

## E3-1 Use of Protective Clothing and Equipment (NCI 6)

### **Purpose**

The purpose of this document is to provide for the cleaning, decontamination, and safe use of Gas Suits and Splash Suits.

Note: Wildfire Uniform and Structural Firefighting Uniform are covered in *N2 National Dress Code for Uniformed Personnel*.

Structural Firefighting Uniform and BA are the required minimum protection at incidents involving hazardous materials when it is necessary to perform a snap rescue.

### **Requirements for Splash and Gas Suits**

#### **Compliance**

All protective clothing and equipment purchased will comply with the relevant *NZFS Equipment Requirements*.

#### **Splash Suits with breathing apparatus**

Splash Suits (also known as Chemical Splash Suits) provide a high degree of protection from liquid and particulate hazardous materials.

Splash Suits with breathing apparatus (BA) will be worn in all situations where personnel are, or may be, likely to come into direct contact with a hazardous material (unless the situation requires the wearing of Gas Suits) including:

- HazMat incidents while identifying the material/s (no contact with the material/s until it and associated hazards have been identified)
- HazMat incidents involving hazardous materials which require Splash Suit protection.
- fire incidents involving hazardous materials, provided exposure to radiated heat is minimal
- during Stage 2 or 3 decontamination.

Splash Suits will be:

- worn over:
  - normal working uniform
  - disposable comfort suit
  - other clothing appropriate for the conditions
- donned with at least one person assisting to ensure it is donned correctly and to check closure and interface integrity.

#### **Maintenance of Splash Suits**

Splash Suits will be decontaminated in accordance with:

- Hazardous Materials Technical Liaison Committee requirements
- manufacturers' recommendations.

The suit will be visually checked for any chemical or physical damage following every operational use.

The suit will be withdrawn from service and arrangements made for specialist repair or replacement if found to be damaged.

### **Gas Suits with breathing apparatus**

Gas Suits provide a high degree of hazardous materials protection, and specific protection from toxic and corrosive gases.

Gas Suits with BA will be worn in all situations where:

- there is a gaseous or vapour hazard and/or contaminant
- a contaminant is present in the atmosphere in very small particles that may breach Splash Suits and be absorbed through the skin.

Situations where Gas Suits will be worn include:

- HazMat incidents where an unidentified material may require gas tight protection
- HazMat incidents involving hazardous materials which require Gas Suit protection
- fire incidents involving hazardous materials, provided exposure to radiated heat is minimal. The Structural uniform with BA will be worn in all areas affected by heat from the fire.

Gas Suits will be:

- worn over either:
  - normal working uniform
  - disposable comfort suit
  - other clothing appropriate for the conditions
- donned with two people assisting to ensure it is donned correctly and to check the suit's integrity
- worn for a period limited to the duration of a single wearing of an NZFS BA set (this may be an extended duration BA set).

### *Maintenance and testing of Gas Suits*

Gas Suits will be decontaminated in accordance with:

- *Hazardous Materials Technical Liaison Committee* requirements
- manufacturers' recommendations.

Gas Suits will be sent to the appropriate BA department for testing following every operational use.

## Hazard Identification and Control: Wearing Protective Clothing

### Hazard control

All hazards will be controlled by eliminating, isolating where elimination is impracticable, or minimising, using one or more of the control methods given in the table below:

### Wearing protective clothing

Hazards	Control measures	Health and Safety references
<b>Splash Suits</b>		
<p><i>Significant hazards:</i></p> <ul style="list-style-type: none"> <li>heat stress</li> <li>heat exhaustion</li> <li>chemical contamination</li> </ul>	<ul style="list-style-type: none"> <li>instructing all personnel who wear Splash Suits in their safe use</li> <li>not wearing Splash Suits for firefighting</li> <li>fluid replacement</li> <li>providing rest breaks for crews</li> <li>providing relief crews</li> </ul>	Refer to <i>E1 Equipment requirements</i> for uniform specifications.
<b>Gas Suits</b>		
<p><i>Significant hazards:</i></p> <ul style="list-style-type: none"> <li>burns</li> <li>heat stress</li> <li>heat exhaustion</li> <li>chemical contamination</li> </ul>	<ul style="list-style-type: none"> <li>instructing all personnel who wear Gas Suits in their safe use</li> <li>not wearing Gas Suits for fire fighting</li> <li>fluid replacement</li> <li>providing rest breaks for crews</li> <li>providing relief crews</li> </ul>	Refer to <i>E1 Equipment requirements</i> for uniform specifications.
<b>Cleaning contaminated and/or dirty clothing</b>		
<p><i>Significant hazard:</i></p> <ul style="list-style-type: none"> <li>contamination</li> </ul>	<ul style="list-style-type: none"> <li>all personnel who wear protective clothing will be instructed in safe decontamination and cleaning procedures</li> </ul>	<i>NZFS Health and Safety Policy and Guidelines Manual</i>