**TORQUE TALK**

KEN WILSON

**Bushfire support from JCB**

JCB Construction Equipment Australia (CEA) has matched dollar-for-dollar funds raised by a Perth boarding school to support the bushfire-ravaged Esperance region.

St Mary’s Anglican Girls’ School raised $38,000 during the first week of December and that figure was matched by JCB CEA and its local dealership, Staines Esperance.

In addition, JCB CEA staff nationwide raised more than $7000, and this figure was also matched by the company.

Last week a cheque for $43,200 was handed over to the principal of St Mary’s, Lynn Thompson, by JCB CEA State manager Renay van der Meulen.

JCB CEA executive general manager Hybros Taylor said all company staff were deeply saddened to hear of the tragic events.

“We hope that by matching the funds raised by St Mary’s and our generous staff we can play some small part in supporting devastated families and helping the region rebuild,” he said.

One of those killed in the fires was Esperance farmer Kym Curnow, a respected member of the boarding parent community at St Mary’s and a long-time customer of JCB dealer, Staines Esperance. He lost his life helping to save others.

“Kym Curnow was a respected member of the Esperance community,” Mr. Taylor said. “Our hearts go out to his loved ones, and the loved ones of the other three people lost in these dreadful fires.”

**Tweaking engines**

JUST when you thought it was safe to start any diesel engine, European regulators have signalled more changes to further reduce emissions.

According to US ag industry analyst Dave Kanicki, Ag Equipment Intelligence, engine manufacturers already have started unveiling technical solutions to meet new diesel engine emissions regulations planned by the European Union.

Under current European and US regulations, particulate matter limits determined by mass, have been driven down by a remarkable 99 per cent from Tier 1 levels,” Mr. Kanicki said.

“Buy EU Stage V rules will target ultra-fine particulate emissions, which are considered the most harmful to human health, by setting limits on the number of particles emitted.

“The new EU-only regulations are expected to be phased in by engine power bands over three years starting in January 2019.

“The US regulators have given no indication it will adopt the same measure.

“But future EU-spec engines may become standard if ag vehicle OEMs (original equipment manufacturers) want to avoid the complication of supplying engines to different specifications in two major markets – Europe and North America – where emissions rules currently are pretty much identical.”

According to Mr Kanicki, using a Diesel Particulate Filter (DPF) will be the only way to meet the EU’s proposed limits defined by particle number rather than mass.

Some engine makers, such as Cummins, Deere and Perkins, already use filtration among measures to meet EPA Tier 4 Final and EU Stage IV rules,” he said. “But AGCO Power, FPT Industrial, JCB Power Systems and MTU are among those who have chosen combustion tuning and selective catalytic reduction (SCR) to avoid using a DPF, which adds cost and often has a servicing requirement.

“Although the regulations have yet to be formally established, engine manufacturers have pushed ahead with solutions,”

According to Mr Kanicki:

- Deutz already has DPF options in anticipation of the Stage V limits as an addition to the SCR system on 4.1 litre and larger engines and the diesel oxidation catalyst on 2.9 litre and 3.6 litre engines.

- FPT Industrial says a particle filter will replace part of the SCR catalysers in its next-generation Hi-eSCR system.

“Together with a lack of exhaust gas recirculation (EGR), this will help maintain the after-treatment installation flexibility available with the manufacturer’s Tier 4 Final engines,” Mr Kanicki said.

- Perkins highlights its experience as an early adopter of DPF technology and is confident that its low temperature regeneration system – to periodically remove accumulated deposits from the filter material – can