

GUIDELINES

Guide note on the management of subsisting petroleum and geothermal titles

Contents

1.	Purpo	ose	3
2.	Legis	lative framework	3
3.	Obtaining titles		3
	3.1.	Overview	
	•		
		3.1.1. Acreage release	
	0.0		
	3.2.	Assessing applications	
		3.2.1. Criteria for assessment	4
		3.2.2. Assessment considerations for subsisting titles	
		3.2.3. Subsisting assessment principles	
		3.2.4. Assessing impacts	
	3.3.	Requirements of section 69A of the PGERA	6
		3.3.1. Notifying underlying titleholders	6
	3.4.	Title conditions and endorsements	6
		3.4.1. Conditions	6
		3.4.2. Endorsements	6
4.	. Management of operations post grant of title		8
	4.1.	General considerations	8
	4.2.	Land access	9
	4.3.	Variations, exemptions, extensions for subsisting titles	9
	4.4.	Renewal of title	9
	4.5.	Petroleum and Geothermal Resources (Resource Management and Administration) Regulations 2015	10
		4.5.1. Significant events	10
		4.5.2. Well Management Plans	10
		4.5.3. Field Management Plans (FMP) for petroleum recovery	11
		4.5.4. Geothermal Energy Recovery Development Plans	12
	4.6.	Petroleum and Geothermal Energy Resources (Environment) Regulations 2012 (the Environment Regulations)	13
		4.6.1. Environment Plans	13
Fic	gure 1	- Assessment process	7

1. Purpose

This document aims to:

- 1.1. guide the Minister for Mines and Petroleum (the Minister), and officers of the Department of Mines, Industry Regulation and Safety (DMIRS) in its management of petroleum and geothermal titles that subsist in respect of the same blocks under the *Petroleum and Geothermal Energy Resources Act 1967* (the PGERA); and
- 1.2. assist applicants to identify the information DMIRS considers relevant to the assessment of an application for subsisting petroleum and geothermal tenure.

2. Legislative framework

The PGERA governs Western Australia's onshore regulatory framework for the exploration and recovery of petroleum and geothermal energy.

- 2.1. This framework creates a regime that allows for petroleum and geothermal titles to subsist in respect of the same blocks (section 69A, PGERA).
- 2.2. Penalties apply to any person who explores for or recovers petroleum or geothermal energy except in accordance with a granted title (sections 29(1) and 49(1), PGERA for petroleum; sections 29(2) and 49(2), PGERA for geothermal energy).
- 2.3. Both petroleum and geothermal operations are authorised in accordance with the rights conferred by the relevant individual title. Exploration and/or recovery operations cannot be authorised as **both** a petroleum operation and a geothermal operation.
- 2.4. Other than Access Authorities and Special Prospecting Authorities, no petroleum title can subsist with another petroleum title and no geothermal title can subsist with another geothermal title.
- 2.5. The Minister must be informed of any discovery of petroleum or geothermal energy resources without delay. The Minister must subsequently be provided the particulars in writing within three days of the discovery and fines apply for non-compliance (section 44, PGERA).
- 2.6. There is no requirement to disclose the discovery of petroleum or geothermal energy to the holder of a subsisting title.
- 2.7. All petroleum and geothermal energy operations, including surveys and wells, are managed in accordance with the requirements of the:
 - Petroleum and Geothermal Energy Resources (Resource Management and Administration) Regulations 2015 (the RMAR); and
 - Petroleum and Geothermal Energy Resources (Environment) Regulations 2012.

3. Obtaining titles

3.1. Overview

The PGERA establishes two pathways to accessing acreage within Western Australia: Acreage release and Special Prospecting Authorities (SPA).

3.1.1. Acreage release

Western Australia's petroleum and geothermal energy resources DMIRS are responsibly managed through periodic release of discrete areas for which applications can be made for exploration permits (section 30, PGERA). This involves a competitive work-program bid assessment process.

- 3.1.1.1. Acreage releases are published in the Government Gazette and on the DMIRS website.
- 3.1.1.2. Discrete areas are selected based on a combination of nominations from proponents and an assessment of the prospectivity and/or proximity to relevant infrastructure.
- 3.1.1.3. From time to time, DMIRS will publish information on its website, and depict in Tengraph Web, prime areas which are suitable to be set aside for future acreage releases (section 28, PGERA).

3.1.2. Special Prospecting Authorities

Acreage can also be accessed by applying for an SPA which specifies either petroleum or geothermal energy resources as the target (section 105, PGERA). At time of application, a proponent can request authority to apply for the grant of an exploration permit, known as the acreage option.

- 3.1.2.1. Areas subject to reservation for acreage release under section 28 of the PGERA will not be available for SPAs.
- 3.1.2.2. Consideration of a request to apply for an exploration permit at the time of SPA application is a discretionary decision. Authority to apply for a permit may be withheld even if the SPA is granted.
- 3.1.2.3. An SPA can only be granted for a six month term and cannot be extended.
- 3.1.2.4. An SPA does not authorise the drilling of a well (section 105(5), PGERA).

3.2. Assessing applications

3.2.1. Criteria for assessment

The criteria for assessing applications for exploration permits is separately addressed in the following guidelines:

- · WA Petroleum Guideline Criteria for Assessment
- · WA Geothermal Guideline Criteria for Assessment

3.2.2. Assessment considerations for subsisting titles

Prior to making an application either as part of an acreage release or for an SPA, applicants should undertake the following:

- 3.2.2.1. Make themselves aware of any existing petroleum or geothermal titles.
- 3.2.2.2. Be aware that proposals for work may be restricted due to potential impacts to existing operations. Applicants should identify any potential impacts and demonstrate how these are to be mitigated or managed (section 31(1)(e), PGERA).
- 3.2.2.3. Demonstrate that the proposed work program and expenditure is achievable without interference with subsisting titles or rights (section 117(c), PGERA), or potential excluded areas (section 91B, PGERA).
- 3.2.2.4. Note that in the case of applications received as part of an acreage release, work programs cannot be changed by the applicant post bid; however, the Minister may approve an alternative work program.

3.2.3. Subsisting assessment principles

The following principles will be applied when assessing tenure applications which would create subsisting petroleum or geothermal titles:

- 3.2.3.1. Avoidance of potential impacts to existing recovery operations and declared locations will be prioritised over exploration operations and leads or prospects.
- 3.2.3.2. Discovered resources are given priority over prospective resources.

3.2.4. Assessing impacts

The following process has been developed for assessing applications which subsist with existing petroleum or geothermal titles. To assess potential impacts, DMIRS will undertake the following:

- 3.2.4.1. Identify potential impacts to existing petroleum or geothermal recovery and exploration operations.
- 3.2.4.2. Review the information regarding the mitigation or management of impacts submitted as part of the application.
- 3.2.4.3. If appropriate, request the applicant provide further information regarding any potential impacts (sections 31(4), 43C(4), 48A(3) and 51(2), PGERA). Whilst not exhaustive, this may include requests for:
 - a description of discovered petroleum pools or geothermal energy resources within subsisting titles, or where there may be an impact on another title;
 - · the outcomes of any consultation undertaken with existing title holders; and
 - whether the applicant intends to explore in the same geologic intervals as any declared locations, petroleum pools or geothermal energy resources within subsisting titles or another title.
- 3.2.4.4. DMIRS may also seek information from existing petroleum or geothermal title holders on what they consider to be the potential impact on their operations and how best these might be mitigated or managed.
- 3.2.4.5. DMIRS' assessment will consider:
 - The degree to which any proposed exploration (as per the proposal for work and expenditure)
 or recovery operations interfere with exploration or recovery operations in subsisting
 petroleum or geothermal titles.
 - Where applicable, how the proposed work program will assist with the future demonstration of how the extraction of petroleum or geothermal energy in the application area will not affect the extraction of the other.

3.3. Requirements of section 69A of the PGERA

3.3.1. Notifying underlying titleholders

Section 69A of the PGERA requires the Minister to notify any underlying title holders, allowing them time to make a submission relating to the proposed grant, prior to the grant of a subsisting title. Any submissions made must be considered in making the decision to grant the subsisting titles, including if any additional conditions should be imposed.

If an application is progressing towards grant DMIRS will:

- 3.3.1.1. provide all relevant underlying title holders with a written notice of intent to grant a subsisting title, including a draft of the proposed title instrument (excluding commercially sensitive information);
- 3.3.1.2. allow underlying title holders a minimum of one month to make any submission relating to the proposed grant;
- 3.3.1.3. assess and consider any submissions and make further requests for information if required; and
- 3.3.1.4. notify respondents of DMIRS' recommendation, prior to the application being determined.

3.4. Title conditions and endorsements

3.4.1. Conditions

The Minister may grant titles subject to such conditions as the Minister sees fit (sections 43, 43C(2)(a), 48H, 66, 105(3)(a)(i), and 106(3)(a), PGERA).

Without limitation, conditions may be applied to:

- 3.4.1.1. prevent impact to existing petroleum or geothermal titles;
- 3.4.1.2. prohibit the holder from entering specified land (section 91B of the PGERA). Such specified land could include any land upon which existing petroleum or geothermal infrastructure exists (i.e. well pads and production facilities);
- 3.4.1.3. mitigate or manage potential impacts; and
- 3.4.1.4. remediate or rehabilitate actual impacts, if they were to occur.

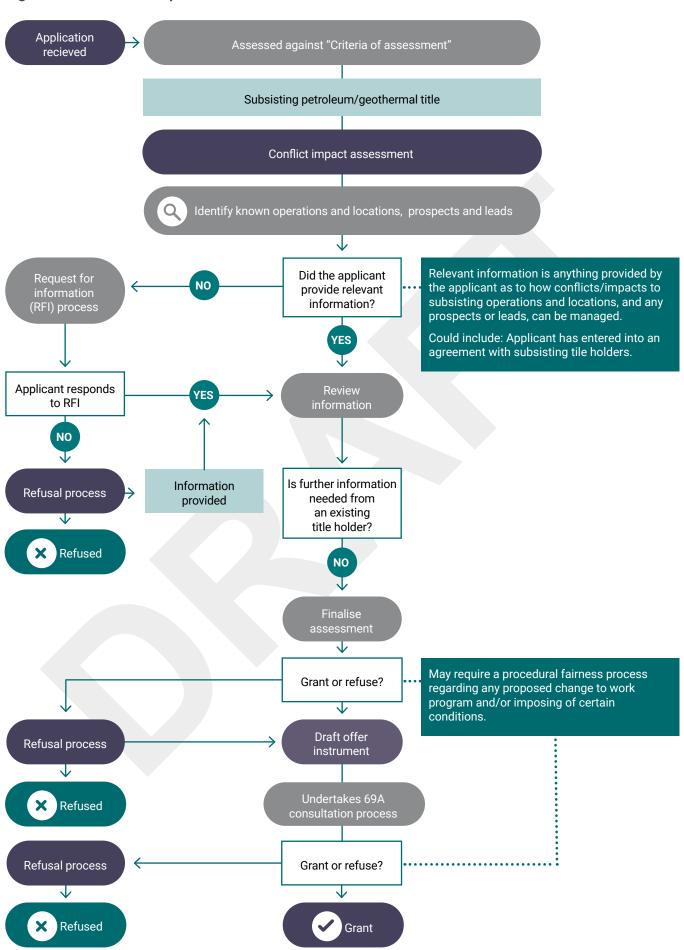
The PGERA provides for the Minister to consider requests to vary or revoke conditions (sections 43(3), 48H(5), 66(4)).

3.4.2. Endorsements

An endorsement on all petroleum and geothermal titles notifies title holders that petroleum and geothermal titles can subsist in respect to the same blocks.

Guide note on the management of subsisting petroleum and geothermal titles

Figure 1 - Assessment process



4. Management of operations post grant of title

4.1. General considerations

- 4.1.1. Post grant, each operation will be considered on a case-by-case basis and the further approvals required to undertake works or activities under the granted title will take into account potential impacts to subsisting operations before approvals are issued.
- 4.1.2. Any petroleum or geothermal operations which results in requirements for decommissioning and/ or rehabilitation will remain the responsibility of the holder of the title under which the operation was authorised.
- 4.1.3. Petroleum and geothermal operations should be carried out in a manner that does not interfere with other approved petroleum and/or geothermal operations (section 117(c), PGERA). DMIRS expects that title holders will cooperate to minimise the risk of potential interference.
- 4.1.4. Penalties apply to a person who intentionally or recklessly:
 - causes damage to or interferes with equipment/structure/vessel used in petroleum or geothermal operations (section 117A(a), PGERA); or
 - interferes with any petroleum or geothermal operation (section 117A(b), PGERA).

4.2. Land access

- 4.2.1. Both petroleum and geothermal titles grant land access rights for the purpose of their respective approved activities.
- 4.2.2. A petroleum or geothermal title holder does not require an Access Authority for approved activities on land within their title area, including blocks over which there are subsisting titles.
- 4.2.3. Where a title condition has been imposed under section 91B of the PGERA, consideration may be given to varying restrictions on the basis the proponent can demonstrate that an agreement has been entered into with any relevant petroleum or geothermal title holders.

4.3. Variations, exemptions, extensions for subsisting titles

- 4.3.1. A title holder has the right to apply to vary title conditions, this includes varying the minimum work commitments (section 97, PGERA).
- 4.3.2. Work proposed to be undertaken as part of a variation application will be assessed for any potential impacts using the principles outlined above at 3.2.3.
- 4.3.3. Title holders should be aware that proposals for work may be restricted due to potential impacts to existing petroleum or geothermal operations and should consider appropriate mitigation strategies at the time of making an application.

4.4. Renewal of title

- 4.4.1. Work proposed to be undertaken as part of an application to renew a petroleum or geothermal title will be assessed for any potential impacts using the principles outlined above at 3.2.3.
- 4.4.2. Title holders should be aware that proposals for work may be restricted due to potential impacts to existing petroleum or geothermal operations and should consider potential restrictions at time of making an application.
- 4.4.3. If renewed, consideration will be given to the title conditions required to carry over any requirements or obligations to the next renewal period, in relation to activities conducted under the previous title period and existing infrastructure.

4.5. Petroleum and Geothermal Resources (Resource Management and Administration) Regulations 2015

4.5.1. Significant events

Regulation 62 of the Resource Management Administration Regulations (RMAR) requires that the Minister receive notification of any significant event occurring within a licence.

- 4.5.1.1. A significant event, amongst other meanings, refers to:
 - "a new or increased risk to the recovery of petroleum or geothermal energy within the licence area" (regulation 62(1)(b)); or
 - "a new or increased risk to the recovery of petroleum or geothermal energy outside the licence area caused by the development of petroleum pools or geothermal resources areas in the licence area" (regulation 62(1)(c)).
- 4.5.1.2. While this regulation applies to petroleum production licences and geothermal production licences, it is anticipated that all registered holders would notify the Minister in the event of such an occurrence.
- 4.5.1.3. All petroleum or geothermal energy data remains confidential in accordance with the RMAR Part 9 Release of technical information about petroleum and geothermal energy resources.

4.5.2. Well Management Plans

Activities for petroleum and geothermal wells are conducted under a Well Management Plan (WMP) in accordance with the RMAR, Schedule 1 – Well management plan.

- 4.5.2.1. Schedule 1 Item 4 The well activity, including risk management and data requirements, should be carried out in accordance with the well objective as either petroleum or geothermal.
- 4.5.2.2. A well activity under a petroleum title is linked to that petroleum title. A well activity under a geothermal title is linked to the holder of that title. A well cannot be both a petroleum well and a geothermal well.
- 4.5.2.3. For well activities involving the removal or injection of substances from an underground reservoir (such as a well test), the title holder may be requested to provide information demonstrating that the well activity will not impact on nearby petroleum or geothermal energy resources.
- 4.5.2.4. In accordance with regulation 13(8) of the RMAR, the Minister may impose reasonable conditions on a WMP to safeguard petroleum or geothermal energy resources.
- 4.5.2.5. The Minister may withdraw approval of a WMP to, amongst other reasons, safeguard petroleum or geothermal energy resources as per regulation 29(c) of the RMAR.

4.5.3. Field Management Plans (FMP) for petroleum recovery

Activities for the recovery of petroleum are conducted under a field management plan in accordance with the RMAR, Schedule 3 – Field management plan.

- 4.5.3.1. An approved FMP must be in place and a petroleum production licence must have been granted before petroleum recovery operations can commence. Only the holder of the production licence (the licensee) or an applicant for a production licence can apply for approval of an FMP (regulation 43(1), RMAR).
- 4.5.3.2. Schedule 3 of the RMAR sets out the detailed technical content that must be included in an FMP, in accordance with regulation 48. The guidelines for the RMAR describe the FMP requirements as identified in the regulations.
- 4.5.3.3. Under regulation 44(1)(c) and 44(2) of the RMAR, an applicant may be requested to provide further information to support that activities will not interfere with discovered geothermal energy resources.
- 4.5.3.4. Under regulation 44(5) of the RMAR, the Minister may apply conditions to the FMP to protect geothermal energy resources and, under regulation 45(a)(ii), must provide the reasons for the imposition of the condition.
- 4.5.3.5. Under regulation 51(2) of the RMAR, an application for revision to an FMP, made under regulation 50, may require evidence to support that activities will not interfere with discovered geothermal energy resources.
- 4.5.3.6. Under regulation 51(5) of the RMAR, the Minister may apply conditions to a revision to a FMP to protect geothermal energy resources and, under regulation 52(a)(ii), must provide the reasons for imposition of the condition.
- 4.5.3.7. The Minister may request a revision to the FMP pursuant to regulation 54 to, amongst other reasons, protect nearby geothermal energy resources and state the technical reasons for the revision.
- 4.5.3.8. In addition to the information requested under Schedule 3 of the RMAR, information that may be requested that is specific to the preservation of geothermal energy resources may include (but is not limited to):
 - The regional extent of geological reservoirs for which material or substance is to be extracted or injected.
 - The volumes of materials or substances to be extracted from each geological reservoir.
 - The volumes, composition and properties of materials or substances to be injected into each geological reservoir.
 - An estimate of the spatial changes to each geologic reservoir, including pressure, temperature and fluid composition, in the subsurface that will result from the extraction or injection of materials or substances per the FMP. This should be based on information such as regional geological concepts, regional hydrodynamics, past well performance, rock properties, geomechanics, and faults.
 - Information on how changes to geological reservoirs will be monitored throughout field life in respect to geothermal energy resources.

4.5.4. Geothermal Energy Recovery Development Plans

Activities for the recovery of geothermal energy are conducted under a Geothermal Energy Recovery Development Plan (GERDP) in accordance with the RMAR, Schedule 4 – Geothermal energy recovery development plan or in accordance with section 38(2)(b) of the PGERA.

- 4.5.4.1. An approved GERDP must be in place and a geothermal production licence must be granted before geothermal energy recovery operations can commence. Only a geothermal licensee (and not an applicant for a licence) can apply for the approval or variation of a GERDP.
- 4.5.4.2. Schedule 4 of the RMAR sets out the detailed technical content that must be included in a GEDRP as required by regulation 63.
- 4.5.4.3. In addition to the information required under Schedule 4, information may be requested that is specific to the preservation of petroleum resources and may include (but is not limited to):
 - The regional extent of geological reservoirs for which material is to be extracted or injected.
 - The volumes of materials to be extracted from each geological reservoir.
 - The volumes, composition and properties of materials to be injected into each geological reservoir.
 - An estimate of the spatial changes to each geologic reservoir, including pressure, temperature
 and fluid composition, in the subsurface that will result from the extraction or injection of
 materials per the GEDRP. This should be based on information such as: regional geological
 concepts, regional hydrodynamics, past well performance, rock properties, geomechanics
 and faults.
 - Information on how changes to geological reservoirs will be monitored throughout field life in respect to petroleum resources.

4.6. Petroleum and Geothermal Energy Resources (Environment) Regulations 2012 (the Environment Regulations)

4.6.1. Environment Plans

All petroleum and geothermal activities as defined in the Environment Regulations, require an approved Environment Plan (EP) prior to commencement of the activity. The activity must comply with the approved EP at all times.

- 4.6.1.1. An activity must not continue if new or increased environmental impact(s) or environmental risk(s) is identified.
- 4.6.1.2. An EP must include the matters set out in regulations 14, 15, 16 and 17 of the Environment Regulations.
- 4.6.1.3. Environment is defined in regulation 4 of the Environment Regulations as:
 - (a) ecosystems and their constituent parts, including people and communities;
 - (b) natural and physical resources;
 - (c) the qualities and characteristics of locations, places and areas; and
 - (d) the heritage value of places, and includes the social, economic and cultural features of the matters mentioned in (a), (b), (c) and (d).
- 4.6.1.4. Therefore, all potential risk and impacts of an activity must consider the impacts and risks to subsisting activities.
- 4.6.1.5. The requirement to engage and consult with relevant authorities and other relevant interested persons and organisations and report on all consultations in the EP is set in regulation 17(1)(b) of the Environment Regulations.
- 4.6.1.6. Regulations 18 and 19 of the Environment Regulations set the requirements for a revision of an EP.
- 4.6.1.7. Petroleum and geothermal activities are assessed on a case by case basis. Regulation 3 of the Environment Regulations specifies the object of the regulations is to ensure that any activity carried out in the State is:
 - (a) carried out in a manner consistent with the principles of ecologically sustainable development; and
 - (b) carried out in accordance with an EP that:
 - (i) demonstrates that the environmental impacts and environmental risks of the activity will be reduced to as low as is reasonably practicable; and
 - (ii) has appropriate environmental performance objectives and environmental performance standards;
 - (iii) has appropriate measurement criteria for determining whether those objectives and standards have been met.

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

Fax: +61 8 9222 3333

Online

Website: www.dmirs.wa.gov.au Email: petroleum.titles@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 This publication is available in other formats on request to assist people with special needs.