

## FINANCE AND ADMINISTRATION COMMITTEE

### **INQUIRY INTO OPTIONS:**

**(1) WORKERS' COMPENSATION AND REHABILITATION AND OTHER LEGISLATION AMENDMENT  
BILL 2015 AND**

**(2) WORKERS' COMPENSATION AND REHABILITATION (PROTECTING FIREFIGHTERS) AMENDMENT  
BILL 2015**

### **SUMMARY OF**

#### **SUBMISSION BY THE SEVEN SISTERS RURAL FIRE BRIGADE, YUNGABURRA**

1. Both Bills provide presumptive deemed disease coverage with the Government Bill possessing liminary provisions which impact the unpaid volunteer firefighters in particular by imposing attendance at 150 exposure incidents, as well as 10 years of service, plus 10 to 25 years as a firefighter before being eligible under the Bill for compensation for contracting any of 12 specified cancers.
2. The justification for these restrictions are the findings of the Monash University Australian Firefighter Health Study which on closer examination do not support such pretexts. Furthermore, it is maintained that only crude measures of exposure, such as duration of employment and number of runs or exposure incidents are used in such studies.
3. Ignorance of the actual types of fires attended by the volunteers and their job activities compared with those of the paid full time and part time firefighters obviously contributed to the bias against the volunteers contained in the Bill.
4. A brief outline of toxic smoke chemicals is provided together with information on the efficiency of the current respiratory equipment provided by the State to volunteers. Samples of the mask and facepiece used by volunteers were supplied for the Committee's edification.
5. The conclusion that it is ultimately in society's interest to compensate for the risks taken by the volunteers in protecting 93% of Queensland and its environment, homes, livestock, crops and economy and the Government budget raises the leading question of whether firefighters, and especially the unpaid volunteer firefighters, will be served fairly by the Bill in its present form, despite the Government's protestation that we believe it's our duty to look after the people who put themselves in harm's way to keep our communities safe.
6. Not convinced that this is so, a number of requests have been submitted to the Committee on behalf of all Queensland firefighters.

## FINANCE AND ADMINISTRATION COMMITTEE

### INQUIRY INTO OPTIONS:

#### **(1) WORKERS' COMPENSATION AND REHABILITATION AND OTHER LEGISLATION AMENDMENT BILL 2015 AND**

#### **(2) WORKERS' COMPENSATION AND REHABILITATION (PROTECTING FIREFIGHTERS) AMENDMENT BILL 2015**

### **SUBMISSION BY THE SEVEN SISTERS RURAL FIRE BRIGADE, YUNGABURRA**

#### **1. PURPOSE OF THE TWO BILLS**

1.2 To provide presumptive deemed disease legislation whereby a firefighter (either a permanent, part-time or volunteer "worker" under the *Fire and Emergency Services Act 1990*) develops one of 12 specified cancers then the cancer will be deemed to be work-related under both the *Workers' Compensation and Rehabilitation Act 2003* and the *Workplace Health and Safety Act 2011*. While volunteers are presently unable to pursue common law claims under these Acts, they may do so under the *Personal Injuries Proceedings Act 2002* and under Option 1.

#### **2. OPTION 1: WORKERS' COMPENSATION AND REHABILITATION AND OTHER LEGISLATION AMENDMENT BILL 2015**

2.1 The Treasurer, the Hon. Curtis W. Pitt M.P., issued a "FACT SHEET: Deemed disease legislation for Queensland Firefighters" which states, *The Monash University Australian Firefighter Health Study ... is considered the most authoritative research in this area. The Monash study found that overall volunteer firefighters in Australia do not have an increased incidence of cancer. However, there were increased rates of cancers in volunteers that attended fires compared to those volunteer firefighters that did not attend fire events. There was a higher incidence of cancers in those volunteer firefighter(sic) who had extended periods of service such as 10 years or more to 20 years depending on the cancer.*

2.2 The 2014 *Australian Firefighters' Health Study* by the Monash University Centre for Occupation and Environmental Health looked at records of individual firefighters serving before/including or only after 1985 provided by Queensland, New South Wales, Victoria, Australian Capital Territory, Western Australia, Northern Territory and Air Services Australia. The Study report recommended that, *There are many analyses in this report and it is important to look at the overall patterns of results, rather than focus on a single isolated result when interpreting the findings.*<sup>1</sup>

2.3 According to the Monash Study, it is true that the overall pattern shows that male and female volunteer firefighters do not have an increased incidence of all cancers combined when compared to the general population but some cancers showed an increase with increased years of service.

2.4 The actual conclusions of the Study's report summary were that:

*Male volunteer firefighters had a significantly increased risk of prostate cancer compared to the Australian population and this was mainly associated with firefighters who had served for more than 10 years in external analyses and more than 20 years in internal analyses. The internal analyses showed a statistically significant*

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1. Monash University. *Final report Australian firefighters' health study*. Melbourne, 2014. p.10

*trend for increasing prostate cancer risk with duration of service but not with tertile of incidents.*

*Testicular cancer was not increased for male volunteer firefighters overall compared to the Australian population but was significantly increased for those volunteers who have attended fires compared to those who had not attended fires. It was also significantly increased for those volunteers who served for more than 20 years when compared to volunteer firefighters who served for less than 10 years (with a significant trend) and raised but not significantly so when the 20 years+ group were compared to the Australian population. There were also significantly elevated risks for some incident tertiles but **there was no trend of increasing risk with increasing number or type of incidents.***

*Kidney cancer was not elevated when compared to the Australian population or when examined internally by service duration but there were some significant trends of increased risk with the number of incidents attended, although **no individual incident tertile was significantly elevated.***

*Compared to the Australian population, cancer of the lip was significantly raised for volunteers who had served for more than 20 years and for those who first served before 1970. Internal analyses **did not show an association with duration or number or type of incidents attended.***

and for women the Study report stated:

*There was a borderline significant result for increased colorectal cancers for those women who first volunteered after 1994. There were statistically significantly increased risks of colorectal cancer for those who had attended the most structural fires, and of female reproductive cancers for those who had attended the most landscape fires but **there were no significant trends by incident or duration of service.***

2.5 The Fact Sheet continued, *Based on this information, the additional exposure criteria of 150 exposure events has been introduced, which is also a requirement in a number of other jurisdictions that have introduced deemed disease coverage for firefighters.*

2.6 Furthermore, the Fact Sheet added, *The Opposition's Bill covers volunteer firefighters with the same qualifying period as fulltime firefighters, without the requirement that volunteer firefighter(sic) also attend 150 fire events. This means that a volunteer firefighter could be eligible without having attended a single fire.*

2.7 In the Federal legislation there is a qualifying period of service for presumptive legislation of 5-15 years (depending on the cancer) for paid firefighters. Presumably the Queensland requirement of 150 fire events is an attempt at equivalence for volunteers where the same years of service would be unlikely to result in attendance at the same number of fires. The Monash Study report did not recommend 150 incidents as a requirement threshold for compensation which the Study felt was outside their remit. Just because other jurisdictions may have included 150 exposure events in their legislation (which in the very short time available for comments we have been unable to find or confirm) does not mean that Queensland has to perpetuate this injustice and inequity.

2.8 The Fact Sheet justification that the pre-requisite of 150 exposure events is also required to weed out the volunteers that attend fires from those volunteers that do not, is offensive and discriminatory, if not sexist, as it is mainly women volunteers who do the administrative and management tasks such as Secretary and Treasurer. In times of bushfires it is all hands to the pumps and women, be they the Chairperson, Secretary or Treasurer, are fully involved at the fire site.

2.9 The statement in the Fact Sheet that a volunteer firefighter can become eligible for compensation payments without attending a single fire is ludicrous especially since Schedule 4A of Specified Diseases stipulates the number of years that a permanent, part-time or volunteer firefighter must contribute before their claim is recognised, namely from 10 to 25 years of service. Any slackers amongst the volunteers are not tolerated as they cause resentment and discord, so are smartly asked to leave the brigade. As volunteers regularly undertake practice and training burns, back burning, interstate fire events as well as major fires, a volunteer with no recorded fire incidents over a period of 10 years could only be attributed to poor record keeping.

2.10 Indeed, the Monash Study report identified that there was likely to have been under-reporting of incident attendance among Queensland volunteers. As it stated *...even if all incidents were captured in the records, not all firefighters attending the incidents may have been identified and recorded as having attended. This was thought to be the case for Queensland volunteers, so their data were excluded from those analyses related to attendance at incidents.*<sup>3</sup>

2.11 Unlike the volunteers, permanent firefighters have not been categorised into those attending fire events and those not doing so. As the International Agency for Research on Cancer (IARC) noted, *some municipal firefighters may be permanently assigned to tasks other than fighting fires, including fire scene investigation (i.e. the investigation of suspected criminal fires started by arsonists), hazardous material response, building safety inspections, or technical and administrative support. These individuals may or may not have experience fighting fires.*<sup>4</sup>

2.12 The pre-requisite of 150 fire events to be imposed on volunteer firefighters is based on faulty assumptions that do not take into account that ***exposure of firefighters vary considerably depending on their job activities with only crude measures of exposure, such as duration of employment and number of runs, used in studies.***

2.13 The stipulation of 150 fire events indicates that there is no appreciation of the difference between the types of fires attended and of the job activities undertaken by the paid full-time firefighters and the unpaid volunteers. In 2010 the International Agency for Research on Cancer (IARC) published a Monograph relating to firefighting. It describes the two phases in municipal firefighting as 'knockdown' and 'overhaul' as follows:

*During knockdown, firefighters control and extinguish the fire. Approximately 90% of municipal structural fires are either extinguished within 5–10 minutes, or abandoned and fought from the outside. This results in an **average duration of heavy physical activity at fires of approximately 10 minutes** ... Knockdown of large fires may last much longer. During overhaul, any remaining small fires are extinguished. The environment during overhaul is not as hot or as smoky as during knockdown, but it still contains products of combustion from small fires or smouldering material. Exposure can differ widely between the two phases of firefighting.*

2.14 With regard to the work of the volunteers fighting bushfires and wildfires, the IARC reported that, *Analogous to knockdown and overhaul, wildland firefighting also comprises two phases, referred to as "attack" and "mop-up." Attack at a wildland fire **generally extends over a long period of time, one fire lasting hours, days or weeks.** The frequency of aggressive strategies and tactics by firefighters may increase where there is an attempt to save residential developments. Municipal firefighters may also be called upon to fight wildland fires within or adjacent to municipal limits.*

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3. *Ibid.*, p.91

4. IARC, World Health Organization, Monograph. 98, Lyon, France, 2010. p.397

*Both municipal firefighters and wildland firefighters engage in heavy work activity at fires. In particular, wildland firefighters who use hand tools and carry a considerable amount of equipment with them engage in heavy work activity levels while fighting forest fires. Typical tasks include hiking, fire-line construction, chainsaw work, and brush removal. As a result, the amount of chemicals inhaled is greater for a firefighter at heavy work levels without respiratory protection than for a worker engaged in regular levels of work. This needs to be taken into consideration when comparing exposure levels to occupational exposure limits that were developed assuming regular work levels.*

*Also, studies relating to municipal firefighters usually do not distinguish between the different categories of exposed and unexposed firefighters or between the different task assignments.*<sup>5</sup>

2.15 The IARC investigated surrogates of exposure such as the 150 exposures or 10 years of service contained in the Option One Bill. It concluded that, *As a matter of practicality, epidemiologists have generally used years of employment or, in one case, years of active duty fighting fires, as a surrogate for exposure to smoke. This does not take into account the reduction in exposures when respiratory protection was used, differences between exposure groups, the intermittent nature of exposures, differences in tasks, or the fact that not all firefighters actually combat fires. In a Montreal study, only 66% of [municipal] fire department personnel were 1st line firefighters. ... Among firefighters at the same fire, statistically significant differences in exposure to combustion products have been found between front-line firefighters and both squad leaders and ordinary firefighters (Takehito & Maeda, 1981). The same study found no significant difference between ordinary firefighters and the officers who accompanied them.... However, different crews could have similar numbers of runs yet spend significantly different lengths of time at fires.*<sup>6</sup>

The requirements of attendance at 150 fire events plus 10 years of service for specified volunteer firefighters are pitiless and inequitable measures especially since the time spent at fires varies tremendously between brigades depending on the geographic location, the social and economic environment, staffing, the time of year and the types of fire. The IARC report concluded that, *Wildland firefighters go to fires more frequently and spend more time at fires during a season than do municipal firefighters during an entire year, and all of their exposure occurs during the wildfire season.*<sup>7</sup>

### **3. TOXIC SMOKE CHEMICALS**

3.1 The Bushfire CRC reveals that bushfire smoke contains volatile organic fractions (including toluene, benzene, xylenes, phenols etc.), aldehydes (e.g., formaldehyde, acrolein and acetaldehyde) all of which are poisonous and can cause cancer and respiratory illnesses, particulates (composed of carbon particles which appear as smoke, unburnt fuel etc.) which can deeply penetrate and damage the lungs and the gas carbon monoxide which can cause death.

3.2 The Queensland Government publication "Firefighter Minimum Skills: reference manual" states, *It is clear that airborne substances, such as dust, particles, fibres (e.g., asbestos), viruses and bacteria inhaled at an incident, enter the body by way of the respiratory system. They may result in short-term and long-term health effects for a firefighter. The possibility of exposure to gas is common at incidents involving fire due to the presence of carbon monoxide in the smoke.* It also defines smoke as a work hazard.

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5. *Ibid.*, p.398

6. *Ibid.*, p.406

7. *Ibid.*, p.405

#### **4. EFFICIENCY OF THE CURRENT RESPIRATORY EQUIPMENT PROVIDED TO VOLUNTEERS**

4.1 This equipment has been restricted to Moldex 2400P2 masks held onto the face by two non-adjustable 6mm wide strips of artificial rubber which limits users to those without facial hair, beards, long sideburns or eyewear. The manufacturer states on the packet that these *respirators may reduce **but do not eliminate wearer exposure to airborne biohazard** or risk of contracting any disease or infection and are not to be used against gases or organic vapours.* In fact after a short exposure in bushfire conditions, smoke leaks into the mask as the rubber head straps soften in the heat and with use, and with the non-adjustment of the mask to changing facial contours resulting from continuous exertion.

4.2 Also recently provided have been the 3M 9320 fold flat facepieces which are a variation of (4.1) above without the exhalation valve but with the same limitations. The accompanying leaflet states, these filtering facepiece respirators [are] for use against particles. *They should be used to protect the wearer from solid and non-volatile liquid particles only .... These products do not protect against gases/vapours ... **Do not use for respiratory protection against atmospheric contaminants/concentrations which are unknown or immediately dangerous to life and health.***

4.3 In each workplace health and safety case, it is a question of fact whether the employer has taken reasonable duty of care to protect employees (Rural Fire Brigade volunteers are defined as employees) from work accidents and harm. The Firefighter Minimum Skills publication states, *Generally, the employer's obligation breaks down into providing the following ... adequate Personal Protective Equipment and instructions for use ... safe and adequate plant and equipment.* It is obvious from paragraphs 4.1 and 4.2 that the term 'respirators' used in the *Rural Fire Service Queensland Equipment Catalogue* is a misnomer for the grossly inadequate and inefficient masks and facepieces provided by the State Government. A sample of each of these 'respirators' is provided for the Committee's inspection.

4.4 As, the IARC report stated, *There is currently no respiratory protection standard for wildland firefighters. One bottle of compressed air used with a self-contained breathing apparatus lasts approximately 15–30 minutes, so self-contained breathing apparatus are not an option for wildland firefighters who work extended shifts at fires for consecutive days or weeks. The only other options are administrative controls to reduce exposure, or the use of air purifying respirators. Air purifying respirators have recently been evaluated for use by firefighters. In some jurisdictions, such as Australia, wildland firefighters use negative-pressure air purifying respirators.*<sup>8</sup> Our brigade has never seen the latter respirators and they are certainly not available in the *Rural Fire Service Queensland Equipment Catalogue*.

#### **5. CONCLUDING COMMENTS**

5.1 The Fact Sheet also states that, *The government's amendments are about providing the best benefits we can to those firefighters who have been active in protecting the community – we believe it's our duty to look after the people who put themselves in harm's way to keep our communities safe.* But, does that extend to the volunteer firefighters who are unpaid, under-resourced but still freely give up their time and energies (not limited to 10-14 hour shifts), and often their health and lives to give back to their communities across 93% of Queensland, thereby protecting our environment, homes, livestock, crops and economy as well as saving the Government of Queensland millions of dollars in salaries, disaster relief and resources each year? Remember Marysville. With its limitary provisions the Bill does not quite match the sentiments expressed above in the Fact Sheet.

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8. *Ibid.*, p. 442

5.2 The policy underpinning a presumption for firefighters, as contained in this Bill, has been described by as follows:

*It is based on the idea that firefighters, like police and a few other public safety occupations, are expected to take risks that would be unacceptable in any other work environment. They may be trained to manage these risks and to protect themselves, but the working environment cannot be made safe because they deal with situations that are inherently dangerous and may lose control. In the interest of society and as safety professionals, however, they essentially waive the right to refuse dangerous work and routinely accept the risk, like a soldier sent into battle to defend the country. It is, by this logic, ultimately in society's interest to compensate for this risk because the work has to be done.*<sup>9</sup>

Surely this compensation entitles the volunteers, who take similar risks, to equality of treatment in line with that enjoyed by the full time firefighters.

5.3 **We request that the Finance and Administration Committee recommend to the Government that the Government Bill:**

(1) **Be amended to achieve equality of treatment for full-time firefighters, part-time and volunteer firefighters with the removal of the adjective "specified" in relation to volunteer firefighters together with removal of the requirement that volunteer firefighters must attended at least 150 exposure incidents. In view of the fact that with bushfires the duration of incidents can cover hours, days and weeks, that any specification of a number of incidents to be attended by volunteers, be totally excluded from the Bill and from the proposed Act.** As volunteer firefighters have lungs as do paid firefighters, let there be no difference and no discrimination.

(2) **Be amended to remove the provision that all firefighters must attend exposure incidents for the specified period of 10 years.** The time limitations are set out in Schedule 4A, column 2.

(3) **Be not amended to increase the degree of permanent impairment (DPI) presently at more than 5% arising from injury, to 20% or more (Clause 6 and section 239) and to 30% or more for lump sum compensation.**

## **OPTION 2: WORKERS' COMPENSATION AND REHABILITATION (PROTECTING FIREFIGHTERS)**

### **AMENDMENT BILL 2015**

6.1 The private member's Bill provides the same entitlements as the Government Bill with fewer restrictions than contained in Option 1. The statement in the document "Comparison of deemed diseases provisions" that *available research and data on cancer incidence in volunteer fighters does not support the scope of coverage provided in the private member's bill* is untrue as that same research and data is the basis of the Government Bill which is discussed in detail under Option 1. Similarly, the further claim that *the Private member's bill will increase compensation costs for deemed diseases due to its broader coverage of volunteer firefighters* is another unsupported justification as no assessment of the financial implications to Queensland has been given in the event that the Bill is enacted. Moreover the Commonwealth,

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9. T. Guidotti, *Evaluating Causation for Occupational Cancer among Firefighters: report to the Workers' Compensation Board of Manitoba*, 7 March 2005, p. 6

*... explored the possibility that the Bill could bring about significant increases in premiums by improving the ease with which firefighters can access compensation. However, based on overseas experience as well as the fact that the legislation would not provide for any new grounds to claim, the committee is of the view that there would be negligible impact on the Commonwealth or ACT budget.*

*For information on the cost impacts of similar presumptive legislation in other jurisdictions the committee considered evidence provided by the Fire Chief Ken Block of Edmonton Fire Rescue Services in Canada. Fire Chief Block informed the committee that the cost impact of presumptive legislation in Canada had been 'minimal if not negligible'<sup>10</sup>*

6.2 The 1,441 volunteer brigades do not operate out of fully resourced, substantial government buildings. Some brigades have managed to fund-raise enough money to build their own metal sheds while the vast majority have collected only sufficient funding to possess one or two slip-on units under a tarpaulin. A slip-on unit is a plastic tank holding 500 or 1000 litres of water, a reel of hose and a small petrol pump. It has taken 23 years for our brigade to be able to afford 2 slip-on units and a tarpaulin. With these very limited resources, volunteers face the horror of bushfires and the possibility of burns, injury and death. It is becoming harder to recruit volunteers especially as the first question that they ask is, "What happens to my family if I am injured in any way, develop cancer or I die as result of being a volunteer?" The Bill at Option 1 will not make it any easier to gain new members with its requirements of 150 exposure incidents and 10 years of service. At least Option 2 acknowledges the efforts of the 36,000 volunteers by not being so restrictive and with the realisation that the majority of volunteers are elderly and new younger, but reluctant, blood is urgently needed for the survival of the volunteer brigades to continue to fight Queensland's bushfires.

**6.3 We request that the Finance and Administration Committee recommend to the Private Member that his Bill:**

**(1) Be amended by the Parliamentary Draftsman to include provisions for excluding 32A(2)(b), to improve the definition of injury in section 32, include incapacity if it predates diagnosis and to add a provision permitting common law damages.**

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10. Australia. Parliamentary Library. *Safety, Rehabilitation and Compensation Amendment (Fair Protection for Firefighters) Bill 2011*. *Bills Digest* No. 83, 2011–12, 23 November 2011. p.10