

Creating a safer state with electricity and gas

16 September 2013

Coroners Registrar
Coroners Court
Level 11
222 Exhibition Street
MELBOURNE VIC 3000

MELBOURNE VIC 3000

Inquest into the deaths of Tyler and Chase Robinson 2037 and 2038/2010

I act for the Director Energy Safety. Enclosed please find the signed hard copy of our response to the recommendations made by the Coroner on 30 July 2013.

If you would like to telephone me the best number is 0438 501 769

Yours faithfully

Dear Sir

John A Murphy Solicitor

Energy Safe Victoria

jmurphy@esv.vic.gov.au



In the Coroners Court
Of Victoria 2037 and 2038 of 2010
Sitting at Shepparton and Melbourne
Inquest into the deaths of Chase and Tyler Robinson



ESV Response to the Coroner's Recommendations

Recommendation 1

THAT ESV continue its public awareness campaign to alert the public to the risks associated with failure to regularly service gas heating appliances and the need to have this servicing performed by licensed gas fitters. In this regard, I want to highlight the tremendous contribution that has been made to this campaign by Vanessa and Scott Robinson. By selflessly and publicly displaying their grief and advocating for safer monitoring and maintenance of domestic gas appliances they have reached many people in a poignant way that has been memorable and, therefore extremely effective.

ESV will continue with its public awareness campaigns, including undertaking analyses with respect to the effectiveness of the communications and behavioural changes. ESV will continue with an annual advertising and community awareness campaign which includes radio, TV, print and cinema advertising and features in ESV and VBA respective magazines, "Energysafe" and "The Plumber". Brochures are distributed throughout the community. ESV also educates industry through registered training organisations, including TAFEs.

Following the tragic deaths of Chase and Tyler, ESV spent approximately \$1.3 million on advertising to raise awareness about the dangers of CO poisoning and the need to get appliances serviced at least every two years. In the year after the boys' deaths ESV spent about \$700,000 which was the biggest single campaign ESV has ever undertaken.

ESV has received the results of its 2013 carbon monoxide (CO) awareness campaign and the results are gratifying. Awareness of the campaign has risen to 62 per cent (up from a previous high of 59 per cent), and four out of five people said they were more likely to have their heater serviced after viewing the campaign.

The key message of the campaign is reaching a broad target audience in Victoria with 82 per cent responding that they should get their heater serviced at least every two years.

ESV, as in previous years, will take a stand at the Royal Melbourne Show and will continue its public awareness campaign via that venue.

Recommendations 2 and 3

- 2. THAT ESV whose publications are widely distributed to many trade organisations specifically target the electrical trade to ensure that exhaust fans are not retro-fitted in homes with gas heaters without first getting a clearance from a properly qualified and licenced gas fitter who can conduct the necessary tests and analyses.
- 3. THAT ESV in its public awareness campaign alert the public to the dangers of DIY exhaust fan retro-fitting insofar as this may impact on the safe operation of gas furnaces.

ESV came into existence in August 2005 and since its inception it has devoted space in 15 of its 32 quarterly magazines circulated to every licensed electrician and gasfitter as well as to a number of peak bodies associated with the gas and electricity industries.

ESV will continue its publicity which will include warnings about exhaust fans fitted by "do it yourself" home handymen. ESV also consults with the Victorian Building Authority, Department of Climate Change and the Master Plumbers Association on a wide range of matters, including Carbon Monoxide dangers. ESV will continue its industry education campaign about the dangers of carbon monoxide and in particular of open flued gas space heaters.

Retro fitting of exhaust fans can affect the air pressure throughout a dwelling and ESV will encourage electricians, builders, plumbers and gas fitters not to retro fit exhaust fans into residential properties which have gas space heaters. However, there is no current statutory mechanism that would compel the testing contemplated by the court.

ESV is one of the organisations which participates in the committee which reviews the Australian Standards relating to electrical work, in this case the Australian Standard AS/NZS 3000 "Wiring Rules". While ESV cannot unilaterally change this standard ESV is represented on the Committee "EL001" for AS/NZS 3000. There is scope in the standard to include advisory information which would show electricians the effect of and the creation of, negative air pressures between gas-heated living spaces and the room into which an exhaust

fan is to be installed. ESV will put forward this recommendation for consideration by the committee at the next opportunity.

Recommendation 4

THAT ESV- investigate the sorts of ventilation options available in five and six star energy rated homes that could be fitted in circumstances in which open flued furnaces have been or are to be installed and distribute any recommendations that arise from such an investigation to relevant parties.

ESV has been communicating with the Australian Building Codes Board and has established that the Building Code of Australia exempts buildings from the sealing requirements where ventilation is required for gas appliances. The driving factor, however, in reduced ventilation is the energy star ratings that are given to buildings. There is an obvious conflict between ventilation requirements for the safe operation of open flued gas appliances and requirements to ensure modern buildings are energy efficient by reducing ventilation. ESV is attempting to establish how significant increased ventilation is to the reduction of star ratings. ESV will communicate further with the Department of Climate Change and the Victorian Building Authority on this issue, however the present building codes are national and ESV will cooperate with the VBA on this issue.

Further, ESV will publish advice to plumbers who are qualified gas fitters about the need for adventitious air when gas space heaters are to be installed in residential properties.

Recommendation 5

THAT ESV in its public awareness campaign stress the difference between carbon monoxide alarms and smoke detectors to dispel any perception in the community that each is equal of the other giving equal reassurance. This could be simply done by expressing it in the way Mr Bonsak did in his evidence

The evidence of Mr. Paul Bonsak was clear. ESV does not support the mandatory use of carbon monoxide alarms. Carbon monoxide, by its nature, lingers in air at any point from ceiling height to floor level and does not dissipate readily. A carbon monoxide alarm must be positioned at the height where the gas exists, but this is difficult to determine. Carbon monoxide readily mixes with air and can be harmful at relatively low levels. ESV reiterates that detection of carbon monoxide by an alarm in a room may fail because the alarm is in a

fixed position and if room conditions alter, by opening a door or window, then the carbon monoxide may concentrate in one part of the room and not register on the alarm. Carbon monoxide alarms can give a false sense of security.

ESV in its public awareness campaigns will refer to the importance of regular servicing of gas space heaters to prevent the occurrence of carbon monoxide

Recommendation 6

THAT ESV continue to train gas fitters to test for spillage of CO from open-flued appliances and continue to conduct presentations and continuing education on this issue.

ESV continues to sponsor training of gas fitters ensuring that carbon monoxide awareness training is included in the "Certificate III in Gas Fitting" and in the "Certificate IV in Plumbing and Services". Those are accredited courses taught in TAFEs. ESV also sponsors the Master Plumbers and Mechanical Services Association and the Plumbing Industry Climate Action Centre specifically in relation to carbon monoxide detection training courses for gas fitters.

ESV has produced a training DVD for gas fitters and published a technical information sheet to assist the industry.

Recommendation 7

THAT ESV as a member of the Australian Standards Association continue to use its offices to persuade manufacturers of gas heating appliances to nominate within their Owners Manuals the appropriate periodic checking and servicing of such appliances.

ESV will use its offices as a member of Australian Standards Association to persuade manufactures to include cleaning as an integral part of servicing and for servicing to be performed at least every two years, into their Owners Manuals.

Domestic gas appliances are installed in accordance with the Australian Standard AS 5601 "Gas Installations". Clause 5.2.5 requires appliances to be installed in accordance with the manufacturer's instructions. Where there is conflict between a specific requirement of AS 5601 then it sets out a procedure for resolving that conflict. There is no prescribed standard for maintenance of domestic gas appliances. This is guided by the appliance manufacturers' instructions.

AS 5601 is a living document and ESV is represented on the relevant technical committee "AG006". Standards are kept under review and are updated and amended from time to time. ESV will propose that the committee consider a further provision that where a flued appliance is located within a building that the appliance should be serviced and cleaned every two years.

ESV considers a two-yearly maintenance schedule for gas appliances to be appropriate as reflected through its media campaigns that domestic appliances be serviced every two years. Maintenance requirements are set out in Owner's Manuals which typically vary from twelve months to two years. ESV is a part of a network of safety agencies that exist in each state. Each regulator has a place on the Gas Technical Regulators Committee. ESV is a member of, and currently chairs, the Gas Technical Regulators Committee (GTRC). ESV will work with other committee members to encourage manufacturers to specify a maximum maintenance period of two years, and include appliance cleaning practices in the Owner's Manuals.

Finally, ESV will approach manufactures directly to encourage them to add two year cleaning cycles into their Owner's Manuals.

John A Murphy Solicitor ESV

16 September 2013