



The Honourable Scott Emerson MP
Minister for Transport and Main Roads

Our ref: PET-11863

Your ref: 10.4 Petitions

11 MAR 2014

Mr Neil Laurie
The Clerk of the Parliament
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Dear Mr Laurie

I refer to a petition number 2192-13 lodged with the Legislative Assembly on 11 February 2014 about coal dust needing to be contained.

Currently approximately 200 million tonnes per annum of export coal is railed to Queensland export ports.

In relation to coal dust generally, there are two broad categories of dust that may require management.

The first is coarse dust (typically 200 to 10 microns in diameter) which may appear as deposited dust and can have amenity or nuisance impacts. The second category is PM₁₀ fine particles, or particles less than 10 microns in diameter. PM₁₀ particles are invisible to the naked eye. By way of comparison a human hair is 60 microns in diameter.

The health impacts from dust are predominantly related to long-term exposure to PM₁₀ fine particles, which usually originate from industrial processes and fuel combustion. High levels of PM₁₀ fine particles can particularly affect asthmatics and persons with pre-existing cardiac and respiratory conditions.

Coal rail transport and coal terminal stockpiles predominantly contribute to coarse dust emissions.

Transported coal and related coal dust have low levels of PM₁₀ fine particles and consequently have very low impact on human health. This is due in part to the fact that product coal is crushed and washed in a coal handling and preparation plant to remove most coal fines including fine particles before being loaded for rail transport, and to meet customer specifications.

To further reduce dust emissions, rail and coal terminal operators also implement comprehensive dust reduction programs across their operations.

In fact Queensland leads the world in the use of innovative coal dust management systems. In association with rail operators, over the last three years, all Queensland export coal mines have installed veneering systems at their mine rail load-out facilities.

Veneering is a world-leading dust suppression technology. It involves the spraying of an environmentally-friendly binding agent onto the surface of loaded coal wagons. This forms a flexible cover on the coal wagon and helps bind particles within the load. In Central Queensland the introduction of veneering by miners and rail operator Aurizon Limited has led to dust reductions of up to 75 per cent.

All Queensland coal terminals also implement comprehensive coal dust management systems. Management measures include the extensive use of water sprinklers to reduce dust lift-off from coal stockpiles. At ports, coal trains are unloaded within enclosed train unloading facilities. Enclosed conveyors transfer coal to stockpiles and shiploaders. Shiploaders use telescopic booms and enclosed chutes to deliver coal deep into ship holds, shielding transported coal from wind effects during loading.

Coal miners, rail operators (Aurizon Limited and Queensland Rail) and coal terminal operators have developed and are implementing a Coal Dust Management Plan to minimise dust emissions on the Western - Metropolitan rail system which transits Brisbane. Complementing this initiative the Port of Brisbane has developed and implemented a Port of Brisbane Coal Dust Management Plan.

In order to protect human health, all coal terminals have to comply with National and State Air Quality Standards, and all Queensland terminals are in compliance with such standards.

All coal terminals have in place an extensive array of air quality and dust monitoring systems. Monthly air quality reports are submitted to the Department of Environment and Heritage Protection and real-time dust monitoring data is available on coal terminal web-sites for interested citizens and communities.

As has been outlined above, Queensland leads the world in the deployment of best-practice coal dust management systems at mines, on rail and at our ports.

Yours sincerely

A handwritten signature in blue ink that reads "Scott Emerson". The signature is fluid and cursive, with a long horizontal stroke at the end.

Scott Emerson MP
Minister for Transport and Main Roads