

**Supplementary  
Submission  
No 326a**

## **INQUIRY INTO COAL SEAM GAS**

**Organisation:** Upper Hunter Shire Council

**Date received:** 4/10/2011

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The  
*Bluett*  
AWARD  
~ 2010 Winner ~



30 September, 2011

General Purpose Standing Committee No 5  
Legislative Council  
Parliament House  
SYDNEY NSW 2000

RECEIVED

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LEGISLATIVE  
COUNCIL

Dear Sir/Madam

**Submission to the Legislative Council Inquiry (General Purpose Standing Committee No 5) into Coal Seam Gas**

Upper Hunter Shire Council appreciates the opportunity to make a submission to the NSW Parliament Legislative Council General Purpose Standing Committee No 5 Inquiry into the Environmental, Economic and Social impacts of Coal Seam Gas Mining activities in NSW including exploration and commercial extraction activities.

This Submission is in addition to and supports Council's preliminary submission to the committee dated 6 September 2011.

**INTRODUCTION**

The Upper Hunter Shire is located at the northern end of the wonderful Hunter Valley. The Shire was formed from the amalgamation of Merriwa, Murrurundi and Scone Shires during 2004 and encompasses an area of some 8100 square kilometres with a current population of around 14,000.

Our Shire has an important agricultural based industry and a world renowned horse industry. Scone is known as the 'Horse Capital of Australia' and the locality represents the 2<sup>nd</sup> largest concentration of thoroughbreds in the world (Kentucky USA is the largest) and is one of the top three international centres of thoroughbred breeding in the world together with Kentucky, USA and Newmarket, UK.

Scone is also the home to the Australian Stock Horse Society, our unique Australian, nationally significant breed. A satellite Australian Stock Horse Stud has recently been set up in the US based on an Australian Stock Horse stallion from the Upper Hunter.

Local Upper Hunter breeders including the Packer polo centre Ellerston are now exporting significant numbers of polo ponies to the UK and Argentina – once the bastion of polo pony breeding.

Coal and gas are not the only Australian exports to Asia. Horses from the Upper Hunter, both thoroughbreds and performance horses, are increasingly being exported to Asia - China in particular. In the past 12 months over 70 polo ponies have been sent to the Metropolitan Polo Club in China alone. The market for the first class horses of the Upper Hunter has only just begun.

**A Quality Rural Lifestyle – in a caring and thriving community**

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The Upper Hunter Shire has a unique position within the Hunter Valley as it still remains free of open cut coal mining.

The vital importance of the thoroughbred industry to the area has been clearly demonstrated in the past decision in respect of the proposed Bickham Coal Mine (30 km north of Scone) whereby the Planning Assessment Commission (PAC) report to the Minister stated that:

*"The thoroughbred industry in the Upper Hunter Valley is a very significant contributor to the regional, state and national economies and a major source of employment. The structure of the industry makes it particularly vulnerable to threats based on image and the introduction of coal mining to the Upper Hunter Valley is strongly identified as such a threat. The available evidence supports the view that open cut coal mining and viable international scale thoroughbred breeding enterprises are incompatible land uses."*

In response to the PAC report, the Minister made amendments to the relevant State Environmental Planning Policy which prohibited open cut coal mining on the Bickham site.

In recent times this threat has not only been from coal mining but also from the CSG Industry.

As a result of a number of companies indicating their intention to explore for Coal & Coal Seam Gas (CSG) in the Upper Hunter Shire, Council at its meeting held on 18 April 2011 resolved to adopt the following recommendation of the Development and Environmental (D & E) Services Committee:

*That the D & E committee be permitted to engage in research, site inspections and within four months hold a public forum with key stake holders to gather information sufficient to make a recommendation to Council on coal mining and coal seam gas extraction as required providing a report back to Council within six months.*

In regard to Coal Mining, Council has for some time been developing its strategic response to coal mining expansion in the Upper Hunter and had explored the development of open cut coal mining exclusion zones particularly to protect the equine industry, based on catchments which also includes protection of the vast majority of class 1 and 2 prime agricultural land within the alluvial areas of the identified catchment valleys. This strategy had been developed in consultation with NSW Department of Planning and the Equine industry.

In regard to CSG exploration and extraction the Committee and senior staff visited the Camden area in May and the Gunnedah and Narrabri region in July to view first hand the infrastructure associated with the industry. In August a tour of the Roma / Dalby region was conducted to gauge the impacts of Queensland's well established gas fields on local areas and communities. As well as further site visits, Councillors and staff were able to meet with local elected members, representatives of the local communities, industry representatives and a number of local landowners, some of whom had CSG infrastructure on their properties.

From these inspections and discussions Council representatives were able to meet a number of stake holders from both sides of the debate in order to gain an objective and balanced perspective of the impacts and benefits associated with the industry.

On 5 & 6 September 2011, Council held a community forum on coal mining and CSG exploration and extraction.

In excess of 30 speakers presented at the forum over the two days and included various industry representatives (including industries other than Coal Mining and CSG), experts in their chosen field, community and environmental organisations and local landowners.

## ISSUES

Council acknowledges the coal and CSG industry can provide economic diversity in rural-based regions, and economic benefits to individuals, local communities and all levels of government.

However, as a result of Council's extensive investigation into the coal mining and CSG industries and the subsequent public forum a number of issues and community concerns pertaining to the industries were revealed. Some of the issues relating to the CSG industry include:

### **Impacts on underground water supplies and aquifers.**

A common concern of a number of community / environmental groups and local landowners was the uncertainty surrounding unknown impact on valuable ground water supplies and the possible interference with underground aquifers by processes mainly associated with the CSG industry. Council shares this concern.

Many areas of the Shire depend on ground and underground sources for its water supply for agricultural and grazing industries. The protection of our precious water resources remains a major and ongoing concern. At its meeting on 25 July 2011 council resolved:

*to oppose any new industry in the Upper Hunter Shire which knowingly and/or is reasonably expected to:*

- *Compromise existing water security (ground or surface)*
- *Negatively impact viable and desired existing industries (as stated in 2010 UHSC Economic Development and Tourism Strategic Plan)*
- *Detrimentially affect water resources for future generations*

Due to the infancy of the CSG industry in NSW and past problems associated with the industry in Queensland and other countries it was the general belief of many presenters that the industry could not guarantee the safety of the water supplies or the integrity of aquifers. With water being the life blood of the prominent industries in our Shire, without such a guarantee the renewal and granting of new exploration and production licences would need to be reconsidered.

In particular were the potential risks to water resources due to CSG identified in a report commissioned by the Upper Hunter Waterkeepers Alliance, "Risks of Coal Seam Gas in the Upper Hunter September 2011" prepared by water experts FrOG Tech. An extract from the Executive Summary:

- *Lack of baseline hydrological datasets*

*The Upper Hunter has a lack of long term surface water and groundwater monitoring. Without adequate baseline datasets, the effects of CSG mining cannot be adequately measured or modelled.*

*Most of the available stream flow monitoring is located in the eastern part of the Upper Hunter LGA. However the primary focus of CSG exploration thus far is in the Gunnedah Basin (west of the New England Highway).*

*There is no continuous monitoring of groundwater levels or groundwater quality in the Upper Hunter. Where groundwater monitoring exists, measurement intervals are sparse and infrequent.*

- *While rainfall in the Upper Hunter has remained near normal, stream flow and groundwater levels have decreased.*

*Most gauged rivers in the Upper Hunter LGA (the Hunter River, Kingdon Ponds Creek, Moonan Brook, Pages River and Rouchel Brook) are highly utilised and show a decrease in streamflow compared to 'natural' conditions. In addition, all rivers are rated as having a high level hydrologic stress, with the exception of Stewarts Brook (which is rated as having a medium level of hydrologic stress).*

*In addition, groundwater levels across the Upper Hunter have declined over the last 30 years.*

*Rivers in the Upper Hunter also have a high level of baseflow (groundwater component) so any decrease in groundwater levels will result in a decreased volume of water in the rivers as well.*

Until assurances of water security can be given, council supports the recommendation of the NSW Farmers Association, the NSW Local Government & Shires Associations and the National Water Commission of adopting the precautionary approach:

The **precautionary principle** or precautionary approach states that if an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is harmful, the burden of proof that it is *not* harmful falls on those taking the action.

Concerns expressed during the community forum also related to core hole drilling, hydraulic fracturing ("fracking") of the coal seam, dewatering techniques, treatment and reuse of water brought to the surface, disposal of waste products such as salt and other toxic chemicals, resulting from both exploration and production wells.

The use of chemicals in the CSG extraction process to aid the flow of gas has been expressed as a major concern. Conflicting reports as to the chemicals and quantities being used and the effect of such chemicals on the surrounding environment and local communities is confusing and alarming.

The process of fracking requires further investigation and the process needs to be understood and appropriately regulated.

Council supports the extended moratorium until 31 December 2011 on the use of fracking during CSG drilling in NSW and would expect the moratorium to remain in place until all appropriate investigations are completed. Should such investigations reveal concerns in relation to impacts on aquifers alternative drilling methods should be employed.

Council also supports the NSW Government's 'Aquifer Interference Regulation' included in the Strategic Regional Land Use Strategy.

**Land use conflicts between mining and coal seam gas operations and the equine industry, and prime agricultural land used for food production, grazing and cropping.**

Land use conflict between mining and CSG operations and agricultural activities are varied.

The definition and protection of "prime agricultural land" is essential to ensure the long term sustainability of the region's agricultural industry. Council supports the premise of identifying strategic agricultural land where mining and CSG development would be prohibited.

The potential impacts of CSG operations on all productive agricultural land needs to be recognised and managed. Impacts such as interference and contamination of aquifers to the inadvertent importation of plants and weeds onto land when access is provided by landowners need to be addressed.

As mentioned earlier this region is considered as the premier Thoroughbred breeding area in the country and the 2<sup>nd</sup> largest of the three Thoroughbred breeding conurbations in the world. The performance horse breeding is also a significant and growing industry. The Equine industry is a major contributor to the region's economy and provides significant employment opportunities for the local communities. The dependence on the equine industry was clearly evident in 2007 with the devastating impact on our local economy with the spread of the Equine Influenza.

The Shire's brand as "The Horse Capital of Australia" was identified as a major asset for the area and something that is worth protecting.

The need for exclusion and buffer zones are the only way of dealing with land use conflict and preserving the areas traditional industries of agriculture, Thoroughbred racing and breeding and the equine industry in general.

In this regard, Council in consultation with the Department of Planning and the thoroughbred breeders has prepared a draft proposal which provides for a Protection Area (exclusion zone) for the Shires equine industry.

Our thoroughbred industry is internationally recognised and acclaimed. It is the largest domestic producer of thoroughbreds and the largest exporter of Australian thoroughbreds.

The Shire has a unique environment for producing Australian Champions and is home to the most influential breeders in the world.

It is home to Australia's most sophisticated network of equine support industries. It employs thousands of people directly and indirectly in the region and supports hundreds of thousands of Australian jobs across its value chain nationally.

It contributes \$5 billion to the national economy and \$2.4 Billion to the NSW economy annually.

A map of the proposed Protection Areas (exclusion zones), together with a map of the Shire is attached.

Detailed Agricultural Impact Statements should be required with all applications for exploration and production licences to enable a thorough assessment of the proposed development on the agricultural viability of the area.

### **Strategic Regional Land Use Policy**

The issues associated with the cumulative impacts of existing and proposed mines and the impending impacts of the CSG industry on the Upper Hunter Valley supports the need for an effective Strategic Regional Land Use Policy.

Investigations revealed a general desire to assess existing mining and CSG activity before renewal of any exploration licences and further granting of new exploration and production licences and to identify and rectify deficiencies associated with the activities including the cumulative impacts, community engagement, land use conflicts, impacts on local infrastructure and the manner by which the activities of the industries are regulated and enforced.

The development and implementation of the Upper Hunter Regional Land Use Plan is seen as a way forward for all stake holders to have a level of clarity and certainty in relation to their concerns and expectations surrounding the future development of the industry.

NSW Farmers are advocating for a "traffic light approach", whereby there would be three spatially defined zones;

- 1) A "red light" zone – strategic agricultural land including the Upper Hunter Equine Industry where mining and CSG development would be prohibited;
- 2) An "orange light" zone – a buffer area adjacent to strategic agricultural land which will need to be assessed on its strategic importance prior to exploration licences being approved; and
- 3) A "green light" zone – subject to increased protection for landholders and their water as previously outlined.

Council sees merit in this approach, particularly in the protection of the Shire's equine industry and highly productive agricultural land in the west of our Shire, and believes the extensive collection of base line data is required in order to determine such spatial boundaries.

Data relating to water and soil quality, value of production, social, cultural, heritage and environmental values, agricultural classification and others will need to be determined before any "green light" is given.

**Impacts on health as a result of excessive dust, noise, contamination of water supplies, etc. and psychological impacts associated with change and 'threats' from the mining and CSG industries.**

Of major concern was the cumulative impact of the coal mines in the region and their effects on health as a result of excessive dust.

It was suggested that the air quality of the Upper Hunter Shire has been deteriorating over a number of years due to the increase in the number of coal mines in the area and the expansion of existing mines.

Dust generated by mining operations such as the use of haul trucks, blasting, unprotected stockpiles, uncovered trains etc. was highlighted as a major contributor to the declining air quality.

It is believed that the introduction of the CSG industry into the region will add to the detrimental impacts on the health of local residents and communities

Other concerns relating to health included increased levels of anxiety and angst for some community members including the concept of 'solastalgia', a distress that is produced by environmental change, such as mining, which impacts on people while they are directly connected to their home environment.

Detailed Social Impact Statements should be required with all applications for exploration and production licences to enable a thorough assessment of the proposed development and its impact on the health and well-being of local residents.

### **Need for improved community engagement / consultation.**

Council's investigations revealed that while some coal mining and CSG companies placed a high level of importance on community consultation the practices of other companies do not meet the community's expectations.

The need to consult early in the process, notification to surrounding landowners and communities and not just adjoining landowners, conducting public information sessions and the establishment of Community Consultative Committees were all seen as vital components to ensure effective communication between the mining companies and local communities.

It was considered that community engagement should be implemented at the earliest opportunity, preferably before the granting of any new exploration licence, and continue throughout the exploration, construction / development and extraction phase with a requirement that Community Consultative Committees be established by exploration licence holders as a condition of their licence.

Past and current practices appear to indicate that the first knowledge or experience an individual has with exploration in their area is when approached by a representative of a CSG company.

This is an indication of poor, or a total lack of, communication throughout the process of granting exploration licences.

This lack of communication is exacerbated by the use of 'confidentiality clauses' in contracts negotiated by landowners who agree to allow access to their property.

The absence of readily available information for landholders regarding their rights and obligations when negotiating access agreements has also compounded the issue.

In an effort to ensure better and effective Community engagement in the future, Council at its ordinary meeting held on 25 July 2011 resolved to:

- a) *Note the minutes of the meeting of the AGL Hunter Gas Project Community Consultative Committee held on 12 July 2011.*
- b) *Write to Santos and Planet Gas and request that the respective companies establish a Community Consultative Committee (CCC) as soon as possible and;*
- c) *Write to the relevant State Government Minister and request that any existing gas exploration licence holders be compelled to establish a Community Consultative Committee (CCC) and;*
- d) *Write to the relevant State Government Minister and request that all future exploration licences granted, include a condition requiring the explorer to establish a Community Consultative Committee (CCC) as soon as possible after the appropriate agreement(s) with landowners have been established but prior to any work beginning.*

Council believes it is imperative that community engagement is implemented at the earliest opportunity and that consultation continues throughout the exploration, construction and extraction phase of the development.



### **Impact on local infrastructure**

Investigations revealed the growth of the coal mining industry and the rapid expansion of the CSG industry can have substantial impacts on local infrastructure such as roads, landfill sites, sewage treatment plants etc.

Advice received from elected members of the Roma and Dalby districts indicated that these impacts should not be under estimated and the need to negotiate and secure adequate compensation at an early stage is imperative.

Any proposed changes to legislation should provide Local Governments an opportunity to negotiate suitable compensation and a proportion of royalties collected by the State and Federal Government should be redirected back to the local regions in order to address these impacts.

If viable reserves of CSG are identified in a particular area the local government authorities in those areas will need financial resources to improve public infrastructure and to cater for the increased demands of a rapidly expanding industry and significant population increase.

The ability for local government to negotiate suitable compensation and for a proportion of the royalties paid to State and Federal Governments by CGS companies to be paid back to the local government authorities is crucial so that the impacts and stress placed on the local infrastructure can be addressed.

### **Impacts on the local economy & labour markets**

The impacts on the local housing and rental markets in the Upper Hunter Shire are already quite significant as a result of the coal mining industry.

With the expansion of the mining industry and introduction of the CSG industry into the area it is believed that these impacts will be compounded and there will be a need for additional housing in the area.

Housing affordability, both rental and ownership, is becoming increasingly difficult for those outside the mining industry who are competing in the same market for accommodation as mining industry employees.

The use of "mine workers villages" as an accommodation option can have social impacts, with little economic benefit to the community and the possibility to create a division between industry employees and the remainder of the community.

This has a follow on effect to the local labour markets where many local residents leave their existing employment as they are attracted to the higher wages provided by the mining industry which are needed to meet the cost of the inflated accommodation market.

Existing local businesses and industries are then faced with the situation of being unable to compete with these higher wages and therefore find it difficult to attract and retain suitable staff.

## **CONCLUSION**

Council believes that the prime agricultural areas of the Shire and throughout NSW have an obvious crucial role in Australia's food production which relies heavily on ground water, underground sources and aquifers.

The agricultural industry and the water that allows and supports it must be protected to sustain agricultural production and the viability of local communities.

It has already been identified that the region's iconic equine industry is "particularly vulnerable to threats based on image and the introduction of coal mining to the Upper Hunter Valley is strongly identified as such a threat".

As a result of its extensive investigations into the coal mining and coal seam gas industries and upon completion of its two day public forum, Council, at its ordinary meeting held on the 26<sup>th</sup> September 2011 resolved the following:

*That Council:*

1. *Endorse the following position statement, commitments and approach:*

*The Upper Hunter Shire Council acknowledges that the dominant land use in the Shire is agriculture and further acknowledges its role as custodian and guardian of horse production and in particular thoroughbred breeding; our unique 150 year old identity based around "the Horse Capital of Australia", and the pristine natural environment which enhances the Shire as a preferred place to live and work.*

*The UHSC is totally committed to:*

- *Protecting our prime agricultural land and rural water quality in the catchments and underground through the rigorous and robust regulation, control and monitoring of coal mining and Coal Seam Gas (CSG) extraction.*
- *Protecting our agricultural and equine industries from any negative impact of coal mining and CSG extraction through prohibiting mining and extraction in the Shire where it is demonstrated that it directly threatens equine breeding operations and prime agricultural production.*
- *Protecting our unique identity based around "the Horse Capital of Australia".*
- *Protecting our clean and green image as a unique point of difference in attracting industry, tourism and residents to the area.*
- *Protecting the community health and amenity, and social and emotional well-being in keeping with its vision of a "quality rural lifestyle in a caring and thriving community".*

*In accord with the NSW Farmers Association, the NSW Local Government & Shires Associations and the National Water Commission the UHSC supports a precautionary approach including:*

- *State wide strategic planning – Strategic Regional Land Use Policy;*
- *Balanced and transparent approval processes for coal and CSG licenses;*
- *Enforced aquifer protection and agricultural impact assessment;*
- *Robust, independent monitoring of extractive industries;*
- *Rigid guidelines for Hydraulic Fracturing ('Fracking');*
- *Compensation for landholders affected by extractive industries;*
- *Amended assessment requirements to cover cumulative impacts for all future coal and CSG applications.*

*Acknowledging that the CSG industry has burgeoned ahead of the associated sciences in states such as Queensland, where the industry is more mature and that state legislation has not kept pace with the expansion of the CSG industry, the UHSC urges the continuation of the current moratoriums to enable full evaluation of the cumulative impacts of the CSG industry and calls on the State Government to have regulation, legislation and robust enforcement in place prior to the renewal of any CSG Peels and prior to the granting of any new CSG Peels or Coal and CSG Production Licenses.*

2. *Endorse and actively pursue the following objectives for Coal and CSG:*

2.1 *Council's Objectives for Coal Mining and CSG Extraction:*

- I. *To develop exclusion zones in accordance with draft plans developed in consultation with the NSW Department of Planning and the Thoroughbred Breeders and for these to be included in the Upper Hunter Shire's planning instruments (see attachments 1 & 2).*
- II. *To ensure that any proposed expansion outside the exclusion zones incorporate the principals of cumulative impact assessments, improved regulations, more robust monitoring and control and development of regional plans to provide a strategic framework within which assessments of individual resource development proposals can be made.*
- III. *To ensure thorough assessment of social, economic and environmental impacts, together with community health and human well-being, are carried out for individual resource development proposals and that the cumulative impacts of the proposal together with other unrelated projects are considered accordingly.*
- IV. *To request the State Government require Community Consultation be implemented at the earliest opportunity i.e. before the granting of any new exploration licence, and continue throughout the exploration, construction/development and extraction phases with a requirement that a Community Consultative Committee be established by exploration license holders as a condition of their licence.*
- V. *To enable local government the opportunity to negotiate suitable compensation in order to address impacts and stress placed on local infrastructure and that a proportion of the royalties paid to State and Federal Government by companies be paid to relevant local government authorities in order to address these impacts.*
- VI. *To require the submission of an Agricultural Impact Statement with all exploration and production licence applications to enable a thorough assessment of the proposed development and its impact on the agricultural viability of the area.*
- VII. *To require the submission of a Social Impact Statement for all exploration and production licence applications to enable a thorough assessment of the proposed development and its impact on the health and general well-being of local residents.*
- VIII. *Endorse the establishment of an independent authority, funded by industry, to oversee all aspects of the industry such as approvals and licensing, environmental monitoring, community engagement, investigation of complaints etc.*

2.2 Council's Additional Objectives for CSG Extraction:

- I. *To support a review of current legislation to provide a balanced and transparent approval process which ensures the involvement of the community and local government in relation to the granting of consents?*
- II. *To support a review of current legislation and the legal rights of property owners in relation to access, community consultation, compensation, confidentiality clauses and site rehabilitation.*
- III. *Prior to any further expansion or production starts, the determination of baseline data over at least 10 years and a need for ongoing investigation into the processes used to minimise the impacts on underground water resources and to ensure the integrity of aquifers.*
- IV. *To support the requirement for all water testing before, during and after exploration and/or extraction activities, for landholders and neighbouring landholders to be science-based, independently reviewed at the expense of the CSG companies.*
- V. *To support ongoing investigation into appropriate methods of treating, storing and transportation of the waste materials, including salt, produced from the extraction process and to have an environmentally sustainable solution prior to any CSG production commencing.*
- VI. *To support the NSW Government's policy for Aquifer Interference Regulations being an integral component for both exploration and extraction proposals for CSG.*

The need for legislative reform, enforced aquifer protection, agricultural impact assessments, exclusion zones etc. are seen as critical in minimising the threats of both the coal mining and coal seam gas industries on all local industries including the Shire's agricultural and equine industries.

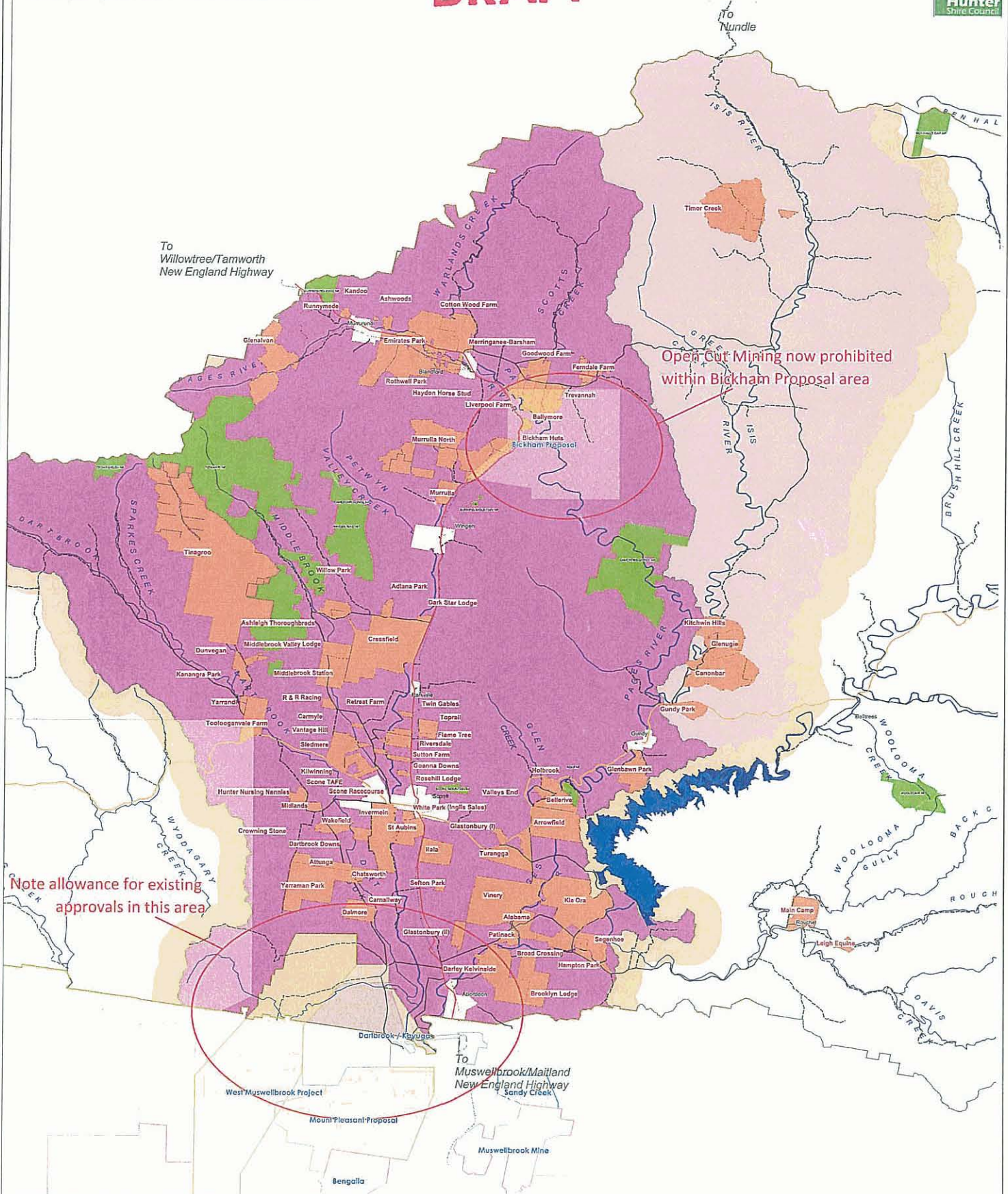
Yours sincerely

Daryl Dutton  
GENERAL MANAGER



Thoroughbred Horse Facilities,  
Coal Exploration and Operation  
within Upper Hunter Shire Council  
and proposed Protection Area

**DRAFT**



National Parks	State Forests	UHSC Town Areas	Major Streams	Upper Hunter T'ired and related properties	Coal Operations / Proposals	Protected Area Proposed by UHSC	<b>DISCLAIMER:</b> This map has been produced to assist individuals in determining land status within Upper Hunter Shire Council and the information contained herein is made in good faith but on the basis that Council or its Staff are not liable (whether by reason of negligence, lack of care or otherwise) to any person for any damage or loss whatsoever which has occurred or may occur in relation to their person taking or not taking for the case may be action in respect of any representation, statement or advice referred to above. Copyright (2010) Upper Hunter Shire Council LPLA Department of Lands DHS RPS Commonwealth of Australia (Geoscience Australia)
Highways	Regional Roads	Local Roads	Main North Railway	Upper Hunter Shire Boundary	Proposed Open Cut Operation	Expanded Protected Area Proposed	
					Coal Exploration Title	203,543 ha	
					Underground Operation	1500m Buffer additional to Protected Area Proposed	
					Open-cut Operation	224,630 ha	
					Care and Maintenance		



