



Government of **Western Australia**
Department of **Mines, Industry Regulation and Safety**

DISCUSSION PAPER

Draft Decommissioning Discussion Paper for WA onshore and State waters petroleum, geothermal and pipeline property, equipment and infrastructure

For activities regulated under the *Petroleum and Geothermal Energy Resources Act 1967*, *Petroleum Pipelines Act 1969* and *Petroleum (Submerged Lands) Act 1982*

PURPOSE

This document outlines the Department of Mines, Industry Regulation and Safety's (DMIRS) expectation for the decommissioning of onshore petroleum, geothermal and pipeline infrastructure pursuant to the *Petroleum and Geothermal Energy Resources Act 1967* (PGERA) and *Petroleum Pipelines Act 1969* (PPA) and decommissioning in State waters pursuant to the *Petroleum (Submerged Lands) Act 1982* (PSLA) (together, the Petroleum Acts). Following stakeholder consultation, DMIRS intends to create a corresponding Policy and supporting documentation to assist registered holders in Western Australia to understand their decommissioning and rehabilitation obligations with respect to their operations, and any facilities, infrastructure, equipment, wells and pipelines.

This paper is provided for stakeholder feedback. The department will provide a response to each submission received on this paper which will be collectively published in a response to submissions document. Submissions will be published verbatim, with the submitter listed.

OBJECTIVE

To establish the State Government's position, standards and expectations for registered holders to appropriately plan for, and execute the decommissioning of petroleum, geothermal and pipeline and associated infrastructure, and rehabilitation of all affected land onshore and in Western Australian State waters.

SCOPE

The scope of this paper extends to matters covered by the PGERA, PPA and PSLA for onshore and offshore petroleum, geothermal and pipeline activities in Western Australia. The paper outlines DMIRS' position on decommissioning in the context of the administration of the Petroleum and Geothermal Energy Resources (Environment) Regulations 2012, Petroleum Pipelines (Environment) Regulations 2012 and Petroleum (Submerged Lands) (Environment) Regulations 2012 (together, the Environment Regulations).

This paper does not capture safety-related matters established in the *Work Health and Safety Act 2020* or the Work Health and Safety (Petroleum and Geothermal Energy Operations) Regulations 2022. Notwithstanding, it is important to note that registered operators are required to have a Safety Case in force at all times until decommissioning and rehabilitation activities are completed and the facility, equipment and/or infrastructure no longer exists. The registered operator is responsible for ensuring that decommissioning, rehabilitation and monitoring activities are addressed in an approved Safety Case.

1. INTRODUCTION

Decommissioning occurs in the late stages of a petroleum, geothermal or pipeline activity, however, this does not negate the need for registered holders to thoroughly plan ahead. Adequate planning is essential to ensure appropriate plans, contingencies and budgeting are in place to allow for proper, effective and responsible decommissioning and rehabilitation to occur. Early planning for decommissioning, and continual detailed review, and well-maintained facilities, infrastructure and equipment will allow for thorough and effective decommissioning and will reduce long-term risks to the environment, and legal and financial liabilities for registered holders.

Western Australia's petroleum industry has operated well over a number of years, but as the industry advances and resource availability shifts, a move towards end of life of ageing facilities, infrastructure and equipment has become more evident.

Ageing infrastructure can represent increased financial, legal and environmental risks and obstruct efforts to achieve full and effective decommissioning and rehabilitation, and may even lead to the State incurring decommissioning and rehabilitation liability. Accordingly, there is an inherent need to ensure clear decommissioning and rehabilitation standards and expectations are established to allow registered holders to adequately plan ahead and work towards clearly defined end states.

2. LEGISLATIVE CONTEXT

Petroleum, geothermal resources and pipelines within the limits of Western Australia (onshore areas including islands and coastal waters) are regulated under the PGERA, PPA and PSLA and the associated suite of regulations. Section 98 of the PGERA, section 23 of the PPA and section 104 of the PSLA require the full removal of property (unless otherwise approved by the Minister) and making good the surface of the Earth's crust prior to the surrender of a title.

The suite of regulations establish that decommissioning is to be addressed primarily in Environment Plans, as well as Well Management Plans, Field Management Plans and Safety Cases or Safety Management Systems, which are required to be submitted for each proposed activity.

3. DMIRS' PRINCIPAL POSITION

DMIRS' principal position on decommissioning is that resource industry activities, facilities, equipment and infrastructure are decommissioned and rehabilitated in an ecologically sustainable manner, consistent with agreed environmental outcomes and post-activity land-uses without unacceptable liability to the State. Early consideration and progressive attention to decommissioning, rehabilitation and closure activities is critical to ensuring this objective is achieved and is vital to ensuring Western Australia's petroleum industry complies with its obligations under the Petroleum Acts. Planning for decommissioning should be incorporated into all stages of the life of a petroleum, geothermal and pipeline project and progressive decommissioning and rehabilitation should be undertaken as early as possible in the operational life of a project.

The following key principles establish DMIRS' expectations for decommissioning, rehabilitation and closure and provide useful information to registered holders to inform their planning:

1. *Early planning, continual review and preparation is critical to decommissioning and rehabilitation success*

- Decommissioning and rehabilitation activities are the responsibility of the registered holder. Early and appropriate planning is critical to the success of decommissioning and rehabilitation. Decommissioning planning should be integrated in the life of activity planning, and should start as early as possible and continue through to final surrender/relinquishment of title. For new projects, decommissioning planning should start in the project feasibility stage (before project approvals) and continue through exploration, construction and operations.
- Rehabilitation closure planning should demonstrate that ecologically sustainable closure can be achieved consistent with the agreed post-activity end state, outcomes and land uses, and without unacceptable liability to the State. Closure planning should be based on adaptive management, and should identify relevant experience from other projects and research. Planning should identify good quality material that is intended to be used during rehabilitation.
- Post-activity land uses should be identified and agreed upon where possible through consultation with relevant authorities and other relevant interested persons and organisations before approval of new projects, and should take into account the operational life span of the project. For existing projects, post-activity land uses should be agreed as soon as practicable.
- It is important that the cost of decommissioning and rehabilitation is factored into projections of economic limits prior to the field becoming uneconomic to ensure financial and environmental liabilities are accurately accounted for. The absence of sufficiently detailed information required in the Annual Environment Report (submitted as part of the requirements for regulation 16 of the Environment Regulations) may trigger the need for an inspection that focusses on proper care and maintenance and subsequent decommissioning and rehabilitation.
- Operators are expected to have established all-encompassing decommissioning and rehabilitation Environment Plans at least five years prior to end of field or asset life.

2. *Progressive decommissioning and rehabilitation should be undertaken as early as possible in the development phase*

- Progressive decommissioning and rehabilitation should be undertaken in a safe and environmentally responsible manner, in accordance with relevant approvals.
- If any property, equipment or infrastructure is not in use and has no demonstrated future use (via accepted permissioning documents), registered holders are expected to undertake decommissioning of such property, equipment or infrastructure. As a minimum, and subject to case-by-case consideration, DMIRS expects decommissioning and rehabilitation activities to be undertaken when:
 - any property, equipment or infrastructure is not currently in use;
 - had no recent history of use;
 - has not been maintained in working order such that it can be used;
 - or
 - has no associated permissioning documents allowing for and outlining sound plans for future use.

3. *Case-by-case consideration is appropriate but the end goal should be the complete removal of property and return the site to an agreed state*

- DMIRS operates with the base case of full removal of all property, equipment and infrastructure unless it can be demonstrated that it is more beneficial to leave property, equipment and infrastructure in situ. Exceptions to full decommissioning may be considered by the Minister on a case-by-case basis. Accordingly, decommissioning is a critical planned activity in the life cycle of petroleum, geothermal and pipeline activities, and is a key registered holder responsibility.
- It is very unlikely that DMIRS will approve operators leaving any plastic products in situ. As such, operators should plan for the full removal of any property, equipment or infrastructure that contains plastics.
- All wells are to be plugged or closed off within three years of inactivity and all other property, equipment and infrastructure is to be decommissioned within five years of the cessation of operation.
- All property, equipment and infrastructure must be completely removed and disposed of appropriately, unless the registered holder has written approval from the Minister (in the form of an approved permissioning document) that states otherwise.
- DMIRS expects registered holders to monitor the status of the affected environment (and any infrastructure that has been approved to be retained/left in situ) and undertake remedial works (which may include further removal of property, equipment and infrastructure) to address any subsequent risks or impacts. The duration of the monitoring phase will occur over a number of years and will be risk-based, before any title can be surrendered.

4. EXPECTATIONS FOR CONSIDERATION OF DECOMMISSIONING IN APPLICATIONS SUBMITTED TO DMIRS

a. Environment Plans

The Environment Plan will form the primary compliance/permissioning document from which DMIRS will regulate progress towards decommissioning and rehabilitation. The Environment Plan is revised on a five yearly basis giving the operator time to provide refined detail about closure planning over time. It is DMIRS' expectation that as activities progress, each Environment Plan revision should contain greater decommissioning and rehabilitation planning information.

The Environment Regulations establish that operators must demonstrate the proposed activity meets the acceptance criteria in regulation 11 in order to enable the approval of an Environment Plan. In order to comply with regulation 11, DMIRS expects:

- **Inventory of all Property, Equipment and Infrastructure:** An inventory of all property, equipment and infrastructure on the title area including a description, design life, age, operational status and future intended use. This would preferably be accompanied with spatial data and/or figures.
- **Maintenance of Infrastructure:** Information and provisions for the maintenance of property, equipment and infrastructure in such a way that allows for full removal and future use.
- **Description of Progressive Decommissioning:** A description of progressive decommissioning when property, equipment and infrastructure is not in use. DMIRS expects the Environment Plan to show progress towards proactive and progressive decommissioning. DMIRS expects property, equipment or infrastructure that is no longer in use to be appropriately maintained and progressively decommissioned over time.
- **Description of Full Decommissioning:** A description of how and when full decommissioning is expected. The older the asset, the more decommissioning detail will be expected in subsequent Environment Plan revisions. The Environment Plan should discuss trends in offtake/production rates and when cessation of production is anticipated. This information should be accompanied by estimates on remaining resources.
- **Commitment to Full Removal:** DMIRS expects to see a commitment towards full removal of all property, equipment and infrastructure as a base case. Partial removal may be considered by the Minister on a case-by-case basis and the responsibility lies with the registered holder to demonstrate equal or greater outcomes.
- **Risk Assessment:** If operators submit a comparative risk assessment to leave property, equipment or infrastructure in place, DMIRS expects to see a full description of the risk assessment include all factors, weighting, risks, benefits, environmental impacts, technical risk, effect on other users and

full social and economic considerations. This should then be followed by a demonstration of how the proposal meets the ALARP principle (as low as is reasonably practicable).

- **Stakeholder Engagement:** A detailed and bespoke consultation and engagement program that focusses on the impacts of decommissioning, rehabilitation and monitoring must be included in the Environment Plan in accordance with regulation 17(1)(b) of the Environment Regulations. The consultation should cover all the proposed scenarios (from leaving in situ to full or partial removal, and not just the preferred scenario).
- **SMART Completion Criteria:** DMIRS expects to see rehabilitation completion criteria in the Environment Plan. These criteria should be set out as SMART criteria (specific, measurable, achievable, relevant, time-bound).
- **Monitoring:** Environment Plans should contain details of the monitoring post-decommissioning and pre-title surrender that the registered holder intends to conduct. This should be risk-based and may vary from case to case. DMIRS expects annual reporting on monitoring activities with the potential for adaptive management if/when needed.

DMIRS will only consider the surrender of a title when all obligations are satisfied, including the fulfilment of all decommissioning and rehabilitation commitments and expectations to the satisfaction of the Minister. This may include the full removal of all property, equipment and infrastructure and the restoration of the Earth's crust to the satisfaction of the Minister (see for example section 98(2) of PGERA).

Registered holders incur liability for actions (or in-actions) performed on their title, including the preparing for and undertaking of decommissioning. The financial resources of a prospective transferee who is not currently on title (in part, to address the decommissioning obligations and liabilities) are a key consideration of each application to transfer a title. New and prospective registered holders need to be cognisant of the obligations and liabilities attached to the licence they are acquiring.

b. Field Management Plans

Planning for the decommissioning of infrastructure and rehabilitation of the environment should begin when a petroleum, geothermal or pipeline activity is first proposed. Item 16 of Schedule 3 of the Petroleum and Geothermal Energy Resources (Resource Management and Administration) Regulations 2015 establishes that a Field Management Plan is to incorporate the plans and timing for decommissioning and rehabilitation of the field.

A Field Management Plan is required before the recovery of petroleum. With respect to decommissioning, Field Management Plans must include the following:

- Details of the estimated timing of decommissioning and closure.
- A description of the plans for closure and field decommissioning including:

- How each well will be decommissioned and how the reservoir will be isolated.
- Plans for infrastructure, pipelines, flowlines and production processing facilities and progressive decommissioning.
- A description of how the title area will be rehabilitated.

Planning for decommissioning should occur well in advance to cessation of production, while the field is still generating cash flow. A general indicative guide would be to establish the final holistic detailed decommissioning plan five years prior to cessation of production

Registered holders are reminded that changes to how a field is being managed necessitates the need for a revision of the Filed Management Plan for that field. These revisions will need to include updates of the decommissioning program and any changes to estimated forecast recovery rates or estimation of earlier cessation of production that had previously been provided.

c. Well Management Plans

DMIRS encourages Well Management Plans and Environment Plans for decommissioning to be provided at the same time for assessment. This assists DMIRS in gaining a full understanding of the proposed decommissioning activities and reduces the occurrence of requests for further information.

A Well Management Plan should include a description of the arrangements that will be in place for the permanent plugging or closing off of the well(s).

Revisions to the Well Management Plan must be approved for each new activity that is planned for the well. Decommissioning is the final activity in the life of a well and therefore the final revision to the Well Management Plan will be the decommissioning program.

An approved Well Management Plan will remain in place until the well has been permanently plugged or closed off. The final well activity report (FWAR) is submitted to DMIRS on completion of plugging or closing off. The FWAR is reviewed prior to surrender of the title and the title can only be surrendered if the Minister is reasonably satisfied with the written report of the plugging or closing off process.

5. DMIRS COMPLIANCE FOCUS

DMIRS will base its decommissioning and rehabilitation compliance plan on the following principles:

- All activities will be risk triaged and a level of compliance oversight assigned. Any directions issued may include a requirement to publicly disclose the occurrence of the direction on the registered holder's website and to publicly self-report progress

towards meeting the requirements of the direction. Concurrently, DMIRS will undertake compliance monitoring by site, office and desktop inspections to ensure registered holders are taking the appropriate steps towards fulfilling decommissioning and rehabilitation requirements.

- Compliance monitoring will be risk-based and focus on the relative age of the infrastructure, the maintenance of the infrastructure, the length of time that the infrastructure has been used or in care and maintenance, and the likelihood of it being used in the future.
- DMIRS intends to introduce public reporting of non-compliances and publishing directions issued under the Petroleum Acts.

DRAFT

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