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Ms Tracey Winters
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**EPBC Act approval 2008/4398 - Gas field development
(QGC Ref: QCLNG-AUS-PMT-ENV-LTR-0890)**

Dear Ms Winters

I am writing in regard to your letter of 21 March 2011 in which you sought clarifications of certain conditions of *Environment Protection and Biodiversity Conservation Act 1999* approval 2008/4398 for the Queensland Curtis LNG Project. I apologise for the delay in responding on these matters.

This letter responds to the issues you have raised and also responds to your letter of 5 April 2011 in which you sought an extension of timeframe in relation to condition 78 of EPBC 2008/4398. My response is in the order of the issues you have raised.

Clarification of condition 43 (a)

You sought clarification of the definition of 'beyond the life of the project' with respect of condition 43 (a). This issue was raised by Queensland Gas Company/British Gas (QGC) in response to the proposed approval provided by the Minister for comment in October 2010. At the time QGC queried the wording of the conditions and sought a specific timeframe to a maximum of 100 years. Given the uncertainties of QGC modelling (and other available modelling) about the potential extent of groundwater drawdown and recovery the wording was not changed.

We do not believe that the situation has changed. The department therefore does not accept QGC's proposition that the QGC obligation under condition 43 (a) to ensure water management has no significant impact on any matter of national environmental significance (MNES) should end 'when groundwater levels begin to move toward pre-depressurisation levels', or if sooner, five years after production ends.

QGC's obligation under condition 43 (a) is to take all reasonable measures to ensure the protection of MNES. From the department's perspective reasonable measures would need to relate and respond to the extent of drawdown for each relevant aquifer, the post production period for drawdown recovery for each relevant aquifer, and factors such as QGC's management of water extraction and groundwater repressurisation. Much of this information is yet to be fully considered.



Clarification of condition 49 (f)

You sought clarification of information requirements to satisfy condition 49 (f) relating to ecotoxicity testing of fracking fluids. The department is considering the information provided in the Stage 1 Water Monitoring and Management Plan and will advise on its adequacy shortly. The information provided in the Stage 1 plan on ecotoxicity testing is being considered with QGC's proposed water quality monitoring practices, thresholds for response actions, and specific management response actions relating to the risks of fracking fluid contamination of groundwater and surface water. If the information provided is not considered adequate to address the condition, QGC will be asked to submit the necessary information.

Regional groundwater model – Conditions 61 to 64

The department has been informed by the Queensland Water Commission (QWC) of the declaration under the Queensland *Water Act 2000* of the Surat Cumulative Management Area (SCMA) and work being undertaken to develop a regional scale groundwater model applying to the area within the Surat and Southern Bowen Basins.

QWC has advised the department that QGC and other CSG proponents are cooperating in the development of the groundwater model. I understand that the QGC contributions will be formalised through a levy to be finalised by the QWC later this year.

QWC has also advised that the regional groundwater model will be capable of predicting impacts at regional and subregional levels. On this basis the department expects that the regional model will substantially satisfy the requirements of conditions 62 and 63. As delegate of the Minister, I therefore approve in accordance with condition 64 of EPBC 2008/4398 that the requirement of condition 61 (a) to develop a regional groundwater model will be satisfied by QGC's contributions to the QWC's development of a regional model. My approval is subject to the QGC contributions being formalised and provided when required by the QWC, and the department being informed by QGC in writing of these actions.

QWC has highlighted that the model may not address localised conditions and predictions, for example those relating to localised reinjection of groundwater. Therefore aspects of the groundwater management and monitoring conditions which may require localised modelling predictions and monitoring to support QGC gas field development will need to be addressed by QGC to ensure that necessary information can be provided to the department when required.

I will be writing to other proponents similarly on conditions relating to the regional groundwater model and the need for each proponent to address localised issues that may not be addressed by the QWC regional model.

Springs survey – conditions 68 and 99

The department acknowledges that the Queensland *Water Act 2000* requires the QWC to develop a Springs Impact Management Strategy for springs within the SCMA. This

work requires a survey and assessment of springs, which largely corresponds to the extent of survey required for the EPBC Act relevant recharge and discharge springs required under condition 68. This work has been progressed with input from the department.

The department expects the QWC's survey will substantially satisfy the requirements of condition 68. As delegate of the Minister, I therefore approve, in accordance with condition 68 (b) of EPBC 2008/4398, that the requirement of condition 68 comprise QGC's contributions to the QWC's survey and assessment of springs to the extent that the survey and assessment is proximal to the project area and within 100 km of modelled limits of aquifer drawdown. The survey must address the spring complexes specified in condition 68 (a). My approval is also subject to QGC contributions being formalised and provided when required by the QWC, and the department being informed by QGC in writing of these actions.

The department notes that the agreed method includes that the QWC spring survey and assessment area will be informed by the regional groundwater model later in 2011. When the modelling prediction of the extent of aquifer drawdown has been provided to the department and considered, the department will confirm to proponents the extent of the survey and assessment area including any area within 100 km of modelled limits of aquifer drawdown not surveyed through the QWC work and which may require survey to fulfil the requirements of condition 68.

To allow the extent of the survey area to be informed by the QWC regional groundwater model I also approve, in accordance with condition 99 of EPBC 2008/4398, the extension of the timeframe to undertake the spring survey and notify the results to 30 November 2011. If a targeted area needs to be surveyed to fully meet condition 68 I will review and determine any adjustment to the timing requirements. I will be writing in similar terms other proponents.

Cumulative impact report

Your letter of 5 April 2011 highlighted a series of requests made to Queensland agencies for extension of timeframes for QGC to provide cumulative impact assessments to the Coordinator-General under Queensland conditions of approval. Your subsequent letter of 28 April 2011 provided the department with the cumulative impact reports submitted to the Queensland Department of Employment, Economic Development, and Innovation (DEEDI).

Advice from DEEDI on 29 April 2011 confirmed that the groundwater and surface water cumulative impacts are to be addressed in the QWC work. This department is yet to complete its review of the information provided to date under condition 78 against the requirements of condition 79. The department notes that impacts on MNES and cumulative impacts on MNES need to be addressed adequately to meet the conditions.

EPBC 2008/4398 Gas Field development – exploration and production wells

In relation to the definition of "Gas Field Development" you sought an amendment to approval conditions to remove the reference to exploration wells. The department does not propose to make any amendment to the definition. Similar views were raised by QGC last year. The department's position was made clear in correspondence to Mr Andrew Wharton dated 7 December 2010. The response highlighted that while condition 2 sets a limit to a maximum of 6000 developed "production" wells other conditions apply to exploration, appraisal and production wells, as well as other aspects of gas field development and their impacts. These include conditions requiring the constraints planning and field development protocol and the conditions setting of disturbance limits for specified MNES.

The letter also highlighted that QGC will need to clearly distinguish and account for in its documentation the status of wells for compliance and auditing purposes, and to differentiate the EPBC Act approved action from any pre-approval exploration and production Activities.

Please contact Mr Nick Gascoigne (02 62759304) if you wish to discuss these matters.

Yours sincerely



David Calvert
A/g Assistant Secretary
Environment Assessment Branch 2

5 July 2011