#

Proposal for Work Health and Safety (Petroleum and Geothermal Energy Operations) Regulations for Western Australia

for public consultation

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# Introduction

The Department of Mines, Industry Regulation and Safety (DMIRS) is providing this consultation package to stakeholders on the development of the Work Health and Safety (Petroleum and Geothermal Energy Operations) Regulations [WHS (PAGEO) R].

# Background

The Ministerial Advisory Panel on work health and safety reform recommended harmonising occupational safety and health into a single Act. This includes the removal of occupational safety and health from the [*Petroleum and Geothermal Energy Resources Act 1967*](https://www.legislation.wa.gov.au/legislation/statutes.nsf/law_a596.html), [*Petroleum (Submerged Lands) Act 1982*](https://www.legislation.wa.gov.au/legislation/statutes.nsf/law_a602.html) and [*Petroleum Pipelines Act 1969*](https://www.legislation.wa.gov.au/legislation/statutes.nsf/law_a597.html). The occupational safety and health provisions currently covered by these Acts will be covered under the harmonised WHS Act. However, these three acts will not be repealed, as they provide for, among other things, titles and royalties.

The following sets of regulations will consequently be removed from the three petroleum Acts:

* [Petroleum and Geothermal Energy (Management of Safety) Regulations 2010](https://www.legislation.wa.gov.au/legislation/statutes.nsf/law_s40757.html)
* [Petroleum and Geothermal Energy (Occupational Safety and Health) Regulations 2010](https://www.legislation.wa.gov.au/legislation/statutes.nsf/law_s40756.html)
* [Petroleum (Submerged Lands)(Management of Safety on Offshore Facilities) Regulations 2007](https://www.legislation.wa.gov.au/legislation/statutes.nsf/law_s38339.html)
* [Petroleum (Submerged Lands)(Pipelines) Regulations 2007](https://www.legislation.wa.gov.au/legislation/statutes.nsf/law_s38305.html)
* [Petroleum (Submerged Lands)(Diving Safety) Regulations 2007](https://www.legislation.wa.gov.au/legislation/statutes.nsf/law_s38293.html)
* [Petroleum (Submerged Lands)(Occupational Safety and Health) Regulations 2007](https://www.legislation.wa.gov.au/legislation/statutes.nsf/law_s38371.html)
* [Petroleum Pipelines (Management of Safety of Pipeline Operations) Regulations 2010](https://www.legislation.wa.gov.au/legislation/statutes.nsf/law_s39452.html)
* [Petroleum Pipelines (Occupational Safety and Health) Regulations 2010](https://www.legislation.wa.gov.au/legislation/statutes.nsf/law_s39453.html)

Note that there is no intention to include the regulation of major hazard facilities in the Work Health and Safety legislation. Regulation of major hazard facilities will remain under the *Dangerous Goods Safety Act 2004.*

**Proposal for the development of the WHS (PAGEO) Regulations**

The proposal is to develop the WHS (PAGEO) R as a single set of regulations to replace the existing eight sets of regulations. Most of the WHS Regulations that apply to general industry will not apply where the WHS (PAGEO) R apply.

To avoid unnecessary duplication, it is anticipated that the following Parts of the WHS Regulations will apply to Petroleum Operations:

* Chapter 2 Representation and Participation – Parts 2.1, 2.2, 2.3, 2.4, which provide for workplace consultation, Health and Safety Representatives, and Safety Committees
* Chapter 3 General Risk and Workplace Management – Part 3.1
* Chapter 11 Miscellaneous – Part 11.3, which provides for the clarification of miscellaneous matters.
* Schedule 10 Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals. This Schedule will replace the provisions in the current three sets of Occupational Safety and Health Regulations related to petroleum and geothermal energy operations, which are linked to Codes of Practice by the National Occupational Health and Safety Commission.

Other than the Parts listed above, it is proposed that the remainder of the WHS Regulations will be disapplied from Petroleum and Geothermal Energy Operations. This arrangement is shown in the diagram below:



The existing petroleum safety regulations are largely outcome-based through a Safety Case, or equivalent, process. Note that each set of the existing regulations has differing requirements. The proposed WHS (PAGEO) Regulations creates a single Safety Case process for all petroleum and geothermal operations within the defined jurisdiction. Petroleum diving is the exception, which will maintain the existing Diving Safety Management System.

General arrangements for the submission and acceptance of safety cases and the review of decisions about them will reside in the WHS (PAGEO) Regulations, just as they do in the current regulations. Provisions for powers of inspectors, including entry and improvement and prohibition notices, and rights of entry, will reside in the Act. Hence, they are not considered in this discussion document.

# Scope of activities included and excluded under the proposed regulations

## Activities included

A petroleum operation is an activity carried out at or near an area in respect of which a *petroleum title* is in force, or in the *adjacent area*, for the purpose of any of the following:

1. exploring for petroleum
2. drilling or servicing a well for petroleum
3. extracting or recovering petroleum
4. injecting petroleum into a natural underground reservoir
5. processing petroleum
6. offloading of petroleum
7. the piped conveyance of petroleum

A geothermal energy operation is an activity carried out at or near an area in respect of which a geothermal energy title is in force for the purpose of any of the following:

(a) exploring for geothermal energy

(b) drilling or servicing a well for geothermal energy

(c) recovering geothermal energy

The above operations include the following activities:

(a) planning, designing, preparing or constructing

(b) commissioning, operating or maintaining

(c) decommissioning, abandoning or removing any fixture, fitting, plant or structure

(d) administrative and other support functions

(e) care, upkeep, or security

(f) constructing, commissioning, operating or maintaining accommodation premises

## Activities excluded

Certain activities will be explicitly excluded from being petroleum and geothermal energy operations. This approach is similar to that taken by the Commonwealth Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009. The intention, broadly speaking, is to exclude those activities that do not involve a hydrocarbon hazard or that would not affect the integrity of a petroleum or geothermal energy facility. Those activities will include:

* Operating a vessel supporting a remotely operated vehicle or diving operation that is being used for:
	+ inspecting,
	+ cleaning,
	+ non-disturbing span rectification (for example grout bagging) on,
	+ operating a valve on,
	+ recovering debris from,
	+ valve control unit change out on, or
	+ the removal of weight coating from a pipe prior to hydrostatic pressure testing of a petroleum facility.
* Operating a vessel that is used for:
	+ the off-take and bulk transportation of petroleum,
	+ towing or locating other vessels,
	+ handling anchors,
	+ supplying and transporting goods or people to a petroleum or accommodation facility, or
* Onshore and offshore acoustic or seismic survey

Additionally, activities carried out at a major hazard facility will be excluded from being petroleum and geothermal energy operations.

# The safety case approach to safety regulation

The Safety Case approach to safety regulation was introduced to the petroleum industry as a response to the 1990 Cullen Report into the 1988 Piper Alpha disaster. The Safety Case regime of legislation was applied to the offshore oil and gas industry in the Australian Commonwealth jurisdiction in 1996 and was soon adopted by all of the States and Territories.

The legislative regime enabling the Safety Case approach has been continually reviewed and improved, but the basic approach has remained consistent. This consistency has enabled the industry and the workforce to become knowledgeable in the application of the basic principles.

#### A Safety Case is a document produced by the operator of a petroleum or geothermal energy operation that:

* Identifies the hazards and risks
* Describes how the risks are controlled
* Describes the safety management system in place to ensure the controls are effectively and consistently applied.

#### The Safety Case must be produced by the operator of a petroleum or geothermal energy operation

The principle here is that those who create the risk must manage it. It is the operator’s job to assess their processes, procedures, and systems in order to identify and evaluate risks and implement the appropriate controls, because the operator has the greatest in-depth knowledge of their operation.

#### The Safety Case must identify the safety-critical aspects of the petroleum or geothermal energy operation, both technical and managerial

Analysis of disasters almost always shows a combination of technical and managerial flaws that led to the event occurring.

#### Appropriate performance standards must be defined for the operation of the safety-critical aspects of the petroleum or geothermal energy operation

A 'performance standard' is a standard, established by the operator, of the performance required of a system, item of equipment, person or procedure which is used as a basis for managing the risk of a major accident event.

#### Independent validation is required

Acceptance of the Safety Case by the Chief Inspector Petroleum Safety is dependent on an engineering validation by an independent competent person or organisation. The validation verifies that the design, including the performance standards, is consistent with the formal safety assessment and is appropriate for the petroleum or geothermal energy operation.

#### The workforce must be involved

Workforce involvement is necessary so that they know what happens in practice and why. This makes it more likely that they do the right thing because they know why, rather than relying on a 'rules-based' culture.

#### The Safety Case is produced in the knowledge that it will be scrutinised by a competent and independent regulator

The Chief Inspector Petroleum Safety (CIPS) assesses Safety Cases and 'accepts' a Safety Case if the CIPS is satisfied that the arrangements set out in the document demonstrate that the risks will be reduced to as low as is reasonably practicable (ALARP).

#### The Operator must comply with the Safety Case

Following acceptance of the Safety Case, the Operator must comply with it. The regulatory authority will conduct inspections in relation to petroleum and geothermal energy operations to monitor the Operator's application of the Safety Cases in practice.

# Changes to safety case arrangements from the existing three sets of petroleum regulations

* One Safety Case under the WHS (PAGEO) Regulations will replace the existing requirements for Facility Safety Cases, Pipeline Management Plans, Pipeline Safety Cases, and Safety Management Systems.
* The requirements for contents of the Safety Case will vary from the requirements under the Commonwealth Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009. Under the WHS (PAGEO) Regulations, the Safety Case will consist of a Design description, a Safety Management System description, a Formal Safety Assessment description, and an Emergency Response Plan description.
* There will be the ability for the Chief Inspector Petroleum Safety (CIPS) to suspend a Safety Case, at the request of the Operator. This is not an enforcement action for the CIPS. It is a mechanism by which the Operator does not incur the safety levy while the operation is suspended, such as when a drilling rig is not in the adjacent area.
* An optional Design Case as an early engagement tool will be introduced. If the operator chooses to, the submission of a Design Case would occur at the Front End Engineering Design stage. The Design Case summarises the design intent, safety and reliability objectives, engineering processes and design life of the planned facility.

# Summary of key changes

With the adoption of a single WHS Act, the following key changes should be noted:

#### Registered Operators and Duties

All petroleum and geothermal energy facilities will be required to have a registered Operator. The Operator will have to be registered with the regulatory authority. In order to be registered, the Operator will have to demonstrate that they will have day-to-day management and control over the operation. Most of the duties are placed on the registered Operator. The Operator could conceivably be a *natural person* (that is, an individual with a name); but since the Operator must prove that they have day-to-day management and control over the operation, it is more likely that the Operator would be a *body corporate*. If that were the case, the Operator would have to be a specific corporate entity with a specific ACN, rather than an informal affiliation of companies.

If a Registered Operator were to cease to exist – for example, become insolvent – the operation will have to cease until a new Operator who has day-to-day management and control is registered.

#### Duties to the Public, not just to the workforce

Duties relating to all types of operations will now include duties regarding health and safety of the public, not just that of the workforce and other protected people.

#### Consolidation of three sets of safety regulations

The WHS (PAGEO) Regulations will cover the safety and health aspects of activities that are currently performed under the *Petroleum (Submerged Lands) Act 1982*, the *Petroleum and Geothermal Energy Act 1967* and the *Petroleum Pipelines Act 1969*. The basis for inclusion in each of the current three sets of regulations is different: the PAGERA applies to “operations” (activities); the PPA applies to pipeline operations in “licence areas” (places); and the P(SL)A applies to “facilities” (things). The proposed WHS (PAGEO) Regulations will apply to “petroleum and geothermal energy operations.”

#### Introduction of the Design Case

A Design Case will permit the operator, at their request, to engage formally with the regulatory authority early in the design of new facilities. The primary aim of the Design Case is to encourage formal dialogue between the operator and regulator. Providing for the Design Case in the regulations will recognise explicitly a process that has existed informally for some time

If an Operator chooses to submit a Design Case, the Chief Inspector Petroleum Safety will respond with comments on the Design Case, rather than accepting or rejecting it. A target time frame for the CIPS to respond to the submission of a Design Case would likely be 90 days. The response will provide the Operator with any areas of concern about the proposal and items to consider regarding process safety.

#### Application of the Dangerous Goods (Storage and Handling of Non-explosives) Regulations 2007 to petroleum pipelines

Currently petroleum and geothermal energy operations under the PAGERA and facilities under the P(SL)A can be classed as Dangerous Goods sites, and the [*Dangerous Goods Safety Act 2004*](https://www.legislation.wa.gov.au/legislation/statutes.nsf/law_a7019.html) (DGSA) applies to them. However, the DGSA is currently dis-applied to pipeline operations under the PPA and pipelines under the P(SL)A. Regulations 68, 69, 70, 71, 72, 73, 76B, 77, 78 and 79 of the [Dangerous Goods (Storage and Handling of Non-explosives) Regulations 2007](https://www.legislation.wa.gov.au/legislation/statutes.nsf/law_s37950.html) will be specifically applied by the WHS (PAGEO) Regulations to all petroleum and geothermal energy operations, including pipeline operations. These sections of the DGSA require the operator to have appropriate information and equipment in place to assist in the event of an emergency. This includes placarding, accessible manifests, fire-fighting equipment and an Emergency Response Guide submitted to DFES.

#### Statutory position – Chief Inspector Petroleum Safety (CIPS)

In the current three sets of safety regulations, decisions are made by either the Minister or the Director of the Petroleum Safety Brach. Under the WHS (PAGEO) Regulations these decisions will be vested in the Chief Inspector Petroleum Safety (CIPS).

The Chief Inspector Petroleum Safety will primarily be responsible for the acceptance of Safety Cases, responding to Design Case submissions, the acceptance of operator nominations, the assessment of dispensation applications, and the review of improvement and prohibition notices.

#### Existing Acts

Some of the key definitions relating to the petroleum operations will remain in the existing three Petroleum Acts, which will reduce jurisdictional inconsistencies. The definition of a petroleum or geothermal energy operation will make reference to a title or the adjacent area. For this reason it will be necessary to refer to the three petroleum Acts, which will remain in effect even though the safety aspects of them will be repealed.

#### Accommodation

Duties related to the health and safety of people using accommodation supplied for the purpose of the petroleum or geothermal energy operation will be included. This will not apply to accommodation camps that are off the licence area, for example, hotels in towns.

#### Periodic reporting and incidents

Periodic reporting will be required quarterly (not monthly, as is the current case) and will be expanded to include process lead/lag indicators. The current reporting requirements on accident frequency rates will remain.

Likely examples of lead indicators to be included in the periodic reports are: deviations from the required performance of Safety Critical Elements (SCE), open Management of Change on SCEs, demand on SCEs, and failure of a SCE on test.

Notifiable incidents will be defined under the Act, so there will be consistency across industries. However, the WHS (PAGEO) Regulations will define additional industry-specific notifiable incidents in addition to the requirements of the Act.

Likely examples of industry-specific incidents to be added are: failure of a Safety Critical Element (SCE) on demand, failure of an SCE to danger, significant damage to primary containment, and a “kick” in a well during drilling.

#### “At or Near”

The concept of “At or Near,” which already applies to the P(SL)A, will be extended to cover all petroleum and geothermal energy operations. “At” simply means at the site where the petroleum or geothermal energy operation is taking place. “Near” cannot be defined as a specific distance, but rather should be considered to be sufficiently near that the petroleum or geothermal energy operation could have a credible physical impact on a person or thing.

For example, a person standing on the boundary of the pipeline licence of a high-pressure gas pipeline is certainly “at” the petroleum operation. A person standing 200m away from the pipeline may feel a dangerous level of radiant heat if the pipeline were to rupture and explode; that would be “near.” A person standing 600m away from a larger, higher-pressure gas pipeline may feel the same level of radiant heat, so that distance would be “near.”

An anchor-handling tug that is moving anchors for an offshore semi-sub drilling rig may be a kilometre away from the rig, connected to the semi-sub by the anchor chain. The tension on the chain is influenced by the rig and it certainly has an impact on the tug. The tension on the chain may even cause the tug to capsize. In this respect, the anchor-handling tug would be considered to be “near” the semi-sub drilling rig, although the anchor-handling tug would not itself be a petroleum facility.

#### Transitional provisions

There will be transitional provisions, either in the Act or in the WHS (PAGEO) Regulations. Safety Cases that had already been submitted when the WHS (PAGEO) Regulations come into place will be assessed under the old regulations.

# Description of the proposed regulations by topic

The following table has been prepared to discuss the proposed WHS (PAGEO) Regulations. It contains, for each topic:

* A brief description of the existing legislative requirements, organised by set of Regulations
* A summary of what was proposed in 2015/16 with the WHS (R&MH) Regulations for that topic.
* The current proposal for each topic
* Comments where necessary

## Key changes: Dangerous Goods Safety (Major Hazard Facilities) Regulations 2007

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Topic** | **DGS (MHF) R 2007** | **2015 Draft WHS (R&MH) Bill / Regulations** | **WHS (PAGEO) Regulation Concept** | **Comment** |
| ****General**** |
| **Scope of the WHS (PAGEO) regulations** | **Regulation of MHFs is currently covered under the DGSA** | **MHF regulations removed from the DGSA and covered under the WHS (R&MH) regulations** | **MHF regulations to remain under the DGSA.** | **Recommendation from the Ministerial Advisory Panel** |

## Key changes: Petroleum (Submerged Lands) (Management of Safety on Offshore Facilities) Regulations 2007

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Topic** | **P (SL) (MoSoOF) R 2007** | **2015 Draft WHS (R&MH) Bill / Regulations** | **WHS (PAGEO) Regulation Concept** | **Comment** |
| **General**  |
| **Scope of the WHS (PAGEO) regulations** | **P (SL) (MoSoOF) regulations apply to facilities as defined in the Act.** | **WHS (R&MH) regulations apply to petroleum operations defined in the Act.****Scope to remain consistent with the existing facilities definitions.****List of operations not covered to align with OPGGSA list of facilities included in the regulations.** | **WHS (PAGEO) regulations apply to petroleum operations defined in the regulations.****Consistent approach to that provided in the WHS (R&MH) Bill / Regulations.** | **The Duties under the WHS Act will apply equally to general industry and the petroleum industry.****The defined petroleum operations will also include on and offshore petroleum pipelines, petroleum operations and petroleum drilling, but will exclude seismic.** |
| **Chief Inspector of Petroleum Safety (CIPS)** | **Acceptance of Safety Case and operator nomination made by a Delegate of the Minister** | **Acceptance of Safety Case and operator nomination made by the Resources Safety Commissioner (Regulator), with capacity to delegate** | **Acceptance of Safety Case and operator nomination made by the Chief Inspector Petroleum Safety (CIPS)** |  |
| **Operator** | **Specific duties for Operators included in the Act** | **Specific duties for Operators included in the Act** | **Specific duties for Operators included in the Regulations** | Primary duty of care in the WHS Act will apply to the operator as a PCBU |
| **Person in Charge** | **Operator’s representative requirements defined in the Act** | Site Senior Executive (SSE) appointedNormally attended facilities must have a Site Senior Executive present at all times | Operator’s representative requirements to align with the existing requirements under the P(SL)ADefined in the Regulations |  |
| **Incidents** | **Accidents and Dangerous Occurrences defined in the Regulations.** | **Notifiable incidents defined in the Act based on the model WHS Act.****Additional dangerous incidents defined in the regulations to include dangerous incidents defined in the P (SL) (MoSoOF) Regulations.****Inclusion of the failure of a Safety Critical Element to meet its performance standard on demand** | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations.** |  |
| **Reporting** | **Each month, the operator must submit a written report stating the number of deaths and injuries, hours worked and days not worked due to injury** | Each quarter, the operator must report to the regulator on the status of injured employees, hours worked, number of workers and process lead/lag indicators | Each quarter, the operator must report to the regulator on the number of deaths, status of injured employees, hours worked, number of workers and process lead/lag indicators | This data will be used to track industry performance.Reduced reporting frequency to ease administrative burden. |
| **Safety Case**  |
| **Suspension of the Safety Case**  | There is currently no ability to suspend a safety case | The regulator may suspend a safety case at the operator’s request or where no operation is taking place  | The CIPS may suspend a safety case at the operator’s request or where no operation is taking place | **This will simplify the resumption of a safety case** |
| **Major Accident Event** | A major accident event (MAE) is an event that has the potential to cause multiple fatalities to persons engaged in the operation and other protected persons.  | An MAE is an event that has the potential to cause multiple fatalities to workers and other persons.  | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations.** | The definition of MAE will be expanded to cover the general public and not be limited to workersThe MAE definition will apply to all types of petroleum operation. |
| **Design Case** | Early engagement process is informal  | Formal early engagement through a design case includes a description of the design intent, safety and reliability objectives and engineering policies and procedures.  | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations.** | The design case will apply to new facilities and permits early engagement. It will describe the design intent and design process before the detailed design to allow for regulatory certainty.  |
| **Content of the Safety Case** | The safety case must contain: * a facility description;
* a description of a formal safety assessment (FSA);
* a description of a safety management system (SMS) and emergency procedures.
 | The safety case must describe the: * Design Basis (DB) (similar to the facility description with a high focus on the design);
* Formal Safety Assessment (FSA)
* Safety Management System (SMS);
* Emergency Response Plan (ERP).
 | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations.** | This provides consistency across the different types of facilities and permits one safety case to cover multiple operations  |

## Key changes: Petroleum (Submerged Lands) (Pipelines) Regulations 2007

| **Topic** | **P (SL) (P) R 2007** | **2015 Draft WHS (R&MH) Bill / Regulations** | **WHS (PAGEO) Regulation Concept** | **Comment** |
| --- | --- | --- | --- | --- |
| **General**  |
| **Scope of the WHS (PAGEO) regulations** | **P (SL) (P) R applies to pipelines as defined in the Act.** | **WHS (R&MH) regulations apply to petroleum operations as defined in the Act.****This includes the operations of a pipeline licensed under the P(SL)A** | **WHS (PAGEO) regulations apply to petroleum operations as defined in the Regulations.****Consistent approach to that provided in the WHS (R&MH) Bill / Regulations.** | **The Duties under the WHS Act will apply equally to general industry and the petroleum industry.****The defined petroleum operations will also include on and offshore petroleum facilities, petroleum operations and petroleum drilling but will exclude seismic.** |
| **Chief Inspector of Petroleum Safety (CIPS)** | **Acceptance of Pipeline Management Plan and operator nomination made by a Delegate of the Minister** | **Acceptance of Safety Case and operator nomination made by the Resources Safety Commissioner (Regulator), with capacity to delegate** | **Acceptance of Safety Case and operator nomination made by the Chief Inspector Petroleum Safety (CIPS)** |  |
| **Operator** | **Specific duties for Operators included in the Act** | **Specific duties for Operators included in the Act** | **Specific duties for Operators included in the Regulations** | Primary duty of care in the WHS Act will apply to the operator as a PCBU |
| **Incidents** | **Accidents and Dangerous Occurrences defined in the Regulations.** | Notifiable incidents defined in the Act based on the model WHS Act.Additional dangerous incidents defined in the regulations to include dangerous incidents defined in the P (SL) (P) Regulations.Inclusion of the failure of a Safety Critical Element to meet its performance standard on demand | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** |  |
| **Reporting** | **Each month, the operator must submit a written report stating the number of deaths and injuries, hours worked and days not worked due to injury** | Each quarter, the operator must report to the regulator on the status of injured employees, hours worked, number of workers and process lead/lag indicators | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations, including number of deaths.** | This data will be used to track industry performance.Reduced reporting frequency to ease administrative burden. |
| **Consent to Construct** | **Before the construction or operation of a subsea pipeline, the Minister must provide consent.** **The pipeline licensee must construct, operate, modify and decommission the pipeline in accordance with the pipeline management plan (PMP).**  | **The proposed WHS (R&MH) regulations will not require consent to construct or operate.** **The operator will be required to operate under a safety case.** | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** |  |
| **Reporting** | **The pipeline licensee must provide an annual report** | No requirement to provide an annual report | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** |  |
| ****Pipeline Management Plan****  |
| **Safety Case** | A pipeline management plan (PMP) is required to operate a licenced pipeline | **A safety case is required to perform a petroleum operation.** | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** |  |
| **Assessment period** | Within 28 days, the Minister must make a decision on the acceptance or rejection of the pipeline management plan.  | The regulator must make a decision on the acceptance or rejection of: * a new safety case within 90 days
* a revised safety case within 30 days.
 | The CIPS must make a decision on the acceptance or rejection of: * a new safety case within 90 days
* a revised safety case within 30 days.
 | **This timeframe is consistent with Safety Cases for all types of petroleum operation** |
| **Suspension of the Pipeline Management Plan**  | There is currently no ability to suspend a pipeline management plan | The regulator may suspend a safety case at the operator’s request or where no operation is taking place  | The CIPS may suspend a safety case at the operator’s request or where no operation is taking place  | **This will simplify the resumption of a safety case** |
| **Significant Pipeline Accident Event** | A **Significant Pipeline Accident Event** (SPAE) is connected with work carried out in relation to a pipeline and causes a significant risk of causing death. | An MAE is an event that has the potential to cause multiple fatalities to workers and other persons.  | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | The definition of MAE will be expanded to cover the general public.The MAE definition will apply to all types of petroleum operation. |
| **Design Case** | Early engagement process is informal  | Formal early engagement through a design case includes a description of the design intent, safety and reliability objectives and engineering policies and procedures.  | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | The design case will apply to new facilities and permits early engagement. It will describe the design intent and design process before the detailed design to allow for regulatory certainty.  |
| **Content of the Pipeline Management Plan** | The PMP must include a comprehensive description of the pipeline, the pipeline management system (PMS), statement of standards, document management and reporting. The description of the pipeline must describe the design, route, petroleum composition and safe operating limits. The PMS must describe the assessment of the risk of significant pipeline accident events (SPAEs) and other risks to the pipeline integrity. Revision of the PMP is required due to a change in the petroleum composition or a change in environmental conditions  | The safety case must describe the: * Design Basis (DB) (similar to the facility description with a high focus on the design);
* Formal Safety Assessment (FSA)
* Safety Management System (SMS);
* Emergency Response Plan (ERP).
 | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | This provides consistency across the different types of facilities and permits one safety case to cover multiple operations  |
| **Miscellaneous** |
| **Interaction with the P(SL)A1982** | **Safety Regulations fall all under the P(SL)A** | The definition of a petroleum operation references a petroleum title under the P(SL)A. | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | The existing title provisions and titles will remain in force under the P(SL)A. Only the OSH provisions in the P(SL)A will be affected by the introduction of the WHS Bill. |
| **Interaction with the DGSA 2004** | **The DGSA is dis-applied to a pipeline licenced under the P(SL)A** | **Regulations 68, 69, 70, 71, 72, 73, 76B, 77, 78 and 79 of the Dangerous Goods (Storage and Handling of Non-explosives) Regulations 2007 will apply to petroleum operations** | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | This will create consistent requirements for emergency response agencies regardless of the primary safety legislation |
| **Exemptions** | No ability to exempt provisions.  | The regulator may provide consent for the operator to carry out an operation in a manner different from the safety case  | The CIPS may provide consent for the operator to carry out an operation in a manner different from the safety case  | Permits the regulator to exempt certain provisions.  |

## Key changes: Petroleum (Submerged Lands) (Diving Safety) Regulations 2007

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| **Topic** | **P (SL) (DS) R 2007** | **2015 Draft WHS (R&MH) Bill / Regulations** | **WHS (PAGEO) Regulation Concept** | **Comment** |
| **General**  |
| **General** | **Petroleum diving operations covered with a separate set of regulations** | **Petroleum diving operations have an separate division within the petroleum safety regulations to cover diving safety** | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | **No significant changes** |

## Key changes: Petroleum (Submerged Lands) (Occupational Safety and Health) Regulations 2007

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| --- | --- | --- | --- | --- |
| **Topic** | **P (SL) (OSH) R 2007** | **2015 Draft WHS (R&MH) Bill / Regulations** | **WHS (PAGEO) Regulation Concept** | **Comment** |
| **General**  |
| **General Occupational Safety and Health**  | The existing regulations prescribe controls in relation to; drugs and intoxicants, fatigue, and noise.  | These aspects will be covered under the safety case. | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | The safety case replaces the prescriptive controls and permits risk-based safety management. |
| **Prohibited and Restricted Substances** | List of hazardous substances provided in Schedule 2 | The list of hazardous substances to be retained. | The list of hazardous substances to be replaced with the list in Schedule 10 of the model WHS Regulations | The intent is to provide consistency with the general industry on prohibited and restricted substances |

## Key changes: Petroleum and Geothermal Energy (Management of Safety) Regulations 2010

| **Topic** | **PAGE (MoS) R 2010** | **2015 Draft WHS (R&MH) Bill / Regulations** | **WHS (PAGEO) Regulation Concept** | **Comment** |
| --- | --- | --- | --- | --- |
| **General**  |
| **Scope of the WHS (PAGEO) regulations** | **PaGE (MoS) regulations apply to petroleum operations as defined in the Act.** | **WHS (R&MH) regulations apply to petroleum operations defined in the Act.****Scope to remain consistent with the existing definitions.** | **WHS (PAGEO) regulations apply to petroleum operations defined in the regulations.****Scope to remain consistent with the existing definitions.** | **The Duties under the WHS Act will apply equally to general industry and the petroleum industry.****The defined petroleum operations will also include on and offshore petroleum pipelines, offshore petroleum operations and petroleum drilling but will exclude seismic.** |
| **Chief Inspector of Petroleum Safety (CIPS)** | **Acceptance of Safety Case and operator nomination made by a Delegate of the Minister** | **Acceptance of Safety Case and operator nomination made by the Resources Safety Commissioner (Regulator), with capacity to delegate** | **Acceptance of Safety Case and operator nomination made by the Chief Inspector Petroleum Safety (CIPS)** |  |
| **Operator** | **Specific duties for Operators included in the Act** | **Specific duties for Operators included in the Act** | **Specific duties for Operators included in the Regulations** | Primary duty of care in the WHS Act will apply to the operator as a PCBU |
| **Operator** | The operator is the registered holder of the title under the PAGER  | The operator will be required to be registered with the Department.There is no requirement for the operator to be the title holder | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | The registered facility operator will have overall control of the operation and be responsible for the development and submission of the safety case.  |
| **Person in Charge** | **Operator’s representative requirements defined in the Act** | Site Senior Executive (SSE) appointedNormally attended facilities must have a Site Senior Executive present at all times | Operator’s representative requirements to align with the existing requirements under the PAGERADefined in the Regulations |  |
| **Incidents** | **Accidents and Dangerous Occurrences defined in the Regulations.** | Notifiable incidents defined in the Act based on the model WHS Act.Additional dangerous incidents defined in the regulations to include dangerous incidents defined in the P (SL) (MoSoOF) Regulations.Inclusion of the failure of a Safety Critical Element to meet its performance standard on demand | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** |  |
| **Reporting** | **Each month, the operator must submit a written report stating the number of deaths and injuries, hours worked and days not worked due to injury** | Each quarter, the operator must report to the regulator on the status of injured employees, hours worked, number of workers and process lead/lag indicators | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations, including number of deaths.** | This data will be used to track industry performance.Reduced reporting frequency to ease administrative burden. |
| ****Safety Case****  |
| **Safety Management System** | **A safety management system (SMS) is required to perform a petroleum operation.**  | **A safety case is required to perform a petroleum operation.**  | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** |  |
| **Suspension of the Safety Case**  | There is currently no ability to suspend a safety case | The regulator may suspend a safety case at the operator’s request or where no operation is taking place  | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | **This will simplify the resumption of a safety case** |
| **Major Accident Event** | A major accident event (MAE) is an event that has the potential to cause multiple fatalities to persons engaged in the operation and other protected persons.  | An MAE is an event that has the potential to cause multiple fatalities to workers and other persons.  | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | The definition of MAE will be expanded to cover the general public and not be limited to workersThe MAE definition will apply to all types of petroleum operation. |
| **Design Case** | Early engagement process is informal  | Formal early engagement through a design case includes a description of the design intent, safety and reliability objectives and engineering policies and procedures.  | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | The design case will apply to new facilities and permits early engagement. It will describe the design intent and design process before the detailed design to allow for regulatory certainty.  |
| **Content of the Safety Case** | The SMS for the operation must provide a description of the operation, a risk assessment and ongoing management of safety.  | The safety case must describe the: * Design Basis (DB) (similar to the facility description with a high focus on the design);
* Formal Safety Assessment (FSA)
* Safety Management System (SMS);
* Emergency Response Plan (ERP).
 | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | This provides consistency across the different types of facilities and permits one safety case to cover multiple operations  |
|  | The SMS must describe how the operator will ensure that certain operations are carried out during daylight hours. Inspections are carried out, at least 75 m from railways, at least 3 km from a mine and with a suitable penetration rate recorder.  | These prescriptive provisions will be removed  | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | These controls are covered under the safety case.  |
|  | The SMS must describe how the operator will ensure that the well is equipped with a blowout preventer.  | These prescriptive provisions will be removed  | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | These controls are covered under the safety case.  |
| ****Miscellaneous**** |
| **Interaction with the PAGERA 1967** | **Safety Regulations fall all under the PAGERA** | The definition of a petroleum operation references a petroleum title under the PAGERA | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | The existing title provisions and titles will remain in force under the PAGERA. Only the OSH provisions in the PAGERA will be affected by the introduction of the WHS Bill. |

## Key changes: Petroleum and Geothermal Energy (Occupational Safety and Health) Regulations 2010

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| **Topic** | **PAGE (OSH) R 2010** | **2015 Draft WHS (R&MH) Bill / Regulations** | **WHS (PAGEO) Regulation Concept** | **Comment** |
| ****General****  |
| **General Occupational Safety and Health**  | The existing regulations prescribe controls in relation to; drugs and intoxicants, fatigue, and noise.  | These aspects will be covered under the safety case. | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | The safety case replaces the prescriptive controls and permits risk-based safety management. |
| **Prohibited and Restricted Substances** | List of hazardous substances provided in Schedule 2 | The list of hazardous substances to be retained. | The list of hazardous substances to be replaced with the list in Schedule 10 of the model WHS Regulations | The intent is to provide consistency with the general industry on prohibited and restricted substances |

## Key changes: Petroleum Pipelines (Management of Safety of Pipeline Operations) Regulations 2010

| **Topic** | **PP (MoSoPO) R 2010** | **2015 Draft WHS (R&MH) Bill / Regulations** | **WHS (PAGEO) Regulation Concept** | **Comment** |
| --- | --- | --- | --- | --- |
| ****General****  |
| **Scope of the WHS (PAGEO) regulations** | **PP (MoSoPO) regulations apply to the pipeline licence area as defined in the Act.** | **WHS (R&MH) regulations apply to petroleum operations defined in the Act.****This includes the operation of a pipeline licenced under the PPA.** | **WHS (PAGEO) regulations apply to petroleum operations defined in the regulations.****This includes the operation of a pipeline licenced under the PPA.** | **The Duties under the WHS Act will apply equally to general industry and the pipeline industry.****The defined petroleum operations will also include offshore petroleum pipelines, on and offshore petroleum operations, and petroleum drilling, but will exclude seismic.** |
| **Chief Inspector of Petroleum Safety (CIPS)** | **Acceptance of Safety Case made by a Delegate of the Minister** | **Acceptance of Safety Case and operator nomination made by the Resources Safety Commissioner (Regulator), with capacity to delegate** | **Acceptance of Safety Case and operator nomination made by the Chief Inspector Petroleum Safety (CIPS)** |  |
| **Operator** | The licensee is the registered holder of the pipeline licence under the PPA  | **The operator will be required to be registered with the Department.****There is no requirement for the operator to be the licensee.** | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | The registered facility operator will have overall control of the operation and be responsible for the development and submission of the safety case.  |
| **Operator** | **Specific duties for Licensees included in the Act** | **Specific duties for Operators included in the Act** | **Specific duties for Operators included in the Regulations** | Primary duty of care in the WHS Act will apply to the operator as a PCBU |
| **Person in Charge** | **Licensee’s representative requirements defined in the Act** | Site Senior Executive (SSE) appointedNormally attended facilities must have a Site Senior Executive present at all times | Operator’s representative requirements to align with the existing Licensee’s representative requirements under the PPADefined in the Regulations |  |
| **Incidents** | **Accidents and Dangerous Occurrences defined in the Regulations.** | Notifiable incidents defined in the Act based on the model WHS Act.Additional dangerous incidents defined in the regulations to include dangerous incidents defined in the PP (MoSoPO) Regulations.Inclusion of the failure of a Safety Critical Element to meet its performance standard on demand | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** |  |
| **Reporting** | **Each month, the licensee must submit a written report stating the number of deaths and injuries, hours worked and days not worked due to injury** | Each quarter, the operator must report to the regulator on the status of injured employees, hours worked, number of workers and process lead/lag indicators | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations, including number of deaths.** | This data will be used to track industry performance.Reduced reporting frequency to ease administrative burden. |
| ****Safety Case****  |
| **Suspension of the Safety Case**  | There is currently no ability to suspend a safety case | The regulator may suspend a safety case at the operator’s request or where no operation is taking place  | The CIPS may suspend a safety case at the operator’s request or where no operation is taking place  | **This will simplify the resumption of a safety case** |
| **Major Accident Event** | A major accident event (MAE) is an event that has the potential to cause multiple fatalities to persons engaged in the pipeline operation and other protected persons.  | An MAE is an event that has the potential to cause multiple fatalities to workers and other persons.  | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | The definition of MAE will be expanded to cover the general public and not be limited to workersThe MAE definition will apply to all types of petroleum operation. |
| **Design Case** | Early engagement process is informal  | Formal early engagement through a design case includes a description of the design intent, safety and reliability objectives and engineering policies and procedures.  | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | The design case will apply to new facilities and permits early engagement. It will describe the design intent and process before the detailed design to provide certainty.  |
| **Content of the Safety Case** | The safety case must contain: * a facility description;
* a description of a formal safety assessment (FSA);
* a description of a safety management system (SMS) and emergency procedures.
 | The safety case must describe the: * Design Basis (DB) (similar to the facility description with a high focus on the design);
* Formal Safety Assessment (FSA)
* Safety Management System (SMS);
* Emergency Response Plan (ERP).
 | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | This provides consistency across the different types of facilities and permits one safety case to cover multiple operations  |
| **Validation** | Scope of validation required only if requested by the Minister  | The facility operator may not submit a safety case until the scope of validation has been agreed upon with the regulator.  | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | Confirming the scope of validation early in the process provides certainty and improves the acceptance timeframe.  |
| ****Miscellaneous**** |
| **Interaction with the PPA 1969** | **Safety Regulations fall all under the PPA** | The definition of a petroleum operation references a petroleum title under the PPA | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | The existing title provisions and titles will remain in force under the PPA. Only the OSH provisions in the PPA will be affected by the introduction of the WHS Bill. |
| **Interaction with the DGSA2004** | **The DGSA is dis-applied to a pipeline licenced under the PPA** | **Regulations 68, 69, 70, 71, 72, 73, 76B, 77, 78 and 79 of the Dangerous Goods (Storage and Handling of Non-explosives) Regulations 2007 will apply to petroleum operations** | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | This will create consistent requirements for emergency response agencies regardless of the primary safety legislation |

## Key changes: Petroleum Pipelines (Occupational Safety and Health) Regulations 2010

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| **Topic** | **PP (OSH) R 2010** | **2015 Draft WHS (R&MH) Bill / Regulations** | **WHS (PAGEO) Regulation Concept** | **Comment** |
| ****General****  |
| **General Occupational Safety and Health**  | The existing regulations prescribe controls in relation to; drugs and intoxicants, fatigue, and noise.  | These aspects will be covered under the safety case. | **Consistent approach to that provided in the WHS (R&MH) Bill / Regulations** | The safety case replaces the prescriptive controls and permits risk-based safety management. |
| **Prohibited and Restricted Substances** | List of hazardous substances provided in Schedule 2 | The list of hazardous substances to be retained. | The list of hazardous substances to be replaced with the list in Schedule 10 of the model WHS Regulations | The intent is to provide consistency with the general industry on prohibited and restricted substances |