



Key Greenhouse Gas Operations

All fact sheets should be read in conjunction with the [Offshore Petroleum and Greenhouse Gas Storage Act 2006](#) (the **OPGGGS Act**), associated regulations, relevant guidelines and policies (available on [NOPTA's website](#)).

A greenhouse gas (**GHG**) assessment permittee or holding lessee must seek prior approval from the responsible Commonwealth Minister (**RCM**) or Cross-boundary Authority (**CBA**) to undertake a key GHG operation. An application for approval is made to the RCM/CBA, as relevant, under sections 292, 292A, 321 or 321A of the OPGGS Act.

The OPGGS Act describes how the GHG and petroleum industries coexist, including in some circumstances where a GHG operation could impact¹ on petroleum operations

Titleholders should be aware of the requirements to seek other approvals under associated regulation prior to commencing a key GHG operation.

Definition of key GHG operations

Under the definition in section 7 of the OPGGS Act a key GHG operation includes:

- make a well
- inject a GHG substance, air, petroleum, or water on an appraisal basis
- store a GHG substance, air, petroleum, or water on an appraisal basis
- a seismic survey or survey of any kind
- monitor behaviour of a GHG substance, air, petroleum, or water
- baseline investigation
- take a sample of the seabed or subsoil
- or as specified in the regulations²

Approval of key GHG operations

A GHG assessment permittee or holding lessee may not carry out any key GHG operations unless the RCM/CBA has approved the operations.

The RCM/CBA will have regard to sections 27 or 27A and subsections 292(4) or 292A(4), 321(4) or 321A(4) of the OPGGS Act, which refer to assessing whether there is an impact of the key GHG operations on petroleum exploration or recovery operations that are being or could

be carried on under and existing or future petroleum title, and if there is, whether the impact is a significant adverse impact and there is a significant risk of it occurring. This is referred to as significant risk of significant adverse impact (**SROSAI**) in the OPGGS Act and regulations.

Subsections 292(7), 292A(7), 321(7) or 321A(7) of the OPGGS Act, as relevant, include that if any of the key GHG operations are to inject or store a substance on an appraisal basis the RCM/CBA must have consideration to the composition of the substance.

Applications

An application can be made with respect to one or more key GHG operations that occur during the same time period. For example, drilling, testing, and taking core samples from a well or carrying out a site survey that includes seabed sampling and geophysical surveying.

Note: Due to information requirements and potential impact on timing of applications it is recommended applicants do not submit one application with respect to multiple activity types and timeframes/phases of activity.

A key GHG operation application should include the following information:

For all operations

- objective of the proposed key GHG operation, including linkages to work program commitments and/or how the operation will assist in progressing the status of the project (e.g., towards a declaration of storage formation/injection licence/site plan)
- a detailed submission against each of the relevant legislative criteria relevant to the application assessment and decision making, e.g., subsections 292(4), (7) and (8) or subsections 292A(4), (7) and (8) (reasoning should be provided if the applicant considers that there is no adverse impact),
- an estimate of the proposed timeline and duration of the operation

¹ 'Impacts' are considered to be only those that result in an adverse impact.

² [Offshore Petroleum and Greenhouse Gas Storage \(Greenhouse Gas Injection and Storage\) Regulations 2023](#) (GHG Regulations)



- where an applicant submits there will be a significant risk of an adverse impact evidence of written agreement with relevant petroleum titleholders

The information included in key GHG operation application will depend on the nature of the operational activity. Early engagement with NOPTA is recommended to help facilitate the application process.

Information requirements for applications for specific operations should include:

For drilling

- operational details for any drilling – location of well (exact co-ordinates and well path if deviated), estimated of number of drilling days and expected operational window, operational footprint (in terms of rig type, anchor placement, support vessels, etc.)
- map showing the well details and operational footprint outlined above and including graticular blocks, petroleum and GHG titles, and any infrastructure in the area
- geological information in support of selection of the well location, target depth/ formation, summary of any proposed injection tests (substance, indicative depth, and volumes), information about any coring (including side-wall cores) etc
- an assessment of the likelihood of encountering/ entering hydrocarbon bearing formations during drilling; if this occurs, the submission should address any risks of damage to a formation(s) and how would those risks be mitigated/managed.

For seismic acquisition

- operational details for any seismic acquisition – location of survey (exact co-ordinates including information about acquisition and operational areas), estimated of number of operational days, expected operational window, type of vessel, streamer length, support vessels, etc
- map showing the survey details outlined above and including graticular blocks, petroleum and GHG titles, and any infrastructure in the area.

For site surveys, baseline investigations or monitoring

- operational details for the activity – location of activity (exact co-ordinates of operational area), estimated of number of operational days, expected operational window, details of each component of the activity, types of sampling, the substance/s being monitored and monitoring method/s, support vessels, etc
- map showing the details outlined above and including graticular blocks, petroleum and GHG titles, and any infrastructure in the area
- geological information in support of selection of the location of the site survey/baseline investigation or monitoring, target depth/formation (if relevant).

Applicants are also reminded of their responsibility to consider any [other regulatory requirements](#) which may be required in relation to key GHG operations.

How do I apply?

Applicants can apply in writing to NOPTA at ghg@nopta.gov.au.

More information

If you have any specific questions, please contact NOPTA via ghg@nopta.gov.au.

Please note: this document is intended as a guide only and should not be relied on as legal advice or regarded as a substitute for legal advice in individual cases.

Version History

Version	Date	Comment
3.0	30/08/2024	Update to format, layout, links, reviewed text to include cross-boundary authority
2.0	18/03/2024	Update with admin amendments new GHG Regulations link
1.0	04/07/2022	New factsheet