Mrs Wendy Bowman
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POEO (HRSTS) Regulation Review
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Submission to the Hunter River Salinity Trading Scheme Review

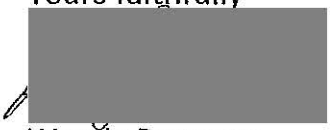
This statutory ten year review is timely, as the last ten years have seen a massive expansion of the coal mine industry putting more stress on the Hunter Valley and the Hunter River. While the Scheme manages saline water discharges, it should also incorporate measurement of Heavy Metals, minerals and other by-products of the mining industry that may be present in mine water discharges. Changes in technology over the last ten years provide some opportunities for improved monitoring of discharges.

1. Salinity targets should not exceed 600 EC at Denman and 700 EC at the confluence of Glennies Creek and the Hunter River. The reason I have indicated a level of 700 EC at the Glennies Creek confluence it that Lucerne crops and other crops starts to show salt stress and reduced yield at 700 EC.
2. Monitoring of water quality in the Hunter River at points between Aberdeen and the Maitland tidal pools should be expanded to include measuring other pollutants such as heavy metals. This information could be displayed on the Water Info NSW internet site alongside the water flow, EC and water temperature data.
3. The World Health Organisation standard for drinking water is 800 EC. The 900 EC target should be lowered to 700 EC which would provide an improved water quality level that is below the WHO standard, and

benefits the ecology of the river and also allows a wider range of crops to be irrigated with this water.

4. Salts and minerals from irrigation water accumulate in the soil profile of irrigated land. In dry periods salt accumulates in the soil profile and remains there until it is flushed out by rainfall. Reducing the salinity level to 700 EC will assist land owners with reducing the salt burden in their cropping soils.
5. Flood Flow exemptions need to be removed. All mine discharges should require the use of salinity credits. All polluters that discharge into the river should be contributing financially to the trading scheme by using credits. Polluters that do not have credits should not be relying on using discharges at flood levels to avoid cost.
6. Mine and Power Station discharges will differ in salinity levels and pollutant levels. All mines should test water before discharge and send the results to the Office of Water. Not only salt levels but heavy metal levels need to be tested. The Office of Water should then use the results to regulate the rate of discharge so that the 'shock' of a high salinity spike in the vicinity of the discharge point/s into a water course or the Hunter River is minimised. The Office of Water needs to co-ordinate the discharges from different mines so that the cumulative effect of multiple discharges does not result in spikes in salinity in any section of the river. The Office of Water needs to co-ordinated discharges to take into account the time it takes for discharges to travel down tributary creeks to the river, so that discharges do not reach the river 'late'.
7. More detailed work needs to be done to define what constitutes a "high flow" in the river.
8. Dam leakage should be considered as a discharge that requires salinity trading credits. These leaks contribute to the overall salt burden in the river.

Yours faithfully



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