

**Submission  
No 279**

## **INQUIRY INTO COAL SEAM GAS**

**Organisation:** Northern River Guardians Inc

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Submission by

**Northern Rivers Guardians Inc.**

To : **INQUIRY INTO COAL SEAM GAS**

by the **NSW Parliament; General Purpose Standing Committee No. 5**

Terms of Reference; ***inquire into and report on the environmental, economic and social impacts of Coal seam gas (CSG) activities....***

**Preamble**

This submission;

- is made on **behalf of the Northern Rivers Guardians, Inc, affiliated member of 'Lock the Gate Alliance'** with the assistance of **Tyalgum District and Community Association** members and other affiliated local District, Community and Environmental Associations in the NSW Northern Rivers Basin.
- confirms that our association **does not oppose Coal Seam Gas Mining (CSGM) per se**. However the association is firmly opposed to any CSGM which harms or which may or is **likely to cause harm to the public interest generally**, members of the public specifically, to the economic or social wellbeing of any sector of the public or to the environment in any form or description.
- seeks to ascertain the comparative benefits of CSGM may provide as opposed to any loss, harm, damage, dislocation, or other ill-favour that may adversely affect communities, individuals, businesses, social arrangements, or the environment.
- does **not address in detail, the overall merits or otherwise** of Coal seam gas mining other than to **firmly and unequivocally assert** that where such mining causes or is likely to **cause quantifiable harm to the environment**, individuals or the community then no licences should be issued until all such matters are satisfactorily resolved so as to properly protect the public interest.
- notes that Gas which is produced **for domestic use and that produced for export** creates different public interest arguments and cost/benefit motivations and also involves both State and Federal Government interests and authorities.
- asserts that it is the **absolute duty of respective governments to protect** and maintain the safety, health and wellbeing of the public generally and specifically and to protect the nation for the sustainable use of future generations
- asserts that natural gas exploration, extraction and production has commenced in NSW and throughout the nation in circumstances where relevant **public interest matters have been badly managed** by respective Governments.
- highlights the **lack of equitable management controls, resources and regulatory authority** to ensure public and environmental safety and protection.

- asserts that the legislation in respect of all matters concerning CSGM is **outdated, imprecise to the point of being ineffectual, inequitable, biased, and unjust**. It lacks clarity and certainty but where certainty exists, it favours mining without regard to virtually any other public interest matters.
- addresses **widespread public concern** about the unjust nature of the legislation which permits exploration without proper and comprehensive assessments as to the likely adverse impact that such exploration can have on the environment, communities and individuals.
- notes that the political, legislative and administrative processes of **granting Petroleum licences lack genuine concern about matters of public interest**; none the least being the health of the environment or affected communities and the lack of concern about procedural fairness and due process. Furthermore the emphasis of the whole process seems to strongly favour the financial interests of the petroleum industry and Government revenue.
- references the Tweed area as a case in point [referencing PEL 445] – highlighting the **ineffective legislative processes** which could put residents, businesses and the environment at risk of harm.

## Background

- The Northern Rivers Guardians is incorporated in NSW with a direct membership of more than 400. Lock The Gate Alliance is an umbrella organisation also covering other local district, community and environmental groups all of which support the general principles of concern set out in this submission.

## Objective of the submission;

Noting the concerns and unresolved issues raised herein, we are calling on the relevant Ministers to **halt all Coal Seam Gas mining exploration and extraction** in the Tweed and Clarence River areas particularly, but to the maximum extent possible in all other circumstances, pending a full and proper assessment of the costs, benefits and social and environmental impacts of such mining.

## Overview of Concerns in Summary;

**Principle Issues:** The primary issue underpinning CSGM is to determine precisely what outcomes are expected to be achieved from this activity. The question of who benefits and who loses from the activity and the extent of those outcomes is basic to the whole issue of CSGM.

The second issue is whether those outcomes meet the needs and expectations of the electorate. And it raises the question as to whether the outcomes being sought by the CSGM companies and the government have been fully, properly and honestly communicated to the electorate.

The third issue is the question of whether Government policy, legislation and administration arrangements are directed at achieving the government's declared and intended outcome.

**Legislation:** Petroleum (Onshore) Act, appears to be unconstitutional in part; it does not afford all parties the same rights in respect of due process, procedural fairness and

equity. And it does not ensure that the losses of various existing rights or benefits are warranted or that those suffering or likely to suffer losses are properly and fully compensated.

Furthermore the licences granted cover vast areas with minimal exceptions or exemptions, therefore making all citizens, communities and individuals liable to have to defend their rights against the intrusion of behemoth multinational organisations holding CSGM licences.

**Political policy:** there appears to be NO Government policies or guidelines giving any appropriate direction or weight to determining whether licences for exploration or extraction should be granted. The absence of firm political policies implies that the Government either has no regard for the public interest or is indifferent as to any harm, damage or loss imposed on communities, individuals, local economies or the environment or they actively prefer to support CSGM regardless of the outcome.

**Ministerial authority:** The process by which Ministers may issue licences seems to lack transparency and accountability. It also seems to lack reasonable appeal mechanisms and the objective testing of evidence to ensure that all matters are properly considered against the guidelines.

**Delegation of functions by Minister (s126):** Delegation powers which allow the Minister to delegate powers to the holder of any office seems unwise and open to reduced accountability.

**Administrative and Regulation deficiencies:** Organisations and resources seem to be well short of that which is necessary to ensure that Coal Seam Gas exploration and extraction complies with procedural requirements and that the regulatory requirements meet public interest safety standards.

**Exploration licences:** Licences are issued over a 'blanket' area without regard for any specific matter in a specific location which may cause harm to the affected public interest, other industries, village communities, individuals or the environment.

**Environmental Concerns:** it is clear from objective international, national and scientific information available that the fracking and waste disposal arrangements from Coal Seam Gas mining are not effective or are not sufficiently effective to protect fundamental natural environmental matters (e.g. ground water, salinity and local atmosphere).

**Potential Toxic inundation to Ground Water:** direct evidence, much of it scientific and verified, indicates increased salinity/toxicity of ground water where Gas Seam mining has occurred.

**Specific risks must be addressed:** All factors likely to adversely affect a localised region, industry or community must be thoroughly examined publicly and assessed prior to any exploration or extraction of gas.

**Poor protection against harm:** the current legislation seems aimed at remedial action after a misadventure or harm is caused to affected parties, rather than ensuring that such harm never occurs.

**Notices of perceived danger (s129) :** such notices concerning the operations of a petroleum licence may only be given to the licensee and not to the affected

landholder or other persons who may be affected. This is a serious failing of legislative and administrative requirements dealing with the duty of care.

**Royalties seem totally inadequate:** A cost benefit analysis of Coal Seam Gas royalties suggests that there is a poor return to the nation compared to the profit generated by extractors and exporters. Royalties should be linked to profit. The community is reasonably entitled to a significant share of benefit from extraction of commonwealth non-renewable resources.

**Royalty Insurance against damages:** The very likely adverse effects of Coal Seam Gas Mining, warrants a comprehensive insurance scheme funded by Gas exploration, extraction, processing and exporting industries.

### **Terms of Reference [ToR] (*see Italics*)**

*...inquire into and report on the environmental, economic and social impacts of coal seam gas (CSG) activities, including exploration and commercial extraction activities, allowable under the NSW Petroleum (Onshore) Act 1991 (the Act), and in particular:*

1. *The environmental and health impact of CSG activities including the:*
  - a. *Effect on ground and surface water systems,*
  - b. *Effects related to the use of chemicals,*
  - c. *Effects related to hydraulic fracturing,*
  - d. *Effect on Crown Lands including travelling stock routes and State forests,*
  - e. *Nature and effectiveness of remediation required under the Act,*
  - f. *Effect on greenhouse gas and other emissions,*
  - g. *Relative air quality and environmental impacts compared to alternate fossil fuels.*
2. *The economic and social implications of CSG activities including those which affect:*
  - a. *Legal rights of property owners and property values,*
  - b. *Food security and agricultural activity,*
  - c. *Regional development, investment and employment, and State competitiveness,*
  - d. *Royalties payable to the State,*
  - e. *Local Government including provision of local/regional infrastructure and local planning control mechanisms.*
3. *The role of CSG in meeting the future energy needs of NSW including the:*
  - a. *Nature and extent of CSG demand and supply,*
  - b. *Relative whole-of-lifecycle emission intensity of CSG versus other energy sources,*
  - c. *Dependence of industry on CSG for non-energy needs (eg. chemical manufacture),*
  - d. *Installed and availability costs of CSG versus other stationary energy sources,*
  - e. *Proportion of NSW energy needs which should be base load or peaking supply and the extent to which CSG is needed for that purpose,*
  - f. *Contribution of CSG to energy security and as a transport fuel.*
4. *The interaction of the Act with other legislation and regulations, including the Land Acquisition (Just Terms Compensation) Act 1991.*
5. *The impact similar industries have had in other jurisdictions.*

**Comment:** The NSW Government is to be commended for the breadth of the ToR for this inquiry. At first glance the ToR appears to cover almost all aspects of CSGM.

However **the current ToR does not require the inquiry** to consider and report on other relevant and vital issues such as;

- what factors are driving the expansion of CSGM, who benefits and to what extent
- the availability and costs of CSG versus other stationary energy sources such as Natural Gas which is not derived from coal seams, and other comparisons with renewable alternatives.
- the extensive shortcomings of the existing legislation (Petroleum (Onshore) Act)
- the administrative resources and arrangements to regulate and apply the legislation.
- the relevant Government policy on Gas which is to be exported and that which is to be used for domestic use.
- a comparative cost/benefit assessment of the value of CSGM to foreign investors as compared to the value gained by domestic users or providers.
- CSG Mining companies and their record of meeting compliance standards in relation to safety (particularly wellhead safety, transportation and involving piping practices).
- the inadequacy of the sanction regimes in place to punish CSGM companies for harm caused.
- The standard of environmental restoration required by CSGM Companies at completion of production and how to enforce any statutory requirements.
- how any damage to the community or the environment will be paid for if a CSGM Company simply closes operations and departs Australia.

**It is noted that this is the second NSW Government Inquiry this year.** This current inquiry must surely be set against the context of the previous inquiry and any findings would be expected to complement each other. The comments below were put to the previous inquiry but they have been expanded to address matters raised under the Terms of Reference (ToR) of this current inquiry.

The earlier inquiry was titled THE NSW COAL & GAS STRATEGY MINISTERIAL SUBCOMMITTEE OF CABINET which, to the best of our knowledge, has not yet produced a report on that matter.

The ToR of that Inquiry was interalia... “to (*also*) ensures sustainable local communities and the ongoing development of a wide range of existing industries (eg agriculture, tourism) in mining regions through the coordinated management of all environmental, social, health and economic impacts on regional development, job creation, infrastructure and wealth distribution ..... about where mining and non-mining activities **can most appropriately develop..**”

**COMMENT:** if Coal Seam Gas mining interferes with or adversely affects non mining matters (environmental, community, social, health, safety or economic stability of a region) then **such mining CANNOT be an appropriate development.**

The aims [inter alia] are to

- *Facilitate sustainable development of the Coal mining industry and associated activities (including Coal Seam Gas) in identified mining regions alongside continued development of existing industries including agriculture;*
- ***Minimise*** any adverse health, environmental, food production and land use impacts, including cumulative impacts associated with development of existing industries including agriculture.

**COMMENT:** it appears that the **aim of the government is not to prevent or prohibit harm** to health, the environment or food production or land use – rather the aim is simply to **minimise** the amount of harm which the government expects to occur. The anticipation by Government that Coal Seam Gas Mining will cause harm is alarming in itself, but to be satisfied that the harm is simply to be minimised and tolerated is not acceptable.

**Nothing short of the prevention and prohibition of harm is acceptable.**

- *Ensure the industry is **regulated** efficiently and effectively;*

**COMMENT:** governments are relatively effective at creating efficient and effective regulation of industries, however they are **notoriously ineffective at ensuring the enforcement** of such regulations. There is evidence to date that existing regulations are not being enforced or applied in the public interest. **The resources necessary to ensure proper regulation are not sufficient or effective.**

- *Provide the context for the NSW Coal & Gas Strategy, including:*
  - *identifying the size, area, and location (including surrounding communities, land uses and activities) of the State's Coal resources, and those resources that might be mined by open cut methods;*
  - *assessing the likely growth (including the economic, employment and social implications) of the industry over the next 25 years, taking into consideration domestic energy requirements and export opportunities, and any potential challenges or policy developments having an impact on this growth.*

**COMMENT:** in the context of a balance between the benefits of Coal Seam Gas extraction and the social, environmental, health, safety, population, amenity and existing industries it is incomprehensible that the PEL445 (title) was ever granted. Note below an extract from the government's report on far North Coast strategies; Take further note that the licence was granted under the current 'regulated' arrangements.

*The Far North Coast is the most biologically diverse region in NSW, with stunning beaches, World Heritage areas, character-filled villages and productive rural hinterlands. It is no surprise that around 2500 people come to settle in the region each year to enjoy the lifestyle.*

*The region's natural wealth is also the basis of resource industries, expanding exports and tourism, which contribute significantly to the State economy.*

*In the next 25 years the region's population is expected to grow more than 26% to 289, 000. A well balanced long-term vision is needed to provide for this growth while ensuring the environment is protected.*

- 2. *Identify key impacts and **constraints** associated with Coal seam mining, including:*
  - (a) Environmental and amenity impacts on surrounding communities, land uses and activities e.g., conflict between miners and the thoroughbred industry in the Upper Hunter Valley;*
  - (b) population health impacts of mining, particularly dust and particulate emissions and noise;*
  - (c) interaction between specific mining activities and potential biodiversity or conservation sites;*
  - (d) impact of mining activity on subsidence;*
  - (e) pressures on transport infrastructure in key mining areas and related communities; and*
  - (f) impacts on water resources, including water for Coal washing.*

**COMMENT:** factors such as health, safety and social well-being or security of affected residents and the risk of collateral damage to other parties **is, according to this TOR, not considered necessary to identify as ‘key impact or constraint’** factors. Nonetheless it is noted that other impacts on communities, population, biodiversity, infrastructure and water resources are noted as possible constraints. Unfortunately is not clear what weight these constraints would have on balance against an indecent rush to create a Coal Seam Gas extraction/production industry.

**The ToR of the current** inquiry does, in some sub clauses, seek to address questions about the impact on communities, businesses and the environment. However the importance and effect of those issues on Government policy is problematic. The Government has remained silent as to the weight likely to be afforded to Royalty payments as opposed to adverse impacts on communities, existing businesses or the environment.

- 3. *Assess government’s existing regulatory, legislative and facilitation activities to determine if the existing framework is adequate to address the issues that have been identified, and recommend measures to strengthen whole of government regulatory and monitoring mechanisms.*

**COMMENT:** as a generalisation the legislation, regulatory processes and facilitation activities concerning the issuing of petroleum exploration and extraction licences are not effective and do not best serve the public interest. To recommend measures to strengthen the whole of government regulatory and monitoring mechanisms would require a Ph.D. thesis.

However as a good start, the strengthening of public interest disclosure laws, whistleblower protection, and the creation of an effective well resourced, **Regulatory Inspection Bureau** paid for by the respective industries and accountable to the public must be a fundamental first step.

The next step would be an **Audit Authority**, paid for by the CSGM companies, to record and make public, all data arising from any CSGM enterprise. The information to be made freely available would include;



- Licence applications – including the full details of the applicant.
- Areas covered by any licence including any areas within the licence area which are exempt from CSGM activities (and reasons for exemptions)
- All cases where any malefaction, misconduct or breach of licences occurs.
- All cases where, either by negligence or accident there is a safety or other breach of licence terms.
- All cases where a licence is revoked or limited and the reasons for same.
- All cases where an appeal against a licence is successful.
- The total Gas produced by a CSGM enterprise and the portion of Gas produced to be exported.
- The actual revenue/Royalties paid to governments by any CSGM enterprise
- The rate of revenue or Royalties paid to governments for domestic and exported Gas.
- Any exemption from tax or other benefit granted to a CSGM enterprise (and the reasons for the exemption).
- An assessment of costs to the Nation/State/Shire for any infrastructure (including roads) built or maintained to facilitate Gas exports.
- Assessed profit made by CSGM enterprises from the gas sold and used domestically.
- Assessed profit on exported Gas, based on quantity exported and averaged pump selling price at foreign outlets.
- Number of employees used per year in the CSGM industry identified as employed respectively on the production of domestic and exported Gas.

Lastly a requirement that Licences for exploration, extraction, productions or export are not transferable unless the whole process of seeking a licence is recommenced and properly conducted as if the transfer is a new application.

- *4. Identify options for addressing key issues for inclusion in the Strategy. This could include, for instance, identifying: strategic initiatives to **minimise** the potential environmental, health, social, transport, land use conflict, and other impacts (including on local communities) associated with the sustainable development of the industry, either for specific Coalfields where the management of cumulative impacts is likely to be a significant issue, or the industry more generally;*

**COMMENT:** See critical comment above in respect of “**minimise**” harmful impacts rather than preventing and prohibiting harm.

- *5. Assess, where relevant, the various options identified using a broad based social, environmental and economic cost-benefit analysis framework and an objective assessment of equity considerations to inform the assessment of the various options identified. This could include, for instance, cost-benefit analysis of competing land uses (mining, agriculture, tourism, environmental conservation) in specific regions or defined sub regions, as well as potential health costs and benefits, to guide decision-making on the relative merits of introducing or expanding Coal mining in these regions or sub regions.*

**The comments below have been extensively expanded from that which was provided to the previous inquiry.**

**COMMENT:** Any **cost/benefit analysis** must start from questioning whether Coal Gas must be extracted and sold. The longer that Coal Gas remains untapped the more value it gains.

The value of energy is increasing exponentially and therefore the longer natural gas remains in situ the more valuable it becomes. Furthermore if the current production is sufficient to meet domestic needs then the real question needing to be addressed is, who benefits from increased production to meet exportation needs and does that benefit outweigh any adverse effect on domestic circumstances.

Any analysis **must firstly consider** what is to be done with any Gas that is produced.

If it is necessary for domestic use then there is an imperative to replace higher CO<sub>2</sub> producing Coal use. But if there is already a surplus of Gas being produced for domestic use then there is no imperative for further Gas extraction or production – unless the surplus gas produced is for sale overseas.

Surplus Gas produced for sale overseas produces no direct benefit to affected communities, individuals, businesses or industries. To the contrary, the exported gas may be used to help overseas countries compete with Australian agriculture, industry or manufacturing.

The small number of people employed in domestic Gas production would probably be virtually the same numbers to be used to produce surplus gas production.

The cost of building infrastructure to support domestic use is a national asset and has an ongoing benefit to local communities and businesses. Whereas the infrastructure to support surplus gas production, transport, piping and exportation is no asset to the nation and within 15 years will very likely be a redundant pile of scrap metal.

**The second stage of the cost benefit analysis must address long term issues.**

Residual salt pans, uncapped wells, deep bore holes into or through water tables will be a legacy that must be addressed and resolved before any licence is granted for exploration let alone extraction and production.

Other concerns about the appropriation of land, interference with local businesses, loss of value of property, environmental degradation or destruction, loss of amenity and probably safety are all long-term matters that are addressed later in the submission.

Similarly issues concerning royalties or revenue raised from Coal Seam Gas mining for domestic use or for export are addressed later in the submission.

Nonetheless the long-term resolution of these matters must be addressed and resolved, concurrently with the resolution of any short-term or immediate concerns about Coal Seam Gas mining. To permit Coal Seam Gas mining while long-term issues and benefits of such activities are not resolved or properly weighted would be a complete abrogation of the duty of care owed by the government to the people of this State.

**The ultimate issue** of any **cost-benefit analysis** about the competing interests of Coal Seam Gas mining is **really dependant on government policy**. The weight the

government gives to mining royalties/revenue as opposed to revenue raised from taxes from the produce of existing landholders is a matter of government (preference) policy. Whether that policy also factors in the ongoing sale and retail benefits that accrue from agriculture and farming is not clear. It seems more likely that governments to date favour the “cash in hand” that mining royalties bring rather than the long-term and accumulative benefit that working the land has for the nation as a whole.

At present these policies and supporting legislation do not seem to realistically balance the additional factor of likely harm to communities or the environment caused by Coal Seam Gas exploration or extraction.

In the absence of clear policy statements from the government as to where their preferences lie, it seems a pointless exercise arguing the respective merits of royalty receipts compared to adverse effects on communities, the environment or the accumulative loss to the financial well-being of the nation. The financial ability of large mining companies to pay for lobbying government gives these a huge and unfair advantage over other citizens/competing interests.

- *6. Facilitate the development of the associated infrastructure required to support the effective and efficient operation of the Coalfields. This could include an assessment of the total approved production versus existing transport handling capacity (from rail to port); projected/potential maximum production versus transport capacity; and transport-related impacts on local communities.*

**COMMENT:** the costs of any infrastructure to facilitate the export of Coal Seam Gas must be borne by the relevant industry. No public funds should be used to facilitate Coal Seam Gas export businesses (particularly those which are foreign owned). **For example, proposed gas pipelines to take gas to export terminals must be totally paid for by the relevant Gas producer including.** However, setting aside other factors against Coal Seam Gas production, if the gas extracted is to be used exclusively for domestic purposes then the provision of normal domestic infrastructure would be provided as usual as a government service. Regardless of how the gas is to be used, no gas pipelines should encroach on public or private lands without permission and without significant compensation payments for all losses foisted on the public interest/amenity or on private property.

Moreover as the Act seems to provide for exploration and production it does not seem to entitle the laying of pipelines particularly those above the ground. Pipelines above the ground are not within the scope of legislation. Therefore all and any pipelines may not be entitled to construction without the permission of the relevant land holder.

- *7. Establish formal mechanisms to improve the communication between government, industry, and the community on mining-related matters.*

**COMMENT:** the establishment of formal communication mechanisms between government, industry and community is important. Unfortunately such mechanisms are dependent on the **respective party's power and influence**. And in respect of community power and influence, there is a deficit and clear disadvantage in the period between elections. Clear government policy and a power to take a matter before a relevant court at minimal cost, would go some way to balancing the respective parties powers and influence. To make the whole process a more

balanced and just process, the legislation should establish a minimal cost arbitration court which provides free legal representation to landowners .

- *8. Recommend to Cabinet a short-term and a medium to long term Coal Mining Strategy that assists the Coal industry to continue to develop in a broad, balanced and sustainable manner that takes into account human health and environmental protection.*

**COMMENT:** Research and objective assessment of the health and safety of all factors is necessary to ensure that any Coal Seam Gas exploration or extraction causes no quantifiable harm in any given location. That independent research and objective assessment must be paid for by those seeking to exercise the exploration and extraction of Coal Seam Gas. In the absence of supportive evidence that such exploration and extraction will not cause harm, then the government must err on the side of public safety and well-being and deny the relevant licenses.

## Issues in Detail

### Legislation;

The Petroleum (Onshore) Act [the Act], appears to be unconstitutional in part; The Act in Part 11 – Compensation, provides limited compensation for simple specific damages and harm caused to a landholder's property. It also provides compensation for the loss of the use of land occupied by a petroleum title. But other losses of amenity, production, expansion and general value do not seem to be appropriately covered by the Act. The compulsory loss of any right, entitlement or benefit must be fully and properly compensated and it seems the Act does not meet that constitutional standard.

The legislation apparently does not require any limits as to the number of wells that may be established on a landholder's property. Theoretically, if not in practical terms, the legislation permits the Minister the right to completely take over a landholder's property by granting petroleum license rights over the entire property. The inequity of legislation which permits such powers would seem to be unconstitutional. Furthermore the lack of specific limiting provisions under the Act controlling where wells may be located seems to be an unjust provision, which robs landholders of some fundamental property rights.

A petroleum titleholder may cause a broader range of damage or harm to a land title holder by having a petroleum well or several wells on a landholder's property. That situation could substantially detract from the overall value of a property. It may even make the property unsaleable. A farming asset and residence which has been built over the years could become a virtual liability if petroleum wells on the property seriously detracted from its value. And not only are the wells of themselves a potential robber of value but the maintenance and ready access to those wells by engineers, inspectors and others would be a further deduction of a land owner's property value.

Simply having a petroleum well on a property could totally destroy an organic farm (animal, plant or vegetable) certification. Yet the compensation provisions under the Act do not seem to address this issue. Moreover such personal losses to a vocation, lifestyle or business could not be compensated simply by the payment of money.

Furthermore if the loss of such certification caused the land title holder to fail to meet existing contractual obligations then that additional loss must be taken into consideration when calculating any compensation.

The same arguments in principle hold true for all agricultural businesses, whether they be certified organic or not.

Moreover, having petroleum wells on one property may cause serious loss of value to adjacent properties for the same reasons. If the introduction of those wells is a direct cause of loss or value to an adjacent property it seems that this must be a factor to be considered in granting petroleum licenses; and likewise legislation must also ensure that such losses are properly compensated for under the Act.

Other losses and damage may be caused to the environment generally, adjacent farms, communities and villages and businesses in those villages. The specifics of these losses will be addressed below, but it should be noted that the legislation is inappropriately silent about the compensation and means to obtain compensation that may be payable to relevant parties for such damage or harm.

### **Political policy:**

It is clear that regardless of the recommendations and requests that are put to this latest Inquiry, the Government's policies, guidelines and objectives will flavour the whole process.

Therefore it is incumbent on the government to publicly declare their value weighted preferences for Coal Seam Gas mining (in respective locations) compared to their preferences for the protection of public health, safety, well-being, communities, businesses, industries and the environment.

In the absence of that clear policy directive and guideline to formulate appropriate legislation, administrative practices and enforcement of regulations, the whole process of this Inquiry is in effect, superfluous and redundant..

We look forward to the Government setting out their Coal Seam Gas exploration and extraction objectives in a comprehensive public document as soon as possible, but certainly before the current Inquiry makes any recommendations.

### **Ministerial authority;**

Ministers may issue a petroleum exploration licences if they so wish without full and accountable regard to the likely or certain impact that the execution of such licences may have on various parties or the environment. The extent to which any regard is given to any argument seems to be at the sole discretion of the Minister or his/her delegate.

Under the Act, the only parties who seem to have any right of appeal to the issuing of such licences is the immediate landholder whose property rights will be diminished by the granting of the licence.

Clearly some basic principles which will guarantee minimal protection to the health and well-being of people, property or the environment must be included in any license application for consideration by the Minister. Yet petroleum licences are granted covering vast tracts of land containing towns, villages, businesses, industries, farms, water courses and water aquifers.

From the information available it is not certain what information is specifically required to be provided by an applicant for a petroleum exploration or production licence. Due

process and procedural fairness would require that ALL relevant information must be made available to the decision maker and to all parties likely to be affected. Yet it does not appear that any specific mining locality or process information is required other than the boundaries of the area subject to the application.

For example it is not clear whether an applicant must disclose the chemicals to be used and their quantities, the intended volume of water to be used, the process of injection, the depth of the intended operation, whether the drilling is vertical or at an angle and whether or why that angle drilling is necessary. Similarly the satisfactory disposal of any water, salt, soil, chemicals or petroleum products must be spelt out in any application. Any licence application must contain fixed guarantees that the process permitted by the licence will not lessen, harm or otherwise adversely affect the water available to others anywhere within the boundaries of the licence permit. Furthermore any application for any licence must state precisely what quantities of water will be used under the licence and where the water to be used will be drawn from.

**If petroleum licences are to be granted, those licences must only be granted when the specific processes identify safe procedures, appropriate chemicals, drilling angles and depths and safe disposal of residue have been declared and resolved.** All factors relevant to the processes used must be publicly identified and taken into consideration before the licence is granted.

Though the Act appears to make provision for National Parks and Native Title, other less well prescribed areas such as cultural or National Heritage places, wildlife corridors, rare flora or fauna locations or unique tourist attractions do not have such protective provisions. Permitting petroleum exploration licences in these areas is contrary to any common sense, it ignores the value of national assets and is certainly contrary to the public interest. Yet the legislation seems silent as to how those national assets can be protected and by whom they may be protected under the Act.

In some locations, because the specific landform or geography (e.g. valleys or natural basins) any use of toxic chemicals, used in the petroleum licence process would be a serious threat to the life and well-being of residents in that area. Alternatively the process of fracking could allow the leaching of natural but toxic chemicals into watercourses or the atmosphere particularly in natural basin areas.. It appears that petroleum licences have been issued without regard for any specific geographical assessment of the risk to communities, people in general or the environment.

If there are regulations specifying the distances from such places at which exploration can occur, it is simply not possible to issue a blanket license for vast tracks of land in the hope that any risk to people or the environment will be dealt with properly at a later time.

**If petroleum licences for exploration are to be granted, those licences must only be granted for specific and precise locations.** All factors relevant to the location - including impacts on neighbouring properties - must be identified and taken into consideration before the licence is granted.

This approach would it appears, be totally different from the 'blanket' licences currently granted. Therefore it is strongly recommended that the licence process be in 3 stages.

**Stage 1.** An approved petroleum licence prospector applies to hold licence over a specified area and pays a licence fee directly proportionate to the area covered.

The licence fee would pay for a proper government investigation of the area under consideration. Any license granted would take note of specific places and circumstances which are defined as being excluded from the licensed area.

**Stage 2.** After land or aerial surveys are carried out an approved petroleum licence prospector may apply for a new and separate licence to carry out physical exploration at specific locations (eg a precise 50mtr square area and its exact geographic location for each licence).

A fee for that license would pay for a proper independent and objective assessment of the location subject to the licence application. All factors relating to the relative merits for and against the application for the licence must be publicly assembled and exhibited and assessed before a minister decides to grant or withhold the licence.

**Stage 3.** If an approved Gas Production company applies for a Production licence (on a location proved by exploration to contain viable gas deposits), the licensing fee payable must pay for an independent evaluation of the application and all factors concerning the potential for revenue/royalties, the actual production process, the transport, infrastructure and facilities to deliver the gas as required , the effect on local communities, individuals, businesses, industry and the environment and any other factor considered necessary.

### **Delegation of functions by Minister (s126);**

The Act allows the Minister to delegate powers to the holder of any office (presumably employed under the Act). This arrangement seems to allow junior officeholders in the relevant agency to grant various petroleum licences. This seems to be a facility which allows the Minister to avoid responsibility and accountability in respect of granting petroleum licences.

Granting of licences must only be done after a thorough examination of the relevant facts balanced against the policies of the incumbent Government, the interest of other affected parties and the general public interest. Though the administrative work and general assessment of arguments for or against the granting of a licence may be carried out by relevant agency office holders, it is really the absolute responsibility of the Minister to make the final decision.

**The power to grant a licence or reject a licence must not be delegated by the Minister.**

That is an abrogation of responsibilities and undermines the process of Ministerial accountability. It may also open the way for possible corrupt decision-making.

### **Administrative and Regulation deficiencies;**

Government agencies seldom have sufficient resources to ensure compliance with all statutory requirements or the enforcement of regulations. In the highly lucrative field of Coal Seam Gas sales there is a constant risk of compromise at best or corruption at worst.

Coal Seam Gas explorers or extractors must be levied an amount in their ongoing licensing fees to pay the costs of maintaining a satisfactory standard of regulatory process (ie claims assessors and inspection officers).

Best practice suggests that the administrative and regulatory process should be handled by a series of officials at varying levels. This process constantly tests whether the administration and regulatory process is working and it also minimises the opportunity for maladministration or corruption.

Random sampling of petroleum licence applications by a specialist group of auditors and inspectors will ensure that adherence to any and all guidelines, practices or procedures which are required, were properly administered.

### **Exploration licences:**

Petroleum licences appear to be issued over 'blanket' areas. As discussed above, 'blanket' licenses cannot properly address the specific concerns of individuals, communities, villages and other interest groups about the likely adverse effects that petroleum licences may have.

In plain words, licences which are granted for a blanket area without regard for the specific interests of parties who may be affected indicates very bad legislation, a poor understanding of social and community needs, an abrogation of effective administration and an unjust and procedurally flawed process.

**If licences are to be granted they must be granted for specific locations having regard to the interests of all parties who may be adversely affected by the granting of such licences.**

### **Environmental Concerns:**

Objective international, national and scientific information available as well as direct evidence of persons who have suffered from Coal Seam Gas exploration or extraction verifies that the processes used to extract Coal Seam Gas is fraught with danger and must be treated with the utmost care.

Australia is one of the driest areas on Earth, and our water supply from groundwater and aquifers is paramount to sustaining life in Australia. The national subterranean water reserves must be protected by all means possible – even if that is at the expense of keeping gas reserves in the ground.

The environmental concern of having any part of our groundwater or dam reserves contaminated by mining processes is simply unacceptable.

**The fact is, Australia's groundwater, river water and reservoir holdings are more valuable than compressed natural gas.**

Any industrial practice which uses vast amounts of water in its processing must be viewed with considerable scepticism. That scepticism should be greatly heightened if the residual water from that process becomes contaminated to the extent that it is unpotable.

And further concerns should be raised if it is likely that the contaminated water used in the gas extraction or other contaminants from the ground can be mixed with sweet freshwater, thus making it also unpotable.

Many communities and agriculture or farming industries are dependent on fresh ground water. Any activity which puts that water at risk in any way must be prohibited.

### **Exposure of Toxic inundation of Ground Water:**

The relevant Government agencies have, or should have, information about instances of contamination by Coal Seam Gas of natural water reserves both in Australia and other locations. These examples should be publicly available. Similarly a register should exist on the relevant Agency web site listing any instances or complaints of Coal Seam Gas contamination arising from Gas extraction or exploration.



### **Specific risks must be addressed:**

All factors likely to adversely affect a localised region, industry or community must be thoroughly examined publicly and assessed prior to any exploration or extraction for gas. As a case in point the licence PEL 445 applies to deep valleys and natural basins in the geographic region near Mt Warning. There are many National and State Parks recognised for their natural beauty.

However the real concern is that this area is totally dependent on ground water for village life. Already Arrow Energy has drilled in valleys above Kyogle and is fast approaching Tyalgum and other Tweed Valley areas.

Tyalgum poses a unique risk factor. The village is located in a natural basin. If there is an escape of Coal Seam Gas during a time of an atmospheric inversion layer, then the Coal Seam Gas could be trapped in the basin. Given Coal Seam Gas's properties, it is likely that people would not know that they were being gassed until it was too late. The specific nature of each location where gas is mined or where it may be inadvertently released must have a direct bearing on the consideration of granting any petroleum licence.

### **Poor protection against harm:**

The current Petroleum (Onshore) Act is typical of government legislation. Governments stipulate that certain events must not happen but if they do, then a Band Aide should be applied to the problem. Safety issues work best if they prevent injuries rather than treat them.

What is needed in legislation, is more emphasis put on determining any risk in the first instance. More importantly is the need to ensure that where risk is involved that those at risk are given a veto over any proposed action.

Knowing that a risk to local residents is present and not providing adequate protection is culpable negligence at best or callous disregard for safety at worst.

### **Notices of perceived danger (s129);**

It appears that notices of dangers concerning the operations of a petroleum licence may only be given to the licensee and not to the effected landholder or other persons who may be affected.

This is simply not acceptable. Where there is a risk to any person, directly or indirectly it is obligatory on the person detecting the danger to alert any person who may be affected.

To restrict the circulation of this information to petroleum licence holders seems to confirm the close and unhealthy association between Government and the petroleum industry. The public interest must be paramount.

This legislative provision must be revoked and a more publicly responsible attitude adopted in the legislation.

### **Royalties seem totally inadequate – Impose an export levy:**

A cost- benefit analysis of Coal Seam Gas royalties suggests that there is a poor return to the nation compared to the profit generated by extractors and exporters. Royalties should be linked to profit and increased incrementally relevant to use or profit.

Royalties (State Revenue) paid on Gas produced for domestic use should be at a rate considerably lower than the royalties imposed on exported gas. Under that framework we would recommend that the current royalty rate for gas used

domestically would rise marginally but that the rate for exported gas would increase significantly

If for legal or constitutional reasons this was not possible, then the rate of revenue to be raised from exported gas could **be imposed by the Commonwealth as an export levy**. This option would in fact be probably preferable as it would mean that investment on state gas production could not be influenced by States competing to set the lowest royalty rates.

Royalties should be paid on the well head production as a base rate at 10% of the value at that point. However after the gas is processed it is sold at wholesale prices to retail outlets.

The final Royalty payment should be based at 10% of the wholesale sale rate with a discount taken into account for the earlier well head payment.

### **Royalty Insurance against damages:**

In addition to the Royalty payments which should be collected, an additional 10% rate should be added which should be used to fund an insurance arrangement against any and all damages cause by the Coal Seam Gas exploration, extraction, processing and exporting industries .

This submission has been prepared without sufficient time to adequately research all necessary aspects to support the arguments. Nor has there been time to copy and enclose supporting documentation. However the information provided above is ~~se~~ provided in good faith and to the best of our knowledge and information.

You are further advised that this submission has not been formally adopted by the Northern Rivers Guardians or Lock the Gate Alliance but that process will be formalised in due course. Given these circumstances you may take this document to be our formal submission until advised otherwise.