My submission is concerning, **'Prevention and Management Practices'**, for unloading coal at PWCS  facilities at its Kooragang Is. and Carrington terminals. I make this submission with prior knowledge of current and past practices having previously been employed on both their sites between the years 2007-2013.

I would like to bring to your attention, the problem that exists, of what is know as 'carry through' or coal which remains in or on the rail coal wagon hoppers, bogies and brake gear, that discharge their load at both terminals.

Carrington Terminal.
This terminal is the older of the two and was designed for trains with only half the capacity of those which now use it. Coal is dumped into a 'deep' hopper with large capacity, therefore there seems to be little 'carry through' except that residue that may remain stuck to the inside of the hopper.

Kooragang Island.
This terminal has a different dump hopper design than that of Carrington. The dump station is designed with a hopper that can only receive the load from one coal wagon at a time. There is a high capacity conveyor beneath which clears the hopper before the next wagon is in place to discharge. As the rail wagons are moved forward and due to the hopper design the rail wagon's under frame, bogie and brake gear are drawn through the surcharge of coal, still in the hopper, which then lodges itself on the under structure. This is then transported out of the dump station to be deposited on the railway per way on the way back to the mines for reloading.

It is this 'carry through' which I am sure leads to contamination of the railway perway and the possible production of airborne fine particulate matter.

Possible solutions
There are feasible solutions that could be employed to minimize the 'carry through' of coal preventing airborne particles.
Firstly at the loading points, spray a loaded wagon with a water soluble binder to limit the amount of airborne particles.
Secondly, when wagons have exited the dump hoppers at both Carrington and Kooragang terminals they could have their hopper doors left open for high pressure water jets to clean both the inside of the hopper and the underside including the frame, bogies and brake gear. Hopper doors can then be closed. All of the residue can be collected and recycled back into the dump hoppers and water can be recycled to settling ponds.

I am sure a combination of these and other efforts can be used to reduce the community's perception, either right or wrong, of airborne coal particles in our environment.