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Level 8 / 160 Queen Street
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16 OCT 2008

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13 OCT 2008

Dear Sir,

**PEL285: Approval to fracture stimulate coal seam methane exploration wells
Weismantel 3, Faulkland 3 and Craven 6**

In accordance with Condition 1 of PEL 285 granted under the provisions of the *Petroleum (Onshore) Act 1991*, the titleholder is hereby granted approval to conduct the fracture stimulation of coal seam methane exploration wells known as Weismantel 3, Faulkland 3 and Craven 6, subject to the conditions set out below. These conditions relate specifically to this approval. The conditions are in addition to those previously attached to PEL 285 and prevail to the extent of any inconsistency. A breach of these conditions is an offence under the *Petroleum (Onshore) Act 1991*.

CONDITIONS

General conditions

1. The works must be carried out at the location(s) and in accordance with the methods contained in:
 - Review of Environmental Factors for Exploration Boreholes – Lucas Molopo Gloucester Waukivory 02 to 04 and Lucas Molopo Gloucester Craven 02 to 04 as AMENDED and prepared by Lucas Energy Pty Ltd (including all appendices) dated July 2008
 - Review of Environmental Factors for Exploration Boreholes – Doc no. G-H-PEL285-RP-0-070319 – Re-issued for DPI-MR Assessment dated July 2008
 - Review of Environmental Factors – Addendum for Boreholes Weismantel 3, Faulkland 3 and Craven 6 prepared by Lucas Energy Pty Ltd (including all appendices) dated August 2008

Except as amended by the following conditions.

Security

2. An additional security will not be required for the proposed works.

Prior to drilling

3. Prior to the commencement of activities on each site, the title holder must make reasonable efforts to provide notice of disturbing activities, in particular any drilling or fracking operations, to immediate neighbours of the land on which the activities are to take place. The titleholder must

accommodate reasonable requests by landholders for limited rescheduling of activities.

Note that conditions under other headings may also have elements which must be fulfilled prior to drilling.

Site access and management

4. The titleholder must maintain access roads to any sites subject to this approval in a condition satisfactory to the Department and landholder requirements.
5. The site must be securely fenced with a lockable gate and adequate signs warning of potential dangers.
6. The title holder must maintain the site in a clean and tidy condition and undertake a program of ongoing environmental maintenance leading to full restoration of the site.

Well location data

7. The location and height (AHD) of each well collar must be determined to an accuracy of 1 metre and the position of the hole within all potentially mineable coal seams must also be determined to an accuracy of 1 metre. This information must be supplied to the satisfaction of the Department.
8. Reasonable access must be provided to Departmental staff to carry out additional surveys or inspections as necessary.

Water management

9. All produced formation water must be collected and stored in a secure manner which prevents leakage and contamination of soil, surface water and groundwater.
10. Any on-site water storage dams must be fully lined with an impermeable barrier.
11. Volumes of produced formation water must be measured and recorded on a daily basis.
12. If so directed in writing by the Manager – Petroleum Operations, production well testing must cease, if in the opinion of the Manager – Petroleum Operations continued water production will likely lead to significant environmental harm.
13. Any removal or discharge of water from the site requires prior notification to the Manager, Petroleum Operations. This notification must include the following details:
 - a) Water source
 - b) Water volume
 - c) Water quality
 - d) Method of removal or discharge (e.g. truck, pipeline)
 - e) Intended frequency of removal or discharge
 - f) Discharge point (e.g. name, type, location, operator and environment protection licence details)

Documentation covering the chain of custody for any off-site disposal of water must be maintained and made available for inspection by the Department on request.

Noise and vibration management

14. The titleholder must implement management practices as necessary to minimise potential noise and vibration impacts resulting from activities subject to this approval. These management practices are to include, but are not limited to:
 - a) identifying all potentially affected noise and/or vibration sensitive receivers (including residences, schools, commercial premises and noise sensitive equipment) that may be affected by the approved activities
 - b) predicting potential noise and vibration levels from the proposed operations where appropriate
 - c) identifying and implementing all reasonable and feasible mitigation methods to reduce any noise and vibration impacts
 - d) documenting and implementing any specific work practices the titleholder will employ to limit noise and vibration
 - e) conducting noise and vibration monitoring where appropriate
 - f) appropriately informing affected residences and other relevant parties in advance of any activities and updating information as required
15. If so directed in writing by the Manager Petroleum Operations, additional noise and vibration management practices may be required. Any written instructions given by the Manager Petroleum Operations with regard to noise and vibration management are to be implemented by the operator.
16. The operator must ensure that a suitably qualified person is available at all times during fracing and production testing operations to undertake noise measurements as required. A calibrated noise monitoring device should be made available for this purpose.

Hours of operation

17. Except in emergencies, or with the written consent of all affected landholders and the Department (Manager Petroleum Operations), no activities which are likely to disturb landholders or other affected parties (with the exception of dewatering, venting or flaring) are permitted at well sites or associated areas outside the following times:
 - a) 7:00am to 6:00pm on weekdays
 - b) 8:00am to 1:00pm on SaturdaysNo activities (other than dewatering, venting or flaring) will be permitted on Sundays or public holidays.

This condition may be amended or waived at the discretion of the Manager Petroleum Operations if the well site is located more than 1km from the nearest residence.

Dust management

18. The titleholder must undertake a dust minimisation program to the satisfaction of the Manager Petroleum Operations.

Well abandonment and site rehabilitation

19. Within 3 years from the date of this approval, the well(s) subject to this approval must either:
 - a) be completed and fully rehabilitated, or;
 - b) a Development Application for consent under the *Environmental Planning and Assessment Act 1979* must be lodged for conversion of the exploration well(s) to a production well(s).
20. At the completion of well testing, and prior to abandonment of the well, any steel casing must be removed from the vertical interval(s) encompassing all potentially mineable coal seams. Alternatively, glass-reinforced epoxy casing may be used across mineable coal seams subject to separate written approval of the Department. Downhole logging and/or imaging of a quality acceptable to the Department must be used to confirm the removal or absence of steel casing through potentially mineable coal seams. All logs and information pertinent to this condition must be provided to the Department. Abandonment of the well must not proceed until written confirmation is received from the Department confirming that this condition has been satisfied.
21. A Rehabilitation Report must be provided to the Department within two months of well abandonment for all surface and underground disturbance arising from activities subject to this approval.

Please contact the Team Leader - Coal & Petroleum of the Department's Titles Branch on (02) 4931 6456 in regards to the lodgement of the additional security requirement.

Should you wish to discuss any details of this approval, please contact Craig Campbell directly on (02) 6571 8788.

Yours Sincerely,



MICHAEL MCFADYEN
Assistant Director – Environment

DATE: 30/10/08