

Petroleum and Geothermal Energy Act 2000 Environmental Liability Management Policy

Purpose

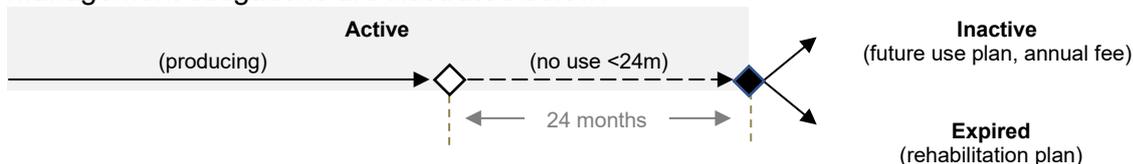
This policy aims to effectively manage the environmental rehabilitation liability from petroleum, gas storage and geothermal activities undertaken in South Australia and is consistent with the requirements of the *Petroleum and Geothermal Energy Act 2000* (the Act). The risk-based approach to managing liabilities set out in this policy aims to (i) reduce the proportion of expired wells, and (ii) to ensure an adequate level of financial security.

Scope

The scope for this policy applies to licensees operating in South Australia under the Act. Environmental liability management encompasses all regulated activities including wells, seismic lines and infrastructure such as pipelines, flowlines, facilities and access roads. It also applies to Legacy Contamination Assessment Plans requiring active rehabilitation.

Policy detail

This policy applies to all petroleum, gas storage and geothermal activities in South Australia undertaken pursuant to the Act. It recognises the greatest risk and impact to the environment and human health is largely vested in wells. This risk-based approach seeks to reduce the proportion of expired wells using evidence-based management plans. Activities are categorised by their operating status which are described in the [definitions](#) of this policy and include: active, inactive, expired, legacy or orphan. Key operating status categories and management obligations are illustrated below.



The number and status of wells and infrastructure changes over time so regular reviews are required to determine the environmental liability. Similarly material changes in ownership of a license, a licensee's reserves or credit rating or a significant change in market conditions, may require a review of financial security and rehabilitation requirements.

An [example](#) case study that shows how all the elements of the policy outlined below may apply to a licensee is provided on page 14 of this document.

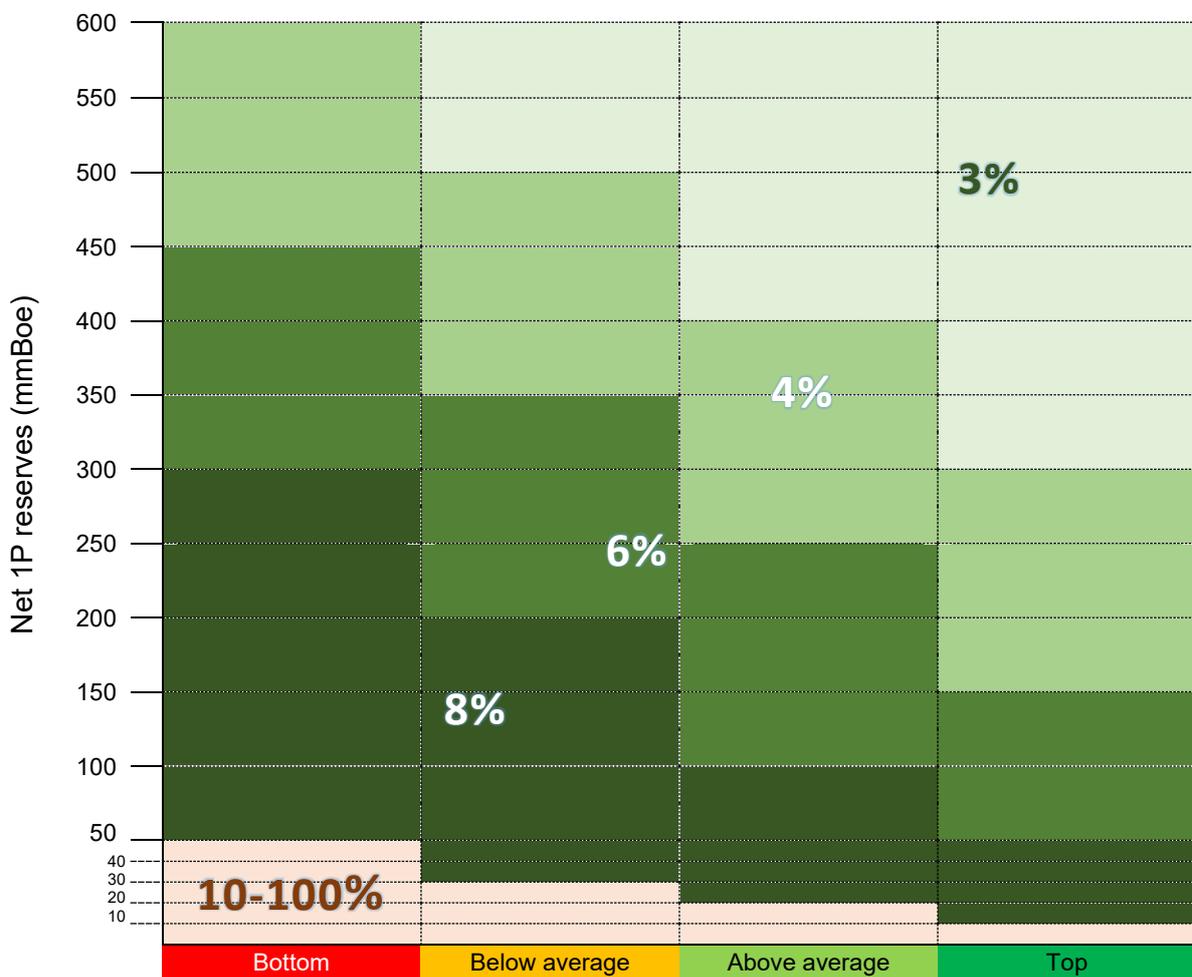
The Environmental Liability Management Policy consists of four elements:

1. Financial Security:

- Consistent with [s66\(2\)](#), [s76](#) and [s111](#) of the Act, the Minister may require the applicant to give security, of a kind and amount acceptable to the Minister, for the satisfaction of obligations arising the Act.
- The Rehabilitation Liability Estimate (RLE) includes the cost to meet the legal obligations to decommission wells, facilities, flowlines, transmission lines, access roads and seismic lines and rehabilitate land disturbed by regulated activities. The RLE may be adjusted for activities that provide a benefit to landowners or land users where a recognised agreement is in place.

- Each Licensee is required to submit a report of the total RLE by 30 June each year for all licensed activities as at 31 December of the preceding year. The estimate may also be adjusted on activity notification or activity completion.
- Two factors will be considered to determine an appropriate risk-based level of financial security, as a proportion of the total RLE:
 - i. Deemed assets- estimated monetary value of exploration projects, pipeline assets and proven (90% certainty of being economic – also referred to as 1P) reserves for production projects; and
 - ii. Financial performance- an assessment of operational, solvency and liquidity measures.
- The minimum financial security level is 3% of the RLE up to a maximum of 100% of RLE as illustrated in the financial security requirement matrix below:

PGEA (2000) financial security level matrix



Credit Health Panel Assessment

- Licensees that fall into the 10-100% financial security range will be assessed against additional criteria to determine an appropriate risk-based level of financial security.

The criteria to be applied (where relevant) to determine an appropriate risk-based level of financial security, include:



Petroleum and Geothermal Energy Act 2000 Environmental Liability Management Policy

i. Financial

- Liquidity indicators (e.g. quick ratio¹);
- Solvency indicators (e.g. funds from operations to total debt);
- Operational performance indicators (e.g. return on capital);
- Third party credit assessments;
- Project net present value (NPV) of remaining proven reserves plus salvage value plus other credits less liabilities or expected monetary value (EMV) for undeveloped reserves and resources
- Ability to meet licence commitments (expenditure, work program);

ii. Management and Operational Expertise

- Management expertise;
 - Company operational experience in the relevant basin(s);
 - Company operational experience in the oil, gas, gas storage and geothermal industries;
 - Remaining operating life of petroleum, gas storage and geothermal assets;
 - Previous performance and experience in decommissioning and rehabilitation;
 - Licence expenditure compliance;
 - Any other relevant criteria.
- Key criteria to be considered specific to transmission pipelines will be developed and this policy updated.
 - Financial security requirements will be reviewed on an annual basis, or upon material change to the RLE or financial and technical resources of the licensee in accordance with Section [75](#) of the Act which sets mandatory conditions about resources required for compliance with environmental obligations. Should a licensee show material improvement in financial capability over a year (example: an increase in 1P reserves), with all other things being equal, the amount of financial security required may be reduced.
 - The financial security may be lodged in the form of cash or an unconditional/irrevocable bank guarantee, insurance bond, surety or other form acceptable to the Minister within the timeframe set out in the [workflow](#).

2. Well Activity Status

- A well that has not produced/ injected/ been in use for more than 24 consecutive months may be deemed to be in abeyance under [s39](#) and [s41](#) of the Act.
- The activity status of a well as at 31 December of the preceding year will be based on monthly production reports.
- Each Licensee is required to prepare an activity status report detailing all licensed activities and declaring the status of wells as active, inactive or expired. The activity status report, supported by draft Future Use Plans and draft Rehabilitation Plans, must be submitted within the timeframe set in the [workflow](#).

- Future Use Plans must meet the requirements of [Section 3](#) (Inactive Well Management) of this policy.
- Rehabilitation Plans must meet the requirements of [Section 4](#) (Expired Well Management) of this policy.
- DEM may convene a meeting with the Licensee to discuss the review, reach consensus and confirm requirements for a final Future Use Plans and final Rehabilitation Plans as set out in the policy [workflow](#).
- Licensees will be required to submit final Future Use Plans and final Rehabilitation Plans following DEM review in accordance with the [workflow](#).
- DEM will issue a letter with accepted Future Use Plans and Rehabilitation Plans to the Licensee for execution in accordance with the [workflow](#).

3. Inactive Well Management:

- The licensee will need to demonstrate a bona fide future use of a well that has not been in production for over 24 months, as at 31 December of the reporting year, by satisfactorily proving a future use in applying for it to be declared 'inactive'.
- Licensees may prepare a Future Use Plan to demonstrate a bona fide future use of a well by addressing criteria including but not limited to:
 - Historical production / use data;
 - Average monthly production / use at the time production / use ceased;
 - Well / facility product composition
 - Estimated remaining recoverable reserves;
 - Whether reworking the well to recover additional reserves is possible;
 - Whether secondary recovery is possible;
 - Whether production from other formations is possible;
 - Whether the well can be drilled deeper;
 - Estimated cost to deepen the well;
 - Whether the well is connected/ proximity to a pipeline system;
 - Whether an inactive fee is being paid;
 - The licensee's schedule for putting the well / facility into production/ future use;
 - Whether the well is capable of use for gas storage or liquid injection well;
 - Well / facility integrity status;
 - Summary of assumptions used in demonstrating a bona fide future use;
 - Any other information that the licensee considers relevant to demonstrate a bona fide future use.
- DEM will consider Future Use Plans with due regard to the criteria above in determining whether to accept or refuse the plan, and if accepted, the terms and conditions on which it should be accepted.
- If a Future Use Plan is accepted, the well will be declared inactive.
- If a licensee is unable to demonstrate a future use acceptable to DEM, or does not apply for a well to be declared inactive after 24 months of it not being in use in a reporting period, it will be deemed to be expired. A notice will be issued providing Licensees at least 30 days to either (i) show how a well has a bona fide future use or (ii) to prepare or update an expired well rehabilitation plan in accordance with [s109](#) of the Act.



Petroleum and Geothermal Energy Act 2000 Environmental Liability Management Policy

- Licensees may apply for the decision to be reviewed as outlined in [Section 5](#) (Application to review a decision) of this policy.
- A well may be declared to be inactive by DEM for a period up to 5 years at a time which may be extended upon application by the licensee.
- The inactive status of a well may be revoked if it is returned to production/transmission or if it is deemed to be expired (i.e. no future use).
- An annual inactive well fee will apply as per the schedule below:

Schedule of inactive well fees

Well age (since rig release)	Annual fee/ unit
2 years ago or longer and less than 8 years	\$150
8 years ago or longer, but less than 15 years ago years	\$300
15 years ago or longer but less than 20 years	\$750
20 years ago or more	\$1,500

- Inactive fees collected are retained in a 'legacy Petroleum and Geothermal Energy Act liabilities facility' and can be utilised by DEM to rehabilitate legacy expired wells or infrastructure that have no attributable owner due to bankruptcy or insolvency. Inactive fees will apply until all legacy wells have been decommissioned and fully rehabilitated.
- If a Licensee fails to pay the annual inactive well fee, the well may be deemed to be expired and the operator may be required to pay a higher level of financial security.

4. Expired Well Management:

- The Department seeks to progressively reduce the proportion of expired wells in South Australia that have no bona-fide future use.
- An expired well is defined as a well that has not produced/injected for more than 24 consecutive months where:
 - i. the licensee has declared the well expired; or
 - ii. where the licensee has NOT demonstrated a bona fide future use acceptable to DEM.
- The minimum number of expired wells that are required to be decommissioned and rehabilitated are defined in the schedule below. Licensees are required to rehabilitate a minimum 5% of expired wells each year that are under the control of a licensee as at 31 December of each year. In no case shall a licensee decommission and rehabilitate less than 2 expired wells per annum unless, and until, a licensee has no expired wells.

Schedule of minimum expired well rehabilitation requirements

Total number of expired wells	Decommissioning requirement
1-40	2 expired wells/ year
41+	5% of expired wells / year

- DEM will require a licensee to prepare an expired well rehabilitation plan for acceptance by DEM. The plan needs to show how the licensee has prioritised and will rehabilitate the prescribed number of expired wells each year for a period specified in the plan. The plan and any renewal of the plan shall cover a time period of no more than 5 years. Failure of the licensee to submit an appropriate plan for approval, may result in DEM issuing the licensee a direction in accordance with [s109](#) of the Act.
- DEM will issue a decision letter with the final accepted rehabilitation plan to the licensee for execution.
- Licensees are required to meet the annual decommissioning requirement for expired wells by the end of the financial year.
- The annual decommissioning requirement may be adjusted where decommissioning costs for expired wells and infrastructure are significantly higher or lower than typical costs in any one year.
- The plan will be reviewed for performance annually by DEM, and be subject to amendment by DEM, or by the licensee with the approval of DEM.
- Licensees that fail to rehabilitate the required number of wells in an accepted plan, without good reason, will be liable for inactive well fees on all the expired wells and may be subject to DEM's [compliance policy](#).
- Licensees (or former licensees) remain liable for the cost of environmental rehabilitation from activities carried out under a licence as set out in [s111](#) of the Act.

Application to review a decision

- If a licensee has a concern or complaint about an environmental liability management policy decision, a complaint may be made in accordance with DEM's [complaint and feedback policy](#).
- If a licensee is not satisfied with the outcome of the complaint, licensees may elect to exercise their legal rights for review in accordance with [s124](#) and [s125](#) of the Act.

Roles and Responsibilities

Licensees are responsible for:

- producing independently audited annual financial reports and statements of proved (1P) reserves that are consistent with reporting requirements of publicly listed companies;
- preparing annual RLEs for regulated petroleum, gas storage and geothermal activities in South Australia;
- providing an adjusted financial security as may be required by the Minister;
- notifying DEM of any material change such as change in ownership or in market conditions, to determine any required adjustments in financial security or rehabilitation requirements;
- preparing annual activity status reports of all licensed activities and declaring which wells are active, inactive or expired

***Petroleum and Geothermal Energy Act 2000* Environmental Liability Management Policy**

- applying for wells that have not been in use for over 24 months in the reporting period to be declared inactive by preparing future use plans;
- complying with the terms and conditions for accepted inactive wells future use plans;
- paying fees for inactive wells;
- preparing rehabilitation plans that show which expired wells will be decommissioned and rehabilitated each year for the period of the plan;
- participating in meetings with DEM to discuss the review of the annual RLE, draft future use plans and draft rehabilitation plans, reach consensus and confirm requirements for final plans;
- reporting annual compliance against annual rehabilitation plan requirements; and
- applying for a review of an environmental liability management policy decision.

The Department for Energy and Mining (DEM) is responsible for:

- notifying Licensees of PGEA environmental liability management policy requirements
- verifying the annual RLE prepared by licensees;
- determining financial security requirements;
- notifying licensees of the requirement to prepare a bona fide future use plan within 24 months of a well ceasing production in a reporting period;
- assessing applications for a well to be declared inactive or deemed expired;
- collecting inactive fees and decommissioning legacy wells and infrastructure;
- notifying licensees to prepare or update a rehabilitation plan;
- convening meetings with licensees to discuss the review of the annual RLE, draft future use plans and draft rehabilitation plans, reach consensus and confirm requirements for final plans;
- assessing rehabilitation plans;
- issuing decision letters on annual licensee RLEs, future use plans and rehabilitation plans
- monitoring progress and compliance with future use and rehabilitation plans;
- accepting applications to reconsider administrative acts; and
- reconsidering administrative acts if a licensee is dissatisfied with an environmental liability management decision under this policy.

Monitoring, evaluation and review

- This policy will be reviewed within 24 months from the date of approval;

Relevant documents and web links

Key documents which relate to this policy include:

- [Petroleum and Geothermal Energy Act 2000](#)
- [Petroleum and Geothermal Energy Regulations 2013](#)
- [DEM Petroleum and Geothermal Energy Act Compliance Policy](#)
- [DEM Complaints and Feedback Policy](#)

Definitions

Term	Definition
Active	refers to the operating status of a well or facility that has been used for its purpose (production/ injection/ transport / storage / etc.) in the last 24 months (2 years).
Not in use	refers to a state of inactivity or suspension. After 24 consecutive months of no use, the status of whether a well or facility is inactive or expired needs to be determined.
Inactive	refers to the operating status of a well or a facility that has not been used for (production/ injection/ transport / storage / etc.) for more than 24 consecutive months where the licensee has demonstrated a bona fide future use that has been accepted by the regulator.
Expired	refers to the operating status of a well or a facility that has not (production/ injection/ transport / storage / etc.) for more than 24 consecutive months where the licensee has declared the well or facility expired or where the operator has NOT demonstrated a bona fide future use acceptable to DEM.
Legacy	refers to expired wells or facilities that are at greater risk of becoming orphan wells or facilities where the license holder has limited current financial capacity to meet decommissioning and rehabilitation obligations.
Orphan	refers to legacy wells or facilities/infrastructure where the licensee(s) has become bankrupt and is unable to meet decommissioning obligations.
Legacy contamination action plans	refers to identified contamination sites resulting from legacy practices with impacts to soil and/or groundwater that may pose a risk to the environment or human health.
Decommissioned well / facility	a well or facility that has been permanently decommissioned. For a well – this means plugged, cut and capped below the ground surface to licence decommissioning and rehabilitation requirements.
Flowline	refers to a pipeline used solely for the transport of unprocessed or minimally processed regulated substances.
Pipeline	refers to a transmission pipeline that transports a regulated processed substance to a market under a Pipeline License.
Facility	Refers to surface infrastructure such as a processing plant, bulk storage, accommodation camp etc.
Pipeline assets	refers to assets specific to a pipeline which may include pumping stations and any legal rights over land (i.e. easements) and bona fide new use of a pipeline.



Petroleum and Geothermal Energy Act 2000 Environmental Liability Management Policy

Term	Definition
Infrastructure	refers to anything that is reasonably necessary for, or incidental to, carrying on regulated activities. It may include a facility, pipeline assets, flowline, camp, access road, airport or building.
Rehabilitation Liability Estimate	The estimated total cost of rehabilitating land disturbed by activities relating to exploration and production of regulated resources. This includes the decommissioning of wells, facilities, flowlines, transmission lines, access roads and seismic lines.

Feedback

To provide feedback on this document email to: DEM.ERDadmin@sa.gov.au

DOCUMENT CONTROL

Approved by: Barry Goldstein

Title: Executive Director, Energy Resources Division

Contact person: Nick Panagopoulos	Date of approval: 24 August 2020
Division: Energy Resource Division	Version number: 1.0
Date of review: 22 May 2020	Next review date: +24 months of approval

Referenced Sections from the Act

39—Requirement to proceed with production

(1) The holder of a production licence must, subject to this Act, proceed with operations for production of the relevant regulated resources—

- (a) with due diligence; and
- (b) in accordance with the conditions of the licence.

Maximum penalty: \$60 000.

(2) If operations for production of the relevant regulated resource have not commenced within 24 months after the grant of the production licence, the Minister may, by written notice given to the holder of the licence, require the holder of the licence to commence the operations.

(3) If, in the Minister's opinion, production from the area of a production licence is practicable and commercially feasible, the Minister may, by written notice given to the licensee, require the licensee to undertake or continue operations in accordance with requirements specified in the notice until the licensee satisfies the Minister that the operations are no longer practicable or commercially feasible.

(4) A notice under subsection (3) may require production from the area comprised in a production licence at a rate that is no less than a rate specified in the notice.

(5) If the holder of a production licence fails to proceed with operations for production of a regulated resource as required under the terms of the licence or by notice under this section (and has not entered into arrangements, satisfactory to the Minister, for future production), the Minister may, by written notice to the licensee, cancel the licence.

41—Cancellation or conversion of production licence where commercial operations in abeyance

(1) If operations resulting in production from the licence area on a commercial basis have not been carried on within the area of a production licence for 24 months or more (and the licensee has not entered into arrangements, satisfactory to the Minister, for commencing or resuming such operations at a reasonable future time), the Minister may, by written notice to the licensee—

- (a) convert the licence into a retention licence; or
- (b) cancel the licence.

(2) Before cancelling a licence under this section, the Minister must give the licensee a reasonable opportunity to make representations about the proposed action.

66—Preconditions of grant or renewal of licence

(2) As a condition of granting or renewing a licence, the Minister may require the applicant to give security, of a kind and amount acceptable to the Minister, for the satisfaction of obligations arising under this Act or the licence.

74—Classification of activities to be conducted under licence

(1) A licence is to include mandatory conditions dividing the regulated activities to be carried out under the licence into—

- (a) activities requiring high level official surveillance; or



Petroleum and Geothermal Energy Act 2000 Environmental Liability Management Policy

(b) activities requiring low level official surveillance.

(2) The activities are to be classified as requiring high level official surveillance unless the licensee satisfies the Minister that, in view of the licensee's demonstrated competence to comply with the requirements of this Act and the conditions of the licence, the activities should be classified as requiring low level official surveillance.

75—Mandatory condition about resources required for compliance with environmental obligations

It is a mandatory condition of every licence that the licensee must have adequate technical and financial resources to ensure compliance with the licensee's environmental obligations (including the rehabilitation of land adversely affected by regulated activities carried out under the licence).

76—Discretionary conditions

(1) A licence may be granted on other conditions (discretionary conditions) the Minister considers appropriate.

(2) The discretionary conditions of the licence may (for example) include a condition requiring the licensee to maintain insurance on terms and conditions approved by the Minister insuring the licensee and the State against obligations arising from regulated activities under the licence.

(3) The Minister may add a discretionary condition to a licence, or vary or revoke a discretionary condition of a licence—

(a) on the renewal of the licence; or

(b) at any other time with the agreement of the licensee.

88—Ministerial direction

(1) The Minister may, by notice in writing given to a licensee, direct the licensee—

(a) to carry out specified obligations under this Act or the licence; or

(b) to cease specified activities that are contrary to this Act or the licence.

(2) The licensee must comply with a direction under subsection (1) within the time allowed in the notice.

Maximum penalty: \$120 000.

(3) If the licensee fails to comply with a direction under subsection (1)(a) within the time allowed in the notice, the Minister may take the required action, or arrange for the required action to be taken, and recover the cost, as a debt, from the licensee.

91—Disciplinary power to suspend or cancel licence

(1) If a licensee fails to comply with this Act or a condition of the licence, the Minister may, by written notice given to the licensee—

- (a) suspend the licence for a specified period or until the Minister terminates the suspension; or
- (b) cancel the licence.

(2) Before the Minister suspends or cancels the licence, the Minister must give the licensee a notice of default—

- (a) specifying the default; and
- (b) stating the action that the Minister proposes to take; and
- (c) if the default is capable of being remedied—allowing the licensee a reasonable opportunity to remedy the default; and
- (d) whether or not the default is capable of being remedied—giving the licensee a reasonable opportunity to show cause why the proposed action should not be taken.

(3) If the notice allows the licensee an opportunity to remedy a default, and the licensee remedies the default to the Minister's satisfaction, the Minister is not to suspend or cancel the licence on the basis of that default.

92—Notice to be published in Gazette

(1) Notice of the grant, suspension or cancellation of a licence is to be published in the Gazette.

(2) Notice of the surrender of a licence or part of a licence area is to be published in the Gazette.

109—Power to direct rehabilitation of land

(1) The Minister may, by written notice given to a licensee or former licensee (an environmental direction), direct the licensee or former licensee—

- (a) to take specified action to rehabilitate land adversely affected by regulated activities; or
- (b) to take action necessary to rehabilitate the land to a standard specified in the direction.

(2) A direction under this section—

- (a) must allow a reasonable time for compliance with the direction; and
- (b) may require the removal of abandoned equipment and facilities.

(3) A person must comply with a direction under this section within the time allowed in the direction.

Maximum penalty: \$120 000.

110—Application for review of environmental direction

(1) The licensee or former licensee required to comply with an environmental direction may apply to the ERD Court for a review of the direction within 14 days after receiving the direction.

(2) Unless the Court decides to the contrary, an application for review of an environmental direction does not suspend operation of the direction.

(3) On review of an environmental direction, the ERD Court may—

- (a) confirm the direction (with or without modification); or

***Petroleum and Geothermal Energy Act 2000* Environmental Liability Management Policy**

(b) revoke the direction.

111—Liability for damage caused by authorised activities

(1) A licensee (or former licensee) is liable to compensate the State for the cost of environmental rehabilitation the State is reasonably required to carry out as a result of serious environmental damage, or the threat or potential of serious environmental damage (insofar as this may be reasonably assessed), arising from activities carried out under the licence.

(2) If a licensee provides the Minister with a report, made by an independent expert acceptable to the Minister, containing an assessment of the risk inherent in regulated activities, and of the precautions necessary to eliminate or minimise the risk, the Minister may enter into an agreement with the licensee under which—

(a) the licensee is obliged to take specified precautions to eliminate or minimise the risk; and

(b) the licensee's liability under this section is limited or excluded.

(3) The Minister may recover compensation on behalf of the State under this section in a court having jurisdiction in cases of tort up to the amount claimed.

124—Decisions etc subject to review

The following are ***reviewable administrative acts***:

(a) a decision to grant or refuse an application for a licence;

(b) a decision to refuse an application for the renewal of a licence;

(c) a decision to impose licence conditions or about the nature of licence conditions;

(d) a decision to suspend or cancel a licence;

(e) a determination requiring the holder of a pipeline licence to provide access to the pipeline or a decision not to make such a determination;

(f) a direction to a licensee or former licensee under this Act;

(g) a decision about the material to be included in or excluded from a register kept under this Act;

(h) the imposition of an administrative penalty;

(i) the imposition of penalty interest or a fine on account of a failure to pay royalty or an annual licence fee under this Act.

125—Application for reconsideration

(1) A person directly affected by a reviewable administrative act may, within 14 days after receiving notice of the act, apply to the Minister for reconsideration.

(2) A person is not to be regarded as directly affected by a decision to grant or refuse an application for a licence unless the person was an applicant for the licence.

(3) An application under this section—

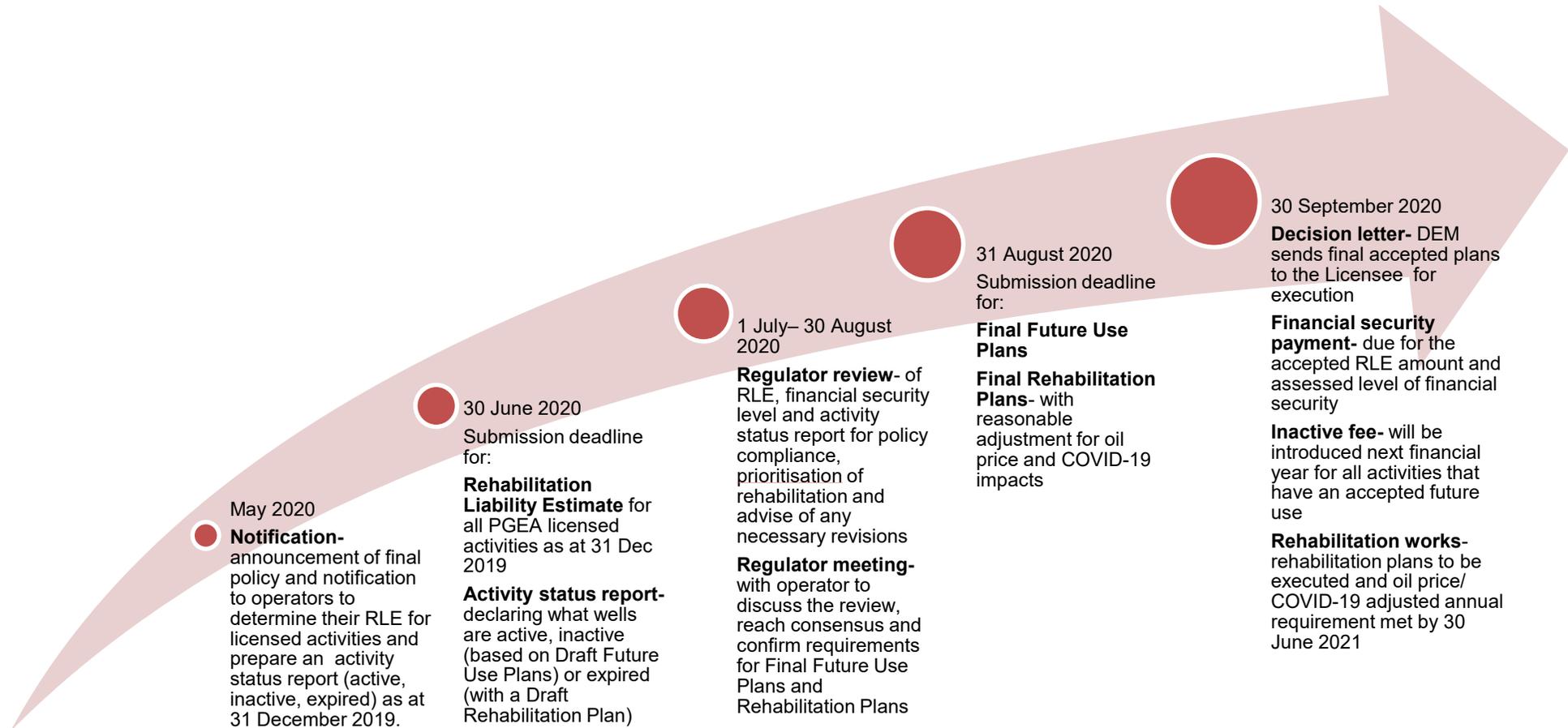
(a) must be made in writing; and

(b) must set out in detail the grounds on which the applicant asks for reconsideration of the administrative act.

(4) An application under this section will not postpone the effect of the reviewable administrative act unless the Minister decides that it should do so and suspends its operation accordingly.

Proposed Final PGEA (2000) Environmental Liability Management Policy

Indicative workflow for policy implementation (FY 2020/2021)



EXAMPLE: ZYX ENERGY PTY LTD (as at 31 December 2019)

Rehabilitation Liability Estimate (RLE): \$85 million
 Proven (1P) Reserves: 260 mmBoe
 Credit Health Check Rating: Above average
 Well inventory:

Active (Produced < 24 months)	Not in use (>24 months)	Total Licensed
175	110	285

An assessment of 110 wells that have not in use for 24 months or longer determined:

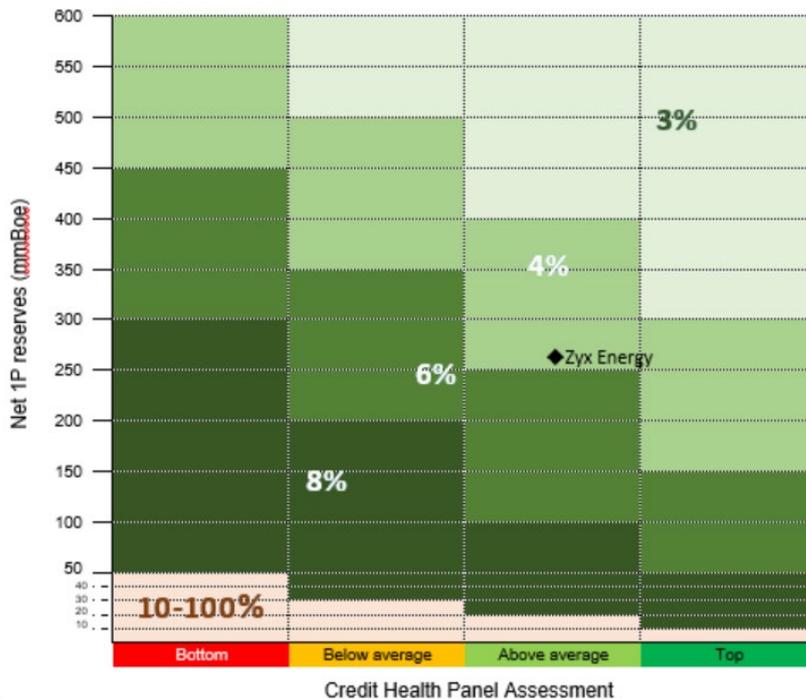
Inactive	Expired
72	38

1. Financial Security Calculation

Zyx Energy has submitted a self-assessed Rehabilitation Liability Estimate (RLE) for their regulated petroleum and geothermal activities in South Australia in the amount of \$85m. This amount has been verified and accepted by the Department for Energy and Mining (DEM).

Zyx Energy has net 1P reserves of 260mmboe as stated in their most recent annual report and a credit health check assessment of ‘Above Average’.

Using the Financial Security Level Assessment Matrix below, DEM has determined the security level for Zyx Energy to be 4% of the total RLE.



The security requirement is (\$85,000,000 x 4%) **\$3,400,000** payable as cash/ irrevocable bank guarantee/ insurance bond or other form acceptable to the Minister. Zyx Energy provides a financial security, in the form of bank guarantee, to DEM on 30 September 2020.

The RLE will be reviewed annually to reflect any change in activities and environmental liability. Similarly any change in 1P reserves and credit health assessment will determine the financial security requirement for Zyx Energy.



Proposed Final PGEA (2000) Environmental Liability Management Policy

2. Activity Status Report

Zyx Energy provides an activity status report to DEM on 20 June 2020 declaring the status of the 285 wells that is licensed to it as at 31 December 2019. The report claims the company has 175 active wells which is supported by monthly production data. Of the 110 wells that have not been in use for over 24 months, Zyx Energy proposes that it has 82 inactive wells and 28 expired wells.

DEM reviews the draft future use plans and determines that there is not enough evidence to satisfy bona fide use criteria for some of the proposed inactive wells. A regulator meeting is held in July 2020 and the Licensee and DEM meet and reach consensus that there are 72 inactive wells and 38 expired wells.

Zyx Energy then revises its plans based on the review discussion and submits finalised Future Use Plans and Rehabilitation Plans on 30 August 2020. By 30 September 2020, DEM issues a decision letter with the accepted assessment of the RLE, activity status and accepted final plans for the Licensee to execute.

3. Inactive Fee Calculation

Zyx Energy has demonstrated that 72 of the 110 wells that have not been in use have a bona fide future use that DEM has accepted. Of these 72 inactive wells, 31 were drilled before 2000, 18 wells are between 15-20 years in age, 10 wells are 8-15 years old and 13 wells are 2-8 years old. The inactive well fees that apply would have applied for the 2020 financial year (in the absence of COVID-19 impacts) total \$64,950 as set out below:

Well age	No of wells	Rate	Fee
2 years ago or longer and less than 8 years	13	\$150	1,950
8 years ago or longer, but less than 15 years ago years	10	\$300	3,000
15 years ago or longer but less than 20 years	18	\$750	13,500
20 years ago or more	31	\$1,500	46,500
Total inactive wells/ fee (FY2020)	72		\$64,950

4. Expired Well Rehabilitation Management

The remaining 38 wells of Zyx Energy's 110 wells that have not been in use for more than 24 months are deemed to be expired. These expired wells have been either (i) declared by the company as having no future use or, (ii) a bona fide future use acceptable to DEM has not been demonstrated.

Zyx Energy is required to submit an expired well rehabilitation plan of up to 5 years duration stating how it will meet the minimum decommissioning requirement of 5% (and at least 2) expired wells per annum. The calculation for the minimum number of expired wells that are required to be decommissioned and rehabilitated is as follows:

$$38 \text{ expired wells} \times 5\% = 1.9 \text{ expired wells for rehabilitation per annum}$$

However, as Zyx Energy has expired wells, it is required to rehabilitate at least 2 expired wells each financial year. Therefore, over the 5 year period of the rehabilitation plan, a minimum of 10 expired wells need to be decommissioned and rehabilitated. The final Rehabilitation Plan that has been accepted by DEM details which 2 expired wells will be rehabilitated by Zyx Energy by 30 June 2021.