



25 June 2018

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Dear Project Manager

Re: Feedback on Discussion Paper for Queensland's Biogas Stakeholders – Biogas Safety Regulation

Australian Pork Limited (APL) welcomes the opportunity to provide feedback on the Discussion Paper for Queensland's Biogas Stakeholders – Biogas Safety Regulation (5 March 2018).

APL is the peak national representative body for Australian pig producers. It is a producer-owned company combining marketing, export development, research and innovation and strategic policy development to assist in securing a profitable and sustainable future for the Australian pork industry. The Australian pork industry employs more than 36,000 people in Australia and contributes \$5.2 billion in gross domestic product to the Australian economy. During 2015-16, the pig production sector in Queensland contributed around \$452 million (value-added) to the state economy, while supporting 2,854 full time jobs that generated \$216 million in household incomes for Queensland families.

APL understands that in the absence of national biogas standards and regulations, each state utilises their own Acts and Regulations to manage such systems. We understand that Queensland uses the Petroleum and Gas (Production and Safety) Act 2004 and associated Regulations (the P&G Act) for the management of biogas production and safety in the state. We are also aware that the P&G Act is currently under review and APL has engaged in this process and made a submission to the Petroleum and Gas Inspectorate (1 June 2018).

While APL is supportive of the Queensland Government initiative to improve access to innovative and effective approaches to biogas production and management, we are deeply confused with current policy and regulatory approach. The following is provided for consideration and clarification:

I. Definition of Biogas and Industry Specific Production Systems

As stated in the discussion paper, 'biogas' is currently undefined in the legislation and is categorised with other unrelated production systems such as waste disposal tips and sewage treatment plants. In the absence of an agreed definition, there is little to no scope to appropriately consider and manage the costs to industry that seek to utilise these production systems. APL would welcome your consideration of including a definition of biogas such as that provided in the APL "Code of Practice for On-Farm Biogas Safety and Use (Piggeries)" as "*a mixture of gases produced by anaerobic digestion*" and the biogas systems definition in the "National Environmental Guidelines for Piggeries" as "*biogas systems capture the gases emitted as a product of anaerobic digestion and convert them into heat and/or power*". Such an approach would facilitate appropriate regulatory requirements and fees reflective of the nature of the production system relevant to pig production.

2. Fees

APL supports a range of research activities to demonstrate and promote the use of innovative and cost-effective solutions including on-farm biogas generation. APL believes the fees currently set out in Schedule 7 of the *Petroleum and Gas (Safety) Regulation 2018* are unreasonable and prohibitive to pig producers that have installed or are considering installing on-farm biogas systems.

Research and analysis from Alan Skerman (Principal Environmental Engineer, Agri-Science Queensland, Department of Agriculture and Fisheries) shows that currently there are five piggeries in Queensland with operating biogas systems. Biogas production at these piggeries is estimated to range from 400,000 to 2,000,000 m³ biogas/year. These are medium to large pig producers. However, APL believes that biogas systems (around 150,000 to 200,000 m³ biogas/year) will become economically viable for smaller piggeries, down to around 500 sows farrow to finish, in the future.

Based on generating electricity to replace power sourced from the grid at a tariff of \$0.20/kWh, the biogas produced would have to generate 22,145 kWh of electricity to save \$4,429 (the 'per site' fee for biogas producers as set out in Schedule 7 of the draft Regulations). At 35 per cent electrical efficiency, this would require 63,271 kWh (227,777 MJ) of biogas energy; or 6,471 m³ methane = 9,955 m³ biogas. In summary, it would take about 10,000 m³ of biogas driving an electrical generator to save \$4,429 in electrical energy.

These figures clearly demonstrate that this is not financially viable for most producers and does not encourage use of alternative systems, which support a closed-loop environment. This is in part because of the effect that the annual cost of compliance has on the return on investment and subsequently the payback period of investment. This has been seen recently in Queensland where a breeder piggery (700 sows, 1400 SPU) recently abandoned their existing on-farm biogas system that was producing around 50,000 m³ biogas/year because of the costs associated with compliance with the gas safety legislation, including payment of the annual fee.

APL proposes that the fees set out in the Regulations should be based upon the generation of biogas production per site up to a capped amount of \$4,429, the current fixed fee amount imposed on all biogas producers per site.

APL also seeks to understand what the 'safety and health fee' covers, as according to the Regulations, the fee is for the '*department's activities carried out for the purposes of safety and health matters relating to operating plant during each financial year*'. APL seeks clarification of what activities are carried out each financial year at each site by the department, as APL is unaware of any health and safety activities undertaken at Queensland-based pig producers by the Inspectorate.

We understand that changes to the fee structure require a regulatory impact statement (RIS) which is a significant body of work. In the interim, APL proposes that a simplified two-tiered system be established which simply delineates between small and large producers. We suggest that the information provided above would be a very good starting point for the costing of appropriate fees that could be used within the Regulations.

3. Fee Exemptions

APL is highly supportive of exemptions for fees where it is demonstrated that efforts are being made to reduce the emissions of greenhouse gases. As stated in the discussion paper:

"Advice from DES notes that while the guideline is not a prescribed guideline, many elements are taken and adopted as conditions within Environmental Authorities which are legally enforceable. These requirements together with the fee exemption for passively venting mean create regulatory inconsistency for some biogas operators.

The Emissions Reduction Fund, administered by the Department of Environment, creates a positive incentive for Australian businesses to adopt smarter practices to cut the amount of greenhouse gases they create. Under this scheme landfill operators who install new landfill gas collection and combustion systems or operators of a system that was registered as a Carbon Farming Initiative project who destroy methane generated by waste disposed, can earn carbon credits."

Not only is there regulatory inconsistency for those operators currently able to gain an exemption under section 135A(1)(a), there remains the underlying inconsistency in who should or should not be able to access these exemptions despite the underpinning policy objective of the ERF to establish mechanisms and incentives for businesses to take up innovative technologies to reduce their amount of greenhouse gas emissions. APL would support these exemptions being broadened to

include producers that are utilising greenhouse gas reducing technologies, such as on-farm biogas solutions, as these have a two-fold benefit of reducing the energy demands on the network while providing an immediate benefit to reducing greenhouse gas emissions.

4. Sequencing of Queensland Government Biogas Review and the updates to the Petroleum and Gas (Safety) Regulation 2018

As stated in our recent submission to the Petroleum and Gas Inspectorate on the amendments to the *Petroleum and Gas (Safety) Regulation 2018*, APL has some deep concerns with the sequencing of reviews being undertaken by the Resources, Safety and Health Division of the Department of Natural Resources, Mines and Energy. While APL commends the government for undertaking the review of biogas to ensure it is appropriately managed and supported to facilitate uptake by producers, it is concerning that the outcomes of the review cannot be integrated into the updates to the *Petroleum and Gas (Safety) Regulation 2018*.

As a result, the Queensland Government will be missing the opportunity to deal appropriately and fairly with the production sector that want the opportunity to utilise biogas as an on-farm solution. Feedback by stakeholders on the production and management of biogas should be considered prior to any changes to the Regulations being made. Without this approach being taken there are significant flow-on effects and potential ramifications for the Queensland Government as the current approaches (including the Regulation) conflict with other initiatives, such as the Department of State Development Biofutures (Advance Queensland) Program which is seeking to expand the use of biogas on-farm solutions across the state. This will result in perverse outcomes to both industry and the proactive initiatives of the government that seek to support biogas adoption as an alternative energy source.

APL again suggests a very simple stepped approach that would mitigate the risks associated with rushing through the amendments to the Regulations, which as they stand, conflict with other government reviews and initiatives:

1. biogas is clearly defined
2. production systems relevant to biogas are identified and defined
3. fees are established for biogas production at industry-specific facilities that are appropriate to the scale and risk of the production system.

Noting the appetite for consistency across industry specific standards, APL recommends that the endorsed national guidelines, such as the National Environmental Guidelines for Piggeries and the Code of Practice for On-Farm Biogas Safety and Use (Piggeries) are utilised as part of the regulation to ensure consistency at a national scale.

APL would be happy to discuss the comments provided and the approach for implementing the guideline. Should you require further information or have any questions, please contact Grantley Butterfield, Policy Manager – Planning and Environment, on 02 6270 8820 or grantley.butterfield@australianpork.com.au.

Yours sincerely



Deb Kerr
General Manager, Policy