

Submission of The Australian Wine Industry to

Select Committee on Unconventional Gas Mining

Parliament of Australia

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Senate Select Committee on Unconventional Gas Mining
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This submission to the Select Committee of the Parliament of Australia for its Inquiry into Unconventional Gas Mining has been prepared by The South Australian Wine Industry Association (SAWIA) on behalf of the Australian Wine Industry.

The position of the Australian Wine Industry on Unconventional Gas Mining stated in this submission represents the collective view of the organisations shown below.



SOUTH AUSTRALIAN WINE INDUSTRY
ASSOCIATION INCORPORATED



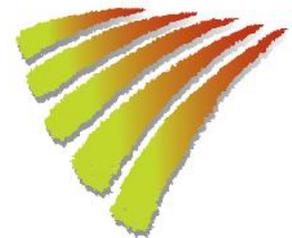
Wine Grape Council SA



C O N A W A R R A

Australia's **Red** Wine Centre

WINE TASMANIA



THE LIMESTONE COAST
GRAPE & WINE COUNCIL INC.

HUNTER VALLEY

WINE AND TOURISM ASSOCIATION



INTRODUCTION

The South Australian Wine Industry Association (SAWIA) has prepared this submission to the Select Committee of the Parliament of Australia for its Inquiry into Unconventional Gas Mining on behalf of the Australian Wine Industry.

The position of the Australian Wine Industry on Unconventional Gas Mining stated in this submission represents the collective view of the following organisations:

National

1. Winemakers' Federation of Australia
2. Wine Grape Growers Australia
3. The Australian Wine Research Institute

State

1. The South Australian Wine Industry Association
2. Wine Grape Council of South Australia
3. Wines of Tasmania

Regional

1. Limestone Coast Grape and Wine Council
2. Coonawarra Grape and Wine Incorporated
3. Hunter Valley Wine and Tourism Association
4. Mornington Peninsula Vignerons Association

SUMMARY OF SUBMISSION

The Australian wine industry does not believe that unconventional gas mining can coexist within or near the wine growing regions of Australia, because it

- is incompatible with viticulture, winemaking and wine tourism,
- threatens the brand and reputation of the internationally recognised wine brands of specific regions and Australia more generally,
- presents an unacceptable risk to scarce water and land resources, and
- appears to be inadequately regulated.

The Australian wine industry considers that there are a range of environmental and economic hazards potentially arising from unconventional gas mining activities that may outweigh the short term benefits, most notably:

- Contamination and/or depletion of groundwater reserves
- Contamination of grapes from air-borne emissions associated with unconventional gas mining activities
- Negative visual amenity that is inconsistent with tourism values of wine-growing regions
- Increased pressure on infrastructure with associated increased costs of maintenance
- Legacy issues and costs with decommissioned drill pads.

SUBMISSION

Background: The wine sector in Australia

The Australian Wine sector is a significant contributor to Australia's economy¹ contributing \$40.2 billion annually in gross output.

Wine is Australia's sixth largest agricultural export with approximately 60% of the total annual wine production of about 1.2 billion litres. Australian wine producers export wine worth \$2.1 billion annually to key markets in Europe, North America and Asia².

Wine related tourism expenditure was estimated at \$9.2 billion in 2013-14.

It is estimated that the sector creates direct employment of 68,395 with a further 104,341 full and part time jobs, mostly in regional Australia.

Response to the terms of reference

This submission addresses certain key issues included in the terms of reference of the Select Committee, which is inquiring into the "adequacy of Australia's legislative, regulatory and policy framework for unconventional gas mining including coal seam gas (CSG) and shale gas mining."

Our concerns are discussed below.

a. A national approach to the conduct of unconventional gas mining in Australia;

Unconventional gas mining activities have the potential to occur in any State in Australia, and we support a nationally consistent approach to the conduct and regulation of such activities. We consider that without a national approach, inconsistencies between States are a real possibility that may result in regulatory confusion and duplication. We believe that the current approach is already significantly confused and we provide some illustrative examples below.

At its May 2013 meeting, the COAG Energy Council's predecessor, the Standing Council on Energy and Resources (SCER) endorsed the National Harmonised Regulatory Framework for Natural Gas from Coal Seams (the Framework), however, implementation has been slow and in our view does not adequately protect landholders and agricultural producers. However, it is important to note that the Framework does not cover all types of unconventional gas mining activities. States and territories (States) are required to report to the COAG Energy Council on their implementation of the Framework on an annual basis. Recent developments reported to COAG under this requirement³ include updates for 2015 from each jurisdiction.

The major developments related to coal seam and other unconventional gas reported to COAG includes:

1. Legislation passed by the NSW Parliament in October 2015 enables the implementation of many of the actions of the NSW Gas Plan, which was released on 13 November 2014. The NSW Gas Plan introduces a new framework for the gas

¹ Economic contribution of the Australian wine sector, Australian Grape and Wine Authority, 18 December 2015. <http://bit.ly/1PUUxSp>

² Australian wine exports jump 14 per cent to \$2.1 billion, Wine Australia media release 21 January 2016. <http://bit.ly/1PUUuWX>

³ State And Territory third annual implementation update on the National Harmonised Regulatory Framework for Natural Gas from Coal Seams, December 2015. <http://bit.ly/1QmUjWS>

- industry in NSW and responds to recommendations in a number of reviews, including the Independent Review of Coal Seam Gas Activities in New South Wales by the NSW Chief Scientist and Engineer, released on 30 September 2014;
2. Queensland Gas Supply and Demand Action Plan announced on 7 July 2015;
 3. Victorian parliamentary Inquiry into onshore unconventional gas in Victoria announced on 26 May 2015;
 4. Independent Inquiry into Hydraulic Fracturing in the Northern Territory (the Hawke Inquiry) completed in November 2014 and published in February 2015;
 5. South Australian parliamentary Inquiry into Unconventional Gas (Fracking) in the State's South East;
 6. Western Australia's parliamentary Inquiry into the Implications for Western Australia of Hydraulic Fracturing for Unconventional Gas; and
 7. COAG Gas Supply Strategy agreed by COAG Energy Council at its December 2014 meeting.

In our view, the common themes emerging from all these activities are the lack of scientific knowledge on which to base regulation, and the high potential risk to agricultural production.

We are deeply concerned that the existing State based regulatory frameworks are insufficient to protect current and future production.

In Queensland, the Department of Environment and Heritage Protection (EHP) has begun work on a review of the current regulatory requirements for hydraulic fracturing and other stimulation activities. In 2016, EHP is expected to develop outcome focused conditions for hydraulic fracturing and also make any other necessary improvements to the regulatory framework. Queensland as part of the review of the Queensland Water Act 2000 is proposing to bring about a consistent framework for management of groundwater use by the resources sectors (petroleum and gas, and mining) including management of cumulative impacts.

In South Australia it is an offence under the Petroleum and Geothermal Energy Act 2000 for a regulated activity (e.g. mining) to damage an aquifer. However the Act fails to require provision for adequate compensation should such damage occur during the life of the activity or as a result of that activity in the future, e.g. through well failure or subsidence. While mining has a relatively short life, farming is a millennial industry and cannot continue if the primary water source is rendered unusable. In addition, currently there is no legislative requirement in South Australia for the risk to other local industries from the proposed activity to be taken into account in the approval process.

Further concerns with the South Australian regulatory framework were raised in the South Australian Parliament's Natural Resources Committee inquiry into fracking. At that inquiry, the Environmental Defenders Office raised concerns⁴ about the lack of acceptable level of risk, transparency, accountability, and Ministerial discretion:

"However robust the tools, political will plays a part... the system is at dire risk of regulatory capture... At present, everything from the approvals of exploration licences through to production and environmental regulation is conducted by the lead regulator, the Department of State Development. The DSD is both the licence issuer and a de facto environmental regulator. In addition, the key decision maker, the minister, has extensive discretionary powers under the act."

⁴ Hansard report, Natural Resources Committee Meeting 10 April 2015, <http://bit.ly/1niH3rK>

In addition, legal advice provided to that Committee in the form of submissions from the Limestone Coast Grape and Wine Council Inc. and the Coonawarra Grape and Wine Inc., submitting advice received from legal firm Thomson Greer, highlighted concerns with the regulation of fracking in SA being undertaken under the Petroleum and Geothermal Energy Act without any reference to that State's Environmental Protection Act. The consequence of this is increased Ministerial discretion in decision making, lower fines for non-compliance, and a less stringent process of review for environmentally risky activity.

We understand that the National Farmers Federation has also made a number of submissions to government outlining their concerns over the regulatory frameworks in Australia (<http://www.nff.org.au/submissions>).

b. the health, social, business, agricultural, environmental, landholder and economic impacts of unconventional gas mining;

The Australian wine industry considers that any activity in wine regions has the potential to impact the wine sector in a variety of ways. Unconventional gas mining is one such activity that we believe has the potential to have a significant negative impact on grape growing and winemaking.

The Australian wine industry does not support unconventional gas mining in or near the wine growing regions of Australia, because it:

- is totally incompatible with viticulture, winemaking and wine tourism,
- presents an unacceptable risk of pollution to scarce water and land resources,
- presents an unacceptable risk of contamination of grapes through air emissions, and
- threatens the brand and global reputation of Australian wine.

The reasoning behind this position is outlined in submissions to previous State government based inquiries relating to unconventional gas mining that are listed in the References section. Some of the relevant key points are outlined below:

Harm to reputation

Grape and wine production is strongly linked to the region and associated production characteristics. Unconventional gas mining has the potential to not only impact adversely on the region and associated employment and tourism activities but also on the national reputation. An association with a highly visible gas extraction industry has the potential to severely damage the Australian wine sector's international environmental credentials and associated brand value.

Reputation is a highly valued asset for the wine industry. It is common practice for wineries to actively promote the recognition they gain for their wines from medals and awards won through competing in local, national and international wine shows. Other sources that bolster reputation include ratings from wine writers (for example James Halliday, Robert Parker), and also from fine wines auctions ratings (e.g. Langton's).

Negative market response to an environmental incident:

The risk of a contamination incident as a result of unconventional gas mining is likely to harm the reputation of any Australian wine region in general, as a producer of 'clean' premium wine. The extent of harm to the reputation of Australia's wine could be significant. For example, the Austrian wine industry experienced an almost 80% drop in exports of wine, worth about 23 million Euros in the year following the anti-freeze

contamination incidents in 1985, which harmed the reputation of the brand of 'Austrian wine'⁵. It took 12 years for exports to recover to pre-1985 levels.

Tourism and infrastructure

The regional impact of unconventional gas mining has the potential to be devastating to those rural and regional communities that depend on agriculture and more specifically, viticulture and wine production. For example, Tasmania is building a strong reputation as a tourist destination and for exceptionally high quality produce, including wine. Almost half of the wine produced in Tasmania is sold either through cellar doors or through restaurants and retail outlets, and sales are heavily linked with tourism. The presence of unconventional gas mining operations in or near wine growing regions or other tourism destinations would have a significant negative impact on this reputation. Coupled with a diminution in Tasmania's reputation for both wilderness and gourmet tourism, the viability of many Tasmanian industries, including (but not limited to) wine, may become fragile.

Visual impact of unconventional gas mining:

The density of drill pads will most certainly be an important factor in the visual aesthetics of the region. A high density of drill pads of the type seen in shale rock gas fracking in the USA at Fort Worth, Texas (<http://bit.ly/1yD3ps5>) or Wyoming (<http://bit.ly/1yD3kVh>), is clearly inconsistent with the tourism themes of Australia's wine regions.

In the recently released report from the New Zealand Parliamentary Commissioner for the Environment, (Drilling for oil and gas in New Zealand: Environmental oversight and regulation, June 2014⁶) the potential amenity impact of fracking activities is highlighted - *"the effect on the landscape of fracking for natural gas in some areas has been dramatic. The hundreds of wells drilled into some shale fields in the United States, like the Bakken field in North Dakota, are clearly visible from space. A rapidly expanding oil and gas industry in New Zealand could have a cumulative effect on landscapes, though eventually it would fall away as wells were progressively abandoned"*.

Heavy vehicles on the roads:

Unconventional gas mining will result in frequent movements of large numbers of heavy vehicles to and from the drill pads. This will add noise and heavy traffic to the roads, not only increasing maintenance costs for roads and bridges, but importantly detracting from the tourism themes and experience, and could well result in loss of economic activity and jobs in the region.

Natural resources

Land use:

Unconventional gas mining is a land-intensive activity, with an average land use of 3.6ha per drill pad with an average of 10 wells per pad) (see for example Broomfield, 2012). There are indications that total rehabilitation may not be achievable for areas of environmental sensitivity or agricultural productivity. For many agriculturally dependent regions the loss of agricultural land could be of grave concern.

Potential contamination of groundwater:

Unconventional gas mining presents a finite risk of groundwater contamination, whether from the fracking compounds, methane gas migration upwards through the drill well or rock structures, saline water from lower aquifers, or other potentially harmful chemicals contained within the fracking field. The most severe impact of such a contamination

⁵ Stockl, A., Austrian Wine: Developments after the wine scandal of 1985 and its current situation, 3rd International Wine Business Research Conference, Montpellier, 6-7-8 July 2006

⁶ Parliamentary Commissioner for the Environment; <http://bit.ly/1Xh0o9b>

could render the groundwater unusable for wine grape growing, and in regions where the industry is reliant on groundwater, it would then be necessary to source alternative water, which could have considerable negative economic impact. Short term benefits via employment and hydrocarbon production may be offset by long term degradation of resources and the environment.

Potential contamination of air:

Unconventional gas mining requires high hydraulic pressures created by very large diesel driven pumps. These emit significant quantities of air-borne compounds that can potentially contaminate grapes growing on vines, and could render grapes commercially useless and cause significant financial loss to the sector. Evidence on this risk was presented to the Natural Resources Committee of the Parliament of South Australia at its inquiry hearing on 16 October 2015 (see Hansard⁷).

Impact on groundwater reserves:

Unconventional gas mining requires a significant volume of water – 4.5 megalitres to 13.2 megalitres per well (see for example, Broomfield, 2012). The requirement for each drill pad is therefore 45-132 megalitres. This water must be supplied from somewhere, either from existing irrigation schemes or from groundwater resources. These extra demands on water resources may result in decreased availability to existing vineyard licence holders (among other irrigators) in respective irrigation schemes, and may further result in vineyards and other irrigators being temporarily unable to access water at critical times.

In fairness to all users of water, domestic, agricultural, environmental and industrial, we believe that all demand for water without exclusions must be considered in regional Water Allocation Plans (WAP), without loss of entitlement to existing users. In other words, existing licensed users must not be disadvantaged by lower allocation if unconventional gas mining were to be allowed.

Clearly, the short term benefits via employment and hydrocarbon production may be offset by long term degradation of resources and the environment.

Legacy issues

Site rehabilitation and remediation:

Unconventional gas mining will leave a legacy of decommissioned drill pads. We would need to be convinced that there are adequate regulatory measures in place to manage legacy issues. Regulation, monitoring and rectification of decommissioned wells, in addition to rectification and remediation of environmental harm due to well failures, will come at a cost. Who will bear this cost when the mining companies have ceased operations? Putting the burden of cost on the community or land owner is inconsistent with a user-pays approach, and an appropriate mechanism must be formulated as part of the strategy to achieve a net economic benefit. Clearly, the full life cycle costs of unconventional gas mining need to be considered in the economic analysis.

f. harmonisation of federal and state/territory government legislation, regulations and policies;

We support a national approach to the conduct of unconventional gas mining, and therefore national regulation, legislation and policies. This would simplify administration and negate the need for harmonisation.

⁷ Hansard report, Natural Resources Committee Meeting 16 Oct 2015, <http://bit.ly/1niH3rK>

h. the unconventional gas industry in Australia as an energy provider;

The wine industry recognises that a future carbon constrained market may require actions that reduce the carbon intensity of its products and encourages the use of renewable and lower intensity energy sources in wine production. The unconventional gas industry may have role to play if it can provide low carbon intensity energy that is transparently proven by accounting for full life cycle emissions and costs.

End of submission

REFERENCES

Broomfield, M. (2012) Support to the identification of potential risks for the environment and human health arising from hydrocarbons operations involving hydraulic fracturing in Europe. Ref: AEA/ED57281/Issue Number 17

<http://ec.europa.eu/environment/integration/energy/pdf/fracking%20study.pdf>

Submissions from wine industry organisations to other inquiries related to unconventional gas mining:

South Australia

Parliament of South Australia, Natural Resources Committee, Inquiry into Unconventional Gas (Fracking). (Submissions available from

<https://www.parliament.sa.gov.au/Committees/Pages/Committees.aspx?CTId=5&CId=295>)

- Treasury Wine Estates (submission # 062)
- The South Australian Wine Industry Association (submission #063)
- Wine Grape Council SA (submission #121)
- Limestone Coast Grape and Wine Council (submission # 122)
- Coonawarra Grape and Wine Incorporated (submission #155)
- The Australian Wine Research Institute (submission #164)

New South Wales

Parliament of New South Wales, Legislative Council General Purpose Standing Committee No. 5, Submissions to Coal seam gas. (Submissions available from

<https://www.parliament.nsw.gov.au/prod/parliament/committee.nsf/V3ListSubmissions?open&ParentUNID=29AE48525CFAEA7CCA2578E3001ABD1C>)

- Hunter Valley Wine Association (submission #259)

Victoria

Parliament of Victoria, Environment and Planning Committee, Inquiry into onshore unconventional gas in Victoria. (Submissions available from

<http://www.parliament.vic.gov.au/epc/article/2636>).

- East Gippsland Food Cluster (submission #654)

Western Australia

Parliament of Western Australia, Legislative Council, Environment and Public Affairs Committee, Inquiry into the Implications for Western Australia of Hydraulic Fracturing for Unconventional Gas. (Submissions available from

<http://www.parliament.wa.gov.au/Parliament/commit.nsf/%28EvidenceOnly%29/6C678FAE3E96186748257BC6002BAF31?opendocument>).

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Tasmania

Parliament of Tasmania, Review of hydraulic fracturing in Tasmania

- Wine Tasmania, submission available from <http://winetasmania.com.au/news/archive/category/submissions>.

ABOUT US:

THE SOUTH AUSTRALIAN WINE INDUSTRY ASSOCIATION INCORPORATED

The South Australian Wine Industry Association Incorporated (SAWIA) is an industry employer association representing the interests of wine grape growers and wine producers throughout the state of South Australia.

SAWIA is a not for profit incorporated association, funded by voluntary member subscriptions, grants and fee for service activities, whose mission is to provide leadership and services which underpin the sustainability and competitiveness of our members' wine businesses.

SAWIA membership represents approximately 96% of the wine grapes crushed in South Australia and about 36% of the land under viticulture. Each major wine region within South Australia is represented on the board governing our activities.

SAWIA has a strong track record as an industry leader and innovator in many areas. SAWIA pro-actively represents members and the greater wine industry with government and related agencies in a wide variety of aspects of business in the wine sector.

WINEMAKERS FEDERATION OF AUSTRALIA

The Winemakers' Federation of Australia (WFA) is the national peak body for Australia's winemakers.

Government recognition of WFA as a representative organisation is on the basis that WFA represents the entire Australian winemaking sector, including members and non-members. WFA is recognised as a representative organisation under the *Australian Grape and Wine Authority (AGWA) Corporation Act*. WFA is incorporated under the *SA Associations Incorporation Act 1985*.

WFA membership represents around 80% of the national wine grape crush and has over 370 wineries as members. WFA represents small, medium and large winemakers from across the country's wine-making regions, with each having a voice at the Board level. WFA Board decisions require 80% support so no one sector can dominate the decision-making process. In practice, most decisions are determined by consensus.

WFA works in partnership with the Australian Government and our sister organisation, Wine Grape Growers Australia (WGGA), to develop and implement policy that is in the wine sector's best interests. WFA's activities are centred on providing leadership, strategy, advocacy and support that serves the Australian wine industry now and into the future.

WINE TASMANIA

Wine Tasmania is the peak representative body for the island wine producers, with the principal role of promoting Tasmania as a benchmark wine region of world renown. Wine Tasmania represents more than 99% of Tasmanian wine production through voluntary membership, with 100 state-wide member wine producers and 55 associated business members.