

SHALE GAS — METHANE DATA COLLECTION

852. Hon Robin Chapple to the Minister for Agriculture and Food representing the Minister for Mines and Petroleum:

In North America there is considerable debate as to whether horizontal shale gas drilling has contributed to methane contamination of groundwater. It has not been possible to conclusively resolve this debate as no pre-fracking baseline methane levels were taken. In the United Kingdom the British Geological Survey (BGS) has collected baseline methane levels in all proposed shale gas drilling areas and this information is posted on the BGS website http://www.bgs.ac.uk/research/groundwater/quality/methane_baseline_initial_results.html. In relation to baseline methane data collection in Western Australia, I ask:

- (a) does the Department of Mines or the Environmental Protection Authority intend to facilitate baseline methane data collection in proposed shale or coal seam gas areas such as the North Perth Basin and Canning Basin;
- (b) if no to (a), why not;
- (c) if yes to (a), when will, or did, baseline data collection commence;
- (d) if yes to (a), will that data become publicly available;
- (e) if no to (d), why not;
- (f) have the companies proposing to use hydraulic fracturing been asked to collect baseline methane groundwater level data prior to commencement of work;
- (g) if yes to (f), will or is that data being made available to the government;
- (h) if yes to (f), will or is that data being made available to the public;
- (i) if yes to (f), will the Minister provide a list of those companies currently conducting baseline methane groundwater levels;
- (j) if no to (i), why not;
- (k) are companies proposing hydraulic fracturing obliged to conduct follow up resultant baseline levels of methane in groundwater post hydraulic fracturing; and
- (l) if yes to (k), and no to (a) or (f), of what value will that data be?

Hon Ken Baston replied:

The Department of Mines and Petroleum advises:

- (a)–(c) Western Australia already has a comprehensive regulatory framework in place for exploration and production in the petroleum industry, which includes shale and tight gas.

In February 2014, the Department of Mines and Petroleum (DMP) released the draft Petroleum and Geothermal Energy Resources (Resource Management and Administration) Regulations for public comment.

These draft regulations include baseline groundwater monitoring requirements in relation to:

- the Field Development Plan under r.48(1) in relation to petroleum activities; and
- the Geothermal Energy Recovery Development Plan under r.65 in relation to geothermal activities.

Baseline groundwater monitoring also may be required on a case-by-case basis at the exploration phase of a petroleum activity depending on the nature and location of the proposal. If necessary, this would be a requirement in the environment plan for the activity under r.14 of the Petroleum and Geothermal Energy Resources (Environment) Regulations 2012.

In addition to these new draft regulations, a guideline for *Baseline Groundwater Monitoring* for the onshore petroleum industry in Western Australia is currently being developed by DMP with input from the Department of Water. This guideline is intended to establish leading practice requirements to:

- identify situations where baseline groundwater monitoring is required for onshore petroleum activities; and
- outline general requirements and considerations for undertaking baseline groundwater monitoring.

Various chemical parameters for baseline groundwater monitoring, including methane, are being considered in the development of the guideline.

It is anticipated the guideline will be released later in 2014.

The public comment period for the draft resource management regulations closes on 30 May 2014. Submissions received during the comment period will be analysed by DMP and, where necessary, changes will be made to the regulations before they are finalised. I therefore encourage the Member to make a submission given his interest in the regulation of this industry.

The new regulations, which include requirements for baseline groundwater monitoring, are expected to come into effect in late 2014.

- (d)–(e) The Western Australian Government’s long-term approach to development of the shale and tight gas industry in this State is based on coordinated, transparent and risk-based regulation.

An independent review in 2011 assessed the capacity of the current legislation to regulate this emerging industry. As a result of that review, new petroleum environment regulations came into effect in August 2012 which provide for greater transparency and enforceability, as well as stronger obligations on industry for water use management and chemical disclosure.

For example, r.11(7) of the Environment Regulations requires an operator to submit a summary of their approved environment plan to the Minister for public disclosure.

The review has also informed the draft resource management regulations which allow for the efficient management of data confidentiality and the disclosure of data on completion of the relevant confidentiality periods (r.3(e)). In addition, Part 9 sets out in detail provisions for the release of technical information about petroleum and geothermal energy resources.

To further strengthen the proposed regulations in terms of making data publicly available, DMP is canvassing the inclusion of additional provisions for the disclosure of environmental data during its consultation on the draft regulations.

- (f)–(l) Please refer to (a)–(e).