

Submission
Coal Gas Scoping Paper
 February 2011

This submission will concentrate on the Hunter and largely deal with coal mining issues. Comments specific to regulation, standards and communication apply equally to the gas industry. This submission contains a number of important and specific recommendations for strategic planning. If it appears disorganised and repetitive that is because it attempts to follow the structure of the Scoping paper.

General Comments

Each stage in the life cycle of coal - extraction, transport, processing, and combustion - carries multiple hazards for health and the environment. In spite of the public policies, guidelines, legislation and regulations in place to help control these externalities the actual impacts and damages remain substantial. These costs must be accounted for in formulating public policies and for guiding private sector practices, including project financing and developing coal mining expansion and coal seam gas extraction industries.

Costs are external to the coal industry and are thus often considered “externalities.”, hidden costs. Many of these so-called externalities are, moreover, cumulative. Life cycle analysis, examining all stages in using a resource, is central to the full cost accounting needed to guide public policy and private investment. Externalities occur when the activity of one agent affects the well-being of another agent outside of any type of market mechanism—these are often not taken into account in decision making and when they are not accounted for, they can distort the decision-making process and reduce the welfare of society.

There needs to be a complete review of the planning and assessment system before the adoption of a coal or gas strategy that can expect to carry public trust and support.

There should be an immediate moratorium on all coal mining and all unconventional gas mining (including coal seam, shale and underground coal gasification) approvals until a robust legislative framework is in place that will replace Part 3A of the EP&A Act.

A much stronger commitment to leading practice sustainable development is critical for coal mining and gas extraction first to gain and then to maintain its social licence to operate. Community opposition is evidence of this need. I am really angry that the Scoping paper p.4 describes community concerns as “emerging”. Those concerns have been expressed consistently and forcefully over a very long period and been ignored. It is disingenuous to call them “emerging” because the opposition is becoming louder. This deceit leaves the impression that any recommendations that might come from this Planning exercise will be ignored in the future as have been those of the 1996 Hunter Cumulative Impact Study and its accompanying Air Quality Report (Nigel Holmes Air Sciences) and the recommendations of the 1999 Synoptic Plan -Integrated Landscapes for Coal Mine Rehabilitation in the Hunter Valley.

The Mining Industry assessment, approvals and regulation needs a thorough and independent investigation. The industry, despite assertions to the contrary, is not operating under World’s Best Practice. Responsibility for this falls on the regulators, the conditions of consent the industry hides behind and the failure to regulate it in the best interest of the environment and the public. There also needs to be a complete reform of the standards which apply to noise, dust, rehabilitation, blasting and community consultation

Communities and local governments are increasingly demanding greater attention to the assessment and management of cumulative impacts, particularly in the presence of multiple mining operations. When environmental and social systems reach their capacity to absorb impacts then it is time to remove those impacts. For the Hunter the time has come.

Adherence to the Principles of ESD is an overriding public Interest issue and must be the first and last thing assessed. Sustainable development concern has arisen due to recognition that development activities, although imperative in improving the economic status of a nation, can severely impair the ability of earth's systems to maintain a healthy and functioning environment. Problems including air pollution, health impacts, biodiversity loss and climate change are recognised as major issues associated with development activities. In the past insufficient attention has been paid to these. The Coal/Gas Strategy must address this.

I dispute the emphasis on p.4 placed on gas as the “only” conventional energy source that can underpin the transition to low carbon economy. Other renewable energy sources are not evaluated against gas particularly for their health and environmental costs, a weakness in this strategy and an indication of the success of the gas lobby to date. As with coal it seems a forgone conclusion in this Scoping Paper that gas will be exploited.

The Scoping Paper recognises the area between Singleton and Muswellbrook is an area where significant growth may occur. This growth must be managed on a regional level. The previous approach of treating each project on its own merits has failed the people of this area and must be abandoned in favour of a more holistic approach. This approach must encompass all environmental and health aspects including noise, dust, biodiversity, traffic etc. In these high growth regions the definition of cumulative must be selected to produce the right outcome for those affected.

There needs to be a definition which prescribes the tolerable scale of an enterprise beyond which the impacts can be determined to be unacceptable. It is time for governments to recognise the difference between acceptable criteria and tolerable limits. Criteria thresholds refer to scientifically defined points where undesirable changes result if they are exceeded. Tolerable limits consider what may be acceptable to the community as determined through consultation.

Community Concerns

The list of community concerns on p.4 is incomplete, too general and underestimates the level of discontent and frustration.

- The reference to the scale of mining places the concern in the context of the Gunnedah Gloucester areas, emerging coal mining regions, but implies that the expansion of mining in the Hunter will be allowed to continue in the present manner where large mega-mines contiguous with one another are being developed. This is one aspect of mining in the Hunter which has to stop.
- Similarly the concern about rivers, creeks, aquifers is attributed to the Illawarra region when it is just as much an issue in the Hunter and likely to be ignored because it does not supply Sydney's water catchment.
- The Scoping Paper has ignored the demand for a PM2.5 NEPM Standard. Although it is recognised that this is a Commonwealth matter no Coal Gas Strategy which ignores this pressing need will be able to cover adequately the likely health impacts.
- The Scoping Paper ignores community concerns about the health impacts from fine particle emissions. The connection between fine particle emissions with emphasis on their size and shape and chemical composition is well accepted among scientists and health experts. Particle matter emissions from exposed areas must be avoided. There should be minimal pre-stripping prior to mining and accelerated rehabilitation of disturbed areas once mining is complete. Due to the long term operational aspects of open cut coal mining there can be an over extended period before overburden emplacements are rehabilitated.

- The ‘Key Issues’ for the Hunter located possible land use conflicts north of Muswellbrook. This is an immoral abandonment of the people of the area between Singleton and Muswellbrook who are the worst affected. Agriculture is still a thriving industry in parts of that area and must be protected and maintained. Small farmers fear that because they do not have the financial resources to employ lobbyists that they will be sacrificed while the wine industry and horse breeders are listened to.
- The Community Concerns section also ignores concerns about;
 - deforestation and biodiversity loss in the Hunter
 - fauna species loss and wildlife corridors
 - the adequacy of conditions of consent and licensing approvals
 - the ease with which mining companies can avoid compliance as a result
 - the need to update regulations in light of the enormous impacts mining is already having. The Industrial Noise Policy, written in 1999 (DECCW) and without the knowledge of where mining might be in 2011, sets noise criteria for individual mines but fails to provide protection for rural communities living in close proximity to several mega-mines.

Government Initiatives

The list of initiatives is selective and therefore lacking in substance.

- The Commonwealth government National Water Initiative has some specific and practical recommendations for the cumulative assessment of mining impacts on groundwater resources and their dependent ecosystems called “The Potential local and cumulative effects of mining on groundwater resources project”. This is highly relevant to any Coal/Gas Strategy. Failure to acknowledge it creates the impression that it and its recognitions of the implications of mining and gas on underground water resources will be ignored.
- The National Water Initiative and the National Water Metering policy are not included in policies that could impact on the Mining Industry. The Strategy must not ignore these.
- The Scoping Paper also ignores the Commonwealth government Department of Resources Energy and Tourism Handbooks for the Mining Industry titled Leading Practice Sustainable Development Programme for the Mining Industry. These Guidelines cover all topics, including Air, Noise, Blasting, Particulates, Water, Rehabilitation, Tailings Disposal, Biodiversity, Mine Closure and others.
- There is no mention in this Scoping Paper of the State Plan objectives and targets. Any future development for gas extraction or coal mining must be measured for its ability to meet these targets across all areas particularly the key priority areas of air quality, sustainable water, native vegetation, biodiversity, land, rivers and waterways.
- There is no recognition of the work already done by the Department of Agriculture (I&I) in mapping agricultural land and classifying it according to Suitability and Capability.
- Environment Protection and Regulation Group DEEC Coal Mining in NSW Summary of Key Issues for DEEC Report for Regional Operations Directors (April 2008) is not referenced.

The 1999 Synoptic Plan Integrated Landscapes for Coal Mine Rehabilitation in the Hunter Valley (DPI) must be referenced in any new Strategy as must the work of the HCRCMA on vegetation mapping.

Local Government Land Use policies should similarly be consulted. Singleton Council Land Use Policy calls for “a strategic review by the NSW Government of future coal mining proposals within the Upper

Hunter region, involving rehabilitation, infrastructure and land use options and an update of the DPI Synoptic Plan for rehabilitation of mined landscapes.”

Hunter Central Rivers CMA Remnant Vegetation Project should be consulted to gain local and regional context for potential vegetation impacts.

Key Issues

Achieving Best Practice

There are fundamental differences between industry, regulators and the public as to what best practice entails. Best practice should seek to achieve the best outcomes for present stakeholders and future generations. A long-term timeframe must be considered so that potential adverse outcomes are identified and managed and this needs to be communicated with a reasonable degree of assurance. Best practice often occurs when management measures go beyond what is required by current legislation and regulations.

Due to the extent of gaps in current knowledge, a precautionary approach should be applied to the approval of mining which might unacceptably impact highly significant land, waterways or natural features. The approvals process should require a ‘reverse onus of proof’ from the mining company before any mining is permitted which might unacceptably impact prime agricultural land or highly-significant natural features such as rivers or streams.

Best Practice Environmental assessment

- involves all stakeholders, especially the community and local government
- applies policy and guidelines consistently
- understands and measures cumulative impacts with a definition which is appropriate to the wider region and long term exposure
- collects baseline data for significant features of the enterprise
- is subject to independent scientific peer review
- imposes firm, unambiguous conditions of consent

Improving the management of cumulative impacts.

Cumulative impacts, ie the successive, incremental and combined impacts of an activity on society, the economy and the environment, can place significant pressure on social, economic and environmental factors and render conventional mine-by-mine approaches to management ineffective.

The first thing that needs to be done is to devise a clear, acceptable definition of ‘cumulative’ which is appropriate to the activity involved and which will encompass the full scope of the impact. There are several definitions of ‘cumulative’ which at different times and for different effects apply to mining. Up to date a simple ‘additive’ definition has been applied. This has not been best practice assessment of cumulative impacts.

It is easy to undertake and unlikely to present difficulties for a developer to define cumulative as a simple “additive” impact. In view of the scope of emerging and existing development this is no longer adequate. In the mining context cumulative impacts can arise from compounding activities of a single operation or multiple mining and processing operations, as well as the interaction of mining with other industries such as power generation. The synergistic impacts of atmospheric fine particles is an example.

The overwhelming number of components and complexity of interactions of cumulative impacts, the methodologies and the effectiveness of conventional mine-by-mine approaches. Cumulative impacts are the successive, incremental and combined impacts of an activity on society and the environment. Cumulative

impacts tend to persist over time and may interact such that they trigger or become associated with other impacts. They may accumulate linearly, exponentially or reach 'tipping points' after which a major changes follow.

Cumulative impacts most important to environments and communities surrounded by multiple mining operations because cumulative impacts are what they experience. The EA process has failed to assess adequately the long term cumulative impacts of recent proposals by failing to consider that as an extension of operations or as a greenfields development the impacts on air, health, noise and water can last for 40 years or more not just the 21 of the particular approval. Assessment must incorporate the effects of other past, present, and reasonably foreseeable future proposals as the baseline for assessing an action's incremental effects.

Cumulative impact must not consider air, nose, traffic etc separately because the affected residents are affected by more than one or all of these simultaneously. This has been overlooked in EAs to date.

The development of Guidelines for Cumulative Risk Assessment must be an essential element in the triple bottom line assessment. The Guidelines must remove the narrow focus on a single stressor, and must acknowledge the additional complexities introduced by cumulative risks from multiple stressors.

NSW must embrace the initiatives of the Commonwealth government about assessment of cumulative impacts on water resources by the mining industry. These initiatives require baseline water studies and a quantitative risk assessment before the DA stage.

Another weakness in the current system of impact assessment is the lack of integration between the various scientific studies carried out for mining proposals. A large number of scientific disciplines are involved in most impact assessments. These various studies are often produced as compartmentalised, stand alone documents, which are then brought together into a final summary document. The outputs from the various disciplines are often not well integrated into a final report form, and there may be a poor integration of the assessment of cumulative impacts for human and environmental consequences of those impacts. This lack of integration has led to situations where there may be an incomplete overall understanding and appreciation by both the community and government agencies, of the predicted impacts and consequences of a mining activity.

Protecting the amenity and health of people living in the population centres.

The health and amenity of everybody including neighbours outside population centres, workers at Industrial Estates as well as residents of towns and villages must be protected.

A wide range of costs associated with the full life cycle of coal, quantifiable and qualitative include;

lost value of abandoned mine lands.

health damages from NO_x, SO₂, PM_{2.5}

the public health burden; the public health damages included mortality cases, bronchitis cases, asthma cases, hospital admissions related to respiratory, cardiac, asthma, coronary obstructive pulmonary disease, and ischemic heart disease problems, and emergency room visits related to asthma.

lost work days associated with ill health

mental health impacts/stress

water degradation

climate impacts

significantly lower property values

loss of tourism income

costs to taxpayers of environmental mitigation

population declines,

damage to farmland and crops

wear and tear on aging railroads and track

Additional impacts include losses in property values, timber resources, crops (due to water contamination), plus harm to tourism, corrosion of buildings and monuments, dust from mines and explosions, ammonia releases (with formation of ammonium nitrate), and releases of methane.

Landscape change from overburden emplacements and tailings dams

biodiversity loss

imperiled aquatic systems

changes to family life, disruption of organized sport in the townships

These external costs can and must be quantified and monetized in any Strategy that attempts a cost benefit analysis. It is disappointing that the Scoping Paper offers no suggestion as to how the Strategy will manage this.

- The number of affected people from a development must be a defining measure. The communities of Warkworth, Ravensworth and Camberwell have disappeared as a result of mining. This should not happen again. The only alternative is to prohibit mining near population centres. The village of Bulga will provide an excellent test case for measuring success.
- No triple bottom line analysis will suffice unless the health costs and amenity costs, in dollar terms, to the area from mining or gas drilling is factored in.
- There must be a 'cease to mine' trigger which is clear, definite and enforceable, in the conditions of consent for days when the dust is intolerable. Broadening acquisition boundaries is not the solution for air quality impacts on the wider, general community.
- Regulatory standards for the potential for particle emissions to damage health focus mainly on size whereas it is now widely acknowledged and scientifically proven that the potential for adverse health impacts is also influenced by their chemistry and shape and mineralogy. Studies must be undertaken to measure the chemical composition of the particulate matter in the Hunter Valley.
- Twelve hour shifts are of concern to family members and residents of coal communities. Fatigue creates dangers on our roads hence this is a matter of wide public interest and must be addressed by the Strategy.

Mining and CG Extraction are finite industries. There must be immediate planning for post mining economic and social change in communities presently experiencing a boom. Evidence documents that mining-dependent economies tend to be weak economies, and weak economic conditions in turn are powerful predictors of social and health disadvantages when the boom industries leave town. Such communities experience high levels of depression and poverty, and increases in assaults and crimes against property, until the culture shifts to allow for development of secondary industries. The Strategy must consider these issues.

Land Use conflicts

Class 1 and 2 agricultural land and its associated water is a finite resource that must be conserved into the future to ensure future food security. Accompanying this Strategy must be a food production strategy quantifying the nation's needs into the future taking into account populations expansion, cultural and social change and suitability of various areas for the production of those identified needs.

The use of Agricultural Suitability data is the most appropriate means of identifying important agricultural resources for the purposes of the Strategy.

The class 1 and 2 lands reflect the extent of productive soils suitable climate and availability of irrigation. They occur along the main river valleys and are typically associated with fertile alluvial soils and their associated aquifers. Prime agricultural lands are used for highly productive improved pastures lucern and other extensive broad acre crops. 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. Rural land Suitability (Class 1 to 5) is a system classifying land in terms of its suitability for general agricultural uses for the EP&A Act. It is determined by identifying the combination of climate, soils, topography etc marketing and socio-economic factors. The Rural land Evaluation Manual (Department Planning 1988) states that "lands of class 1 are elite, they are considered to be significant to the State and priority should be given to their protection from incompatible development". Class 2 lands are identified as being of superior quality and worthy of protection because of their State and regional importance. The Manual identifies Class 1 2 and 3 lands as prime crop and pasture lands and recommends that they should be protected from competing land uses. These lands account for less than 18% of the whole State's agricultural lands, with Class 1 and 2 together only comprising 4%.

The limited extent of prime crop and pasture lands is common for the region and State and emphasizes the importance of valley floor areas for sustainable highly productive agricultural enterprises.

Key factors underlying the ongoing sustainability and growth of agricultural enterprises within the HV are the extent of good quality land favourable climate and topography and available water, good transport links and investment opportunities provided by the current agricultural focus of the region limited competitions for resources and lack of conflict,

Overlying prime agricultural lands and horse studs are the principal agricultural factors limiting the potential for future coal mine developments. The ability of these industries to relocation elsewhere in the region is constrained by the high level of capital investment in fixed infrastructure, limited suitable alternative sites within the regions and increasing land prices.

If mining development alienated significant quantities of high quality arable lands reduced irrigation opportunities or created additional land use conflicts and costs then this could lead to a related decline in these high value farming industries. If mining development alienated such areas and reduced irrigation options by loss of water availability or quality this would also have an adverse impact on the sustainability of the agricultural enterprises and for future investment and employment in the horse industry.

I applaud the Coalition policy promise to establish an independent section on agricultural sustainability and food security within a New Department of Primary Industries. The introduction of comprehensive national food security legislation that prohibits coal and unconventional gas mining on productive agricultural land would be welcomed in association with this Strategy.

The Department of Primary Industries (Agriculture/Fisheries) must be an important part of the assessment process and needs to be removed from I&I and placed under a different Minister. There is a perceived conflict of interest with Mining and Agriculture in the same portfolio.

I applaud the Coalition government policy to require an explicit agricultural productivity impact assessment as part of their Environmental Assessment. However this is too vague. This assessment must be a cumulative assessment in that it considers into the future the indirect impacts and cumulative impacts on agriculture and food production.

There needs to be tougher planning assessment to ensure strategic agricultural land and associated water resources are protected. This should occur prior to the granting of an exploration licence and will identify and define land use priorities for different areas of land within the regions and the state. Not only must it identify the best places for agriculture, equine and viticulture but it must also provide protection of those areas from the cumulative, direct and indirect effects of the coal and gas industries. That may require a set back from these areas with a buffer zone whose land uses can also be identified.

It should be a given that mining and coal gas seam extraction should not occur on or near river flats, alluvial creek beds, ecological sensitive wetlands or woodlands and towns and villages.

In addition there needs to be a clear regulation governing how close mining can come to towns and villages where populations live, schools and hospitals exist and businesses operate.

Biodiversity

Biodiversity in NSW is in a very fragile condition. Biodiversity continues to decline at an alarming rate. Despite the existing planning and legislative regimes, their enforcement and practicality have not been adequate in protecting biodiversity in NSW nowhere better illustrated than in the Hunter Valley where the losses are attempted to be mitigated by Green Offset strategies.

Green offsetting needs to be reevaluated if biodiversity values are to be maintained in the Hunter Valley. Since the Scoping Paper acknowledges that opportunities for biodiversity offsets are limited then this should tell the planners that further destruction in this area must be prohibited.

There are fundamental flaws and uncertainties in the offsetting strategy as it now operates.

- Green offsetting scheme are developer oriented. Offsets offer significant benefits for development proponents and corporations generally, due to their potential to hasten approval processing times. Developers want simple and inexpensive compliance measures.
- It is farcical for the concept of “offset” to be applied to lands distant from the area where the damage is being experienced. Even then the opportunities for finding the right ecological communities eg Warkworth Sands Woodland or White Box/Yellow Box at a distance is remote.
- The improve or maintain or like for like or better test is not rigorously applied. The only alternative is to protect in situ those EECs which remain.

- Offsetting is inconsistent with the targets of the State Plan.
- Green offsetting is a perverse and unreliable approach to biodiversity protection, allowing destruction to occur or a 'license to trash' for developers, whilst the ecological benefits of the offset sites is delayed.
- There is strengthening concern that endangered species habitat can actually be commodified.
- There is no guarantee that mining on land offset for one development may not occur at a later date. This is fundamentally against the in-perpetuity nature of the scheme and creates a controversial ethical issue.
- The fact that an offset may itself be offset by the Planning Minister in future if the site is deemed necessary for mining activities demonstrates short-term thinking. Although such cancellations of offsets will be accompanied by the purchasing of land elsewhere, it will be very difficult to keep track of what has been traded and what will be lost by this seemingly endless offsetting system. This fundamentally devalues the scheme and is connected to the not so 'in-perpetuity' nature of agreements that have been 'used to date'.

This suggests that the current system cannot achieve inter-generational equity. In addition, the trading of biodiversity values in one area for a completely different area means that some communities may suffer the consequences of biodiversity loss with little or no compensation.

- There is a lack of rigour in the way Planning has handled these issues particularly in assessing the public participation and engagement with the offset schemes. Stakeholders, including local communities have lost faith in both the system and administrators of biodiversity protection. There may be social impacts from biodiversity loss in one area when they are offset away from the society affected. The offsetting of a patch of vegetation that may have limited biodiversity value may have major aesthetic importance or social importance to the local community

There is generally no stakeholder ownership of these offsets. Appropriate stakeholder participation is directly linked to sustainable development because without the cooperation and contribution of stakeholders, none of the other principles or instruments of sustainable development can be effective. Offsetting requires the participation and support of local communities and local government to be successful. Local governments have a role in biodiversity protection because of their understanding of local areas. This role includes identifying potential offsets.

Offsetting schemes fail to incorporate the precautionary principle by mandating a net gain. In addition, offsetting does not define any no-go areas. This potentially means that areas that may have been off limits to developers can be developed, essentially allowing a 'license to trash'. The concept of swapping like-for-like or better is also flawed because it fails to recognise the potential importance of individual patches of ecosystems that may have local cultural significance.

The management of the offsets into the future must be transparent and accountable. How this is achievable has not yet been demonstrated. There is also no assurance that management and monitoring will be in-perpetuity and in fact it would seem incomprehensible, particularly to developers, to assume that managing and monitoring will be funded for an unlimited amount of time. Yet, for an offset to remain viable, managing and monitoring must be continuous, especially when considering unpredictable occurrences such as those incurred by climate change.

The Coal Gas Strategy if it is sincere in attempting to deal with this issue must take these points into account and recognise that for some areas between Singleton and Muswellbrook there is limited opportunity for offsetting vegetation loss.

A thorough vegetation Study of the Valley needs to be done so that cumulative impacts on vegetation from continued mining can be properly assessed.

Mine Rehabilitation

The Scoping Paper writes “Progressive and integrated rehabilitation planning is required to ensure optimal landscape outcomes and future uses are achieved” as if this is a new idea that will fix the situation we have in the Hunter. Progressive rehabilitation was to have occurred from the outset. This is a damning reflection on Planning and I&I that they have failed to enforce this. There is a increasing dust problem in the Hunter which is partly related to the poor rate and quality of rehabilitation. In many cases dust is so thick that it coats the skin, and the walls and furniture in homes. This dust presents an additional burden in terms of respiratory and cardiovascular disease,

We now have a situation where the mines have been allowed to grow so large they have nowhere to place their overburden and are dumping it on river flats and on previously rehabilitated land. This is intolerable.

It is a serious omission in this Scoping Paper that the final post-mining landform is not discussed.

The compounding effects of multiple mine closures (a kind of ‘reverse ’cumulative impact where impacts are generated by the absence of activities) can be as challenging for regional communities and economies. Any Strategy that does not consider this will be inadequate. This is a debate that must happen now. I welcome the Coalition’s commitment to ban the use of evaporation ponds for mining and petroleum productions activities.

Water

There must be immediate implementation of the Aquifer Interference Policy and Guideline (NOW 2005) to provide a clear and consistent guidance on the acceptability of impacts on aquifers to ensure our water resources are protected for current and future generations. In the past this policy, although in draft form only, has been applied by mines when it suits them and ignored at their whim. It is unacceptable that any policy should have an inconsistent application. No Strategy will have the confidence of the public that will be applied at whim or whose recommendations are ignored.

Where sensitive or high risk areas are identified in relation to surface or groundwater sources the framework for consents and specific conditions imposed will require protective measures and detailed assessment

To protect the alluvial aquifers and water resources there must be a buffer zone set between these and the mining or gas activity. The NOW Draft Guidelines 2005 clearly set this out and provides justification for it.

Extensive mapping of water resources must be completed for the whole area before any mining approvals are granted. It is not too late for a study similar to the Namoi Water Study for the Hunter.

There is no recognition of concerns for water quality and quantity for the Hunter regulated and unregulated river systems. The salinity of mine water and keeping it isolated from the major sources is a huge issue.

Planning must undertake risk assessments for mining operations which have potential to damage water resources.

The post-mining landscape and final voids is an issue not canvassed by this Scoping Paper. In 1996 the Synoptic Plan gave us assurance that the future landscape left by the mines would have community/stakeholder input as to what the community would like to see in the place occupied by mines. Yet recent consents have given approval to large, permanent, saline, evaporative ponds without the expected

consultation. Since mining no longer follows the mine, dump rehabilitate sequence and we have huge mega-mines with multiple pits we are looking at a future of a chain of salt 'lakes' throughout the valley with the water gradually polluting the Hunter River. I believe that the EP&A Act and the POEO Act embraces the Principles of ESD and that a legacy of so called 'evaporative ponds' is a breach of the ESD Principle of Intergenerational Equity.

The HRSTS is operating successfully with the development at its present limit but whether it can handle increased coal production in the area has not been assessed. The expansion of coal across regions must be also be assessed in relation to the effectiveness of this scheme. The development of mining in the western coal resource area has the potential to affect the Hunter region when licensing is done from Bathurst for some mines whose saline water will then eventually flow into the Hunter. This must be addressed in the Strategy.

Rail

Coal trains must be covered to reduce dust and spillage along the rail corridor. The diesel emissions from the rail movements must be included in any cumulative assessment of health risks for future DA expansion

Planning for jobs and Housing

No such planning must occur without taking into account the cost of housing in communities where large incomes are predominant. House prices and rental rates are pushed up beyond the capacity for lower income earners.

Heritage Matters

The Aboriginal heritage loss is a major issue and I believe the way in which it is handled needs overview. At present there is insufficient information available on the Aboriginal cultural heritage values of the identified coal resource domains to identify which locations may include constraints to major development. There are too many aboriginal groups claiming an interest in the areas solely to share part of the spoils to be earned from assessment. The consequence of this is that those indigenous people with a close and enduring attachment to the lands earmarked for mining are not being listened to and the voices of numerous other groups are heard especially when they might be willing to sign off on removal or destruction.

The sense of loss of Aboriginal heritage to non-indigenous Australians has never been recognised. This loss in the Hunter over the past thirty years has been massive. There has been no involvement of or accountability to the population at large. There is no central repository for salvaged items. There is no professional cataloguing and management of this aspect of Australia's heritage. This needs NSW Planning and DECCW's further attention. The Strategy must provide some concrete management recommendations on these issues.

Just as important is the issue of the loss of European heritage in the mining areas. Insufficient attention has been paid to this. The mining companies buy up significant numbers of adjacent farms and properties and then let them go to rack and ruin. Important heritage items and relics are lost as a result. The Wambo homestead is a major example of neglect but there are many many others; Stafford at Gouldsville, Jarvis' homestead at Mt Thorley, Pikes dairy at Bulga. Some companies have a more responsible attitude to European heritage maintenance and preservation than others. The Strategy must set out Guidelines explaining the importance of our heritage and placing conditions to ensure its survival. Any potential mining-related impacts would require to be assessed and important European heritage sites should be protected from damage during either coal exploration or potential coal mine development

Key Initiatives of the Strategy

Decision making in the future must be risk based. Risk management is a standard aspect of mine planning and operations. The International Council on Mining and Minerals lists the implementation of risk management strategies as a core sustainable development principle, and this has been endorsed by the Minerals Council of Australia.

Health risk assessments should be mandatory in the DGs requirements for developments.

Risk assessment must be undertaken for all other sections of the EA process particularly for agriculture and water and these must be robust, independent, consider into the future and cumulative.

Identify and minimise any adverse health environmental and land use impacts

It is concerning that horse breeding and viticulture are the two industries specifically identified as having potential land use conflicts. There is much being discussed in Australia and world wide about population growth and the diminishing food resources. In spite of technology advances in agricultural production there still needs to be sufficient land on which to grow the food necessary for future generations. This is why there needs to be a greater input into this Coal Gas Strategy by the Department of Agriculture and by various agricultural groups, associations and University researchers.

The Scoping Paper p.9 recognises that in some areas there may be the need for choices to be made. These choices should be made at the mapping stage for the growth of the industry so that the industry can make their decisions at the earliest stages and not then be in a position where they argue for access to areas where other land uses have been identified as more valuable.

The triple bottom line cost benefit analysis must incorporate the financial costs to the community in social and environmental areas not just by examining the current value of existing land uses. Land use values must be calculated well into the future and compared to the shorter term gains from gas or coal.

Some of the issues raised apply only to the region discussed. Decreased tourism for example, affects regional economies; and may affect the overall economy of the State, as tourists may choose other destinations.

Too much emphasis has been placed on the concept of “balance”, of restoring the balance between competing mining and agricultural land uses. Mr Pearson (DoP) at Singleton March 9th said the pendulum has swung too far. It is reassuring to see a triple bottom line cost benefit analysis proposed for this Strategy involving social economic and environmental costs and benefits. This should swing the pendulum the other way, if accurate and transparent assessment of actual and indirect costs of mining to the community in which it operates is factored in. In no EA that I have ever read has the financial costs of pollution, noise, biodiversity etc to the environment, to human health, to amenity and infrastructure, been calculated.

All phases of mining from exploration to construction to operation and finally mine site closure and post mining care must be considered in the triple bottom line analysis.

Health costs, days lost from work, costs of medication, costs to the hospital system, higher costs of living and costs of housing must also be taken into account.

Ensure the industry is regulated efficiently and effectively

Other than profits for the mining companies there is no compelling reason for the size and scale of coal mining to be so huge. Large mining complexes so close to each other are creating problems not envisaged when original consents were given.

For coal mining to have minimum impact there must be stricter controls imposed through consent conditions and POEO Licences. The Present system allows too much self-regulation; fails to set firm compliance criteria; allows avoidance by lack of time frames and clear stated completion criteria and is too lenient in penalties for infringements.

Some recent local examples.

- a) Some mines use waste oils in place of diesel in their blasting. This practice has been allowed without any community consultation; without any environmental or health impact assessment (though the mines have done performance assessment) and by allowing the mines themselves to draw up protocols for the practice which, when asked for, they cannot produce. This is not good enough and further destroys community trust in the government agencies and how they deal with this industry.
- b) Mines are allowed to bury waste tyres under spoil heaps with no specific provision in their licences or additional licence under the Waste Minimisation Act. This would never be allowed for the general public. These tyres could become an environmental hazard in the future especially if there is a spon. com. issue at the site.
- c) Similarly the use of water vaporizers on mine sites has had no environmental assessment, public consultation or either POEO licensing or Planning consent under the EP&A Act.
- d) No time frame was set for the Conservation of the Warkworth Sands Woodland so that a new DA has overtaken the original consent.
- e) A change in the MOP at WMT Operations (consented by I&I Feb. 2011) has undone much of the previous good work in rehabilitation at the mine and created additional adverse noise and dust impacts. This was “generally consistent with” the consent. Not good enough. When complained about the reply offered was that the previous EIS provided that overburden will be dumped in “previously mined areas of the pits”. This might be true but is disingenuous in that previously mined areas did not imply ‘after extensive rehabilitation had taken place’. Indeed it set up, deliberately, the expectation that the sequence of CLEAR

MINE DUMP REHABILITATE

of the Synoptic Plan was going to be followed. The deep distrust of the mining industry is carried over to the Government regulators when these kinds of deceits are perpetrated.

- f) In the above example WMT is building a mountain where there was no mountain previously. When rehabilitated this formation will bear no similarity to the original landscape of river flats and gently undulating hills. In this particular consent or EIS there is no maximum elevation (RL limit) imposed on overburden emplacement. My position is that there should have been. Without it the community is being unfairly adversely affected by night time noise from the dumping on top of this very high emplacement, increased dust escaping offsite and bright lights shining into households in the village of Bulga where this was not a previous problem.

There needs to be clearer more detailed Director General’s requirements and Conditions of consent and Licensing conditions. When issuing the DGRs for coal developments terms such as ‘generally consistent with’, ‘generally in accordance with’, ‘to the satisfaction of’, for the ‘medium’ or ‘long term’ are used freely with inadequate clear definition of what they might mean in reality and in the particular context. It is because of the generally vague nature of these and of the final conditions of consent which uses similar ambiguous terminology that we have such a mess in the Valley.

So, my submission is that conditions of consent and licensing conditions must be improved to remove all ambiguities and offer clearer stricter protection for the environment and public. In addition I submit that when these are imposed there should be an amendment of the legislation that prevents mining companies coming back, time and time again, to have them modified. Once agreed between the company and Planning they must be adhered to. Mining companies are now making ‘Statements of Commitment’ and “Revised Statements of Commitment” to get approvals through. There is plenty of reason to be cynical about this.

However Planning should demand that a commitment by definition is an engagement or obligation that restricts freedom of action.

There is an unacceptable inconsistency in penalties for mining breaches. One mine Xtrata at Mangoola was fined \$100000 for 49 megalitre discharge of sediment into the Goulburne river while another RTCA Warkworth Mt Thorley was not fined at all for a similar discharge and received a \$1500 fine for an oil spill into Loder's Creek. The public loses faith in the sincerity of Government and the Industry when these things happen.

The transfer of the Camberwell Common from public management to Ashton Mine was disgraceful. When these things happen the community will not believe that any fancy Strategy no matter what it says will do anything other than find other ways to facilitate and assist Mining companies. The Coal Gas Strategy must seek to improve accountability and transparency in all aspects of its management to convince the public that it is anything other than a way to facilitate these industries at the expense of community views, values and health.

NSW Health, Agriculture, DECCW and NOW must become an integral part of the environmental assessment processes for major projects. These key agencies must be given a greater role in the assessment process and resourced accordingly. In particular the NSW Office of Water must be allowed to assess each project in detail and report on matters other than water licensing. Hydrological evaluation is a difficult and complex task and cannot be left to people without the precise expertise.

These agencies must become key stakeholders in the development of strategic planning policy. The current advisory roles of these agencies in relation to strategic planning should be reviewed and upgraded to a more central strategic role with the intention of ensuring that health, air quality, biodiversity and water issues are given a higher priority.

All water Management Plans, Flora and Fauna Management Plans, Subsidence Management Plans must be finalised and put out for public comment before consent is granted. The time lag between the finalisation of these and the actual consent is unreasonable since the company can delay them for up to five years or more during which time there is uncertainty as to how the mine is operating within its consent conditions.

The public is at an unfair disadvantage in the Planning process. The public involvement in this process ceases after they send in their submissions to the DA. Yet Mining companies are in constant continuing negotiation with various agencies to alter their MOPs, water management plans, biodiversity offsets, rehabilitation, subsidence management plans and these are allowed with far too little regard for the short or long term consequences.

An additional consequence is that affected residents are delayed in having their concerns mitigated as per the consent. Lack of set time frames allows matters of serious concern to be repeatedly actioned for the following year or described as "not in this year's budget".

Too much emphasis is placed on the mitigation and remediation rather than on avoidance of irreversible or costly impacts. Mitigation or remediation may involve management techniques which may not be effective, available, or may be extremely costly. Any mining development proposal should take into account potential remediation costs as part of the project cost-benefit analysis. This assessment should include any remediation and associated management costs of adverse impacts on streams and alluvium against the beneficial use of surface and ground waters for water users and the community. How this has been done must be revealed honestly in the EA for public comment.

World's best practice dust and air quality management

I note that none of the initiatives mentioned in this section p.9 goes beyond what is already in place. These initiatives pay no more than lip service to the pressing need to both reform the industry practice and to limit its ability or potential to have impact.

DECCW 2010 Desktop Study on World's Best Practice Dust offers some suggestions for practical measures to control emissions of particulate matter from exposed areas which had they been adopted from the beginning would have removed some of the seriousness of the problem. These include minimising pre-stripping to a maximum of one block ahead of an exposed area. Minimising pre-stripping if the area is likely to be exposed for more than 3 months. Revegetation should then take place. Maximizing rehabilitation works and a more strategic use of watering suppressants and mulch. It recommends stockpile heights and shape needs better regulation.. If they are too high then adverse impacts from noise dust and lighting will be exacerbated. In the area where I live the latest stockpile is mountainous and bears no resemblance to the previous natural landscape. The pre-stripping is far in excess of the mining needs and exposes hectares and hectares of soil to wind erosion.

The UHAMN has received criticism for its failure to measure finer particles while a desktop study on any subject has never helped any child suffering from asthma.

There is no mention of the health impacts of finer dust particulates or of the health impacts of having such large volumes of those particulates in conjunction with three coal-burning power stations.

There is no suggestion that analysis of the health risks of the long term exposure of individuals living close to mines ought to be done.

Improvements in blasting techniques to avoid dangerous plumes leaving mine sites is a matter of urgency and must be addressed.

What is desperately needed and outside the scope of this study is a dramatic change in the culture of the Mining Industry. If they could learn and appreciate that worlds best practice is when you act beyond the regulatory requirements then we would begin to make some advances.

World's best practice mine/land rehabilitation

This subject offers the best visible concrete example of the failure of the Planning regime to protect human health and the physical environment. To claim that best practice has been followed is plainly wrong. There is a serious failure of government in allowing such poor rehabilitation in both quality and extent. All the regulators whether NSW Planning, DECCW or I&I have been aware what that best practice ought to be. It is insulting to read "*High quality progressive rehabilitation should be required for all mines.*" Of course it should. Why hasn't it been?

A fundamental benefit of the Synoptic Plan was its plans for approved mine sequencing and rehabilitation. It sought to communicate the advances in mine site rehabilitation keeping pace with disturbance and sought to satisfy the community's request for integrated landscapes for mine site rehabilitation. Mines must be held to their commitments no matter what changes their economic circumstances or the spot price of coal might be suggested.

It is insulting that rehabilitation guidelines are only now being developed.

Rehabilitation bonds, endorsed by the Minister, are too low and generally set by the mining companies. The formula for calculating the cost per ha of rehabilitation is a one size fits all formula and fails to take sufficient account of the site specific values that that particular rehabilitation might have for biodiversity

values or for local people with an attachment to the area. Rehabilitation and other conservation bonds need to be reassessed.

There is a pressing need for bonds to be imposed on enterprises which have the potential to do serious harm to the environment, such as cracking a creek or permanently polluting a stream, so that the long term costs of maintaining and remediating these is not a burden to the general community and to future generations who will not have shared in any benefits from the activity.

Who will decide the desirable landscape outcomes? Community engagement in these issues must begin immediately.

Community facilities and services in the regions

There is no mention in this section of Coal Royalties coming back to the communities who are bearing the cost of the activity. This must be addressed.

The suggestion that there should be private agreements between councils and mining companies for funding of community projects entrenches the practice, which in other circumstances, would be called a 'bribe'. Councils should be able to stand at arms length from the mining companies which they might have to police; all funding should be transparent, and through proper government channels.

Donations by mining companies to Aboriginal groups through offers of employment or cultural centres or to the Heritage Branch for destruction or alteration of buildings, (Wambo homestead), are commonplace and unpalatable. If direct donations to political parties are reportable in the interests of transparent and accountable government, then in the same general public interest, indirect funding of community projects should not be encouraged. A direct share of coal royalties by the communities bearing the unfair share of the negative impacts would overcome this perception of 'deals being done'.

Strategic Biodiversity planning

This rings alarm bells. This is an undisguised attempt to allow destruction of valued and endangered ecological communities and the fauna they support in areas where there is little offset vegetation available. Instead of accommodating the mining industry by this ruse a prompt, clear and direct decision should be made that certain areas cannot be mined. Such areas are those with high conservation value; contain vulnerable or endangered species or vegetation communities.

Singleton Council Land Use Strategy recommends NSW Government agencies commission a regional scale surveying and mapping of high quality native vegetation areas and the distributions of endangered ecological communities for the purpose of including this information as an overlay map forming part of the LEP. It aims to protect threatened species, communities and populations and their habitat and endangered ecological communities. It aims for no net loss vegetation within the LGA. It recommends opportunities to reverse the effect of Key Threatening Processes for threatened species as identified under the the TSC Act when determining planning provision and development proposals. Any Coal Gas Strategy must be consistent with these and other policies of the Singleton Land Use Strategy.

As argued earlier because the offset outside the valley is generally not known by the people there is the strong likelihood that it will not match the values of the area being lost.

Water resource management

Water availability is a key constraint against the expansion of the coal industry. Water issues and the legislative regime governing them are complex and not well understood. Groundwater management plans

are area-specific and are based on a detailed understanding of regional or local water use, water use practices, environmental water requirements and water availability.

There needs to be state wide investigation of baseline data on water resources such as for the Namoi Water Study. The mixed quality, quantity and availability of groundwater resource data is a major concern. Until that has occurred there should be no new mining allowed in any area where there are risks to ground or surface water resources or quality.

There is a critical need for more effective communication and coordination between agencies involved in planning and approvals process. There is a perceived need for strengthening existing legislation and where necessary, developing new policies to deal with water management issues and a need to enhance the assessment and regulatory powers of the NSW Office of Water to achieve Water Management Act Objectives.

As stated earlier in this submission there must be as an urgent and immediate priority the implementation of the Aquifer Interference Policy and Guideline (NOW 2005) to provide a clear guidance on the acceptability of impacts on aquifers to ensure our water resources are protected for current and future generations. This policy adopts a precautionary approach to mining in the vicinity of important water resources. In the past this policy, although in draft form only, has been applied by mines when it suits them and ignored at their whim. It is unacceptable that any policy should have an inconsistent application.

Historically, cumulative impact assessment of mining on groundwater resources has been limited. More recently, however, cumulative effects on environmental receptors, including surface and groundwater, are included in the environmental impact assessment and the potential for interaction between groundwater and surface water systems and other groundwater systems is considered.

Achieving consistency between mining approvals is fundamental for implementing, achieving and sustaining the WM Act 2000 and National Water Initiative objectives. A clear framework, consistent arrangements and risk-based approach is a key step in ensuring cumulative effects of mining operations on groundwater resources can be assessed.

Water planning is a fundamental tool for achieving sustainable use of water and is a key element of the National Water Initiative. I endorse the development of nationally consistent water accounting, data collection, storage and sharing protocols.

As submitted above there must be better communication and coordination between agencies involved in planning and approvals to improve decision-making; a strengthening of existing legislation and where necessary the development of new policies to deal with water management issues and enhancement of regulatory powers to achieve Water Management Act Objectives and the National Water Initiative objectives;

Regulation and standards

It is in the area of regulation and standards that most improvement in the operations of the mining industry can best be achieved and a workable strategy be devised. The EA process needs reform. Essentially, the new Strategy must assure stakeholders that one interest, namely that of the development industry, is not overriding the interests of others, such as townsfolk, farmers and conservationists. This would aid in achieving social equity and economic well-being by increasing trust. There are a number of ways this trust can be gained.

- The community must be involved in the Planning Focus Stage of the Development Application to achieve best protection and regard for their concerns. The DG's requirements must have provision for community requests or input.
- By ensuring that the language used in implementing and operating the planning process is succinct and fixed, with terminology that is clearly defined.
- Any additional reports commissioned by Planning must be made available to the public for perusal and comment. Any significant changes to the DA must be put out for public comment. This is not always so as they are hidden in the Response to Submissions or Revised Commitments. Best practice and public interest demands a generous interpretation of "significant" in these cases.
- Discussion between the developer and the government agencies must have local community representation.
- Minutes of these meetings must be kept and published on the government website.
- Draft conditions of consent or licensing conditions must be shown to the community for comment and suggested modification.
- There should be prosecutions under s.63 of the EP&A Act for misinformation and deceptions in EAs.
- There should be more frequent and consistent prosecutions for breaches of conditions of consent and licences. The penalties should be upgraded to be more of a deterrent against infringements.
- There should be more covert inspections and monitoring of the enterprises.
- Environmental standards and policies should be reviewed and rewritten where appropriate, to reflect changing community expectation and to take into account the changing size and scope of the industries. If mining in any one region cannot meet these stricter standards then it should move on to operate in a region where it will have a lesser impact.
-
- Statutory timeframes should be introduced for relevant Management Plans.
-
- Assessments and approvals by other agencies, in particular the NSW Office of Water must be undertaken rapidly and concurrently with other assessment.
-
- Community Consultative Committees should be strengthened so that they become more effective in addressing local and regional issues. Planning must never underestimate the importance of understanding local issues.
- Representatives of government agencies should be present from time to time at CCCs.

Improving communication

Up to the present the DA process has been a two way process between the developer and the government agencies. Meetings are held between the Companies and executive officers from the various departments and minutes are not kept. These meetings must not be secret. Minutes should be kept and published on the website and community stakeholder representatives be present.

Part 3A assessments advantaged the developer at the expense of the community. The elimination of fast track planning processes for the coal and gas mining industries in all State legislative Acts is welcome. However local governments must have a stronger active role in determining if, where, when and how these mining activities should proceed.

The community participation begins and ends with the submission to the EA. This must change. The community must be involved at frequent and important stages throughout the whole process, not just once through written submissions.

Public participation in the whole process should be strengthened by allowing for public input prior to issuing of the DGRs and consent conditions as well as on the EA and all subsequent additional information requested or supplied whether this constitute a significant change to the DA or not.

There needs to be provisions for independent experts in various fields to assist communities dealing with and evaluating very complex and highly technical consultants' reports in EAs, in making relevant and meaningful submissions. These experts must be independent and have no association with the mining or gas industry.

The granting of mining or gas explorations licences must be more transparent with the community given a say at the exploration stage.

Planning should facilitate or support the holding of community forums both during the EA stage and during the mining operation and post closure. Such forums could allow for a much needed re-evaluation of actual as against predicted impacts.

The mining industry believes it has developed well established community consultation arrangements. Close examination of these would reveal the sham that they are in informing the community truthfully and promptly about changes likely to impact them. Requests for information are met grudgingly. There will need to be a massive cultural change before industry takes a strong lead in engaging with communities in the manner communities deem acceptable.

Industry does the barest minimum in spite of their glossy brochures and loud assertions to the contrary. The Shop front session I attended at RTCA in Singleton was not attended by any one else other than me yet their brochures continue to trumpet how successful the policy is.

Industry is loath to give when the community makes requests even on this very issue of communication. At the moment RTCA are resisting the community's request to hold group sessions to inform the community of changes to the mining operation which will affect them or to inform the community of development plans into the future. The approach is as always one of "divide and conquer". The community is not always comfortable in meeting the company on its own turf.

Glossy newsletters and one on one meetings are no substitute for genuine concern by industry and willingness to co-operate. Community engagement is currently conducted mainly at the individual mine level (in some cases as a legislative requirement) leading to multiple community consultative committees in regions of intense resource development. Planning needs to do an audit on the functioning and community satisfaction with CCCs. Dissatisfaction and frustration is deep and widespread.

One improvement would be the return to the CCCs of representatives from various government agencies who would then be able to hear the complaints and suggestions from the communities affected and consider what is reasonably practical to implement. This will result in efficiency gains; obtain a more immediate redress or mitigation for adverse impacts; address operation specific impacts and co-ordinate the development of initiatives and policies with better community input thus reducing the cumulative burden.

Most mining operations have sponsorship and donations programs to give financial support to community activities. Great emphasis is placed on this in the company's propaganda. This is admirable in itself but is no substitute for the need to address on-site operational impacts. It is these that the companies are reluctant to address with the community and rely continually, ad nauseam, on the line "we are operating within our consent conditions" or "take it up with Planning" or it is out licence entitlement.

Planning should either cease the practice of giving submissions to the Developer for responses or else demand that the responses actually deal with the issues raised. The present system allows the response to submissions to degenerate into a meaningless, circular, repetition of the company's position as described in the EA. It is a massive waste of time and effort. The principle is good but unless Planning demands a better standard from the industry it should be abandoned.

CAROL RUSSELL

898 Putty Road

Singleton, 2330

65 746501