# **Buronga Landfill**

**Emergency Response Plan** 

September 2024

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# 1 Introduction

## 1.1 General

This Emergency Response Plan (ERP) aims to provide information and response procedures on the foreseeable on-site and off-site emergency situations including fire events and other incidents that may occur at the Buronga Landfill as well as during the transportation of waste to the site.

Emergencies can arise from a number of causes and a prompt, effective and organised response by employers, employees and contractors to such emergencies is essential to the health and safety of all persons concerned.

This ERP consists of guidelines and procedures to be followed in the event of an emergency. Our first priority is to ensure the safety and wellbeing of employees, contractors and visitors and then respond to the crises appropriately according to the guidelines within this document.

Although the information provided herein is not exhaustive, the ERP identifies key occurrences that may endanger the public or the environment and outlines the risk control measures that would need to be implemented by Buronga landfill in order to safely mitigate potential risks to the health and safety of employees, contractors, visitors, clients, firefighters and other first responders. It is important that all employees are familiar with the information provided and that they understand that they have a responsibility and duty of care to themselves, their fellow workers, subcontractors, visitors to the site, Council and the environment.

In the event that an emergency occurs, the employees will be required to assist in implementing the emergency response procedures applicable to where the emergency has occurred.

Section 9 provides an up to date list of contact names and relevant authorities who may be contacted in the event of an accident or incident.

The ERP also emphasises the need to accurately record or document the accident or incident as soon as possible. This information will be very important and useful when the time comes to investigate and analyse the matter to determine the cause and to see what lessons can be learned for the future.

## 1.2 Purpose

The purpose of this document is to;

- Promptly provide appropriate attention to the emergency;
- Put in place procedures, plans and training programs;
- Minimise the number of injuries and illnesses;
- Ensure compliance with legislative obligations;
- Make safe any area or equipment involved in an incident;
- Provide advice, support and assistance where required;
- Provide support and counselling to witnesses and employees who are affected by the incident;
- Protect the Council's reputation and sensitivity when dealing with reporters and the media;
- Minimise the Council's exposure to prosecution or action for damages by assisting as required by law, police and WHS legislation;
- Ensure that factual information about the incident is collected without prejudice;
- Report and record information so that the necessary people are notified and correct records are kept; and
- Investigate, analyse and follow up on the accident or incident to ensure that lessons are learned for the future.

# 2 Background Information

The Buronga Waste Management Centre is owned and operated by Wentworth Shire Council (WSC). WSC currently holds Environmental Protection Licence (EPL) 20209 which covers waste disposal activities (Construction of landfill cells and leachate and stormwater collection systems) and resource recovery activities (recovered aggregate processing and storage / Waste storage) at the site and is under the development processes of the expansion to the site under a Development Consent Application Number: SSD 10096818.

The primary regulatory requirements for the operation of the site are:

- NSW Department of Planning, Industry and Environment, 2023, Buronga Landfill Expansion Development Consent, 19 July 2023, Ref: SSD-10096818 (the Development Consent);
- NSW EPA, 2023, Environment Protection Licence 20209, Licence Version Date 8 March 2023 (the EPL);
- NSW EPA, 2016, *Environmental Guidelines, Solid Waste Landfills*, Second Edition, April 2016, Ref: EPA 2016/0259 (The Landfill Guidelines);
- Waste Avoidance and Resource Recovery Act 2001 (NSW) (WAAR Act 2001);
- Protection of the Environment Operations Act 1997 (NSW) (the POEO act 1997);
- Landcom, 2004. Managing urban stormwater: soils and construction, Volume 1, Match 2004, 4<sup>th</sup> edition.

These documents play an important role in the management and operation of the site, particularly with regard to environmental emergency situations.

It is expected that waste tonnages accepted at the Buronga Landfill will increase as it becomes a regional waste facility. WSC are currently licenced to receive up to 100,000 tonnes/year at the Buronga Facility with up to 89,000 tpa disposed of at the facility. A further 10,000 tpa of recyclable inert material can be received at the site along with 500 tpa of both asbestos containing material and tyres.

All waste and recycling material entering the facility is received at the weighbridge where it is screened and categorised prior to being directed to the appropriate area of the site.

Waste material that is not approved under the EPL is rejected and excluded from entering the site and a record of the event is entered in the Excluded Waste Register.

# 3 Emergency Response Plan Principles

This Plan has been written in plain English (everyday language) so that it is easy to understand. The aim of any Emergency Response Plan is for it to be appropriate to the size and complexity of the site, the number of employees involved and the types of activities undertaken on the site.

This Plan will apply not only to the landfill premises but will also take into account activities that will occur outside the premises such as the transportation of waste and other materials to and from the facility. It is acknowledged that accidents and incidents that occur as a result of their association to the landfill operation, will be the responsibility of the landfill management.

Effective implementation of this Plan requires support from all levels of management. The Plan will be communicated to all facility employees and will be reinforced at regular Toolbox meetings.

A user-friendly guide (abridged version of this Plan) will be developed and displayed to assist employees in emergency response. The abridged version will be displayed in the Site Office and will include details of:

- contact names and telephone numbers to be used in the event of an emergency;
- a drawing showing the location of the Emergency Evacuation Point(s) (refer Appendix A);
- Emergency Response Procedures; and
- the Organisation Chart of the Buronga Waste Management Centre.

Responsibility for implementing and maintaining the Plan rests with the Waste Team Leader. The Waste Team Leader will ensure that all employees read and understand the Plan during their induction at the time of initial employment. Sections of the Plan will be sampled regularly with the entire Plan being tested at least every two years. An Emergency Response Team and Safety Committee will be established with responsibility to meet and discuss any problems that may have been identified during practice runs and to put forward amendments to the Plan where necessary.

It is important to note that emergencies do not only affect personnel working on the site. Emergencies can also impact on the environment and neighbouring properties.

In landfills and activities associated with the handling, transport and processing of waste materials, the two most significant environmental emergency situations that can occur are leachate spills and fires. Leachate spills have the potential to contaminate water ways and fires can threaten humans and property and result in the emission of toxic fumes into the atmosphere.

Effective emergency response procedures are essential in the management of any operation and regular training of all employees and contractors is necessary to ensure their safety and well-being as well as provide them with the necessary skills to act appropriately and promptly in all situations.

The Emergency Response Plan is a "living" document and is therefore subject to regular and continuous review and improvement to keep it up-to-date and in line with best practice.

# 4 Emergency Procedures (General)

In the event that an emergency occurs, all employees will be required to assist in implementing the emergency response procedures applicable to where the emergency has occurred. The Waste Team Leader should always be notified immediately while, in the case of a serious injury or medical emergency, 000 should also be contacted as soon as possible.

### 4.1 Landfill Activities

In the event of an emergency within the landfill site, the following procedures should be followed by everyone on site:

- a) Remain calm, don't panic;
- b) Cease all non-emergency communications;
- c) Notify the Manager;
- d) Stop work in the area of the emergency and if necessary on the site as a whole;
- e) Evacuate the area of the emergency, and if necessary, the site as a whole;
- f) Assess the dangers at the emergency scene;
- g) Seek assistance from the appropriate emergency services (Fire, Ambulance, Police) where required by calling 000; and
- h) Administer first aid if necessary, and if safe to do so.

Where applicable the Waste Team Leader or the WHS Officer will notify the relevant regulatory authorities such as SafeWork NSW and the Environment Protection Authority.

Do not attempt to transport someone needing emergency medical treatment to a hospital. Call 000 and act on their advice.

#### 4.2 Waste Transportation

In the event of an emergency associated with the transportation of waste, the same procedures will apply.

A typical incident with the transportation of waste is that the vehicle is involved in an accident resulting in injury to the driver(s) and exposure of the waste to the environment, that is, the waste has spilled onto the road or adjoining property.

In such an instance it is important to also notify Council Management and the relevant authorities and seek assistance from the emergency response service providers.

Containment of the waste is essential and this should be accomplished as soon as practical. However, it is important that the waste type should be identified before action is taken to contain and collect it. If the waste is hazardous, it should only be handled by trained personnel using appropriate procedures and equipment.

# 5 Responsibilities

## 5.1 Waste Team Leader

The Waste Team Leader will be responsible for the overall management of the site including compliance with the Consent Conditions, Workplace Safety and environmental compliance.

Prevention of accidents and incidents is the responsibility of all managers and maintaining a clean and tidy site is one of the most essential preventive actions. Associated with maintaining a clean site is the need to have properly maintained and effective access roads to minimise the likelihood of accidents and enable good access for emergency vehicles in the event of an emergency.

The Waste Team Leader must carry out monthly Toolbox meetings, or as required, with staff and subcontractors to ensure they are aware of their obligations concerning health and safety and that they have a good understanding of the emergency response procedures. Minutes of all meetings will be recorded and kept on file in the Site Office or Weighbridge Office.

The Waste Team Leader is the custodian of the Emergency Response Plan and has overall responsibility for the following:

- Implementation, testing, training and reviewing the effectiveness of the Emergency Response Plan;
- Assess the extent of any incident to determine the severity of the situation and whether or not it constitutes an emergency;
- Ensuring adherence to the Emergency Response Plan in cases of emergency;
- Coordinating all emergency response activities in consultation with operational team as necessary;
- Contacting the relevant Emergency Services organisation;
- Reporting to the Council General Manager or other representatives;
- Ensuring that all relevant training is provided and kept up to date for employees;
- Ensuring all subcontractors are appropriately trained and have the correct operation licences;
- Advising the relevant external authorities in order to ensure that the company's obligations are met following a serious incident;
- Contacting family and/or next of kin; and
- Arranging counselling.

Following an emergency, the Waste Team Leader is responsible for:

- Directing any external enquiries and media on site or in the case of vehicle incidents and any other site media inquiries to the General Manager;
- Declaring the emergency to be over;
- Initiating a post incident review/investigation of events as per the requirements of WPP136;
- Reviewing the effectiveness of the Emergency Response Plan in managing the incident;
- Ensuring all lessons learned are captured and used in the review of all relevant plans and procedures; and
- Recommending any changes or improvements to the Manager.

### 5.2 Emergency Response Team

The Waste Team Leader will establish an Emergency Response team for the site and activities associated with the site. In the case of the Buronga Waste Management Centre, the Team should ideally consist of the Waste Team Leader, the First Aid Officer and one other person who can hold the position for a two year period after which time another person will be elected to the role. These people will be responsible for assessing the situation and provide instructions to other employees on the site.

All employees will be required to follow the instructions given by the Emergency Response Team.

### 5.3 First Aid Officer

The Waste Team Leader, where practicable, must ensure that a trained and accredited First Aid Officer is on site at all times. This person can be an employee who has undergone the necessary first aid training. Employees who are appointed to this position will report to the Waste Team Leader.

The duties of the First Aid Officer include:

- Assuming the role of the Waste Team Leader in his/her absence during an emergency;
- Rendering first aid to the injured or those in need of assistance;
- If possible, collect information from the injured person or persons regarding the incident;
- Cooperating with the Emergency Response Team; and
- Following all emergency response procedures.

First aid officers are generally trained to cope with an emergency situation. The following steps are recommended in all emergencies:

- 1. Do not rush to the scene. Move quickly and calmly.
- 2. Check for any life-threatening situation and remove or control it, if safe to do so.
- 3. Administer First Aid in accordance with level of training. In the event of injury involving blood or body fluid loss, the following must apply:
  - Wear appropriate PPE safety glasses or goggles, disposable apron, rubber or nitrile gloves;
  - Minimise the number of people in the area;
  - Dispose of blood soaked dressings, bandages, swabs and materials used to clean up in a plastic bag for disposal; and
  - Dispose of such materials in the clinical waste bin.
- 4. Phone an ambulance. 000 from a landline or 112 from a mobile.
- 5. If required, send someone to the front gate to escort emergency services.
- 6. Contact a member of the management team if not already done.

### 5.4 Workers

All staff are required to:

- Cooperate with the Waste Team Leader or First Aid personnel and follow their instructions; and
- Follow all emergency response procedures.

## 5.5 Contractors/Site Visitors

All contractors and visitors to the site must cooperate with the Waste Team Leader or the person delegated to stand in for the Waste Team Leader, and follow instructions in accordance with the Site Induction procedure.

Responsibility for the safety and well-being of contractors and visitors to the site at the time of an emergency rests with the Waste Team Leader or the person next in charge in the event of the absence of the Waste Team Leader.

### 5.6 First Person on the Scene

The role of the first person at the scene of an accident or incident is very important and it is essential that this person remains calm while assessing the situation. The first person on the scene is responsible for assessing the situation and communicating it to management and the relevant authorities Each situation will be different therefore the following guidelines only provide a broad course of action:

- 1. Evacuate the area if unsafe to remain there;
- 2. Check for any life-threatening situation and remove or control, if safe to do so,
  - a. e.g. check for electrical cables laying around the person and disconnect power supply, get expert advice on how to deal with snakes or other dangerous insects or animals, isolate moving equipment, etc.;
- 3. In the event of an injury:
  - a. If the injured person has been involved in a vehicle accident or vehicle roll over, make sure the vehicle is stable before attending to the injured person. Turn the engine off and if possible, isolate the battery;
  - b. Stay with the injured person if possible, talk to them and try to comfort them;
  - c. Alert the Waste Team Leader and / or a first aid officer for medical help. Advise the type of injury, how bad it is, where you are and the number of people injured;
  - d. Do not move the person unless they are exposed to a life-threatening situation;
- 4. If safe to do so, stay and wait for the emergency team to arrive and direct them to the area; and
- 5. In the event of a waste spill outside the premises, attempt to identify the waste material and convey that information to management and the relevant authorities.

### 5.7 After Hours Response

Where an after-hours emergency situation is identified, Council has put in place the following measures to ensure a prompt response to the situation:

- Council will establish an after-hours call-out roster
- The emergency contact phone number will be displayed on the front gate and on the Landfill information sign board.
- The after-hours notification will be forwarded to Council's security monitoring provider who will contact the relevant on-call staff member and or the Waste Team Leader.
- The emergency fire services will be provided with a key to access the site if the on-call staff member is not present when they arrive.
- A key safe that houses the keys to the mobile plant and the generator is located inside of the crib room.
- On-call staff and/or the Waste Team Leader will provide any assistance requested by the emergency service. Additional staff will be called in if required to assist.
- In the event of a fire emergency, the Waste Team Leader or the on-call staff member will call the EPA incident notification line on 131 555 to advise of the emergency situation within 24 hours.
- All on-call staff will be inducted and trained in the operation of the on-site plant, generator & water storage supply.

# 6 Emergency Situations

### 6.1 Medical Attention Situations

Where possible a trained First Aider will administer assistance to the level of their training and competence. If, however, the First Aider feels they cannot adequately cope with a situation then medical assistance should be sought by calling 000.

The following conditions must be referred for further medical assistance:

- Anyone who requires CPR;
- Anyone complaining of chest pain or other related heart conditions;
- Anyone with chest injuries particularly if rib cage is involved;
- Anyone with breathing difficulties, e.g. asthma attack;
- Anyone who has lost consciousness for any length of time;
- Anyone suffering from shock;
- All cases of severe bleeding;
- Anyone with sever heat exhaustion;
- Any wounds or incision that require stitches;
- Amputations;
- Bites and stings if a significant adverse effect is experienced;
- All eye injuries foreign bodies that cannot be dislodged, metal fragments or burns to the eyes;
- Foreign bodies that cannot be dislodged without trauma;
- Limb injuries involving a suspect fracture or dislocation;
- Suspected spinal injuries;
- Head and facial injuries including burns;
- All full or partial thickness burns greater than a 20c piece including electrical burns;
- All electrical burns and shocks should be referred to a doctor;
- Bleeding from the ear and foreign bodies in the ear; and
- Poisoning.

### 6.2 Environmental Incidents

In accordance with conditions of the Environment Protection Licence, the Council is required to notify the all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident.

Council must provide written details of the notification to the EPA within 7 days of the date on which they became aware of the incident.

Incidents that require reporting include, but are not limited to:

- Any fire;
- Spills involving waste/leachate which can result in environmental harm;
- Release of potentially contaminated leachate or stormwater to receiving waters;
- In the event that monitoring results exceed, or is reasonably expected to have exceeded licence limits; and
- Incidents which may have public health consequences or cause nuisance.
- Discovery of unreported asbestos

The Waste Team Leader is required to assess the extent of any environmental incident to determine the severity of the situation and whether or not it constitutes an emergency.

Environmental incidents can also occur as a result of illegal waste being delivered to the landfill. This can occur where the illegal waste is not discovered at the weighbridge because it is mixed in with other waste material.

Where the landfill operator is aware of such an incident, the Waste Team Leader must be notified and the waste identified.

The Waste Team Leader will be responsible for seeking advice on how to manage the situation.

Where unreported / unidentified asbestos containing materials are discovered, the Waste Team Leader will ensure the area it isolated and contained and the material is kept moist or covered. The appropriate regulatory authorities will be notified and a licensed asbestos removalist contracted to undertake the clean-up of the area.

## 6.3 Breach of Cell Liner

Staff members believing they have detected or inadvertently caused a breach of the cell liner onsite will contact the Site Supervisor immediately. The following procedure should then be followed:

- The Site Supervisor will investigate the report immediately and advise the Site Manager of their findings.
- The relevant consultants will be contacted to inspect and assess the suspected damage.
- The Site Manager upon advice from the site engineering consultants will initiate all required temporary works necessary to minimise the escape of leachate or landfill gas.
- The Site Manager will notify the EPA.
- The Site Manager, in consultation with the site-engineering consultants and the EPA will devise and implement all necessary repairs.
- The Site Manager will submit a report to the EPA outlining the incident, its repair and measures taken to prevent a re-occurrence.

### 6.4 Delivery of Illegal Waste

In the event that wastes not permitted for disposal are delivered to the site, the person who detects the prohibited substance will notify the Site Manager immediately. The prohibited substance will be kept separate from the tipping face arrangements will be made for the collection and proper disposal of the waste. The EPA will be notified and procedures checked in relation to the collection system to ensure it does not occur again.

WSC policies and procedures are designed to keep known hazardous wastes from ever being received at a disposal facility; however, hazardous or "questionable" waste may be transported to a site inadvertently at any time. It is the responsibility of every site employee to be aware and to ensure that questionable wastes are recognised, identified and that the proper appropriate action is taken.

WSC will train their staff in the identification and appropriate procedure to follow when a questionable waste is identified.

In the event that illegal waste is detected, the following procedures will be implemented:

- Secure area, notify the dispatcher and Site Supervisor;
- Put on the personal protective equipment if not already being worn;
- Secure and/or seal the leaking container to prevent any further escape of asbestos fibres;
- Spray the spilled asbestos with the wetting agent (i.e. water);
- Using a hand broom and shovel or similar equipment, collect all visible signs of wetted asbestos and place it in the 6mm polyethylene bag provided for spills. For spills on soil, it is advisable to also scoop up a small layer of soil that may have been contaminated;
- Seal the bag and affix an asbestos warning label if it is not already marked;
- Liaise with the EPA on the transport and disposal of the illegal waste.

### 6.5 Landfill Gas Leak or Accumulation

All personnel will be made aware of the possible dangers of landfill gas, which are highlighted as follows:

- Ignition/explosion from methane gas when at concentrations of between 5% and 15% (vol/vol);
- Asphyxiation; and
- Poisoning from carbon dioxide, hydrogen sulphide and trace components.

Asphyxiation risk is always present when persons enter a confined space. Certified gas detection equipment will be used at all times. No one will enter a confined space where the oxygen content of air is below 18% by volume unless authorised by the manager in writing and all PPE equipment

is supplied. OH&S Regulations on confined space entry will be followed at all times and only personnel trained in confined space entry will be allowed to enter confined spaces.

#### 6.5.1 Leachate Spill

In the event that an environmental emergency occurs due to a leachate spill the Waste Team Leader must take the following actions:

- Contain the spill to prevent it coming in to contact with clean water or spreading off site;
- If contamination has occurred, contain the spill to prevent further contamination;
- Turn off any pumps connected to the pipes associated with the leachate;
- Repair any damaged plant and equipment associated with the spill; and
- Remove the leachate by pumping it into the leachate storage dam.

#### 6.5.2 Management of Spills

At Buronga Landfill, there are two distinct areas in the form of the public drop off area and the landfill. The approach to the management of spills is similar across both areas.

Control measures and procedures will be established to counter spills if and when they occur. Dry sand or other absorbents may be used for such purposes. WSC will have appropriate materials stored on site that are needed to clean up potential spills as identified above. WSC will ensure that staff will be adequately trained in spill management techniques. Areas where items such as oils, batteries, etc., are stored will be bunded and placed undercover to minimise the potential for impacts on the site. Any spillage of waste outside of the landfill cells will be removed as soon as it is practical.

Equipment will be available for removing large spillage of solid waste material at the site including a front-end loader and site truck. To supplement this equipment, hand operated equipment such as brushes and shovels are also provided for small spillages.

Emergency situations involving the spillage of unauthorised waste, including hazardous wastes, or other materials will be avoided by the following provisions:

- control of vehicles entering the facility;
- inspection of waste prior to, and during, discharge; and
- training of staff.
- WSC will develop a spill control plan as part of the emergency response plans for the facility.

#### 6.5.3 Fire Prevention / Preparedness

To reduce the risk of a waste fire on site the following measures should be implemented. The Waste Team Leader must ensure that all workers and contractors are aware of and trained in the control measures:

- No materials shall be intentionally burned on site.
- Signs should clearly inform the general public that flammable liquids are not permitted on the site.
- Stockpiles of approved amounts of combustibles and composting (such as tyres, wood or vegetation) will be divided into small piles, tyres stockpiles shall not exceed 50 tonnes at any time and shall be located in a clearly defined area away from the tipping face.
- All sealed or contaminated drums are banned from the landfill unless they are delivered as a specific consignment, the contents of which clearly identified and suitable for acceptance.
- All fuels and flammable solvents for operational use will be stored in an appropriately ventilated and secure store located on unfilled land. All flammable liquids will be stored within a bund that has a capacity of 110 % of the volume of the flammable liquids so that any release of raw or burning fuel will not cause a fire in the filled waste or affect stormwater.
- Flammable solid wastes are not stockpiled at the premises in excess of the quantity limits imposed on the EPL.

- Fire breaks will be constructed and maintained around all filled areas, stockpiles of combustibles, gas extraction equipment and site buildings.
- Fire- fighting equipment will be installed at the site, including at flammable waste storage areas.
- All firefighting equipment will be clearly signposted and access to it must be available at all times.
- All firefighting equipment will be maintained according to a regular schedule at a minimum visual check weekly with testing on the equipment undertaken as required by law.
- The Waste Team Leader will monitor the predicted daily weather conditions and weather warnings and implement necessary controls as per the extreme weather policy.
- All staff must monitor the waste for the early detection of signs of overheating or combustion.
- All staff will undertake training and refresher training as required, in the fighting of waste fires, including first attack response.
- The Waste Team Leader is responsible for conducting of 6 monthly fire emergency & evacuation drills
- Commercial waste delivery vehicles can only unload their waste in the cell under the supervision & direction of a landfill operator. The deposited load must be broken open and inspected by landfill staff, during the disposal process to minimise the unauthorised and likely flammable material disposal

## 6.6 Fire Event

In the event of a fire occurring at the site, WSC will take prompt action to extinguish the fire. WSC will notify the EPA as soon as practical after becoming aware of the fire.

WSC will co-operate fully with the Fire Brigade in fighting fires on the site. The health and safety of workers is paramount. Fighting the fire must only be undertaking if it is safe to do so and with the aim of containing the fire, or extinguishing the fire if possible, until emergency services take control of the fire site. In the event of a fire:

- Immediately alert the gate house on the UHF radio and advice the Waste Team Leader or most senior person on site, if you undertaking a first attack response to the fire and which staff members are involved.
- All other non-essential persons and mobile plant must be evacuated from the area of the fire and all persons assembled at the emergency assembly area.
- The Waste Team Leader or the most senior person on site, will assess the fire situation, direct what actions are to be undertaken and alert the emergency services (000), if required.
- If required, access to the site must be restricted and a person assigned to man the front gate to direct the emergency services on arrival.
- If it is safe to do so apply sufficient water to suppress the fire from the up wind side of the fire.
- WSC shall take all reasonable measures to prevent water that has been used to extinguish fires from entering the stormwater system.
- Once the fire has been suppressed, using heavy vehicles with an enclosed cabin and operating on the up wind side of the fire, separate the burning material and create a fire break. The use of a respirator may also be required.
- After the burning material is separated, apply further water or smother with soil.
- When the emergency services have arrived, hand over the firefighting to them and render any assistance as requested.

### 6.6.1 Personal Protective Clothing and Breathing Apparatus

While the following guidelines provide suggestions for protective clothing and equipment, the fire brigade has full discretion to utilize any equipment or safety measures they deem necessary, based



on their expertise and experience, to ensure the safety of personnel and effective response to fire incidents.

All personnel involved in fire response activities where the NSW Rural Fire Service attends utilise appropriate Personal Protective Equipment (PPE) as specified by the NSW Rural Fire Service Standards and any additional safety measures deemed necessary by the fire brigade. The following standards will apply:

**Personal Protective Clothing**: All firefighters and personnel responding to a fire event onsite must wear personal protective clothing that complies with NSW Rural Fire Service Standard 5.1.5. This is included in Appendix B.

**Breathing Apparatus**: Personnel exposed to potential smoke inhalation or other airborne hazards during fire suppression activities must use breathing apparatus in accordance with NSW Rural Fire Service Standard 5.1.9. The breathing apparatus must provide sufficient protection against toxic fumes and ensure safe respiration in hazardous environments. This is included in Appendix C.

In addition to these standards, any other protective measures recommended by the fire brigade or emergency response authorities will be implemented to ensure the safety and well-being of all personnel during a fire emergency.

#### 6.6.2 Landfill Fire

If the fire is a Landfill fire, the following methods are to be used:

- Smother the material with soil;
- Use dry powder or CO2 extinguishers in the first instance; and
- Seek advice from the Site Manager before using water (some materials are not compatible with water).

Only trained operators with appropriate PPE would be utilised. Extreme care must be taken when fighting a landfill fire as smoke and fumes may be toxic.

#### 6.6.3 Equipment Fire

If the fire is an Equipment fire, the following methods are to be used:

- Fire detection and alarm system;
- Activate fire suppression system (where fitted); or
- Extinguish with dry powder or CO2 extinguisher; and
- Do not use water. Isolate batteries at earliest convenience.

Another cause of equipment fire is litter, which can build up on exhaust and manifold. To avoid this possibility, staff must ensure that machinery is cleaned and inspected regularly.

#### 6.6.4 Fuel Storage Fire

If the fire is a Fuel Storage fire, the following methods are to be used:

- Always treat fuel storage fires with dry powder or CO2 extinguishers, as water will tend to spread the fire; and
- Endeavour to turn off the valve or stop leak, to stop the supply of fuel to the fire.

#### 6.6.5 Bush and Grass Fire

If the fire is a Bush or Grass fire, the following methods are to be used:

- Extinguish using water or fire beaters.
- Fire breaks will be established inside the perimeters of the site to assist in controlling bush fires from entering the facility.

#### 6.6.6 Building Fire

If the fire is a building fire, the following methods are to be used:

- The nominated fire warden will ensure all staff are evacuated;
- Alert other people and sound the warning alarm;
- Exit the building closing doors behind you, but DO NOT lock them;
- The main power isolation switch will be turned off;
- Once out of the building, stay out. Don't let anybody back into the building;
- If safe, move all vehicles and other equipment as appropriate to a safe area;
- Attend to all people in immediate danger;
- Go to the Emergency Evacuation Point and wait for further instructions; and
- If required, send someone to the front gate to guide emergency vehicles
- If safe, put out small fires using dry chemical or CO2 fire extinguisher. DO NOT turn your back on the fire and DO NOT go any closer than 2 meters to the fire. When using an extinguisher:
  - Pull the pin a sharp tug is required.
  - Aim the extinguisher at the fire.
  - Squeeze the handle to operate the extinguisher.
  - Sweep the extinguisher agent across the fire, but no wider than the width of the fire.
- Once the power is turned off the fire can be extinguished with water;
- If the fire cannot be extinguished readily, call the local fire brigade.

#### 6.6.7 Vehicle Fire

In the event of a person being in a vehicle which is on fire they should:

- If safe, park the vehicle away from buildings and other flammable goods such as fuel tanks.
- Turn off the engine.
- Exit the vehicle and if safe, fight the fire with a fire extinguisher or water truck. Stay upwind of the fire to avoid toxic fumes (toxic fumes can be from burning tyres, cabins etc)
- Inform the Waste Team Leader of the situation.
- If needed contact Fire Services on 000.
- If required, barricade or block off area around the vehicle. Be aware of a chance of burning tyres exploding.
- If required, send someone to the entry gate to guide emergency vehicles

#### 6.6.8 Post Fire

Once the fire has been contained and extinguished:

- Monitor and check for any hot spots
- Continue cooling or smothering the fire as required
- Do not permit more waste to be deposited in area of the fire until the all clear has been provided by the emergency services.
- Participate in any investigation if requested, to identify the cause of the fire.
- Report as necessary.

#### 6.6.9 Decontamination Procedure for Fire Incident Area

After a fire incident, the affected area must be thoroughly decontaminated to prevent further risks. All firefighting water used to suppress the fire will be collected and directed to the site's leachate collection system to prevent contamination of surrounding areas. Once the fire is fully extinguished, any remaining ash or debris will be carefully inspected to ensure no risk of reignition. The ash and non-combustible materials will then be safely disposed of in the landfill.

All steps must be completed with caution, and regular inspections will be conducted during the decontamination process to ensure that the area is fully safe before resuming normal operations.

#### 6.6.10 EPA Notification

The EPA must be notified, as soon as is reasonably practicable, of any incidents causing or threatening material harm to the environment as soon as practicable. A report on the incident is to be forwarded to the EPA and a copy retained on site.

Details provided to the EPA should include:

- The time of the event;
- Location of the event;
- Actions taken to control the situation;
- Suspected cause of the event;
- Actions taken to mitigate any environmental harm and/or environmental nuisance caused by the event; and
- Proposed actions to prevent a recurrence of the event.

EPA Environmental Line - 131 555

### 6.7 Other Situations

#### 6.7.1 Electric Shock of a Person

In the event that a person has received an electric shock, the following steps should be observed:

- Stay at least 10 meters away from wires or objects where wires are touching. Electricity can jump 6 metres if dry and 10 metres if wet.
- If safe and possible, switch the electricity off at the socket and pull the plug out, or turn the electricity off at the fuse box then remove the fuse.
- Call the local electricity company to switch off power supply.
- Call emergency services on 000.
- Bring a dry chemical fire extinguisher close to the location, in case a fire develops. DO NOT use water.
- Calm and reassure the casualty.
- High voltage currents:
  - DO NOT attempt to rescue the person.
  - If the person is conscious, try and establish their injuries by talking to them and provide some first aid suggestions that they could self-administer.
  - For casualties who do not respond, there is nothing you can do.
- Low voltage currents:
  - Find non-conducting objects (newspaper, dry wood, rubber mats, dry cloth), place on the ground and stand on the object.
  - Using a broom, wood, clothing, rope etc, try and move the wire away from the casualty. DO NOT move with your hand or foot.
  - Check response by firmly squeezing their shoulder and calling out loudly.
  - Elevate the casualty's legs except if it causes pain.
  - Loosen clothing around the neck and chest.
  - If the person is thirsty, moisten their lips.
  - Check for and treat other injuries.
- Wait for emergency services.
- If required, send someone to the entry gate to guide emergency vehicles.

#### 6.7.2 Explosives or Unexploded Ordinances

In the event of explosives or unexploded ordinances being discovered, you should:

- Not disturb the explosives and evacuate the immediate area
- Notify the Waste Team Leader or the most senior person on site, who will notify the Police
- Develop an exclusion zone around the explosives in consultation with the Police

- Wait for the Police or Bomb Disposal officers to attend the site and remove the explosives – DO NOT ATTEMPT TO MOVE OR HANDLE THE EXPLOSIVES or ORDINANCES

# 7 Training

The Waste Team Leader is responsible for ensuring that all employees are trained in site safety as a measure of reducing the occurrence of accidents or incidents.

It is the responsibility of all employees and contractors working on the site to be aware of emergency procedures, work in a safe manner and to look after the interests of their fellow workers.

All people involved in emergency control such as the Waste Team Leader and the First Aid Officer or other persons appointed to act in the event of an emergency, should be sufficiently trained and familiar with all aspects of their area of responsibilities.

All personnel will be trained in the requirements of the Emergency Response Plan.

Training will be provided for appropriate persons in the following:

- First Aid;
- Spill Response;
- Evacuation Drill;
- Fire Extinguishers;
- Waste firefighting and
- Any other training required for the purposes of emergency response identified.

The Waste Team Leader will determine the frequency of retraining and any additional training that may be required for emergency response. The retraining period should not exceed six months before the next session. New employees will receive training upon becoming employed.

The Manager Human Resources will maintain a record of training (Training Matrix) undertaken by all employees and contractors working on the site as well as their competencies, including licences, attained over their working career. The Training Matrix or Record of Training contains details of who was provided training, when it was undertaken and the frequency in which retraining should be provided.

It is the Waste Team Leader's responsibility to ensure that all operational staff undergoes site induction and general environmental due diligence training. The Waste Team Leader is also responsible for completing and maintaining records of operator inductions.

# 8 Evacuation Procedures

The facility's designated Emergency Evacuation Point is the weighbridge. This is the place that all persons on the site, employees, contractors and visitors, must assemble when they hear the emergency warning sound.

The Waste Team Leader will carry out Emergency Evacuation Exercises at least once every six months as a means of testing the effectiveness of assembling all persons on the site at the Emergency Evacuation Point in the event of an emergency.

The minimum evacuation distance from any fire related matter where the NSW Rural Fire Service comes to site will be 30m with downwind separation distances to be increased depending on the conditions.

Through their induction and emergency training, all employees and contractors will be aware of their responsibilities in the event of an emergency. However it is important that these responsibilities be reinforced regularly, particularly at Toolbox Meetings.

# 9 Emergency Response Equipment

All emergency response equipment will be serviced and maintained in accordance with relevant Australian Standards and/or manufacturer's instructions.

Regular training will be carried out to ensure that all site operational employees can operate the equipment.

The equipment will include as a minimum:

- Fire extinguishers for electrical fires and other materials;
- Fire hose, pump and water tank; and
- Operational machinery such as a dozer and FEL/Backhoe.

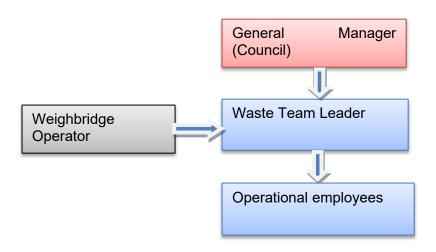
# 10 Emergency Contacts

Emergency contacts for the site are as follows:

Role	Telephone Number
Emergency Services (Ambulance, Fire, Police, SES)	000
Council Administration	03 5027 5027
Waste Team Leader	0429 342 119
Gate House	03 5022 0145
Local Hospital	03 5022 3333
After-Hours	03 5027 5027

## **10.1 Organisation Chart**

The organisational structure below shows the hierarchy of personnel responsible for activities at the Buronga Waste Management Centre and reflects the reporting hierarchy to be followed in the event of any incident. Operational aspects are reported at the Waste Team Leader level with policy based reporting being made by the General Manager and Council.



# 11 Records and Reporting

Council must maintain a number of records and prepare reports as appropriate. Reports to be kept on site are:

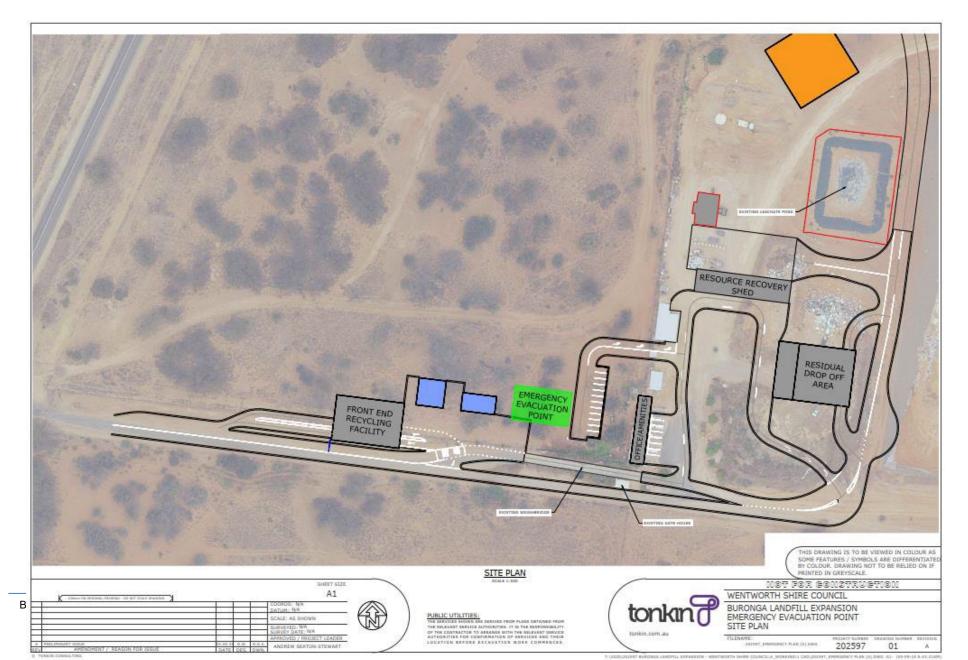
- Daily diary, which is to be used daily for recording events and other daily activities. The Daily Diary is a legal document which can be called upon in a Court of Law and therefore must be kept up to date at all times.
- Training Matrix prepared by the Manager Human Resources and updated regularly. It will cover the training and competency records of all employees and contractors engaged in work on the site (refer to Section 7).
- Minutes for all Toolbox Meetings.
- Inspection check sheets.
- Induction records.
- Incident reports.

The Waste Team Leader is required to notify the EPA of incidents causing or threatening material harm to the environment within 24 hours. A report of such events must be prepared for the EPA.

# 12 References

- 1.1 NSW EPA Environmental Guidelines Solid Waste Landfills (2016)
- 1.2 Tonkin (2024) Buronga Landfill Landfill Environmental Management Plan
- 1.3 Environment Protection Licence No 20209
- 1.4 Workplace Health & Safety Act 2011
- 1.5 Workplace Health & Safety Regulation 2017

# Appendix A Site Plan – Emergency Evacuation Point



Appendix B NSW Rural Fire Service Standard 5.1.5



# Service Standard 5.1.5 **Personal Protective Clothing & Personal Protective Equipment**

Version	6.1		
SOPs	SOP 5.1.5 - 1 Personal Protective Equipment & Personal Protective Clothing		
	SOP 5.1.5-2 Personal Protective Equipment & Personal Protective Clothing– Structural Firefighting		
	SOP 5.1.5-3 Personal Protective Equipment & Personal Protective Clothing - Specialised Operations		
Policy Owner	Deputy Commissioner Preparedness & Capability		
Policy Contact	Director Logistics & Equipment		
Approval Date	19 June 2024		
Next Review	19 June 2029		

# 1. Purpose

- 1.1 This Service Standard ensures that members engaged with various 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 (SOPs) apply to operational environments (including, but not limited to fire grounds, incident grounds, community engagement activities) within which RFS members work.
- 1.3 This Service Standard and associated SOPs covers both PPE and PPC issued personally to individual 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. Policy

2.1 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.

- 2.2 All personnel engaged with various 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.
- 2.3 The RFS will only issue PPE/C that is suitable and appropriate for intended use and which is compliant with Australian Standards and RFS specifications. Approved PPE/C must be worn in accordance with this Service Standard and associated SOPs. 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.
- 2.4 All approved RFS PPE/C, with a reasonable or proper fit, are available to every member via the RFS procurement system.
- 2.5 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.
- 2.6 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.
- 2.7 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 RFS members working in high-risk situations.
- 2.8 All PPE/C is to be worn as aligned to the training materials and SOPs related to each relevant activity.
- 2.9 Issuing of any PPE/C to members must be recorded against the individual member's record through the RFS corporate system (SAP Inventory at time of publication).
- 2.10 RFS members are eligible to receive a minimum of two sets of PPE/C relevant to the task that they undertake.
- 2.11 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
- 2.12 RFS Headquarters (Training and Doctrine) is responsible for the provision of educational and training materials to members regarding which PPE/C is available.
- 2.13 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.
- 2.14 Where a member of the 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.
- 2.15 Individual members are responsible for the appropriate use, maintenance and storage of PPE/C as per 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.
- 2.16 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.
- 2.17 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. Operational Protocols
- 2.18 Any Uniforms should be worn in line with other RFS Service Standards such as SS 8.1.1

2.19 Up to date information for RFS members to support this Service Standard and SOPs can be found on the RFS Member website. This includes, full listing of available PPE/C and Care, Maintenance and Disposal Guides.

# 3. Definitions

- 3.1 For the purpose of this service standard, the following definitions and acronyms apply:
  - 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 selfextinguishing 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. **RFS Approved PPE/C:** PPE/C that has been assessed by the RFS and is deemed to meet the RFS technical specifications and relevant International/Australian standards. These PPE/C items are supported by the 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 RFS Specifications and that has been approved by the RFS.

# 4. Document control

**Release history** 

Version	Date	Summary of changes
1.0	1 Sept 1999	Initial release
2.0	1 May 2001	Repealed and remade 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
3.0	13 Jun 2007	Repealed and remade 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
4.0	11 Feb 2010	Repealed and remade SS 5.1.5 v4.0 Reviewed to include utility shirt and to reflect current practices

Version	Date	Summary of changes
5.0	22 Sept 2010	Repealed and remade SS 5.1.5 v4.0 Clause 2.7 amended to clarify that only that only PPC/PPE approved by the RFS may be purchased
6.0	16 Mar 2022	Repealed and remade SS 5.1.5 v5.0 Complete review
6.1	19 June 2024	Administrative review to correct SOP 5.1.5-1 clause 2.1

## Approved by

Name	Role	Date
Kyle Stewart	Deputy Commissioner	19 June 2024

## **Related documents**

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

# SOP 5.1.5-1

# Personal Protective Equipment and Personal Protective Clothing

## 1. Purpose

1.1 This Standard Operating Procedure (SOP) provides clear and consistent guidelines for appropriate levels of PPE/C and accessories for the NSW Rural Fire Service (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 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. Firefighting boots;
  - g. Protective/ Flash hood;
  - h. Brimmed sunhat.
- 2.2 All PPE/C must be worn in line with relevant training materials and Fireground SOPs.
- 2.3 Appropriate respiratory protective equipment shall be available to members as required and in accordance with Service Standard 5.1.9 Respiratory Protective Equipment.

#### Wildland / Bushfire jacket and Wildland / Bushfire trousers

- 2.4 These items must be worn when attending incident grounds unless a higher level of PPE/C is worn.
- 2.5 The two-piece ensemble assists in allowing the 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.
- 2.6 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.

**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.

2.7 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 RFS members with a minimum issue of two (2) sets of PPC.

2.8 Where the previously issued PPC meets the standard, it may still be used by RFS members.

#### Utility shirt

- 2.9 These shirts are to be worn in situations where there is a risk of sunburn.
- 2.10 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.
- 2.11 The Utility shirt may be worn under other PPC, in lieu of the undergarment shirt, however members must be mindful of heat build-up.
- 2.12 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**

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

#### Helmets (all firefighting)

- 2.14 Helmet chin strap and neck protector must be affixed and retained when on the incident ground.
- 2.15 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.
- 2.16 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 RFS helmets.
- 2.17 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.
- 2.18 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.
- 2.19 Only light weight helmets are to be issued to juniors / cadets.
- 2.20 Helmets may be removed when firefighters are relocated away from the fireground or incident to manage their recovery from working in heat.
- 2.21 Helmets should not be worn inside vehicles.

#### Gloves

- 2.22 The RFS provides a range of gloves to mitigate the risks faced across a variety of operations.
- 2.23 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

2.24 Appropriate eye protection is to be worn in line with training where there is a risk of eye injury.

2.25 Sealed eye protection such as googles or Full-Face Respirator, is to be worn in line with training where the RFS Member is exposed to smoke or dust.

#### Respiratory protection

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

#### Boots

- 2.30 Firefighting Boots must be worn when undertaking activities on the incident ground or other operational environments.
- 2.31 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

- 2.32 This item is to be carried by RFS members on the incident ground.
- 2.33 This hood should not be worn during 'normal' firefighting operations due to the high potential for heat stress.
- 2.34 This hood must be worn as part of protection during an overrun/burn over.

#### Cold climate jacket

- 2.35 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.
- 2.36 The jacket provides higher levels of thermal protection and should be worn with due consideration for the potential for heat stress to develop.
- 2.37 The jacket has an orange collar so that members can distinguish those that are wearing the jacket.

#### Wet weather clothing - jacket and over pants

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

#### Protective fire blankets

- 2.41 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.
- 2.42 Protective fire blankets are single use, and use and are to be replaced after any overrun or medical event.
- 2.43 Protective fire blankets must be kept clean, readily accessible and must not be used for other activities.

# SOP 5.1.5 - 2

# Personal Protective Equipment & Personal Protective Clothing – Structural Firefighting

# 1. Purpose

1.1 This Standard Operating Procedure (SOP) provides clear and consistent guidelines for appropriate levels of PPC/E for the 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 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 only be affixed onto the top flap of the pockets 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.

**N**OTE: 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 retroreflective 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 & 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 5.1.5 - 3

# Personal Protective Equipment & Personal Protective Clothing – Specialised Operations

# 1. Purpose

- 1.1 This Standard Operating Procedure (SOP) provides guidance for the appropriate levels of PPC/E for the 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. 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. Procedures

- 2.1 Only PPE/C approved by the 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:
  - a. **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 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.

Appendix C NSW Rural Fire Service Standard 5.1.9



# SERVICE STANDARD 5.1.9 RESPIRATORY PROTECTIVE EQUIPMENT

ITEM	DESCRIPTION
Version Number	2.2
SOPs	SOP 5.1.9 - 1 Disposable P2 Respirators
	SOP 5.1.9 – 2 Reusable Respirators
	SOP 5.1.9 – 3 Compressed Air Breathing Apparatus
	> SOP 5.1.9 – 4 CABA Filling Stations
Owner Deputy Commissioner Preparedness & Capability	
Contact	Manager Engineering
Approved Date	28 January 2022
Effective Date	28 January 2022
Next Review Date	This standard must be reviewed within 12 months of publication
Document Control	Electronic - Printed Copies are Uncontrolled

## 1 Purpose

- 1.1 This Service Standard ensures that members engaged with various NSW Rural Fire Service (NSW RFS) operational activities are provided with **respiratory protective equipment (RPE)** appropriate to their role and tasks, which also satisfies the requirements of the *Workplace Health and Safety Act (2011)* and relevant Australian and/or International Standards as appropriate.
- 1.2 This Service Standard and associated Standard Operating Procedures (SOPs) apply to operational environments within which NSW RFS members work.
- 1.3 This Service Standard and associated SOPs cover the proper acquisition, use, training and maintenance of **RPE** in the NSW RFS.
- 1.4 This Service Standard covers RPE as defined by *AS/NZS 1715:2009*, as well as all RPE support equipment, including but not limited to:
  - a. P2 Respirators;
  - b. Reusable Respirators;
  - c. Compressed Air Breathing Apparatus (CABA);
  - d. CABA support equipment;
  - e. CABA filling stations.

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## 2 Definitions

- 2.1 For the purpose of this service standard, the following definitions and acronyms apply:
  - a. **Flame Resistant:** a term used to describe a material that burns slowly or is self-extinguishing after removal of an external source of ignition.
  - b. **Incident Ground:** refers to an area of operational activity, e.g. fire grounds, hazard reductions, motor vehicle accidents, structure fires, air bases, assist other agencies, automatic fire alarm, etc.
  - c. **Immediate Danger to Life and Health (IDLH**): Refers to hazards or hazardous environments in which an acute exposure to the hazard poses a severe risk of immediate health damage. Examples Include:
    - i. **TOES:** Toxic atmospheres, Oxygen deficiency, Elevated temperatures and Smoke Refers to the identifying factors for high risk environments.
    - ii. **HOTS**: Heated atmosphere, Oxygen deficiency, Toxic environments and Smoke.
  - d. **Personal Protective Equipment (PPE):** refers to equipment designed to mitigate the risk of injury from physical, thermal and other hazards that may be encountered at an incident (including but not limited to, helmets, goggles, gloves, etc.).
  - e. **Personal Protective Clothing (PPC):** refers to protective clothing designed to mitigate the risk of injury from physical, thermal and other hazards that may be encountered at an incident (including but not limited to, jackets, trousers, etc.).
  - f. **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.
  - g. **RPE:** refers to respiratory protective equipment and is alternately known as respiratory protection devices (RPD). RPE is PPE that is designed to protect the wearer from inhalation of airborne contaminants and other hazardous substances that is certified to AS/NZS 1715:2009.
  - h. **NSW RFS Approved RPE:** RPE that has been assessed by the NSW RFS and is deemed to meet the NSW RFS technical specifications and relevant International/Australian standards. These RPE items are supported by the NSW RFS for purchasing, issuing and the provision of consumables.
  - i. **Contaminated RPE:** Refers to respirators, canisters/filters and other RPE equipment that has been worn and not yet cleaned and returned to a serviceable condition, or cannot be returned to a serviceable condition.
  - j. **Clean shaven:** Where all facial hair of any length, including stubble, is removed where the respirator contacts and seals to ensure a proper fit. This does not include facial hair which does not interfere with the respirator seals.
  - k. **Fit Test:** A documented procedure undertaken by a certified person, in accordance with Australian Standards, to determine the facial fit of a respirator.
  - I. **Quantitative Fit Test:** A fail/pass facial fit test based on the capability to taste a known irritant, and suitable for RPE with a protection factor of 10 or less.
  - m. **Qualitative Fit test:** A measured facial fit test utilising certified equipment to provide a facial fit score and suitable for all RPE types.
  - n. **Fit Check:** A self-administrated rapid facial fit check, to ensure a proper seal is achieved by a respirator. Fit checks may either be positive or negative pressure, depending on the respirator type.

## 3 Policy

- 3.1 Respiratory Protective Equipment (RPE) is considered the 'last line of defence' (as stated in the Bush Firefighter Manual) and should always be utilised in conjunction with other controls, such as safe work practices. Priority should always be given to removing members from areas of respiratory risk.
- 3.2 Members are to apply the Hierarchy of Controls and be responsible for reducing their exposure to respiratory hazards. This includes limiting exposure time to a respiratory hazard where possible.
- 3.3 Where it is not practical to remove members from an area that may expose them to a respiratory risk, then

RPE should be used to reduce that risk, in line with the relevant training material and Fire ground SOPs. The RPE worn must align to the level of respiratory hazard and risk, in line with NSW RFS training material.

- 3.4 Three levels of RPE are provided to NSW RFS members:
  - a. Disposable, negative pressure respirators (Disposable P2);
  - b. Reusable, negative pressure respirators (Half-face/Full-face respirators);
  - c. Compressed Air Breathing Apparatus (CABA).
- 3.5 Only CABA should be used in IDLH environments by appropriately qualified members. No other form of RPE is to be used for IDLH environments.
- 3.6 All members should have access to RPE appropriate to the tasks they are undertaking, and be trained accordingly. To ensure all members have access to RPE, all NSW RFS firefighting appliances are to carry disposable and reusable respirators, in line with the number of crew on the appliance.
- 3.7 The NSW RFS will only issue RPE that is suitable and appropriate for intended use and which is compliant with Australian Standards and NSW RFS specifications. Approved RPE must be worn in accordance with this Service Standard and associated SOPs. NSW RFS Approved RPE is not to be modified or changed in any way. RPE that is not certified to the relevant Australian or International standards must not be worn on any Incident Ground.
- 3.8 Information on NSW RFS Approved RPE, including care and maintenance, shall be available via the NSW RFS member website (currently One RFS).
- 3.9 All NSW RFS Approved RPE are available via the NSW RFS procurement system, to enable a reasonable or proper fit. Where a member is unable to determine reasonable or proper fit, Fit Testing shall be available to determine appropriate alternate Approved RPE. NSW RFS Headquarters (Logistics and Equipment) is to ensure that sufficient stock levels and appropriate supply chain is in place for RPE availability to members.
- 3.10 All RPE is to be worn as per NSW RFS training materials and SOPs related to each relevant activity.
- 3.11 NSW RFS Headquarters (Training and Doctrine) and Area Commands are responsible for the provision of educational and training materials to members with regards to which NSW RFS Approved RPE is available.
- 3.12 District Managers and Business unit managers are responsible for supply of NSW RFS Approved RPE for their members; the oversight and monitoring of use of RPE; as well as ensuring that members have access to and are aware of training in the correct use of NSW RFS Approved RPE.
- 3.13 Individual members are responsible for the regular inspection of NSW RFS Approved RPE, including weekly checks to ensure serviceability. NSW RFS Districts and Area Commands are responsible for the proper maintenance of all RPE, including support and replacement equipment.
- 3.14 Individual members are responsible for the appropriate use, maintenance, cleaning and storage of NSW RFS Approved RPE as per NSW RFS requirements; to advise Brigade Officers/ Supervisor if any defects or damage occurs to RPE so that repairs or replacements can be made. Members must ensure that they do not misuse or damage NSW RFS Approved RPE. Any out of service RPE, due to defects, damage or servicing requirements, must be clearly segregated from in-service RPE. This includes clearly identifying RPE as "Out of Service".
- 3.15 All NSW RFS Approved RPE shall be maintained and disposed of in line with relevant training materials and manufacturers guidelines.
- 3.16 The maximum effectiveness of all types of RPE is only achievable whilst Clean Shaven. Members need to be aware of this requirement, and acknowledge that not being Clean Shaven may result in reduced effectiveness of RPE; in this case higher order controls (such as elimination) should be used to reduce exposure.
- 3.17 Training on the process of undertaking a Fit Check will be made available for all members for the applicable RPE being used.

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- 3.18 All Members need to conduct a Fit Check each time the respirator is donned.
- 3.19 Members are to receive guidance on the disposal of contaminated/soiled RPE, including RPE that has been contaminated by hazardous materials.
- 3.20 Members are to be made aware of the impact of respirators on metabolic, cardiovascular and respiratory load.
- 3.21 Members who have health conditions which may be exacerbated by the use of RPE should discuss these issues with their District in consultation with Health, Safety and Welfare prior to use. Members should utilise higher order controls and should undertake fire ground roles which consider these circumstances where possible.
- 3.22 Health screening shall be available to members who identify as having underlying health conditions and in line with new member polices.
- 3.23 Members need to regularly review their IMSAFER status on the incident ground whilst wearing RPE.
- 3.24 Up to date information for NSW RFS members to support this Service Standard and SOPs can be found on the NSW RFS Member website (currently One RFS). This includes a full listing of available NSW RFS Approved RPE and their associated Care, Maintenance and Disposal training material.

## 4 Related documents

- > AS/NZS 1715:2009 Selection, use and maintenance of respiratory protective equipment
- AS/NZS 1716:2012 Respiratory protective devices
- > AS2030.1-2009:2009 Gas Cylinders General Requirements
- AS3848.2-1999 (withdrawn) Filling of portable gas cylinders Filling of portable cylinders for self-contained underwater breathing apparatus (SCUBA) and non-underwater self-contained breathing apparatus (SCBA) - Safe procedures.

## **5** Amendments

AMENDMENT DATE	VERSION NO	DESCRIPTION
23 March 2001	1.0	Initial release
5 November 2007	2.0	> Repealed and remade SS 5.1.9 v1.0
		> Complete review
14 December 2009	2.1	Repealed and remade SS 5.1.9 v2.0
		> Re-format of BA medical examination information into booklet
28 January 2022	2.2	Repeals and remakes SS 5.1.9 v2.1
		Title updated to "Respiratory Protective Equipment"
		<ul> <li>Complete review and broadened to include other respirators used by the NSW RFS.</li> </ul>

## SOP P5.1.9-1

# P2 RESPIRATORS (DISPOSABLE, NEGATIVE PRESSURE RESPIRATORS)

## 1 Purpose and Definition

- 1.1 The purpose of this SOP is to cover the usage, training, care and maintenance and disposal of disposable, negative pressure respirators.
- 1.2 All NSW RFS Approved disposable, negative pressure respirators are a minimum of P2 under AS/NZS1715:2009.
- 1.3 P2 Disposable respirators are negative pressure, filtration respirators which provide protection from mechanically and thermally generated particulates.
- 1.4 Disposable P2 respirators also provide a level of protection from micro-organisms and as such can be worn when performing medical assistance tasks. These masks are limited to Risk Groups 1-3 under *AS/NZS1715:2009.* If unsure, please liaise with the medical persons at the incident for further clarification.
- 1.5 Use of Disposable P2 respirators will increase the member's heat rate and respiratory load whilst undertaking physical activity. Members must consider this when managing their hydration, body heat and work rate and maintain regular IMSAFER awareness.

## 2 Procedure

- 2.1 Disposable respirators must not be used in IDLH environments.
- 2.2 P2 respirators should be worn in low-medium smoke environments (thermally generated particulates), unless a higher level of protection is available, as well as medical assistance incidents.
- 2.3 Only those respirators that are compliant with Australian Standards (*AS/NZS1715:2009* Appendix C, or equivalent), with exhalation valve, are to be used where there is a risk of fire.
- 2.4 Respirators with unfiltered exhalation valves do not prevent the spread of respiratory particulates from the wearer and should not be used where there is a risk of the wearer exposing others to unfiltered air.
- 2.5 A variety of shapes and sizes shall be available for members to ensure that properly fitting Approved P2 Respirators are available via the NSW RFS procurement system (SAP Catalogue).
- 2.6 Adequate numbers of disposable respirators, including shapes and sizes, are to be readily available and stowed on all NSW RFS appliances and be available for any member.
- 2.7 A surgical mask, or uncertified face covering, is not considered equivalent to a disposable, negative pressure respirator and must not be used where a P2 respirator is required to manage the respiratory hazard.

#### Care, Maintenance and Disposal

- 2.8 A new disposable respirator must be provided to members for each shift/day undertaken, or more often if required.
- 2.9 Disposable respirators must not be cleaned or re-used, even if only lightly soiled.
- 2.10 Disposable respirators are to be stored in a clean, dry environment, readily accessible to all members.

2.11 Disposable respirators can be disposed of in a closed bin and added to the general waste unless it is considered contaminated from hazardous materials. Respirators which have been contaminated by hazardous materials must be double bagged prior to disposal as part of the general waste.

## 3 Related forms

> None

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## SOP P5.1.9-2

# REUSABLE RESPIRATORS (REUSABLE, NEGATIVE PRESSURE RESPIRATORS)

## 1 Purpose and Definition

- 1.1 The purpose of this SOP is to cover the usage, training, care and maintenance and disposal of reusable, negative pressure respirators, also known as half-face and full-face respirators.
- 1.2 All NSW RFS Approved reusable, negative pressure respirators are a minimum of P2 under AS/NZS1715:2009.
- 1.3 All NSW RFS Approved reusable respirators are negative pressure, filtration respirators which provide protection from mechanically and thermally generated particulates as well as organic gasses and vapours as classified by the canisters fitted.
- 1.4 Reusable respirators also provide a level of protection from micro-organisms and as such can be worn when performing medical assistance tasks. These masks are limited to Risk Groups 1-3 under *AS/NZS1715:2009.* If unsure, please liaise with the medical persons at the incident for further clarification.
- 1.5 Reusable Respirators do not provide protection from Carbon Monoxide or elevated air temperatures.
- 1.6 Use of Reusable Respirators will increase the member's heat rate and respiratory load whilst undertaking physical activity. Members must consider this when managing their hydration, body heat and work rate and maintain regular IMSAFER awareness.

## 2 Procedure

- 2.1 Reusable respirators must not be used in IDLH environments.
- 2.2 Reusable respirators should be worn in medium smoke environments (thermally generated particulates and Organic gasses and vapours) as classified by the canisters fitted.
- 2.3 Only approved Reusable Respirators are to be used on the incident ground.
- 2.4 A variety of sizes shall be available for members to ensure that properly fitting respirators are available via the NSW RFS procurement system (SAP Catalogue).
- 2.5 Adequate numbers of respirators, including different sizes, are to be readily available and stowed on NSW RFS appliances and be accessible for any member.

#### Care, Maintenance and Disposal

- 2.6 Reusable respirator masks must be cleaned and decontaminated after each usage. Canisters/filters are to be disposed of after use.
- 2.7 All cleaning should align to manufacturer's recommendations and NSW RFS issued/ endorsed training material.
- 2.8 Respirators should be stored in clean, dry environments readily accessible to members.
- 2.9 Canisters/filters should be stored in air tight containers when not in use to reduce oxidation and therefore extend the usage life of these canisters.
- 2.10 Canisters/filters are to remain unopened until required.

- 2.11 Used canisters/filters should be disposed of in line with manufacturer's recommendations. Canisters/filters contaminated by hazardous must be double bagged prior to disposal as part of the general waste.
- 2.12 Respirators contaminated by hazardous materials must be double bagged whilst in transit for cleaning and decontamination.

## 3 Related forms

> None

## SOP P5.1.9-3

## COMPRESSED AIR BREATHING APPARATUS (CABA) EQUIPMENT

## 1 Purpose and Definition

- 1.1 The purpose of this SOP is to cover the usage, training, care and maintenance and disposal of compressed air breathing apparatus (CABA), SCBA (Self Contained Breathing Apparatus) or also known as BA (Breathing Apparatus) in line with *AS/NZS 1715:2009*.
- 1.2 This SOP covers CABA equipment, including:
  - a. CABA cylinders;
  - b. CABA back plates, including pneumatics;
  - c. CABA masks;
  - d. Equipment associated with CABA sets.
- 1.3 CABA provides protection from all types of respiratory hazards.
- 1.4 Use of CABA increases the member's heat rate and respiratory load whilst undertaking physical activity. Members must consider this when managing their hydration, body heat and work rate and maintain regular IMSAFER awareness.

## 2 Procedure

- 2.1 CABA is the only effective RPE for protection from all respiratory hazards present in IDLH environments and is the only RPE approved for use in these environments, including but not limited to:
  - a. High Levels of Carbon monoxide/Carbon Dioxide;
  - b. Elevated Air Temperatures;
  - c. Low Oxygen Levels.
- 2.2 Only approved CABA should be used on the incident ground.
- 2.3 A variety of mask sizes are available for members to ensure that properly fitting equipment are available via the NSW RFS procurement system (SAP Catalogue).
- 2.4 All CABA use must align with CABA training policy and be worn in line with relevant training material and SOPs.
- 2.5 All members utilising CABA in IDLH environments need to be Clean Shaven to ensure maximum effectiveness.
- 2.6 Any member undertaking work in an IDLH environment must be:
  - a. Reasonably fit for the tasks they are undertaking, including relevant and current medical examination;
  - b. Be current and certified in relevant training.
- 2.7 Members certified in the use of CABA shall be individually issued appropriate PPE/C in line with NSW Training Materials, and to be worn as per with Service Standard 5.1.5.
- 2.8 All CABA equipment, and appropriate records, are to be maintained in the NSW RFS asset management system (currently SAP EAM).

- 2.9 Districts must maintain records of the following:
  - a. Cylinder initial manufacture date, and all subsequent hydrostatic testing and disposal dates;
  - b. Back plate, pneumatics and mask initial manufacture dates, inspections and servicing;
  - c. Cylinder filling, including air quality testing;
  - d. Cylinder and back plate location and usage logs;
  - e. CABA certified members, including training and usage logs.
- 2.10 Each CABA certified member is to maintain a log of their usage, in line with NSW RFS training requirements.
- 2.11 Each NSW RFS Approved CABA set is to include:
  - a. CABA back plate, with pneumatics;
  - b. CABA cylinder;
  - c. CABA mask;
  - d. Distress Signal Unit (DSU) as defined under NFPA 1982;
  - e. Intrinsically safe CABA torch;
  - f. Personal Line;
  - g. Individual Tally Tag.
- 2.12 CABA support equipment, includes but not limited to:
  - a. Spare Cylinders;
  - b. Stage 1 or Stage 2 Breathing Apparatus Control Officer (BACO) Boards and tabard;
  - c. Cleaning equipment.
- 2.13 All members certified as current in the use of CABA are to have their qualifications recorded within the NSW RFS corporate system (currently SAP HR).
- 2.14 All brigades and appliances equipped with CABA are to be recorded using NSW RFS asset management system (currently SAP EAM).
- 2.15 Only appliances which are able to safely meet the requirements for village firefighting are to carry CABA/CABA equipment. However, other appliances may carry CABA support equipment to assist other appliances.
- 2.16 Where an appliance/brigade is allocated CABA:
  - a. A minimum of two (2) sets and One (1) spare cylinder per set is required;
  - b. The brigade must be allocated and carry adequate support equipment to undertake the operational usage of CABA, on all CABA carrying appliances.
- 2.17 CABA should be allocated to brigades that have the operational requirements, capability and capacity to use it safely and effectively.
- 2.18 The District Manager shall be responsible for ensuring that brigades allocated CABA are equipped, capable and have the capacity to use it safely and effectively.
- 2.19 Brigades allocated CABA are to have access to adequate spare CABA cylinders and equipment to maintain operational capability.
- 2.20 Only members who are trained and qualified in the effective use of CABA, including maintenance and cleaning procedures may utilise or access CABA equipment.
- 2.21 Members must undertake a Fit Check each time the respirator is worn in line with NSW RFS training.

#### Care, Maintenance and Disposal

- 2.22 In accordance with Australian Standards and manufacturer's requirements, NSW RFS CABA equipment shall be:
  - a. Inspected weekly for functionality;
  - b. In date for hydrostatic testing;
  - c. Inspected annually by a qualified and approved technician;
  - d. Reconditioned as per manufacturer's requirements;
  - e. Within overall service life.
- 2.23 CABA equipment shall be removed from service on the detection of a fault, and segregated from in-service equipment.
- 2.24 CABA equipment must be cleaned and decontaminated after each usage.
- 2.25 All cleaning should align to manufacturer's recommendations and NSW RFS issued/ endorsed training material, and shall be undertaken in appropriate PPE.
- 2.26 CABA equipment, which has been contaminated by hazardous materials, must be double bagged whilst in transit for cleaning and decontamination.
- 2.27 Where incidents or injuries occur which may be the result of damaged, faulty or contaminated CABA equipment, including back plates and cylinders, the equipment is to be quarantined and investigated by a trained technician and Health and Safety are notified. Equipment, including associated support equipment, may not be re-used till such time as an investigation is complete.
- 2.28 Appliances lockers, which store CABA equipment should be kept clean, dry and readily accessible to qualified members. Where CABA equipment is not stored on an appliance, such as a brigade station, it must also be kept clean and dry.
- 2.29 Maintenance of CABA equipment must be undertaken in line with the manufacturer's recommendations and NSW RFS training materials by an appropriately qualified technician.
- 2.30 Decommissioning/Disposal of all CABA equipment shall be undertaken as per Manufacturer's guidelines and NSW RFS procedures. CABA equipment must be returned to the supplier for disposal at end of life.
- 2.31 No CABA equipment beyond the stated manufacturer's life shall be used or sold.
- 2.32 CABA cylinders are to be used annually to prevent stale air/ contamination.
- 2.33 Full cylinders are to be fitted with dust caps to prevent ingress of debris into the cylinder thread.
- 2.34 Empty cylinders, or cylinder under the minimum required pressure are to be marked "MT" until filled.

## 3 Related forms

> None

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## SOP P5.1.9-4

# COMPRESSED AIR BREATHING APPARATUS (CABA) FILLING STATIONS

## 1 Purpose and Definition

- 1.1 This SOP covers the care, maintenance and disposal of NSW RFS operated CABA filling stations, as well as CABA filling stations/ equipment used to fill NSW RFS CABA cylinders.
- 1.2 CABA filling stations include:
  - a. Air compressors;
  - b. CABA cylinder filling equipment, including armoured filling cabinets;
  - c. In-line air quality measurement systems;
  - d. Storage cylinders/Cylinder bank;
  - e. Metering systems;
  - f. Air chillers;
  - g. CABA cylinder storage;
  - h. CABA filling station rooms.

## 2 Procedure

- 2.1 Only NSW RFS approved CABA filling equipment shall be used to fill NSW RFS CABA cylinders.
- 2.2 Non NSW RFS owned CABA filling equipment may be used to fill NSW RFS CABA cylinders, however they must adhere to the same requirements as NSW RFS owned equipment.
- 2.3 Modification or upgrade of CABA filling stations shall align to NSW RFS specifications and the manufactures recommendations. CABA filling station status shall be captured via the NSW RFS asset management system.
- 2.4 All compressors used to fill NSW RFS CABA cylinders must have an in date air quality check, every three months. The results of the check are to be accessible to anyone using the compressor.
- 2.5 All filling equipment used to fill NSW RFS CABA cylinders must be up to date for:
  - a. Servicing, including filter replacement;
  - b. Three monthly air quality check/ reports;
  - c. Regular hydrostatic testing.
- 2.6 Records of servicing, CABA cylinder filling and transfer must be kept and auditable, and maintained using the NSW RFS asset management system (SAP EAM)
- 2.7 CABA filling stations must be appropriately secured, to ensure that access is only available for appropriately trained or authorised members.
- 2.8 All CABA filling stations must clearly identify and segregate empty/used cylinders, full cylinders and cylinders which are being cooled.
- 2.9 CABA filling compressors must be segregated from areas which may pose a contamination risk, such as cleaning areas. Filling stations shall also be protected from environmental elements.
- 2.10 Each NSW RFS CABA filling station shall require a regular risk assessment as per NSW RFS procedures, as available on the NSW RFS member website (currently One RFS).

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- 2.11 Only members who are suitably trained and qualified in the correct use of CABA filling stations are to fill NSW RFS CABA cylinders.
- 2.12 Training is to be provided by appropriately qualified personnel and undertaken in line with manufacturer's requirements and NSW RFS training policy.

#### Care, Maintenance and Decommissioning

- 2.13 CABA filling stations must be kept clean, free from excessive dust, exhaust and moisture.
- 2.14 All CABA filling stations must be maintained in line with the manufacturer's recommendations and serviced annually by an appropriately qualified and approved technician.
- 2.15 CABA filling station Compressor intakes must be located in an area away from other air borne hazards, such as smoke, dust or other pollutants.
- 2.16 Contaminated CABA equipment must be decontaminated away from the CABA filling station.
- 2.17 Decommissioning/Disposal of all CABA filling station equipment shall be undertaken as per Manufacturer's guidelines and NSW RFS procedures. CABA filling station equipment must be returned to the supplier for disposal and end of life.
- 2.18 No CABA equipment beyond the stated manufacturer's life shall be used or sold.

## 3 Related forms

> None