To the Senate Enquiry into the impacts of mining in the Murray Darling Basin

I wish to register a strong objection to a proposal to mine coal on the Liverpool Plains NSW, part of the Murray Darling drainage basin. The exploration licence covers an area of self mulching soils known as a black earth, a rare soil type occurring in only two other regions in Australia and accounting for 4% of agricultural land.

The Liverpool Plains agricultural production is approximately 40% higher per hectare than the Australian mean.

This valuable agricultural region overlays a large and complex groundwater structure of aquifers and aquitards which probably accounts for the high level of output .Coal mining in this region is likely to impact on this ecosystem in the following ways.

- 1) The fracturing of the aquifers and aquitards significantly altering the fresh water flow system having an unknown impact on the yield of water wells.
- 2)Destruction of the aquitards could release saline water to contaminate shallower freshwater aquifers.
- 3) The connectivity of the river, ground, and surface water is not fully understood in the Liverpool Plains region, which is part of the Murray Darling drainage basin.
- 4)Increase in groundwater salinity will reduce water quality and adversely impact the domestic, livestock and irrigation water supply.
- 5)A decrease in agricultural productivity, with an unknown impact on the quality and safety of farm produce by an industry known for its pollution and toxic wastes.

Policy Issues

a) It should be noted that the National Water Commission (NWC) has launched the National Groundwater Action plan initiated and approved by COAG. An important priority of this plan is "to assess the vulnerability of ground water dependent ecosystems," which clearly would include the Liverpool alluvial plains. The NWC is also undertaking a major research project into the

"Potential local and cumulative impacts of mining on groundwater resources". This study is due for completion in July 2010, and inter alia will----

"Develop guidelines for Environmental Impact Assessments (EIA) related to water resources, in particular groundwater that should be considered in the assessment of mining proposals".

Outcomes expected from the study will assist jurisdictions in ensuring that their land use planning and EIA requirements are National Water Initiative compliant. In the mean time no decisions should be made on coal mining in the Murray Darling Basin.

b)It is a matter of great concern that early national initiatives to promote the development of value added industries in Australia has reverted to the easier short term option of quarry Australia for Asian markets.

It is also of concern that the NSW Minister for Primary Industry. responsible for both mining and agriculture, recently made the claim that mining is economically more important than farming.

The facts are that Australian agriculture provides the raw materials for our largest manufacturing industry, food and beverages, employing 192,000 persons with an annual turnover of \$71 bn.

The Liverpool Plains region provides \$330m of raw material foodstuffs annually for value adding, and unlike coal is a renewable resource and non polluting.

c) It would be totally irrational and irresponsible to jeopardise the known agricultural resources of the Liverpool Plains, by coal mining and environmental degradation. Furthermore little thought has been given to the increase in carbon pollution this proposed mining development entails.

As with climate change policy, though the science is far from settled, society has applied the Precautionary Principle to avoid irreversible harm to the planet.

A similar argument can be applied to the impact of mining on the groundwater resources of the plains and the ridges of the Liverpool Plains.

Australian soils have relatively low levels of fertility, however soils such as the red loams and black earths, as exist on the exploration licence area are rare and vulnerable and should be protected at all costs.

Therefore there are compelling reasons why highly productive agricultural land in Australia should be subject to strict preservation orders through the land use planning system. Such action should be pursued through the COAG and be the subject of national legislation.

P M CURTIS

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