GREENHOUSE GAS ASSESSMENT PERMITS ASSESSMENT OF BID AND RENEWAL APPLICATIONS

A guideline in relation to the

Offshore Petroleum and Greenhouse Gas Storage Act 2006

Prepared by the Commonwealth Department of Industry

29 August 2014

This document has been developed as a general guide only. It does not replace or amend the requirements of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* and associated Regulations, which should be read in conjunction with the guideline. It is made available on the understanding that the Commonwealth is not thereby engaged in rendering legal or other professional advice. Before relying on this material in any important matter, users should carefully evaluate its accuracy, currency, completeness and relevance for their purposes, and obtain appropriate legal or other professional advice relevant to their particular circumstances. It is anticipated the guideline will be amended from time to time. The most up-to-date version of the guideline is available at: www.nopta.gov.au.

PLEASE NOTE: The National Offshore Petroleum Titles Administrator (NOPTA), on behalf of the respective Responsible Commonwealth Minister, is the first point of contact on all titles administration matters relating to offshore greenhouse gas storage.

PURPOSE

This guideline sets out the criteria followed in assessing applications for work bid greenhouse gas assessment permits under Part 3.2 of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (OPGGS Act).

1. OVERVIEW

- 1.1 The Responsible Commonwealth Minister seeks to select the most deserving applicant whose assessment strategy and work program will most likely achieve the most complete assessment of potential greenhouse gas storage formations and potential greenhouse gas injections sites within the release area, to demonstrate the existence (or otherwise) of an 'eligible greenhouse gas storage formation', see subsections 21 (1) & (2) of the Act.
- 1.2 The Responsible Minister must also be satisfied that the applicant has the technical and financial competence to facilitate the proposed work program and advance the proposed assessment strategy for the release area.

2. ASSESSMENT STRATEGY

2.1 The applicant's assessment strategy should significantly advance the understanding of the 'fundamental suitability determinants' of potential greenhouse gas storage

formations and potential greenhouse gas injection sites. Fundamental suitability determinants' of a potential eligible greenhouse gas formation include, but are not limited to:

- the amount of greenhouse gas substance that it is suitable to store
- the particular greenhouse gas substance that it is suitable to store
- the proposed injection point or points
- the proposed injection period
- any proposed engineering enhancements
- the effective sealing feature, attribute, mechanism or geotechnical characteristics that makes it suitable.
- 2.2 The applicant's assessment strategy will be evaluated taking into account:
 - the applicant's technical evaluation of the greenhouse gas storage potential of the area, based on existing data, and how the evaluation informs the assessment strategy
 - the clarity, coherence and logic of the assessment strategy
 - the types of activities assessed as required to identify and characterise suitable permanent storage formations and/or sites in the release area. These activities should form the basis of the proposed work program for the release area.

3. WORK PROGRAM

- 3.1 Work programs will be assessed with regard to the assessment strategy, taking into account the following criteria:
 - the amount, type, timing, expenditure and relevance of proposed studies/modelling/testing with respect to the characterisation of potential geological formations
 - the amount, type, timing, expenditure and relevance of seismic surveying
 - the amount, type, timing, expenditure and relevance of any other new surveying, data acquisition, sampling, monitoring and reprocessing
 - the amount, type and timing, expenditure of any purchasing or licensing of existing data
 - the proposed analysis studies and expenditure relating to potential migration paths for injected greenhouse gas substances
 - the number, timing and expenditure of wells to be drilled, provided there is an adequate supporting work program
 - the proposed studies and expenditure relating to potential impacts on petroleum operations.

- 3.2 The minimum acceptable work program must be credible, coherent and supportable. The early elements of a work program should be sufficient to enable the later elements to proceed, including:
 - If there is no current potential storage formation identified, there must be sufficient geophysical surveys, seismic reprocessing and other relevant studies, such as but not limited to rock property studies and migration modelling to enable a potential storage formation to be identified in the permit area
 - Where extensive non-exclusive seismic data or significant reprocessed seismic data (normally from field tapes) are available over an area, it would generally be expected that the primary work program would include the licensing of the relevant portion of those data
 - Where an area is fully covered by 3D seismic data, substantial reprocessing of the data may form a substantial part of proposed work program commitments. The reprocessing would normally be expected to be from field tapes and to utilise techniques not previously undertaken on the seismic data acquired within the permit
 - Where an area has existing drill results, substantial new assessment/analysis of these data may form a substantial part of the proposed work program commitments.
- 3.4 Preference will be given to applications that can demonstrate the availability of a greenhouse gas stream for injection, or describe the expected provision of a greenhouse gas stream. A decision on whether or not an applicant has an available stream of greenhouse gas for injection will take into account a number of factors including:
 - in the case of greenhouse gas associated with petroleum, whether a petroleum retention lease or production licence has been awarded over the field which is to be the source of the greenhouse gas substance
 - in the case of greenhouse gas from other sources, whether substantial investment has been committed to feasibility and design processes for the capture of the greenhouse gas substance
 - the maturity or stage to which the overall project has advanced (for example, to Front End Engineering and Design study, or a final investment decision)
 - the nature of any agreements between the applicant and capture facility(ies), where relevant
 - the expected timeframe in which a greenhouse gas stream is expected to become available for injection
 - the public interest, including taking into account such factors as the best use of the total available storage capacity of the area and the amount of greenhouse gas proposed to be stored.
- 3.5 If an applicant satisfies the Responsible Commonwealth Minister that it has an available stream of greenhouse gas for injection, then the work program should be sufficient to lead to a possible declaration of a storage formation (identified eligible

greenhouse gas storage formation) in the permit area. Provided that this criterion is met, then the application will be preferred over other applications that do not have a readily available stream of greenhouse gas for injection.

4. TECHNICAL COMPETENCE

- 4.1 The Responsible Commonwealth Minister must be satisfied that the applicant has the requisite technical competence to undertake the proposed work program.
- 4.2 This will include an assessment as to whether each applicant has access to a range of technical skills, and advice available, to satisfy the Responsible Commonwealth Minister of its technical competence, to explore the release area for a potential greenhouse gas formations and potential greenhouse gas injection sites.

5. FINANCIAL COMPETENCE

- An applicant must satisfy the Responsible Commonwealth Minister of its financial competence to undertake its proposed work program, including evidence of the likelihood that the applicant will continue to have the ability to attract outside funding or have sufficient financial resources to meet the requirements of the proposed work program.
- 5.2 This may include consideration of work program commitments in other resources (greenhouse gas and petroleum) titles in which the applicant has a financial interest.
- 5.3 The future viability of any consortium lodging an application, where applicable, will also be considered.

6. PETROLEUM EXPLORATION ACTIVITIES

- 6.1 Greenhouse gas assessment permit release areas may overlie petroleum exploration permits where related exploration activities may generate information relevant to greenhouse gas assessment.
- 6.2 In some cases, the bidder for a greenhouse gas assessment permit may have an interest in an overlapping petroleum title area. In this case the work being undertaken for a petroleum title work program can also be included in the greenhouse gas work program bid, provided that the work is expected to generate significant new knowledge relevant to the greenhouse gas assessment of the greenhouse gas permit area.

7. ASSESSMENT PROCESS

- 7.1 Applications must be compliant with the requirements of the Australian Government Gazette notice inviting bids for release areas and meet the expectations of the Greenhouse Gas Assessment Permits: Requirements for Bid and Renewal Applications Guideline (Requirements Guideline).
- 7.2 Applications for an area will be assessed against the Assessment and Requirements Guidelines by NOPTA, who will provide advice to the Responsible Commonwealth Minister.

- 7.3 If NOPTA deems it necessary to clarify the content of the application, supplementary written information may be sought from the applicant by the Responsible Commonwealth Minister. Please note that the composition and timing of the work program may not be amended through the provision of additional information and other fundamental changes to the original application will not be accepted.
- 7.4 In the event that a winning applicant cannot be determined on the basis of the information contained in the application, the two or more applicants that the Responsible Commonwealth Minister considers as equally deserving of the grant of the permit, will be invited to submit supplementary written proposals for additional work and expenditure, as a basis for the selection of a successful applicant.
- 7.5 If areas are offered for both greenhouse gas and petroleum work program bidding in a similar timeframe, assessment of these applications will be treated separately.

8. REFUSAL TO GRANT A PERMIT

- 8.1 Applicants should note that the Responsible Commonwealth Minister may refuse to grant a permit. While the Act does not specify the grounds for refusing to grant a permit, they may include that the Responsible Commonwealth Minister:
 - determines the applicant does not provide a compliant and/or genuine application (see the Requirements of Bid and Renewal Applications Guideline)
 - determines the work program proposed is inferior to that of a competing bid
 - determines the work program bid is inadequate to significantly advance the greenhouse gas storage assessment status of the area
 - determines the work program bid is not supported by a sound technical assessment
 - is not satisfied that the applicant possesses the financial or technical capacity to complete the work program bid.