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Metropolitan Fire and
Emergency Services Board
ABN 28 598 558 561

456 Albert Street
East Melbourne
Victoria Australia 3002

Telephone: +61 3 9662 2311
Facsimile: +61 3 9665 4522
www.mfb.vic.gov.au

Honourable David Davis (Chair)
Environment and Planning Committee
Parliament House
Spring Street
EAST MELBOURNE VIC 3002

Dear Member Davis

We refer to the inquiry into Victoria's fire season preparedness that is currently taking place before, and being conducted by, the Committee (**the Inquiry**).

In evidence to the Inquiry on 30 August 2016, the Metropolitan Fire and Emergency Services Board (**MFB**) understands the United Firefighters Union (**UFU**) submitted a position to the effect that "rigid" consultation processes are necessary for ensuring firefighter safety. In support of its position, the MFB understands the UFU referred to the unfortunate circumstances that led to a firefighter (Richard Zapart) being seriously injured at a furniture factory fire in Yarraville in October 2007.

We understand the UFU inferred that there was a delay by the MFB in updating the Personal Protective Clothing (**PPC**) issued to firefighters and that if Leading Firefighter Richard Zapart had been wearing PBI Gold PPC (an option being considered at the time of the incident), he would not have suffered any burn injuries from this incident.

What happened to Mr Zapart was tragic and the MFB took steps to ensure that fires such as the one in question do not happen again, and that our firefighters are as well protected as possible. The MFB's comprehensive investigations were made available on the MFB's intranet as well as to regulators and the MFB has been very open about what happened and what changes were made.

The MFB does not wish to cause any further distress to Mr Zapart, his family, friends or colleagues by discussing the incident again in detail at the Inquiry. However, the MFB can't let Mr Marshall's statements stand as fact. This document provides a brief overview of the facts as considered by relevant inquiries to ensure that the Committee is fully informed about the facts and circumstances surrounding these issues.

The MFB asks that the Committee review the relevant factual material gathered during the various investigations and other reviews of the Yarraville fire and the report carried out by Judge Gordon Lewis on the processes to select the new PPC before reaching any conclusions on these issues.

The MFB's position, based on these reports, is this:

- The PPC actually worn by Mr Zapart performed to expectations and may have saved his life in what was a high temperature fire caused by this chemical reaction;

- There is no evidence that PBI Gold PPC would have performed better than the PPC actually worn;
- Neither the PPC actually worn nor the PBI Gold PPC was designed to withstand exposure to the significant temperatures encountered as a result of the chemical reaction of the type caused by this furniture lacquer;
- The MFB took steps, alongside WorkSafe and others, to prevent poor housekeeping practices in furniture manufacturers that might lead to fires such as this;
- The findings of the judicial inquiry by Judge Gordon Lewis which included that the fire services needed to improve their procurement processes, that the UFU had used industrial agreements to 'veto' and that this contributed to delays, and that the relevant clauses in the industrial agreements had no place in modern industrial agreements demonstrates that the clauses referred to by Mr Marshall were not used to improve safety for firefighters.

2007 Yarraville Fire – the “Japanese Screens” fire

The relevant background and facts of the fire at Japanese Screens and Interiors in Yarraville, the MFB response and the circumstances of Mr Zapart's injuries are accurately reproduced in the **attached** findings of Coroner Heather Spooner [paragraphs 5-11]. The Coroner can conduct investigations and inquests into fires, including where there are no fatalities.

In summary:

- The MFB were called to a report of fire at the Japanese Screens and Interiors factory on 12 October 2007.
- Firefighters entered the factory and tried to locate the source of the fire. After an initial search of the building where they observed a misty smoke or haze there was a small flickering flame followed by a rapid flash of light and intense heat followed by flames and fire.
- Mr Zapart appeared to have been knocked to the floor. Three firefighters rescued him and dragged him outside where emergency first aid treatment was administered until arrival of paramedics. These firefighters, Mark Fincher, Brian O'Connell and Russell Johnson were subsequently awarded the MFB's highest bravery award, the Valour Medal.
- From available data and recollections of the other firefighters, it is estimated that Mr Zapart was exposed to extreme heat for up to 45 seconds.
- Mr Zapart sustained significant injuries.

The cause of the fire was determined to be an uncontrolled exothermic chemical reaction caused by the build-up of overspray in a furniture polishing room. There was a significant chemical flash fire that ignited various oxides of nitrogen and suspended airborne particles in the atmosphere that engulfed the firefighters and injured Mr Zapart. This

incident was the subject of significant media reporting at the time, including the **attached** articles.

In response to this significant incident, a number of inquiries, studies and investigations were undertaken and we have set out the relevant findings and conclusions from each of those investigations below.

MFB omnibus report – “Structure Fire at 17 Hall Street, Yarraville 12 October 2007 – A review of events and issues, including the injuries to Leading Firefighter Richard Zapart”

The MFB commissioned a number of reports into this incident, including from the MFB's own Fire & Investigation Analysis Unit, and from the CSIRO. The latter was at a cost of more than \$60,000 and specifically tested the performance of the PPC worn by Mr Zapart and the likely circumstances of the fire.

The MFB's own reports identified the need for improvements in the design and performance of the MFB's shoulder patches and the firefighting helmet.

In relation to Mr Marshall's comments about the PPC, the reports found that:

1. The outer shell of the woollen **Firemark tunic** worn by Mr Zapart was severely charred and disintegrated, **the inner liner had largely remained intact and protected Mr Zapart from further injury.** (MFB Report)
2. Given the temperatures, the woollen material in the **Firemark tunic performed as well as could be expected**, whilst it was charred and disintegrated, **there was no evidence to suggest that it ignited and burned.** (MFB Report)
3. The **Firemark over trousers** had been significantly affected by heat but **showed no signs of actual burning.** (MFB Report)
4. The most probable cause of the burns on the back of Mr Zapart's legs was radiant heat conducted through the material. (MFB Report)
5. The twill trousers had some scorching but there were no signs of direct flame contact or decomposition of the material. (MFB Report)

The CSIRO report was consistent with these findings and also found that:

6. Exposure to an air temperature of 500°C for 1 minute is consistent with the damage to the PPC worn by Mr Zapart (CSIRO Report).
7. Damage to the PPC is due to mostly convective heat but also to radiant heat exposure (CSIRO Report).

The MFB's final report made the following relevant findings and comments:

1. A view that the Personal Protective Clothing and Equipment worn by Mr Zapart quite probably saved his life is not unreasonable.
2. The PPC was not designed to require the temperatures involved in a significant nitrocellulose fire.

3. The Personal Protective Equipment (**the PPE**) ensemble performed to expectations, insofar as those expectations can be measured.
4. In considering a fire of this severity, it "begs the question" to assume that replacement PPE would be the complete answer. The true answer is to aim at avoiding a recurrence of the same circumstances.
5. In conclusion, all equipment used at the fire performed to its expected standards.

Coronial Inquest COR4864/07 – Coroner Heather Spooner (23 August 2010)

The Coronial investigation was undertaken at the urging of the UFU and an inquest was held on 19 April 2010 before Coroner Spooner. The key findings and recommendations of the Coroner include:

1. The Coroner accepted the conclusions of the MFB investigation that the fire was due to an exothermic chemical reaction and spontaneous combustion of lacquer products containing nitrocellulose.
2. That the MFB investigation was extremely detailed and thorough and the firefighting safety issues were comprehensively canvassed.
3. The Safety Management meetings convened by the Coroner to raise awareness of the dangers associated with nitrocellulose products in the furniture industry resulted in an agreed Safety Management Plan for nitrocellulose products in Victoria.
4. The Coroner made no findings or recommendations regarding PPC.

WorkSafe investigation

WorkSafe undertook a thorough investigation into the circumstances of the fire at Yarraville and the injuries sustained by Mr Zapart. No enforcement or prosecution action was taken by WorkSafe against the MFB or its employees.

WorkSafe also participated in the Safety Management meetings convened by the Coroner to raise awareness of the dangers associated with nitrocellulose products in the furniture industry and implemented agreed action items with the MFB and CFA.

The report on the processes to select new personal protective clothing for Victorian firefighters by Judge Gordon Lewis

Shortly after the Yarraville fire, Judge Gordon Lewis provided his report on the processes to select new PPC for Victorian firefighters (**the Lewis Report**). A copy of the Lewis Report is attached to this letter.

The then Minister for Police and Emergency Services, Bob Cameron MP, wrote to Judge Lewis on 25 October 2007 requesting a report on the processes to select new PPC worn by MFB and Country Fire Authority (**CFA**) firefighters in Victoria. The terms of reference for his Honour's report were to:

1. Investigate and report on the procedures and processes undertaken since 2002 to identify and procure PPC for fighting structural fires – the structural ensemble.
2. Identify the causes for delay in timely decisions/agreements about the type of equipment to be procured.
3. Determine the key obstacles in the decision making processes that prevented a more timely decision on the structural ensemble.
4. Make recommendations that would resolve the procedural obstacles that were identified and that would prevent such obstacles from occurring in future equipment purchases.

The issues surrounding that selection of new PPC for Victorian firefighters dated back to 2001. At that time, the MFB had used its then PPC for operational firefighters for the previous twenty years. Following the release of a draft Australian Standard AS4967, the PPC then in use by the MFB did not comply with the requirements of that Standard. With technological advances, and the MFB's existing uniform supply contract coming to the end of its term, it was decided to release a request for tender (RFT).

In early 2002, it was decided a joint tender between the MFB and CFA would be beneficial and on 8 June 2002, the MFB and CFA released the PPC RFT. The MFB specification required that the PPC be compliant with Australian Standard AS4967 while the CFA specification required additional criteria over and above AS4967. Given the differences in specifications, the MFB and CFA conducted separate technical evaluations.

There were various delays throughout the process and the key obstacles and causes for delay as identified by Judge Lewis in the Lewis Report included:

- The MFB and CFA adopting separate specifications and separate approaches to evaluation and testing of the PPC ensembles, despite the RFT;
- The performance based approach to the specification of requirements taken by the MFB (and CFA), while the UFU took a product based approach, preferring a particular product, PBI Gold;
- A lack of proper project planning and clearly defined milestones by the fire agencies;
- Testing delays caused by the manufacturing of garments being more time consuming than anticipated, the University of Wollongong (who was to carry out metabolic stress-testing) having difficulty locating participants, ill-fitting garments due to the withdrawal of participants for whom they had originally been measured and the number of fabrics that required testing;
- The enterprise bargaining agreements and stakeholder relations.

In relation to the enterprise bargaining agreements, both the then MFB EBA and the CFA EBA required that the relevant agency reach agreement with the UFU on the equipment to be worn and/or used. Judge Lewis recommended that any future EBAs entered into between the MFB and the UFU (and the CFA and the UFU) not require UFU agreement,

but rather consultation. His Honour noted that the UFU had consistently taken advantage of the wording "to achieve, in effect, a veto of any attempt by the CFA to improve clothing and equipment issued to employees, with which the UFU does not agree" (see page 38 of the Lewis Report). In this regard, we note the current MFB EBA continues to contain such a clause (see clause 88 of the Metropolitan Fire and Emergency Services Board, United Firefighters Union of Australia, Operational Staff Agreement 2010).

Judge Lewis also identified that the UFU, MFB and CFA had been unable to work cooperatively to delivery new PPC for firefighters in a timely fashion. In particular, Judge Lewis noted that the UFU contested every aspect of the evaluation (of the PPC) and delayed the tendering process by adopting the following tactics:

- The use of industrial action and OH&S and EBA processes;
- Lack of attendance at meetings (in this regard, we note the UFU directed its members on the Tender Evaluation Panel not to participate in panel meetings);
- UFU media releases and bulletins which were critical of the tendering process and senior management and some of which instructed members not to participate in the process;
- The UFU approach to the Minister in 2004 requesting an investigation into the probity and behaviour of MFB management, regarding the PPC project;
- The UFU banning its members from participation in field trials of structural PPC under the tender evaluation process.

We note that despite raising concerns with the tender process, the UFU refused to participate in the review carried out by Judge Lewis, as noted by his Honour at page 9 of the Lewis Report.

We trust this summary, and the accompanying enclosures are of assistance to the Committee and the MFB would be willing to provide any further information sought in relation to these matters.

Yours sincerely



Paul Stacchino
Acting Chief Officer

Enclosures:

1. The report on the processes to select new personal protective clothing for Victorian firefighters by Judge Gordon Lewis dated 28 February 2008.
2. MFB omnibus report – “Structure Fire at 17 Hall Street, Yarraville 12 October 2007 – A review of events and issues, including the injuries to Leading Firefighter Richard Zapart”. Includes:
 - MFB Fire & Investigation Analysis Unit – Investigation Report “Japanese Screens & Interiors Furniture manufacturing plant 17 Hall Street, Yarraville 12.10.2007” (Prepared by Ian Hunter);
 - CSIRO – “Study of the effect of fire on MFB fire fighters’ personal protective clothing” (August 2008);
 - CSIRO – “Review of current knowledge on fire hazards associated with the lacquered furniture industry” (September 2008).
3. Media articles regarding the Yarraville fire:
 - *Firefighter in coma after factory blast*, Andrea Petrie, The Age, 13 October 2007;
 - *Firefighters go space age*, Andrea Petrie, The Sydney Morning Herald, 3 July 2008;
 - *Victorian firies receive bravery medals*, Kellee Nolan, The Sydney Morning Herald, 23 November 2009.
4. Coronial Inquest COR4864/07 – Coroner Heather Spooner (23 August 2010).
5. UFU Bulletin, Re: Uniform Update, Bulletin No. 202, Vol. 14, 31 October 2007.
6. UFU Bulletin, Whitewash Reports by Minister Cameron & MFB deny responsibility for firefighter’s critical injuries UFU insists on Coronial Inquiry to provide the truth, Bulletin No. 297, Vol. 15, 30 October 2008.