

BUSH FIRE FOAM IS TYRE FIRE BREAKTHROUGH

Until now, fighting tyre fires has required huge volumes of water and extreme patience. An experience conducted during a recent fire at a tyre storage depot 20 kilometres south of Sydney, however, has brought a major discovery in the approach to these environmental disasters.

The fire at Kurnell took seven units from the NSW Fire Brigade and thirteen NSW Bush Fire Brigade units almost 24 hours and over 27 million litres of water to extinguish.

The NSW Bush Fire Brigade now believes the fire could have been controlled in less than three hours if a particular type of fire fighting foam had been used. Designed for use in bush fire control, the foam is also suitable for Class A fire situations - those involving wood, rubber and plastics.

Stuart Midgley, Fire Control Officer for the Sutherland Shire Council, began using Fire-Brake™ 3150A (Class A) Foam Concentrate after the fire, fuelled by 30,000 tyres, had been smouldering for 15 hours.

Almost immediately, a spot which had been flaring throughout the night was brought under control with a 3/4" hand line and the Brigade was able to enter the site to begin separating tyres and eliminating hot spots.

"Although we remained at the site for another seven hours, the breakthrough occurred with the use of Fire Brake™ 3150A at 8.00 a.m." said Mr Midgley. "From that time on, it was simply a case of pulling apart the smouldering stacks and wetting them down."

"If we had used the foam in our first attack, I believe the fire could have been extinguished in three hours - the effect was that dramatic. The foam acted as a super wetting agent. Where previously water ran off the tyres, with the addition of Fire-Brake™ 3150A foam it could be seen to penetrate the rubber."

Even a small reduction in the time spent fighting the fire can mean significant lessening of water usage and environmental damage. A carbonaceous residue, flushed out of the site by the millions of litres of water used, posed a major threat to nearby waterways. Hay bales were brought in to soak up the pollution.

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Just as dangerous to the fresh water swamp was the use of salt water reserves to fight the fire. At 500 litres per second, any time savings were crucial to prevent contamination.

Early attempts to extinguish the fire with a fluoroprotein foam resulted in an algal bloom. Unlike this protein based foam which functions as a super fertiliser, Fire-Brake™ 3150A Class “A” foam concentrate caused no damage to the waterways.

And, of course, says Stuart Midgley, any time saved in fighting the fire means less smoke and rubbish in the air. “Tyre fires are characterised by the thick dark smoke they generate. If we had been able to bring this fire under control earlier, we could have prevented extensive air pollution, not to mention the fear and trouble for evacuated neighbours.”

If you have any further questions on this topic, please contact the undersigned.

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Date: May, 2009

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