

# Spray suggestion

Aug. 23, 2013, 5:30 a.m.



A coal train leaving Singleton

RESEARCH developed at Newcastle University commissioned by Queensland Rail has paved the way for routine 'coal veneering' of the majority of Queensland's coal wagons.

Coal veneering is the practice of applying a dust suppressant to each coal wagon as it leaves the mine site, a practice yet to be considered, let alone adopted in New South Wales.

NSW Minerals Council is not keen on the practice and the council's chief executive officer Stephen Galilee claims covering of coal wagons isn't warranted in New South Wales because the train journey distance was significantly less than that of Queensland.

One of the country's pioneers in the coal veneering process, Queensland based Shadforth Civil Engineering project manager Stephen Visser said the practice was used throughout the world and was a highly successful and cost effective method to reduce coal dust emitting from coal trains.

“In Queensland where veneering is actively being taken up by mining companies they have found the process cost neutral because the application of the suppressant reduces the loss of coal from each wagon during its journey to the port,” he said.

“Queensland Rail also promotes the technology because it reduces their costs in line maintenance – in fact in this state everyone is keen to use veneering because of its huge benefits to all the stakeholders.”

But NSW Minerals Council, chief executive officer Mr Stephen Galilee said the need for veneering depends on factors such as coal type, the moisture content of the coal, whether it has been washed, loading practices, travel times and speeds, and weather conditions.

“Practices and conditions widely experienced in New South Wales reduce the potential for dust emissions from the top of loaded wagons.

“For example, most coal is washed before transport, the top of the wagon loads are generally 'shaped' during loading to reduce wind erosion, and travel times are relatively short.

“The conditions and coal types in Queensland are different from those in New South Wales and wind tunnel testing by Glencore of six of the state’s coal types showed little potential for 'dust lift off' from the top of loaded coal wagons under simulated travel times and weather conditions,” Mr Galilee said.

The topic of coal veneering was raised in the recent Senate report into ‘The Impacts on health of air quality in Australia’ released last week.

That report states by the end of this year the majority of mines in Queensland will have committed to using veneering on their coal wagons.

One of the recommendations to come out of the Senate report was a call for all coal wagons to be covered with some form of lid.

There is no doubt this would be an expensive process and involve extra costs at either end of the coal chain with the covers having to be opened and closed.

According to Mr Visser the advantage of veneering was that it was such a simple process to apply the suppressant quickly once the wagon had been filled.

“It’s not rocket science. The suppressant is a mixture of water and a bio-degradable chemical which coats the top of the coal,” he said.

The research conducted by Newcastle University assessed 10 different Queensland coal types and up to 15 different commercial suppressants.

Mr Visser said they all passed the test of zero dust lift off after eight hours in a wind tunnel.

<http://www.singletonargus.com.au/story/1723988/spray-suggestion/>