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AUSTRALIA

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Queensland Branch
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Agriculture, Resources and Environment Committee
Parliament House
BRISBANE QLD 4000
Email: arec@parliament.qld.gov.au

RE: SUBMISSION ON PROTECTION OF PRIME AGRICULTURAL LAND AND OTHER LAND FROM COAL SEAM GAS MINING BILL 2013

The Queensland Branch of Soil Science Australia welcomes the opportunity to comment on the *Protection of Prime Agricultural Land and Other Land from Coal Seam Gas Mining Bill 2013*. The members have considered the Bill and provide the following comments for consideration.

Part A – Introduction and Context

Introduction

The proposed ban on Coal Seam Gas (CSG) activities across the geographical area covers prime agricultural land and marginal country such as that around Texas and Inglewood with poorer soils, more marginal rainfall and fewer aquifers. Consequently, it would be more balanced and more likely to be accepted by all parties if the government used the best available soil and land suitability mapping to separate the most productive land from the marginal land areas. Most of the productive agricultural land could then be targeted for protection without the unnecessary burden on industry to argue for exceptions. To assist the process the following principles are put forward:

- a) Areas of high agricultural productivity should be exempted from exploitation by coal seam gas activities.
- b) There is a greater risk that the extraction of coal seam gas water will lead to depletion of freshwater aquifers and infiltration of salinity from underlying saline water - the connectivity issue, already highlighted for the Cecil Plains area.
- c) The most agriculturally productive areas should not be exposed to the hazards of contamination posed by salts present on coal seam gas water.
- d) Use should be made of existing soil and land suitability maps, land management manuals and local knowledge to identify the most productive areas for crops, horticulture, and pastures for dairying and cattle fattening worthy of protection.

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Commendation and mapping of soils

It is commendable that the importance of retaining highly productive agricultural land for future generations is being emphasised. At the World Congress of Soil Science held in Brisbane in 2010, the loss of productive agricultural land and its consequences was highlighted by Professor Julian Cribb. The Darling Downs region is renowned for its wide range of crops, including horticultural crops, and both dairy and cattle farming country, the result is a combination of desirable soil types, rainfall and availability of high quality water suitable for irrigation. It is coincidental that these highly productive areas, captured clearly on the maps of the agricultural and pastoral potential of Queensland, overlay coal and coal seam gas reserves.

We are aware that the government has at its disposal many soil maps and reports that can identify prime agricultural land at various map scales. Recent efforts by the Government to compile the best available mapping to support Strategic Cropping Lands and the Agricultural Land Audit should be used to ensure consistency in policies aimed at protecting prime agricultural land.

Water resources

High quality groundwater supplies suitable for both irrigation and occasionally stock and domestic water use is a vital resource across the region that can become easily depleted. Therefore, every effort should be made to preserve fresh water aquifers across Queensland. Ironically, coal seam gas reserves are associated with coal seam gas water that comes to the surface with the gas at well heads. The vast volumes of CSG water that require disposal are characterised by high sodium, chloride and bicarbonate concentrations. The deleterious effects of sodium, chloride and bicarbonate on both soils and plants are well documented, particularly in a number of Queensland Government publications. We cannot afford to run the risk of destroying our most productive soils with such pollutants.

Another concern is the possible connectivity of fresh water aquifers with the saline coal seam gas water much lower down. Over a period of time, the coal seam gas water may seep into the freshwater aquifers or, indeed, the freshwater aquifers may drain into the lower strata from which the CSG water has been extracted. The result – loss of groundwater supplies, loss of irrigation water and supplies for crops, stock and domestic use.

Part B – Specific Comments on Explanatory Notes for the Bill

The Queensland Branch of Soil Science Australia would like to raise the following specific queries and comments on the Explanatory Notes and the Bill itself:

Section	Comments
Explanatory Notes	
Objectives of the Bill	
1. Prohibit all coal seam gas and exploration mining	The Bill does not adequately justify the need to protect land from CSG activities while ignoring other land uses. The reasons why CSG activities should be excluded from some lands should be adequately justified.
2. Protect any land under the Strategic Cropping Land Act 2011.	This objective should be refined to explicitly state land on the Strategic Cropping Land (SCL) Trigger Map or decided SCL, as it currently reads this objective could be interpreted to mean all lands within the Management and Protection Zones of the SCL Act.
Reasons for the Bill	
The designated areas described in this Bill are identified as one of the richest agricultural areas in Queensland.	If the Bill is to protect the richest agricultural areas, why are the Central Highlands and other high quality areas of Queensland excluded?
“establishment of science to guarantee risk mitigation of Queensland’s prime agricultural land”.	This recognises that a balance is needed between CSG and agricultural interests competing for the same resource

Section	Comments
Importantly, the Bill is also intended to contribute to food security for all of Queensland.	While this intent has merit, why is there a limit the geographical area that the Bill applies to?
Estimated Cost for Government Implementation	DNR&M and DSITIA as well as DAFF should be involved. The Branch has a concern about the agencies having sufficient technical capacity and resources to support the amendments.
The Bill	
Part 2 Purpose and Application of Act Clause 2	The clause has merit, however the scope of application is questioned
Part 3 Interpretation Clause 8	The <i>Excluded Land</i> will include areas considered to be marginal lands; a more balanced approach would be to separate marginal lands from those of better quality using soil and land resource mapping available to the Queensland Government. Confusion is likely to be caused between separate definitions of Prime Agricultural Land and SCL that rely on the same base-map.
Part 5 Miscellaneous Provisions Clause 11	Refer to comments on Part 6 Clause 13.
Part 6 Transitional Powers Clause 13.	Question whether Clause 13(3) is reasonable for the company who have undertaken 'legal' activities fostered and authorised by the Qld Government

Thank you for the opportunity to comment on the Bill. If you require any further information please contact the Queensland Branch via email at gld@soilscienceaustralia.org.

Yours sincerely

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