



# Petroleum Legislation Amendment Bill (No. 2) 2022

## Supporting Information

### Relationship to other Government initiatives

#### How do these amendments relate to the broad WA Government initiatives for hydrogen?

The Western Australian Government, with the Department of Jobs, Tourism, Science and Innovation (JTSI) as lead agency, is considering a number of initiatives to support the emerging hydrogen industry in Western Australia, including renewable and manufactured hydrogen. JTSI is currently reviewing relevant existing legislation, regulations, and standards affecting the hydrogen industry in Western Australia to reduce the barriers for the renewable hydrogen industry. Related to this work with the Department of Planning, Lands and Heritage is the proposed Land and Public Works Legislation Amendment Bill 2022, which seeks to introduce diversification leases into the *Land Administration Act 1997* to allow more flexible use of Crown land, including large scale green energy generation.

In parallel, Energy Policy WA is engaged at the National Level in making amendments to extend the national gas regulatory framework to hydrogen and other renewable gases, which will allow for economic regulation of and third party access to pipelines carrying these gases.

The Petroleum Legislation Amendment Bill (No. 2) 2022 is limited to enabling the exploration and production of naturally occurring hydrogen through petroleum titles granted pursuant to the *Petroleum and Geothermal Energy Resources Act 1967* (PGERA) and *Petroleum (Submerged Lands) Act 1982* (PSLA). This Bill introduces the concept of 'regulated substances' which will be the mechanism for introducing naturally occurring hydrogen into the PGERA and PSLA. Naturally occurring hydrogen is defined as hydrogen that occurs naturally and is found in a natural geological formation; accordingly this Bill is not related to renewable or manufactured hydrogen and is independent of the State Government's holistic initiatives to facilitate and regulate hydrogen more broadly.

#### How do these amendments relate to Hydraulic Fracture Stimulation?

These amendments do not relate to hydraulic fracture stimulation. The Western Australian Government is progressing amendments to address the findings of the Independent Scientific Panel Inquiry into Hydraulic Fracture Stimulation in Western Australia in a separate package of legislative amendments (the Petroleum and Geothermal Energy Amendment (Hydraulic Fracturing) Bill). The Petroleum Legislation Amendment Bill (No. 2) 2022 is independent of that process and does not make any amendments related to hydraulic fracture stimulation.

#### How do these amendments relate to other petroleum reform initiatives being progressed?

This Bill is part of a package of petroleum legislation reform initiatives being progressed by the Department of Mines, Industry Regulation and Safety (DMIRS). In parallel with this Bill, DMIRS is also progressing the Petroleum Legislation Amendment Bill 2022, which seeks to introduce electronic communications and signature-related amendments to the Petroleum Acts, and the Petroleum Legislation Amendment (Greenhouse Gas Storage and Transport) Bill 2022, which seeks to amend the Petroleum Acts to enable the storage and transport of greenhouse gas. These Bills will be released for consultation individually which will allow stakeholders to consider the key amendments proposed in each of the bespoke Bills. Following consultation, the Bills will be amalgamated into a single Bill in preparation for its introduction into Parliament to enable an efficient Parliamentary process.

# Introducing regulation for naturally occurring hydrogen

## What is a regulated substance?

Regulated substances are substances that are naturally occurring, occur within a natural geological formation and are prescribed in the various Petroleum Regulations (see proposed new term 'regulated substance' in section 5 PGERA and section 4 PSLA). The prescription of certain substances as regulated substances will make the PGERA and PSLA's legislative framework available for the exploration and production of such regulated substances where approval is granted by the Minister for Mines and Petroleum. Once prescribed, interested persons can apply for additional rights for a regulated substance to be granted to their existing petroleum title, or apply for a new petroleum title and concurrently seek approval for additional rights.

An application and approval for a regulated substance is limited to a specified regulated substance and does not apply to all prescribed regulated substances.

## How is natural hydrogen defined?

This Bill inserts the new term 'regulated substance' in section 5 PGERA and section 4 PSLA. 'Regulated substance' is defined as a naturally occurring substance that occurs in a natural geological formation and is prescribed by the regulations. Naturally occurring hydrogen will then be permitted to be explored for and produced pursuant to the PGERA and PSLA once it is prescribed as a regulated substance in ensuing amendments to the various Petroleum Regulations.

The definition of regulated substance confines the Minister for Mines and Petroleum's ability to prescribe hydrogen in the context of the PGERA and PSLA to hydrogen that occurs naturally and is found in a natural geological formation. This distinction delineates naturally occurring hydrogen from renewable and manufactured hydrogen so as to enable the PGERA and PSLA to permit the exploration and production of naturally occurring hydrogen while the Government considers initiatives to facilitate and regulate hydrogen more broadly.

## What is the difference between a prescribed regulated substance and renewable or manufactured hydrogen?

Prescribed regulated substances are substances that occur naturally and occur within a natural geological formation (in the Earth, underground). This definition excludes renewable and manufactured hydrogen which relate to hydrogen that is produced through industrial processes. While hydrogen itself is a naturally occurring substance, it is able to be produced through a variety of different processes; this Bill is focused on permitting the exploration and production of hydrogen that occurs naturally in the Earth, underground.

## How are we enabling exploration and production of naturally occurring hydrogen?

The PGERA and PSLA will permit the exploration and production of naturally occurring hydrogen when hydrogen is prescribed as a regulated substance in ensuing amendments to the various Petroleum Regulations. Once hydrogen has been prescribed as a regulated substance, the majority of the existing suite of petroleum titles in the PGERA and PSLA will be available to support operations for petroleum as well as a prescribed regulated substance. Existing titleholders (and prospective titleholders) may then elect to apply to the Minister for Mines and Petroleum for approval for additional rights to explore for or produce naturally occurring hydrogen.

Importantly, the existing suite of petroleum titles will not automatically include rights to explore for or produce naturally occurring hydrogen. Existing titleholders and prospective titleholders will need to apply to the Minister ('opt-in process'), and obtain approval for additional rights to explore for or produce naturally occurring hydrogen as a prescribed regulated substance.

## Are existing titles varied by this Bill?

For the most part, the existing suite of petroleum-specific titles within the PGERA and PSLA will be permitted to be utilised to explore for or produce a regulated substance once a titleholder has obtained approval from the Minister for Mines and Petroleum to do so.

The following petroleum titles will be available for the purposes of exploiting a prescribed regulated substance:

- Petroleum Drilling Reservation (section 29(1A) PGERA, section 43D(1A) PGERA)
- Petroleum Special Prospecting Authority (section 105(4AA) PGERA, section 111(4A) PSLA)
- Access Authority (section 106(5AA) PGERA, section 112(5A) PSLA)
- Petroleum Exploration Permit (section 29(1A) PGERA, section 38(1A) PGERA, section 19(3) PSLA, section 28(2) PSLA)
- Petroleum Production Licence (section 49(1A) PGERA, section 62(1A) PGERA, section 52(2) PSLA)
- Petroleum Retention Lease (section 48C(1A) PGERA, section 38C(2) PSLA)

Infrastructure Licences within the PSLA will not be available to be utilised for regulated substances, nor will pipeline licences pursuant to the PSLA and *Petroleum Pipelines Act 1969* (PPA). Geothermal energy titles from the PGERA will also not be able to be used to support operations related to a regulated substance.

As a consequential amendment of the introduction of the concept of regulated substance, the term 'offshore petroleum operation' in the PSLA will be updated to 'offshore resource operation' to refer to petroleum and prescribed regulated substance operations occurring offshore.

## Does this vary rights of existing titleholders to allow for regulated substances?

The amendments to introduce regulated substances in the PGERA and PSLA will provide existing titleholders (and prospective titleholders) with the ability to apply to the Minister for Mines and Petroleum for additional rights to explore for and produce a prescribed regulated substance if the titleholder seeks to target a specific prescribed regulated substance. If the Minister elects to grant additional rights, the Minister will endorse the relevant petroleum title for the specified regulated substance, and may also impose new, or vary or remove existing conditions (section 91C(2) PGERA and section 97B(2) PSLA) in order to appropriately regulate activities for a prescribed regulated substance, thereby varying the rights of an existing titleholder.

Importantly, existing titleholders who are not interested in pursuing regulated substances are not impacted by the amendments and may continue their existing operations unaffected. Only titleholders who are interested and elect to opt-in will be impacted.

## Transportation of prescribed regulated substances (naturally occurring hydrogen)

### What is the difference between blending and conveyance of a substance?

In the context of the PPA and PSLA, the conveyance of petroleum refers to the transportation of petroleum through a pipeline. Specifically, this places a limit on the conveyance of petroleum, whereby the conveyance of petroleum does not include the transportation of any other substances or additives.

In the context of the State's energy transition and pipeline licences pursuant to the PPA and PSLA, blending refers to the conveyance of a mixture of petroleum and hydrogen together in a pipeline. The blending of hydrogen with petroleum is being considered as part of the State's energy transition with hydrogen being a potential future source of energy.

The Government is considering whether the PPA is the appropriate mechanism for the conveyance of hydrogen (and derivatives) in isolation through a pipeline.

Where possible, there should be a single mechanism for the conveyance of hydrogen (irrespective of its origin) holistically to assist industry, energy producers and the domestic energy network with future operations.

## Do these amendments facilitate blending of hydrogen?

This Bill does contain a mechanism to potentially permit the blending of a portion of hydrogen (whether naturally occurring, renewable or manufactured) with petroleum for conveyance through a petroleum pipeline. This Bill amends the definition of petroleum (section 5 PGERA, section 4 PPA and section 4 PSLA) to allow certain things, or a class of things, to be prescribed in the various Petroleum Regulations, to be added to petroleum as additives. The primary purpose of this amendment is to specify that certain additives are permitted to be added to petroleum. In doing so, this mechanism could also be utilised by Government to prescribe hydrogen (in any form and from any origin) to be added to petroleum as an additive and conveyed through a petroleum pipeline. In this approach, any hydrogen or other additive added to a pipeline must not be greater than 49 per cent of the total contents within a pipeline (i.e. petroleum must still be the primary substance being conveyed).

Any decision to utilise this mechanism will be considered by Government holistically as part of its broader considerations for the regulation of hydrogen. In the interim, persons seeking to transport naturally occurring hydrogen may do so pursuant to the existing legislative framework by obtaining a dangerous goods licence pursuant to the *Dangerous Goods Safety Act 2004*.

## Petroleum-specific operational amendments

### What are the amendments relating to underground storage?

The Bill will introduce amendments to the manner in which approvals for the underground storage of petroleum are administered. Currently, section 67 of the PGERA facilitates approvals for the underground storage of petroleum, however this approval requires the entering into a formal deed with the Minister. DMIRS asserts the use of deeds is not efficient as deeds can be time consuming to prepare, administratively uncertain and difficult to amend. This Bill will revise the manner of approval by adopting a streamlined approach similar to Well Management Plans and Field Management Plans, by allowing regulations to be made which establish the criteria and requirements applicants must satisfy in applying for approval for such activities (section 67(2) PGERA). Through ensuing amendments to the Petroleum Regulations, applicants will be able to submit a proposal (tentatively referred to as a 'Petroleum Storage Management Plan') to DMIRS, and if all requirements are satisfied and the proposal is appropriate, the application will be approved. This will promote efficiency by removing the administrative burden associated with formal deeds.

This Bill will not make any amendments to permit the underground storage of hydrogen (or prescribed regulated substances – section 67(4) PGERA). Additionally, this amendment does not relate to carbon sequestration and transport; separate to this Bill, Government is progressing the Petroleum Legislation Amendment (Greenhouse Gas Storage and Transport) Bill 2022 to facilitate the transport and storage of greenhouse gas.

For clarity, section 67 of the PGERA is limited to the underground storage of petroleum only.

### What is the polluter pays principle?

The polluter pays principle will ensure that in the unlikely event of an escape of petroleum (or a regulated substance), the polluter (registered holder) would be responsible for eliminating or controlling the escape, cleaning up the escaped petroleum, remediating any damage to the environment and carrying out environmental monitoring of the impact of the escape of petroleum on the environment. These amendments are contained within the proposed new Division 4A PGERA, Part 4A PPA and Division 4AA PSLA and will ensure that the registered holder is financially responsible for addressing an escape of petroleum and any costs incurred by the State are able to be recovered from the registered holder. This will ensure registered holders are held accountable for their actions and will also mitigate environmental liability incurred by the State. The polluter pays principle will complement existing provisions within the Petroleum Acts to ensure registered holders are held accountable in the unlikely event there is an escape of petroleum.

### What will the amendments relating to care and maintenance, decommissioning and rehabilitation achieve?

The Bill will amend the definition of 'petroleum operation' (section 5 PGERA), 'geothermal energy operation' (section 5 PGERA), 'pipeline operation' (section 5 PPA) and 'offshore resource operation' (section 4A(3) PSLA) to expressly include care and maintenance, decommissioning and rehabilitation as specific and distinct petroleum operations. The need to adequately plan for care and maintenance, decommissioning and rehabilitation activities is an established expectation and introducing amendments to specify these activities are formally recognised as a petroleum operation will ensure registered holders adequately plan for, report on, and undertake care and maintenance, decommissioning and rehabilitation operations.

## What will the royalty-related amendments do?

The PGERA and PSLA were constructed on the basis that titleholders will explore for and then process their own petroleum. The Petroleum Acts do not contemplate that titleholders may seek to utilise third parties (and their infrastructure) to process their petroleum (referred to as the 'tolling' of petroleum). As resource availability in Western Australia shifts, additional capacity to process petroleum on existing petroleum infrastructure has become available. It makes sense from an economic perspective to utilise existing third party petroleum infrastructure to process petroleum rather than constructing new infrastructure which is both cost and time intensive, and would result in further impact to the environment. Currently, the PGERA and PSLA calculate royalty at the wellhead in relation to petroleum recovered in the licence area (e.g. production licences), which is not conducive to permitting the third party tolling of petroleum.

In order to allow the tolling of petroleum, the Petroleum Acts are being amended to allow the placement of meters on third party infrastructure to assist in the calculation of petroleum and royalty (definition of pipeline – section 4 PPA, section 12 PPA and section 97C PSLA). This Bill does not contain any amendments to the rate of applicable royalty nor the calculation of royalty; instead the amendments are limited to allowing meters to be installed on third party infrastructure to assist in the calculation of royalty.

Government of Western Australia

**Department of Mines, Industry Regulation  
and Safety**

8.30am – 4.30pm

Mineral House, 100 Plain Street  
East Perth, Western Australia 6004  
Tel: +61 8 9222 3333  
Fax: +61 8 9222 3862

**Online**

Website: [www.dmirs.wa.gov.au](http://www.dmirs.wa.gov.au)  
Email: [REC.Consultation@dmirs.wa.gov.au](mailto:REC.Consultation@dmirs.wa.gov.au)

**Mailing address**

Locked Bag 100  
East Perth WA 6892

National Relay Service: 13 36 77  
Translating and Interpreting Service (TIS) 13 14 50  
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