33 This hood must be worn as part of protection during an overrun/burn over.

Cold Climate Jacket

- 2.34 This jacket is for use in cold environments and is available for general issue to all firefighters, and is approved for wildland/ bush firefighting and other approved operations.
- 2.35 The jacket provides higher levels of thermal protection, and should be worn with due consideration for the potential for heat stress to develop.
- 2.36 The jacket has an orange collar so that members can distinguish those that are wearing the jacket.

Wet weather clothing - Jacket and Over Pants

- 2.37 Only Wet Weather Clothing approved by the NSW RFS are to be issued and worn.
- 2.38 The jacket and pants can be used in wet weather and is available for general issue to all NSW RFS members.
- 2.39 The jacket and over pants are approved for use on the incident ground but MUST NOT BE worn while undertaking firefighting.

Protective Fire Blankets

- 2.40 Protective fire blankets are required to be carried within the cabin of operational firefighting appliances /vehicles at a ratio of one protective fire blanket per seat.
- 2.41 Protective fire blankets are single use, and are to be replaced after any overrun or medical event.
- 2.42 Protective fire blankets must be kept clean, readily accessible and must not be used for other activities.

SOP P5.1.5-2

Personal Protective Equipment and Personal Protective Clothing – Structural Firefighting

1 Purpose

1.1 This Standard Operating Procedure provides clear and consistent guidelines for appropriate levels of PPC/E for the NSW RFS for structural firefighting.

2 Procedures

- 2.1 All structural firefighting PPE/C is to be worn in accordance with training materials and Fireground SOPs.
- 2.2 The following protective clothing shall be issued in addition to the standard PPE/C For all NSW RFS members who are accredited breathing apparatus operators (BAO) and whose brigade is accredited (refer to SS5.1.9 Breathing Apparatus and associated SOPs) to undertake firefighting using Compressed Air Breathing Apparatus (CABA):
 - a. structural jacket and trousers;
 - b. structural gloves;
 - c. structural helmet;
 - d. protective/ Flash hood;
 - e. Structural firefighting boots.

Structural Firefighting Jacket and Trousers

- 2.3 Structural firefighting jacket and trousers are designed as stand-alone garments.
- 2.4 Name, rank, brigade and qualification badges may <u>only be affixed onto the top flap of the pockets</u> using cotton thread only and be in the locations as follows:
 - a. Brigade name and qualifications: on the top flap of the left hand pocket.
 - b. Name and rank: on the top flap of the right hand pocket.
 - c. Navy/Dark Blue Thread only.
 - d. NOTE: Nothing may be sewn directly onto the structural firefighting jacket and trousers.
- 2.5 Epaulettes are to be fitted to chest using the supplied tab.
- 2.6 No other markings are permitted to be made, sewn or attached to PPE/C unless authorised by the District Manager.

Structural Gloves

2.7 Structural gloves must be worn while undertaking all structural firefighting activities in line with relevant training materials

Structural Helmets

- 2.8 Structural helmets must be worn when undertaking structural firefighting in line with relevant training materials.
- 2.9 Service Standard 1.2.1 Rank and Ranking Insignia details the colouring and reflective markings for all operational firefighting helmets.
- 2.10 The structural helmets will be supplied with stripes of lime fluorescent and retro-reflective tape around the crown of the helmets. This tape is not to be removed, repositioned or obscured.
- 2.11 Names on helmets are optional if used, the name must be placed centrally across the back as low to the base as possible. Names are to be Helvetica Narrow Bold in reflective lettering.

Protective/ Flash Hood

2.12 Protective/ Flash hoods be worn in all structural firefighting operations in line with relevant training materials.

Structural Firefighting boots

2.13 Structural firefighting boots be worn in all structural firefighting operations in line with relevant training materials.

Structural and BA Firefighting Accessories

- 2.14 The District Manager shall ensure that the necessary accessories listed below are supplied to certified Breathing Apparatus equipped brigades, in line with Service Standard 5.1.9:
 - a. Breathing apparatus;
 - b. Distress signal units;
 - c. Personal guide lines;
 - d. Torches;
 - e. BA Control Officer Board and tally tags;
 - f. Spare Cylinders;
 - g. Cleaning equipment.

SOP P5.1.5-3

Personal Protective Equipment and Personal Protective Clothing - Specialised Operations

1 Purpose

- 1.1 This Standard Operating Procedure guidelines for appropriate levels of PPC/E for the NSW RFS for specialised operational activities that members may be trained to undertake.
- 1.2 Specialised operations include Rural Fire Brigade trained members or other members undertaking operational support roles such as:
 - a. Chainsaw operations;
 - b. Community First Responders;
 - c. Working at Heights;
 - d. Trailbike operators;
 - e. Remote Area Operations;
 - f. Marine operations;
 - g. Rescue operators;
 - h. NSW RFS Community Fire Units;
 - i. Aviation personnel and airborne roles;
 - j. Aviation rescue;
 - k. Fire Investigation;
 - I. Building/ Bush Fire Impact Analysis; and
 - m. Other roles as managed through the NSW State EMPLAN.

2 Procedure

- 2.1 Only PPE/C approved by the NSW RFS is to be issued and worn for specialised operational activities.
- 2.2 Specialist PPE/C shall be issued, where required, in addition to standard issue PPE/C (as per SOP5.1.5-1).
- 2.3 Members are to wear PPE/C in accordance with the specialised training completed and in line with relevant operational doctrine. Should these qualifications lapse, members are required to return PPE/C to the Rural Fire Brigade/ District Office.
- 2.4 PPE/C requirements for any specialised operational activities are required to be managed as follows:
 - Headquarters: identify any specialised PPE/C required to mitigate operational hazards faced whilst undertaking these activities through the regular review of operational doctrine and member consultation initiatives.
 - b. Area Commands/ District Managers: oversight of qualifications to ensure members maintain the required training level to undertake specialised operational activities including ensuring the supply and use of relevant PPE/C as required.
 - c. Brigade Officers are responsible for ensuring that an annual check of both Rural Fire Brigade and personally issued PPE/C is undertaken to ensure that it is fit for purpose/ in clean, good working order.
 - d. Where a member of the NSW RFS staff has been issued PPE/C, they are to ensure that it is fit for purpose/ in clean, good working order and report results to their Supervisor annually.