

## Mineral and Energy Resources and Other Legislation Amendment Bill 2024

**Submission No:** 32  
**Submitted by:** Origin Energy Limited  
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**10 May 2024**

Committee Secretary  
Clean Economy Jobs, Resources and Transport Committee  
Parliament House  
George Street  
Brisbane Qld 4000  
Via: [cejrtc@parliament.qld.gov.au](mailto:cejrtc@parliament.qld.gov.au)

Dear Committee Secretary,

**Re: Mineral and Energy Resources and Other Legislation Amendment Bill 2024**

Origin Energy Limited (Origin) is responsible for the operation of the Australia Pacific LNG gas fields and main gas transmission pipeline. Australia Pacific LNG is an incorporated company owned by ConocoPhillips (47.5%), Origin (27.5%) and Sinopec (25%).

In addition to the Australia Pacific LNG business, Origin has diverse operations across the energy supply chain; from gas exploration and production to power generation and energy retailing.

Origin is a member of both the Queensland Resources Council (QRC) and Australian Energy Producers. Both industry bodies have co-ordinated a response and made a submission on the Mineral and Energy Resources and Other Legislation Amendment Bill 2024.

Origin has participated in that process and supports the submissions made by QRC and Australian Energy Producers.

Origin is concerned the scope and size of the bill and limited consultation period does not allow for a full examination of the reforms and potential consequences. Origin also supports the suggestion to progress the reforms to establish Coexistence Queensland and allow further consultation on the proposed subsidence management framework.

It is unclear why this Bill has not been subject to the Queensland Government requirements for regulatory development and there is no impact analysis statement. Particularly given the Bill contains proposals to increase the OGIA levy and create a new levy in association with the Land Access Ombudsman. There is no exclusion provided from the existing impact analysis requirements for introducing a new levy, fee or charge or changing an existing one.

The bill also introduces a new regulatory framework for subsidence for the gas industry where there are existing regulatory frameworks to manage the issue of subsidence associated with CSG operations, and with the resources sector such as the coal where subsidence is managed via conditions in Environmental Authorities. How a new framework will interact with existing requirements is not clear.

Queensland's Regional Planning Interests Act regulates gas activity including management of subsidence.

The [RPI Act - Statutory Guideline 09/14 \(windows.net\)](#) details the requirements:

### ***Understanding the condition of land***

*Notwithstanding the potential for assessing any activity and site-specific attributes, the basic components of any assessment of pre-activity condition are likely to include the following:*

- terrain, landform and slope*
- site lithology*
- current land use*
- previous site disturbance and modification*
- site and soil hydrology*
- soil surface condition*
- vegetation and groundcover, including crops*
- microrelief*
- soil depth (including depths >1 metre) and*
- soil profile descriptions, incl. for each horizon or layer.*

### ***Statistical validation***

*Due to the requirement for the restoration of the land to its pre-activity condition, the methodology applied in assessing pre-activity condition needs to be rigorous. This increased rigour extends to the intensity of sites used to characterise an area under assessment. The higher density of assessment sites then allows for meaningful and reliable statistical probabilities to be applied when assessing the success of the restoration, instead of relying on less objective means.*

### ***Restoration plan***

*Information requirements for demonstrating land will be restored to pre-activity condition will be best presented through a detailed restoration plan which contains the following:*

- 1) information on the nature of impact on the land and methods used to determine impact*
- 2) characterisation of the pre-activity (current) condition of the land and soils RPI Act Statutory Guideline 09/14 5*
- 3) evaluation of the nature and risk of any predicted impacts on the land*
- 4) evidence that scientifically proven and practical methods do exist for restoring the land*
- 5) detail on the application of the restoration methods including timeframes*
- 6) a monitoring program including benchmarking and progress milestones*
- 7) a fully costed estimate of identified restoration works*
- 8) restoration criteria against which successful restoration can be demonstrated*

When managing subsidence in the coal sector, the existing regulatory regime is used with conditions on the Environmental Authority. For example, Environmental Authorities for coal projects often contain the following conditions:

*A subsidence monitoring program and management plan must be developed and maintained by an appropriately qualified person. The subsidence monitoring and management plan must at a minimum include:*

- a) subsidence monitoring prior to mining;*
- b) rehabilitation methodology if required to ensure achievement of authorised post mining land use;*
- c) land management practices pre and post mining;*
- d) monitoring program that specifies location, frequency and type of monitoring;*
- e) include map of soil survey types overlaid with locations of subsidence monitoring transects;*
- f) investigation to be undertaken if subsidence monitoring detects changes in excess of modelled subsidence (interim of 35mm);*
- g) identification of environmental impacts and potential environmental impacts;*
- h) control measures for routine operations to minimise likelihood of environmental harm;*
- i) contingency plans and emergency procedures for non-routine situations; and*
- j) periodic review of environmental performance and continual improvement.*

*The subsidence management and monitoring plan required by Condition G4 must be implemented for all stages of the mining activity.*

In addition to State powers in relation to managing subsidence, APLNG is also regulated with respect to impacts from subsidence through Environment Protection and Biodiversity Conservation Act (EPBC) approvals which require predictive modelling and ongoing monitoring of subsidence follows:

- 67. In addition, as part of a staged process of adaptive management of CSG development, the proponent must also provide the following in relation to subsidence:*
- a. baseline and ongoing geodetic monitoring programs to quantify deformation at the land surface within the proponent's tenures. This should link from the tenement scale to the wider region across which groundwater extraction activities are occurring and any relevant regional program of monitoring;*
  - b. modelling to estimate the potential hydrological implications of predicted surface and subsurface deformation; and*
  - c. measures for linking surface and sub-surface deformation arising from CSG activities.*

Measured ground movement is then assessed against approved subsidence trigger levels for site-specific investigations. Subsidence monitoring data collection commenced in July 2012 with a current frequency of satellite acquisition every 12 days over the Spring Gully fields and every 6 days over Condebri, Talinga, Orana fields and Reedy Creek, Combabula and Peat fields. Regular subsidence impact assessment is completed to identify data points exhibiting ground motion of greater than an impact threshold over an area of 1500m x 1500m. To date no trigger conditions have been observed and is not expected to trigger in the future based

on forward prediction and rate of subsidence decreasing following initial measurable depressurisation of the coal measures in production

Subsidence also appears in Environmental Authority conditions with respect to rehabilitation outcomes and requires landholder consent. Subsidence was also a matter addressed in the Queensland Coordinator-General approvals for APLNG which noted that subsidence was addressed in the EPBC approvals.

Section 215 (2)(r) of Queensland's *Environment Protection Act 1994* (EP Act) provides an existing regulatory mechanism for the Queensland Government to amend the environmental authority of petroleum tenure holders where an underground water impact report (UWIR) identified potential impacts on environmental values which include the environmental values of land.

*215 Other amendment*

*(r) for an environmental authority for a resource activity—an underground water impact report under the Water Act 2000, chapter 3, identifies impacts, or potential impacts, on an environmental value*

The Office of Groundwater Impact Assessment prepares a UWIR for the Surat CMA every 3 years which independently assesses the risk of cumulative subsidence from the large majority of gas production in Queensland.

More detailed information regarding approvals and monitoring are available [Document Library – Australia Pacific LNG \(aplng.com.au\)](#), specifically APLNG Environment and Social Report January to December 2023 and EPBC Gas Fields Annual Environmental Return 2024.

| Should you require anything further regarding Origin, please do not hesitate to contact me.

Yours sincerely



Stuart Copeland  
Senior Government Engagement Manager – Queensland and NT