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FORESTRY INDUSTRY BRIGADES

EQUIPMENT SPECIFICATIONS AND GUIDELINES

This guidelines details equipment specifications and guidelines for tankers, slip-on units and protective equipment per person on the fireline



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TANKERS

ITEM	REGULATORY	GUIDANCE
Water carrying and pumping capacity	2,500 litres (minimum) Not less than 5hp firefighting pump	450 litres per minute (minimum) at standard pump duty point complete with priming pump suitable for static filling purposes. Baffled water tank to prevent water slosh from effecting vehicle stability.
Vehicle Capability	Capable of traversing all roads and tracks in the designated area.	4WD tanker with high ground clearance, diesel powered for cab chassis engine and firefighting pump
Safety	Seat belts	Recommended Safety Features for tankers introduced into FIB service post September 2012 and where practical in firefighting vehicles in service pre-September 2012; <ul style="list-style-type: none"> • roll over protection system (ROPS); • roll down crew protection curtains; • woollen blankets – 1 per crew member • intercom system; • diesel powered pump and truck engines; • front sprays; • crew/vehicle protection spray system; • crew deck heat shields; • first Aid Kit; • class “A” Foam safety handling kit – where applicable; • work lights and reflective safety striping. • low water warning system • VHF radio with CFA frequencies. • CFA radio procedure sticker • hazardous tree kit <ul style="list-style-type: none"> ○ Only appropriately, qualified or experienced personnel can carry out a hazard tree assessment. This does not preclude any other personnel from identifying a hazard tree and treating it appropriately (e.g. establish exclusion zone and communicate hazard). JSOP-SOP J8.03
Delivery hose & nozzles 	30m of 19mm hose connected to a firefighting nozzle.	38 mm hose is mainly used on tankers for delivery purposes and is more suitable for pumping water over longer distances. <ul style="list-style-type: none"> • 38mm x 5m hose (where crew operate on deck). • 38mm hose fitted with external lug couplings. 64 mm hose for tank filling from a quick fill pump or hydrant.



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		<ul style="list-style-type: none"> • 64mm x 15m hose with 65mm Storz couplings • 30m of 19mm or 25mm hose with 38mm external lug couplings on live reel.
<p>Suction hose & Equipment</p> 		<p>Suction hose to match the performance of the pump.</p> <ul style="list-style-type: none"> • Hard Suction hose • Suction coupling spanners • Suction strainers • Suction float assembly • Suction strainer basket • Rope lines
<p>Small gear</p>		<ul style="list-style-type: none"> • 38 mm hose strangler. • 38mm three way controlled dividing breeches, • 38mm branches and nozzles
<p>Hand tools</p>		<ul style="list-style-type: none"> • rake hoes • shovel • axe • chainsaw with fuels and appropriate safety gear • drip torch
<p>Welfare</p>		<ul style="list-style-type: none"> • ration packs for the crew sufficient for a full shift • electrolyte supplement and drinking water sufficient for a full shift <ul style="list-style-type: none"> ○ the recommended ratio of water to electrolytes is 2:1 depending on workload. 1200ml of water and 600ml of electrolyte per hour



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SLIPON UNIT




ITEM	REGULATORY	GUIDANCE
Water carrying capacity	800 Litres (aggregate) Not less than 5hp firefighting pump	<ul style="list-style-type: none">• 300 litres per slip-on (minimum)
Vehicle Capability	Capable of traversing all roads and tracks in the designated area.	Diesel powered 4WD vehicle with high ground clearance.
Safety	Seat belts	<ul style="list-style-type: none">• woollen blanket per crew member;• fog nozzle for crew protection;• portable first aid kit.• VHF radio with CFA frequencies.• radio procedure sticker• work lights• hazardous tree kit –<ul style="list-style-type: none">○ Only appropriately, qualified or experienced personnel can carry out a hazard tree assessment. This does not preclude any other personnel from identifying a hazard tree and treating it appropriately (e.g. establish exclusion zone and communicate hazard). JSOP - SOP J8.03
Delivery hose & nozzles	30m of 19mm hose connected to a firefighting nozzle	<ul style="list-style-type: none">• 30m x 19mm with 38mm external lug couplings on live reel.• 38mm external lug branch and nozzle suitable for bushfire.
Suction hose & Equipment		Suction hose to match the performance of the pump. <ul style="list-style-type: none">• hard suction hose fitted with strainer
Hand tools		<ul style="list-style-type: none">• rake hoes• shovel• drip torch (optional)
Welfare		<ul style="list-style-type: none">• ration packs for the crew sufficient for a shift• electrolyte supplement and drinking water<ul style="list-style-type: none">○ the recommended ratio of water to electrolytes is 2:1 depending on workload. 1200ml of water and 600ml of electrolyte per hour.







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PROTECTIVE EQUIPMENT

(Per person on the fire line)

ITEM	REGULATORY	GUIDANCE
<p>Protective Clothing</p>  <p><i>CFA jacket and overtrousers</i></p>	<p>Flame retardant (Proban) treated cotton drill two-piece ensemble (preferred) or overalls able to cover upper and lower body, arms and legs to: AS/NZS4824 (Int-2006).</p> <p>They are made from a lightweight cotton fabric which has been treated with a flame retardant preparation (PROBAN®). The fabric is brightly coloured and has reflective strips for increased visibility.</p>  <p><i>FFMvic overalls</i></p>	<p>Protective Clothing worn to protect against:</p> <ul style="list-style-type: none"> • radiant heat; • minor burns; • sunburn; <p>Large collar, which may be drawn up to protect the neck, lower head and ears. Closures at the wrist and ankle, when worn correctly, provide protection against embers and radiant heat.</p> <p>Both variations are designed to be worn over minimal under garments. For example, Polo-shirts, shorts and cotton or lightweight woollen trousers are the normal under garment combination. It is important to keep undergarments as light and loose fitting as possible, again to ensure sufficient airflow to aid cooling.</p> <p>Personal protective clothing provides the primary protection against risks to life in a burn over situation. Secondary measures such as heat shielding, protective blankets and/or water sprays also assist in performing this function</p>
<p>Head protection</p>	<p>Rural firefighters' helmet to AS/NZS1801 (type 3) specification with 25mm reflective tape.</p>  <p><i>CFA helmet</i></p>	<p>A helmet worn to protect head from:</p> <ul style="list-style-type: none"> • radiant heat; • high temperatures; • ash and embers; • impact and puncture injuries; for example, falling tree limbs or rocks; • splash from Class A foam, wetting agents and chemicals (retardants); • being struck by hand tools; • contact with electrical hazards; and • steam or scalding water created by firefighting. • brims to direct water and embers away from the neck
<p>Eye Protection</p>	<p>Safety goggles to AS/NZS1337 specification.</p>	<p>Bushfire/smoke goggles offer the best protection. They have impact and heat resistant lenses, exclude airborne particles and can be worn over glasses. There are "oversize" goggles available to use with prescription glasses.</p>
<p>Foot Protection</p>	<p>AS/NZS4821 Protective Footwear for Firefighters.</p>	<p>Boots designed to protect feet from:</p> <ul style="list-style-type: none"> • some chemicals;

		<ul style="list-style-type: none"> • radiant heat; • burning embers and hot coals; • impact by heavy objects, the boots have steel toe caps; and • sharp objects, cuts and abrasions; • increase grip on wet and oily surfaces; • keeps feet dry; and • provides support for the foot and ankle. <p>Firefighting boots have heat resistant soles, are made of leather, have a high lace up and have a safety toe cap.</p>
<p>Hand Protection</p>	<p>To AS/NZS2161.6 - 2003</p> 	<p>Gloves feature an all-leather construction with an extended wrist cuff.</p> <ul style="list-style-type: none"> • protect the hands from abrasions, cuts, wounds, burn injuries, splinters and blisters; • prevent the risk of cross infection when handling casualties (if double gloved using a nitrile glove on the inside); • reduce exposure when handling foam solution or other firefighting chemicals; • increase grip; • protect against heat; and • provides protection to the wrist. <p>Note: gloves must be appropriate for their intended use and correctly fitted.</p>
<p>Respiratory Protection</p> 	<p>To AS/NZS1715 and 1716 specification</p> 	<p>Respiratory protection against atmospheric contaminants (particulates) at bushfires can be provided by wearing an approved particulate filter mask which removes contaminants from the air that you breathe.</p> <p>P2 particulate filter masks should be worn when working to prevent the inhalation of particulates contained in dust, exhaust fumes and smoke.</p> <p>P2 nuisance level organic vapour respirator is to be used when decanting Class "A" foam concentrate to prevent the inhalation of vapours. It must be correctly fitted and adjusted to ensure a tight seal.</p> <p>Note: this respirator must not be used when firefighting</p>
<p>Other</p>		<p>Hearing protection, such as earmuffs or earplugs, should be worn when operating or working near equipment and machinery such as chainsaws, pumps, bulldozers and aircraft etc.</p>