



## Standard Operating Procedure 7.01.2

### Operational Hygiene

#### Introduction

Emergency responders face potential risks due to exposure to the toxic byproducts created during combustion incidents. Repeated exposure can amplify the likelihood of health problems for these responders over time. Therefore, it is crucial for all personnel, whether they are staff or volunteers, to understand the accumulating effects of being in contact with incident residue. Everyone should make every effort to minimise their interaction with such residue whenever possible.

All emergency services staff and volunteers are responsible for their personal safety and the safety of others at work and during emergencies. Maintaining proper hygiene measures is essential to ensure the well-being of these personnel and their prompt availability for further response duties.

This procedure provides guidelines for maintaining health, safety, and hygiene after responding to incidents. Its primary purpose is to prevent the transfer of incident residue into workplaces, vehicles, or homes. However, it is important to note that this procedure isn't meant for situations where decontamination is necessary, particularly when hazardous materials are involved. In such cases, personnel must adhere to [SOP 3.6.3 – Decontamination](#).

In summary, this information stresses the significance of emergency responders taking precautions to minimise exposure risks and prioritise the safety for themselves and others, especially when dealing with potentially hazardous substances.

Definitions of terms applicable to this procedure are available in [Annex A](#).

Further information is available from Health and Safety Services (HSS).

#### H&S Topic – Occupational Hygiene

#### 1. Hazard Identification

This procedure highlights the potential dangers from incident residue which can involve various substances such as dirt, dust, sweat, smoke, soot, or grime. These are things emergency responders might touch or be near while performing their job. These substances are not considered hazardous materials that require the special decontamination process after responding to a HAZMAT incident, however, they can potentially be harmful to responders if repeatedly exposed over a long period.

#### Principles

#### 2. General

DFES requires all personnel to undertake operational hygiene to maintain a healthier and safer working environment for themselves and all other personnel.

The key message and standard of practice is - if you're dirty, get clean as soon as practicable.

#### [Annex B – Post Incident Hygiene Control Matrix](#)

#### 3. Type of Incident

Operational Hygiene is required after any incident where personnel are dirty after contact with, or exposure to incident residue.

## **Procedures**

### **4. Preparedness**

All personnel must ensure sufficient supplies of cleaning products and equipment, wipes and change of clothes are always available. This is important for keeping clean and safe, both for individuals and for others, whether on appliances/vehicles or at the station or unit.

Note: Personnel shall wear appropriate PPE for hygiene tasks, nitrile gloves and P2 mask.

### **5. Incident Hygiene**

Personnel should aim to minimise exposure to incident residue during operations where practicable by:

1. Limiting exposure to hazards should always be a consideration of Incident Controllers (IC's) when developing strategies and tactics.
2. Minimising transmission of dirt and residue in all work environments such as IMT facilities, catering areas, Incident Control Vehicles and DFES Buildings.
3. Where possible, vehicles doors and windows should be closed to reduce the potential for residue to enter the interior of the cabin.

### **6. Personal Hygiene**

Upon removal of PPE, and while still on scene, the following actions are to be undertaken:

1. The exposed areas of the body (neck, face, arms and hands) must be wiped off immediately using hygiene wipes. Use the wipes to remove as much incident residue as possible.
2. This process must also be undertaken between Breathing Apparatus wears and prior to having a meal or rest breaks.

### **7. Break in Operations**

When exiting the fire ground or operational area, the following actions are to be undertaken:

1. All dirty equipment including Breathing Apparatus is to be cleaned as per DFES procedures.
2. Dirty PPE is to be brushed or washed down as per DFES procedures.
3. Where possible, PPE is to be removed when entering shared facilities including toilets, IMT facilities and catering areas etc.

### **8. Incident Departure**

Prior to entering the appliance/vehicle and leaving the incident scene, personnel must undertake hygiene actions to prevent the spread of incident residue during transport.

1. PPE requiring laundering is to be placed in sealed plastic bags to prevent the spread of incident residue during transport.
2. Use wipes to wipe down the appliance/vehicle interior and brush down seat covers and footwell.
3. Dress down<sup>1</sup>.
4. Brush off excess dirt from boots etc.

The above actions will ensure a 'Clean Cab' principle can be achieved as best as reasonably practicable prior to returning to station for more thorough post incident cleaning.

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<sup>1</sup> Spare clothing allows personnel to minimise time spent in contact with residue. Spare clothing such as trousers/cargos, t shirts, socks should be carried in kitbags for individual use.

## 9. Post Incident

Post incident hygiene actions are to be undertaken upon return to the station/unit:

ACTION	DESCRIPTION
<b>Remove Dirty Items</b>	Remove dirty boots before entering building and clean thoroughly.
<b>Use External Shower Entry</b>	When available (available at some CFRS stations only, refer <a href="#">Annex B</a> ), enter shower via external doors or approved station entry procedure
<b>Separate Clothing</b>	Separate approved uniform items for laundering, i.e. cargo pants. <a href="#">SAP 1.3.A – Laundering Standard</a> Bag remaining clothing items for separate machine wash as applicable. <a href="#">SAP 1.3.B – Laundering Standard (On Station)</a> Refer to <a href="#">Annex C</a> for approved laundering process
<b>Shower</b>	It is recommended that personnel undertake personal showering as soon as practicable following the conclusion of an incident. Refer to <a href="#">Annex B</a>
<b>Clean Shower</b>	Clean shower area for next user.
<b>Replacement PPE</b>	Source replacement PPE and replenish kit bag <sup>2</sup> .
<b>Kit bag</b>	Clean kit bag if dirty.
<b>Appliances/Vehicles</b>	Appliances/vehicles are to be washed externally and interior surfaces are to be vacuumed and wiped down. (Vacuum with HEPA filter to be used if available).

## 10. Maintenance Hygiene

Regular cleaning plays a vital role in reducing the accumulation of incident residue in the workplace. The OIC has a responsibility to make sure the following tasks are completed according to existing [Schedule of Checks](#):

1. Sweep and/or hose out engine room and tunic room.
2. Sweep out/vacuum and wipe down appliance/vehicle interiors.
3. Wash appliance/vehicle exteriors.
4. Wipe down appliance/vehicle seat covers or request laundering<sup>3</sup>.
5. Launder/wash BA mask covers.
6. Change and launder/wash mattress protectors.
7. Vacuum carpets, mop floors, steam clean furniture and carpets.

## 11. General

Following these practices can significantly reduce the chances of emergency responders being exposed to risks, and can also decrease the probability of them experiencing harmful health effects. In addition to operational hygiene, the following practices will assist maintaining a healthier and safer workplace:

1. Only store clean PPC and Kitbags in storerooms and dressing areas.
2. Operate exhaust fans where fitted and open engine room doors when starting appliances/vehicles, returning to station or operating equipment in engine rooms.
3. When working outdoors use sunscreen and re-apply every 2 hours.
4. Maintain hydration.
5. Undertake regular health monitoring checks.
6. Never hang PPC on the outside of appliances.

<sup>2</sup> Where second set of PPE is not available, spare/emergency PPE should be used. Volunteer stations/units are encouraged to utilise serviceable second hand or spare stocks of PPE for this purpose.

<sup>3</sup> Appliance seat covers can only be removed/replaced by FES technicians.

## ANNEX A Definitions

<b>Hazard</b>	A source or situation with the potential for harm in terms of human injury or ill-health, damage to property, damage to the environment, or a combination of these.
<b>Risk</b>	The effect of uncertainty on objectives (ISO 31000:2018). In relation to any potential injury or harm, the likelihood and consequence of that injury or harm occurring (ISO 45001 Management Systems)
<b>Contaminants</b>	This term is commonly used to refer to both hazardous and non-hazardous substances/particulates (not expected to be present on clean PPE).
<b>Incident Residue</b>	This term is used by DFES to refer to 'dirtiness', i.e., dirt, sweat, soot, dust etc. Substances which are not immediately harmful yet may be harmful in the long term.
<b>Exposure</b>	Exposure is defined as the state of having no protection from something harmful, however, in a hazardous occupation such as emergency response, personnel must always be protected by safe work practices, training and PPE. DFES defines exposure as a situation where personnel have entered an area where it is likely that a hazard is present, and therefore a risk of contamination exists.
<b>Contamination</b>	External contamination occurs when hazardous material/s, in the form of either gas, liquid or solid, comes into contact with a person's skin, hair, or clothing. Internal contamination can occur when a hazardous material is swallowed, inhaled, absorbed through the skin or open wound.
<b>Decontamination</b>	Procedure for removing known harmful substances in a safe manner. See <a href="#">SOP 3.6.3 – Decontamination</a> .
<b>Occupational Hygiene</b>	Occupational hygiene is the science of anticipation, recognition, evaluation and control of hazards in the workplace and the environment. <a href="#">Australian Institute of Occupational Hygienists</a>
<b>Personal Hygiene</b>	Personal hygiene may be described as the principle of maintaining cleanliness and grooming of the external body which plays an important part in preventing spread of infectious disease while contributing to a professional and safe workplace.

## ANNEX B Operational Hygiene Control Matrix

ROUTE OF ENTRY/EXPOSURE	SUBSTANCE	CONTROL
<b>Contamination</b> <ul style="list-style-type: none"> <li>• Inhalation</li> <li>• Injection</li> <li>• Ingestion</li> <li>• Absorption</li> </ul> <p>Contamination should only happen accidentally, either due to problems with personal protective equipment (PPE) or exceptional situations.</p>	<b>Hazardous Materials</b>	As per <a href="#">SOP 3.6.3 – Decontamination</a> . Seek medical advice.
<b>Potential Contamination</b> <p>Where the potential for contamination existed yet personnel did not come into direct contact with the substance and/or were protected by their PPE.</p>	<b>Hazardous Materials</b>	A level of decontamination determined by the OIC, as per <a href="#">SOP 3.6.3 – Decontamination</a> .
<b>Incident Response</b> <p>Personnel and PPE become 'dirty' during incident response.</p>	<b>Incident Residue</b> <p>Substances which are not considered immediately harmful to health however accumulation over a long period may contribute to negative long-term health effects.</p>	<p>Operational Hygiene as per this SOP.</p> <p>Whenever feasible and reasonable, firefighters should use the showers at the nearest authorized station after an incident is resolved. However, this should only be done with prior approval and notification to the DOCC.</p>
<b>Day to Day work activities</b>	<b>Dirt</b> <p>Non-harmful substances, e.g. dirt/sweat, etc.</p>	Shower and change clothes at end of each shift.
<b>Approved FRS Stations with Post Hygiene Shower Facilities</b>		Contact DOCC to confirm FRS stations with post hygiene shower facilities.

## ANNEX C Laundry Items Matrix

<b>Operational Items</b>	<b>Communal Items</b>	<b>Personal Items</b>
<i>Specialised Cleaning Contract</i>	<i>Station Washing Machines</i>	<i>Station/Home Washing Machines</i>
Level 1 Tunic	Tea Towels	Pillowcases
Level 1 Cargo Pants		Sheets
Level 2 Tunic		Towels
Level 2 Cargo Pants		Baseball Cap
Protective Hood		Socks
Helmet Neck Flap		Dress Shirts
Polycotton Overalls		Station Shirts
High Vis Work Shirt		T Shirts
Facemask Bag		Soft Shell Jackets
Level 2 Gloves		Pullovers
Executive Dress Tunic		Linen Bags
Executive Dress Trousers		Sun Hats
Dress Trousers		Wet Weather Jackets
Mattress Protectors		
All items covered by the current SC contract.	Can be washed in station washing machines.	

## Document History

VERSION	DATE	DESCRIPTION of CHANGE
1.0	Sept 2023	Developed

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