

UNCONVENTIONAL GAS INDUSTRY — FRACKING PRACTICE

1553. Mr C.J. Tallentire to the Minister for Mines and Petroleum:

I refer to the role taken by the Department of Mines and Petroleum (DMP) in relation to proposed shale and tight gas fracking. I refer specifically to the media release entitled *DMP sets record straight for shale and tight gas* dated Wednesday, 29 May 2013, and ask:

- (a) did the Minister sign off on this media release, and if not, why not;
- (b) do Mr. Tinapple's comments represent the views of the WA Government;
- (c) what 'activists' or 'activist organisations' is Mr Tinapple referring to in the media release;
- (d) can the Minister provide links or references to the 'misinformation' that Mr Tinapple's claims are being spread by activist groups, and if not, why not;
- (e) if Western Australia's Shale gas resources were to be fully developed, how many wells are estimated to be required by the DMP;
- (f) does the DMP anticipate that more drilling rigs will be brought to Western Australia if shale gas exploration moves to development;
- (g) does the DMP anticipate that the cost of drilling shale gas wells in Western Australia will remain at the current rates if shale gas projects are developed;
- (h) given an independent report recently commissioned by the DMP found that the agency lacks the statutory powers to enforce Environmental Management Plans for gas fracking, does the Minister stand by Mr Tinapple's claim that the regulatory regime is robust;
- (i) can the Minister provide details of the 780 wells that have been fracked in Western Australia since 1958 as stated in the media release:
 - (i) where are these wells;
 - (ii) in fracking these wells, what chemicals were used, what pressures were generated and how much water was used;
 - (iii) can the Minister table the results from groundwater monitoring conducted prior to, and after fracking in each of these 780 wells; and
 - (iv) if not, how can the Minister or the DMP be sure that 'there have been no adverse effects on the environment' as a result of this fracking activity as stated in the media release;
- (j) why would the fracking industry remain in the 'proof of concept' phase for the 'next few years' as stated in the media release, if 780 wells have already been fracked successfully;
- (k) can the Minister confirm that in at least one of the wells that has been fracked, in the environmentally sensitive Whicher Range, diesel was used as a fracking fluid:
 - (i) if yes, was all the diesel recovered after the fracking operation;
 - (ii) does the DMP consider that this fracking operation resulted in pollution to the environment; and
 - (iii) has this site been listed as a contaminated site under the *Western Australian Contaminated Sites Act*, and if not, why not;
- (l) is it correct that fracking operations do not require licensing under part V of the *Environmental Protection Act*, and if not, why not;
- (m) does the Minister consider that the environmental risks of gas fracking are less than the environmental risks of inert waste landfill sites, iron ore processing, or other industrial processes that do require licensing under the *Environmental Protection Act*, and if so, why;
- (n) under the current regulatory regime, if well failure following fracking operations in Western Australia does result in groundwater contamination, what enforcement or other action can be taken by the DMP or other government agencies;
- (o) if groundwater contamination occurs following fracking operations approved by the DMP, what liability rests with the State;
- (p) if groundwater contamination occurs following fracking operations approved by the DMP, can the proponent be charged with pollution offences under the *Environmental Protection Act*;

- (q) what level of groundwater contamination does the DMP believe is acceptable following fracking operations; and
- (r) does the DMP require environmental bonds or other securities to be paid by gas fracking proponents to provide for environmental remediation in the event of compliance failure or insolvency:
 - (i) if not, why not; and
 - (ii) if no to (i), why is gas fracking treated differently from mining operations for which environmental bonds are payable?

Mr W.R. Marmion replied:

The Department of Mines and Petroleum advises:

- (a) Yes
- (b) Mr Tinapple was representing the Western Australian Department of Mines and Petroleum (DMP) in his capacity as the Executive Director Petroleum.
- (c)–(d) Mr Tinapple was referring in a general way to media reports against hydraulic fracture stimulation, both nationally and internationally.
- (e) Given the limited knowledge available at this time as to the extent and nature of the commercial viability of shale and tight gas resources, it is not possible to provide an accurate estimate.
- (f) Yes
- (g) DMP anticipates that drilling costs will change over time.
- (h) Yes. The Petroleum and Geothermal Energy Resources (Environment) Regulations 2012, Petroleum (Submerged Lands) (Environment) Regulations 2012 and Petroleum Pipelines (Environment) Regulations 2012 came into effect in August 2012 and address the issues raised in the independent report.
- (i) (i)–(iv) Information for wells which are more than two years old is publicly available from DMP's website through the Western Australian Petroleum and Geothermal Information Management System (WAPIMS).

It is important to recognise that since fracking began in WA over 50 years ago, Western Australia has been at the forefront of improving its regulatory, compliance and monitoring requirements.

No adverse impacts on the environment have been identified or brought to the attention of DMP from this activity.

- (j) The majority of these 780 wells were targeting conventional oil and gas, and not shale and tight rocks. Since 2005, seven wells have been fraced targeting shale and tight rocks. The proof of concept phase is to demonstrate the commercial viability of oil and gas production from shale and tight rocks.
- (k) Yes
 - (i) No. DMP's records indicate that 47% of the total diesel injected was recovered. This diesel was diverted to a separate vessel for sale to the local community.
 - (ii) No. The remainder of the diesel has stayed confined in the petroleum reservoir, below a depth of 4000 metres.
 - (iii) No. See the answer to (k)(ii).
- (l) No. Activities which are prescribed under Schedule 1 of the Environmental Protection Regulations 1987 are required to be licensed under Part V of the Environmental Protection Act 1986.
- (m) See the answer to (l).
- (n) Division 5 of the Petroleum and Geothermal Energy Resources Act 1967 provides the Minister with wide-ranging powers to issue directions, impose fines or, in extreme circumstances, suspend or withdraw a petroleum permit. Depending on the circumstances there may be enforcement taken by Department of Water, Department of Environment Regulation, Office of Environmental Protection Authority.
- (o) None. Liability rests with the operator.
- (p) See answer to (n).

- (q) DMP approves petroleum operations only where it is satisfied that adequate risk management processes are in place to avoid groundwater contamination.
- (r) No
 - (i) Section 91A of the Petroleum and Geothermal Energy Resources Act, s97A of the Petroleum (Submerged Lands) Act and s37A of the Petroleum Pipelines Act require the registered holder or licensee of a permit, drilling reservation, lease or licence to maintain insurance as directed by the Minister.
 - (ii) The insurance required in (i) is considered to provide an equivalent level of protection for environmental remediation.