



Where there is a Will . . . there is a Way!

*Michael Kovacs, Testing Officer and
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We are now in the middle of Australia's fire season with the hottest day since 1939 being recorded on New Years Day 2006 at 45 degrees Celsius, with 23rd and 24th December 2005 being declared by the Commissioner of the New South Wales Rural Fire Service, Phil Koperberg, as Total Fire Ban days. All crews in the Cumberland Region were at a state of readiness in anticipation of a call-out on Christmas Eve. Throughout October and November TestSafe Londonderry's 100 acre site had been regularly used at weekends for fire crew training in preparation for just such an event.



RFS crew standing by to protect surrounding bush in the event of sudden loss of integrity

Against this background, a client made an urgent request in late December for TestSafe to conduct a series of **integrity under fire** tests in the Fire Ground of its imported steel fuel containers, in accordance with the provisions of Australian Standard AS2906. Recently some imported fuel containers have failed during the testing process due to inferior welding. The client required confirmation that a minor manufacturing fault had been rectified and would be safe for continued sale on the Australian market.



TestSafe's Testing Officer Michael Kovacs during the testing process

These fuel containers are essential equipment for people undertaking trips off the beaten track or away from highway refilling stations.

It was decided, given the safety arrangements of the Fire Ground, that a formal application for an exemption from the Total Fire Ban would be lodged with the Commissioner so that the fuel containers half-filled with fuel could be subjected to tests on 23rd December.

This exemption was promptly granted by Commissioner Koperberg on the basis that *“adequate fire-fighting equipment is immediately available to prevent the escape of fire, spark or incandescent material from the site of exempted work”*.

The *“immediately available adequate fire-fighting equipment”* came next day with the enthusiastic presence of a crew from the local Llandilo Rural Fire Service under the watchful eye of Senior Officer Perce Denton.



Fire Crew from nearby Llandilo. From L to R: Rod Kronhart, Captain Perce Denton, Kyle Weblink, Clarisa Fryier, Andrew Tatiana, Craig Lemming & Robert Faibian

Successfully passing the *“integrity under fire”* test of AS2906 is a rigorous process and requires a metal jerry can fuel container to be subjected to 16 hours of conditioning at 23 degrees in a special conditioning room, and then immediately transported to a fuel-sprayed prepared tray in the Fire Ground. It is required to be quickly ignited and then survive this baptism of fire for 30 seconds without loss of integrity and for 90 seconds without exploding. Testing Officers are also required to wait 120 seconds before extinguishing the fire around the container

with a powder fire extinguisher. A cage is also placed around the container should it explode under the pressure.

This has occurred previously at TestSafe as the photograph left testifies.

Thankfully the steel fuel containers passed the *“integrity under fire”* test and the RFS crew was able to gain vital fire ground experience under controlled conditions.



A previous test conducted which resulted in the fuel can exploding