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SUBMISSION ON COAL GAS SCOPING PAPER

Continued exploitation of the Hunter Valley for coal and/or gas is not sustainable development. Both these resources are finite whereas the agricultural industries they are displacing are sustainable industries for generations to come. The principles of sustainable development must be the foremost principles of any Coal Gas Strategy. Based on those principles these are the things that a Coal Gas Strategy must get right.

- Protection of Agricultural Land
- Protection of water resources, availability and quality
- Better legislation for and regulation of the Industry
- Better communication between government, industry and communities

This is not to say that issues to do with amenity, air quality, blasting and vibration, rehabilitation, noise, social and economic change, biodiversity and vegetation loss are not vitally important. But if the government has success in managing the above four then the others will be taken care of. It is my submission that to the present date the government has not regulated the industry through assessment, approvals and conditions of consent to achieve best practice. The coal industry in the Hunter Valley in size and scale has got out of hand.

With this in mind I make the following observations for a strategy which aims to investigate the future of this area for development.

[1] Land Use Conflict

Prime agricultural land must be protected without exception. The most valuable agricultural lands are those associated with the alluvial aquifers along third and second category streams. Removal of those alluviums by mining cannot be remediated by any kind of rehabilitation. Once gone the valuable soils and subsoils, laid down by hundreds of years of flood activity are gone forever.

Prime agricultural lands are used for highly productive improved pastures. They also support intensive grazing or dairy or horse studs by providing a constant source of high quality feed. Land with the potential for sustainable high-level agricultural production and which can sustain diverse agricultural enterprises is a finite resource. Since food security is an emerging world wide concern these lands where they occur in NSW must be preserved for food production.

It would be devastating to the environment and agricultural production for unfettered expansion of extraction industries in the Hunter Valley and Liverpool Plains, gas or coal. Food security is an issue world wide and NSW faces the danger of leaving its citizens without any secure local production. It would be morally wrong for this state to rely on imports from overseas or interstate for those food sources which are currently being produced on our lands by our farmers.

The Australian Society of Soil Science in their quarterly journal Profile, March 2011, commented that “The Government Regulatory Authorities and even Government itself are playing catch up, with insufficient resources to undertake legislation to protect prime agricultural land and biodiversity and the monitoring involved. Local communities and ENGOs are fighting to preserve their land and develop a modus operandi that enables co-existence of mining and agriculture. There is a compelling need to keep open cut mining off the vertosols as these soils cannot be rehabilitated to their original agricultural production potential. Some of

the best soils in the world for agriculture, grazing and cropping in the Hunter Valley and Liverpool Plains are under threat.”

[2] Landscape change

The rehabilitation of mine sites has not been best practice in spite of the propaganda to the contrary. Coal mines are building mountains where there were none; they are creating saline lakes called evaporation ponds which will be with us forever. The rate of rehabilitation is not keeping up with the rate of disturbance. Introduced weeds are in danger of taking over the countryside and are invading privately owned farms. The dust created from this poor record of rehabilitation is more than a nuisance it is a serious health risk. Unless there is a significant change in attitude by the regulators and from the mines towards this crucial issue then no Strategy can hope to create a sustainable future for the Hunter Valley and beyond.

Gas extractions creates a spider web of pipes and roads which transforms the landscape. The infrastructure will make it very difficult to use the land for farming operations, and could lead to uncontrolled erosion, salinization of soils and potentially sweet aquifers.

The 1999 Synoptic Plan -Integrated Landscapes for Coal Mine Rehabilitation in the Hunter Valley (DPI) must be revisited and the public engaged in widespread and extensive consultation about what they want for their post mining landscape. This must as a matter of urgency contain what is desirable and practicable use for the final voids whose number is growing beyond an acceptable level.

[3] Communication

There is a lack of trust between the mining industry and the general public with whom it directly interacts. For the government to improve this will require a complete cultural change by some mining companies. The chief matter of angst is the failure of the companies to keep its communities informed ahead of planned development and then to provide information that is truthful and helpful.

The results recent Dialogue conducted by the NSW Minerals Council has not been released to date in spite of promises and direct requests that it be available before the Scoping Paper needed comment. The report generated by the Dialogue I believe will corroborate my claims about trust and should inform the government of the problems associated with communication. That it was not released in time, as promised, is a good example of how trust is undermined. Since as I have said earlier the solution is in a cultural change then it will take a long time to occur.

At the government level there is much that can be achieved in communication by reform of the planning process which gives a more direct and continuing involvement of the public in the process; from the Planning Focus stage to the preparation of final conditions of consent should approval be deemed acceptable.

[4] Water

This one of the most serious and controversial issues surrounding any Coal Gas Strategy.

Our water is our most precious and finite resource. It is necessary for towns, industry, recreation, irrigation and environmental needs. Uncontrolled coal exploitation has the potential to impact unfairly on water availability by either buying up entitlements or damaging streams and aquifers so that water losses cannot be measured, controlled or remediated.

In addition the potential for mine polluted water to reenter the river systems and pollute the connected groundwater has risen to beyond an acceptable level. A precautionary approach must be taken with protecting our water. This might mean refusing mines and gas activity where that potential cannot be removed with 100% certainty. It should certainly entail a reliable, scientific and approved policy for the CSG industry to remove all waste water to a credited waste water treatment works. Under no circumstances should saline waste water be allowed to accumulate in situ in ‘evaporative ponds’.

Development at Hunter Valley Operations and later at Ashton Coal have intersected the floodplains have raised the following issues of concern:

- long term alteration to alluvial interactions with the River especially salinisation of the river and alluvium;
- post mining long term maintenance of the site - who is responsible and who pays; and
- what remediation can take place in the event of breach of river or creek beds

In response to these concerns, Government agencies jointly developed an informal policy that no further open cut mining should take place within the Hunter River's alluvial floodplain and its prime alluvial aquifer

There is clearly a potential for long term damage to major streams, aquifers and dependent ecosystems by nearby coal mining. DNR has therefore prepared a draft guideline document, Draft Guidelines for Management of Stream/Aquifer Systems in Coal Mining Developments - Hunter Region, (2005) on the management of stream and aquifer systems in the Hunter Valley. The intention is to reduce the risk of mining -related impacts to streams and aquifers from both open cut and underground coal mining by;

- assessing the importance of streams and associated alluvial ground waters and identifying risk categories
- directing mining away from high risk areas or implementing protective mechanisms and
- monitoring to assess mining-induced impacts to stream systems when they occur and undertaking remedial procedures to achieve stability, flow maintenance and ecosystem resilience.

This document recommended a buffer zone so that no mines should be allowed within 150 meters from the edge of the alluvial aquifer of third order streams. If the particular aquifer is 1km from the river edge then the mine sets back 1.15 km. Underground mining must similarly be setback at least 50 m. This is the minimum necessary to protect our rivers and creeks from damage from mining.

A proper scientific risk assessment for impacts on underground water from the CSG activity must be undertaken prior to any exploration licenses being granted. Groundwater sources and their interaction with surface water must be fully mapped. Impacts on all water users nearby and on adjacent streams must be assessed including on ecological communities. There must be a complete ban on all chemical used in gas extraction including but not restricted to BTX.

Sincerely,
BRUCE RUSSELL