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Environmental Law in WA Part 1

Environmental Essentials WA

1

Outcomes

2

You will gain a general understanding of environmental legislation in WA.

- Definition of environmental law
- Sources of environmental law (and guiding principles)
- Common Law (Trespass, Nuisance and Negligence)
- Key WA and Commonwealth Acts:
 - Mining Act 1978
 - Environmental Protection Act 1986
 - Rights in Water and Irrigation Act 1914
 - Aboriginal Heritage Act 1972 (WA)
 - Planning and Development Act 2005 (WA)
 - Contaminated Sites Act 2003
 - Environment Protection and Biodiversity Conservation Act 1999
 - Relationship between State and Commonwealth Law

2

What is environmental law?

3

Environmental Law refers to:

- Protecting soil, air, water
- The oceans
- Biodiversity
- Protection of areas of land or ocean (such as in national parks)
- Individual species (such as wildlife conservation laws)
- Particular actions. E.g. environmental impact assessment; remediation of environmental damage caused (contaminated sites laws).

Outcome 1: Definition of Environmental Law

3

Sources of environmental law

4

- Common law - individual's rights and private property rights
- Statute – Statutes are laws enacted by the State or Federal Parliament.
- Subsidiary legislation – local or specific details of how a statute applies (made by government rather than Parliament)
- Policies and administrative guidelines - not legally binding, but government must give them proper consideration
- International law - international treaties (these do not have direct legal effect in Australia until they are implemented by Commonwealth legislation).

Outcome 2: Sources of Environmental Law (and Guiding Principles)

4

Guiding Principles of Env. Law

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In developing new environmental legislation, law-makers are increasingly adopting a number of internationally recognised principles:

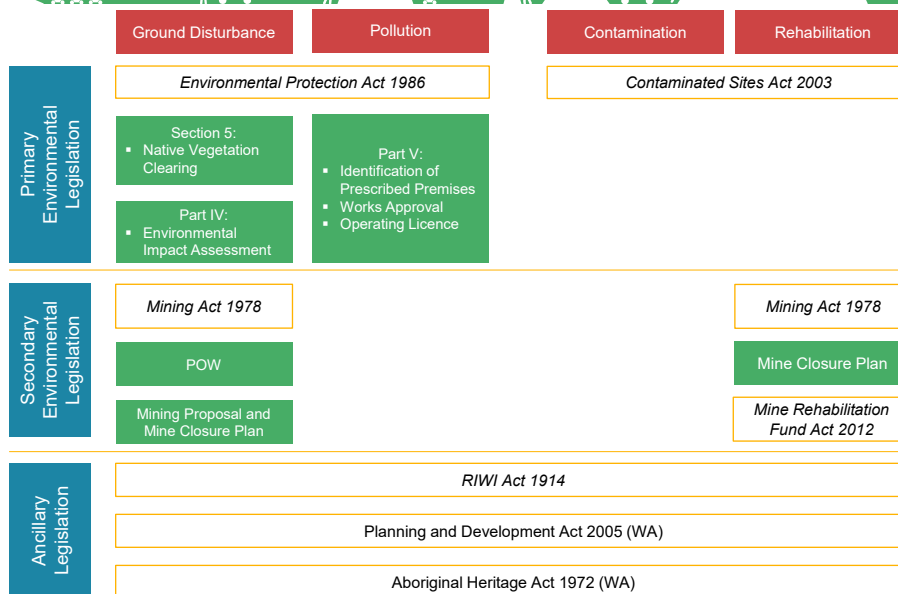
- the precautionary principle
- conservation of biological diversity and ecological integrity
- economic valuation of environmental factors and the polluter pays principle
- ecologically sustainable development and the principle of intergenerational equity
- waste minimisation
- stakeholder participation.

Outcome 4: Key WA and Commonwealth Acts

5

Environmental Legislation

6



Outcome 3: Common Law (Trespass, Nuisance and Negligence)

6

Environmental Protection Act 1986

7

- Principal piece of environmental legislation in Western Australia
- Provides for the prevention, control and abatement of environmental pollution
- Provides for the conservation, preservation, protection, enhancement and management of the environment.

Outcome 4: Key WA and Commonwealth Acts

7

Environmental Protection Act 1986

8

- Projects that are likely to have a significant impact on the environment are subject to a Formal Environmental Impact Assessment (EIA) by the Environmental Protection Authority (EPA).
- The project can be referred to the EPA by either the proponent, other government agencies, non-government organisations or members of the public. The EPA will consider these referrals and determine whether or not a formal assessment is required.
- The ultimate decision as to whether a proposal may be implemented rests with the WA Minister for Environment and other relevant decision-making authorities. The EPA's report is a necessary step in the EIA process, *but the EPA's recommendations are not binding on the Minister.*

Outcome 4: Key WA and Commonwealth Acts

8

Greenhouse Gas Emissions Environmental Factor Guideline

9

- Designed to guide Government decision making for **major projects** that are assessed by the EPA
- Supports the development of Greenhouse Gas Management plans for proponents which:
 - outline strategies to avoid, reduce, mitigate and offset the project's Scope 1 emissions contributing towards the State's aspiration of net zero emissions by 2050
 - are unique to a proposal's specific circumstances (flexibility)
 - Allow proponents to take account of opportunities at either facility level or across national operations
 - To propose their own timeframes and interim targets
 - Include requirements for periodic public reporting against their targets
 - To account for and align with Commonwealth requirements.

Outcome 4: Key WA and Commonwealth Acts

9

Key Aspects of GHG Guideline

10

- Projects across Australia are being more closely scrutinised by decision makers and the courts in the context of the Paris Agreement.
- Most relevant to new projects or existing projects going through an expansion phase, which are expected to have over 100,000 tonnes of scope 1 (direct) GHG emissions per year.
- Projects referred to the EPA for assessment may need to include estimates of scope 1, 2 and 3* GHG emissions (annual and total) for the life of the project.
- Projects to which the GHG Guideline applies will need to prepare and implement a GHG Management Plan which demonstrates the proponent's contribution towards the aspiration of net zero emissions by 2050.

Outcome 4: Key WA and Commonwealth Acts

10

Native Vegetation Clearing

11



The clearing of native vegetation in Western Australia is regulated under Part V of the Environmental Protection Act 1986 (EP Act) and the following regulations and notices:

- Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (Clearing Regulations)
- Environmental Protection (Environmentally Sensitive Areas) Notice 2005 (ESA Notice)

Outcome 4: Key WA and Commonwealth Acts

11

What is Native Vegetation?

12

‘Native vegetation’ means all types of indigenous vegetation, including:

- Those found in aquatic and marine environments
- Dead vegetation (unless declared by regulation to be excluded).

Native vegetation does not usually include vegetation that has been intentionally planted unless the planting was required by law, or the vegetation is protected under a conservation covenant or other binding agreement.

Outcome 4: Key WA and Commonwealth Acts

12

What is Clearing?

13

Clearing means causing substantial damage to native vegetation, including through:

- the killing or removing of native vegetation
- the severing or ringbarking of trunks or stems
- the draining or flooding of land
- the burning of vegetation
- the grazing of stock
- any other activity that kills or damages native vegetation.

Outcome 4: Key WA and Commonwealth Acts

13

What is Clearing?

14

It is unlawful for any person to cause or allow native vegetation to be cleared unless:

1. the clearing is in accordance with a clearing permit
2. the activity causing the clearing is exempt from the clearing laws:
 - As per Schedule 6 of the EP Act, which apply across WA
 - As per the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (“the Clearing Regulations”), which apply across WA except in environmentally sensitive areas.

Outcome 4: Key WA and Commonwealth Acts

14

Clearing Exemptions

15

- Exemptions are
 - Clearing for 'low impact or other mineral activities'. Ex: temporary tracks, groundwater drilling
 - Driving vehicles off road
 - 4m wide raised blade clearing (with 100m distance between tracks)
 - Scrap and detect areas of 2 hectares per tenement
 - Clearing for camp sites and storage with a total area of 2 hectares per tenement
 - There is also an exemption that allows clearing of up to 10 hectares per financial year per authority area for clearing regulated under the Mining Act 1978
 - Construction of a water bore and taking water under a Licence granted under the Rights in Water and Irrigation Act 1914.

Outcome 4: Key WA and Commonwealth Acts

15

Native Vegetation Clearing

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EP Act 1986

- Native Vegetation: *indigenous aquatic or terrestrial vegetation, and includes dead vegetation unless that dead vegetation is of a class declared by regulation to be excluded from this definition but does not include vegetation in a plantation*
- Offence to clear native vegetation unless permitted/approved or there is an exemption legislation
- DWER: primary authority responsible for administering the native vegetation clearing provisions
- Area or Purpose Permits
- Permit exempt if there is a Part IV Referral on Assessment. Clearing approved under Part IV referral on assessment and Ministerial Statement

Outcome 4: Key WA and Commonwealth Acts

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Mining Act 1978

- DMIRS: delegated authority associated with mining related activities or associated with State Agreements
- Area or Purpose Permits
- Exemptions under Mining Act 1978
 - Clearing for 'exploration' = POW
 - Clearing for 'low impact or other mineral activities'. Ex: temporary tracks, groundwater drilling, clearing less than two hectares for camp sites
 - There is also an exemption that allows clearing of up to 10 hectares per financial year per authority area for clearing regulated under the Mining Act 1978

EPBC Act 1999

- If a clearing permit required under EP Act 1986 & proposed clearing will have or is likely to have an impact on a Matter of National Environmental Significance (MNES) = assessed under bilateral agreement
- Bilateral agreement: Between Commonwealth and WA. WA can assess impacts of clearing on relevant MNES while undertaking an EP Act 1986 clearing permit assessment
- Only applies to clearing applications initially referred to the Commonwealth and which the Commonwealth has determined to be a 'controlled action'

Native Vegetation Clearing: Permit

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Two types of Permit (Section 51E of the EP Act 1986):

- Area permit (Form C1)
 - Applied for by an applicant who is the owner of the land, likely to become the land owner
 - Clearing of defined areas specified in the permit
 - Generally approved for a default period of two years
- Purpose permit (Form C2)
 - Applied for by an applicant who is not the owner of the land which will be cleared but has authority under a written law or permission to access the land to conduct the clearing
 - Clearing of different areas from time to time for a purpose specified in the permit
 - Generally approved for a default period of five years.

Outcome 4: Key WA and Commonwealth Acts

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Native Vegetation Clearing: Permit

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Mining Act 1978

Mineral tenure	Area permit	Purpose Permit
General purpose lease	Applicable	Applicable
Mining lease	Applicable	Applicable
Prospecting licence	Not available	Applicable
Miscellaneous licence	Not available	Applicable
Exploration licence	Not available	Applicable
Retention licence	Not available	Applicable

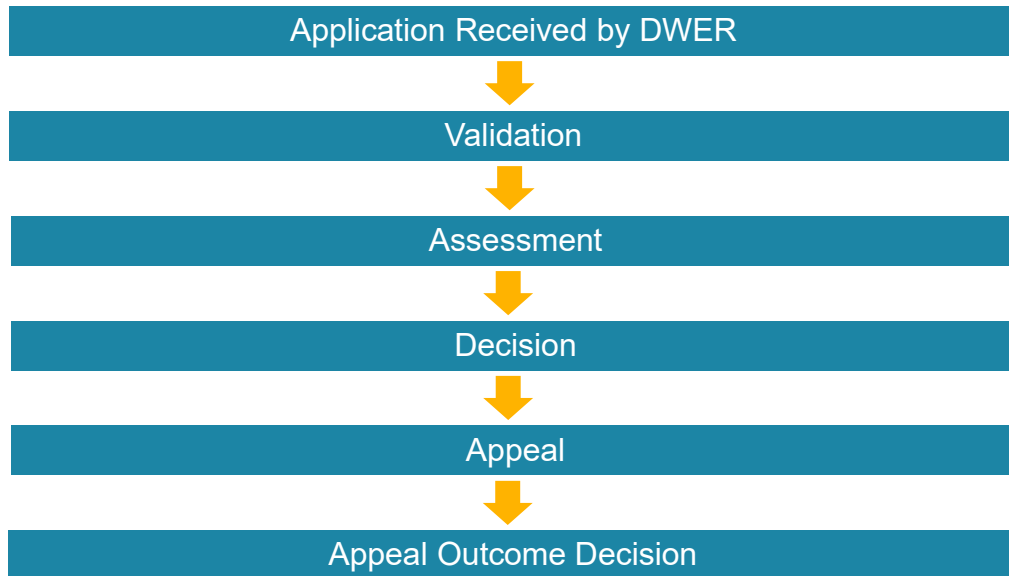
<https://www.der.wa.gov.au/your-environment/native-vegetation/49-fact-sheets>

Outcome 4: Key WA and Commonwealth Acts

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Native Vegetation Clearing: Assessment Process

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Outcome 4: Key WA and Commonwealth Acts

21

Native Vegetation Clearing: Assessment Criteria

22

Risk-based assessment approach:

- Size
- Location
- Environmental values (see Clearing Principles) within or adjacent to the area
- Purpose of clearing
- Urgency of the application
- Public interest in the application.

Outcome 4: Key WA and Commonwealth Acts

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10 Clearing Principles - Schedule 5 EP Act

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- Principle (a) – Native vegetation should not be cleared if it comprises a high level of **biological diversity**
- Principle (b) – Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a **significant habitat for fauna indigenous** to Western Australia.
- Principle (c) – Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, **rare flora**.
- Principle (d) – Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a **threatened ecological community**.
- Principle (e) – Native vegetation should not be cleared if it is significant as a **remnant of native vegetation** in an area that has been extensively cleared.

Outcome 4: Key WA and Commonwealth Acts

23

10 Clearing Principles - Schedule 5 EP Act

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- Principle (f) – Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a **watercourse or wetland**
- Principle (g) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable **land degradation**.
- Principle (h) – Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the **environmental values** of any adjacent or nearby **conservation area**.
- Principle (i) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause **deterioration in the quality of surface or underground water**
- Principle (j) – Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the **incidence of flooding**.

Outcome 4: Key WA and Commonwealth Acts

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- Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)

- Projects should be referred and are likely to be assessed under the EPBC Act when there is a potential to have a significant impact on any of the nine Matters of National Environmental Significance (MNES):

- World Heritage Properties
- Commonwealth Marine Areas
- Great Barrier Reef Marine Park
- National Heritage Places
- Migratory Species
- Nuclear Actions
- Wetlands of International Importance
- Nationally Threatened Species and Ecological Communities
- Water Resource, in relation to coal seam gas and large coal mining development

Australia's natural environment and iconic places are in an overall state of decline and are under increasing threat. The current environmental trajectory is unsustainable.

The EPBC Act is ineffective. It does not enable the Commonwealth to play its role in protecting and conserving environmental matters that are important for the nation. It is not fit to address current or future environmental challenges.

Recommendations include:

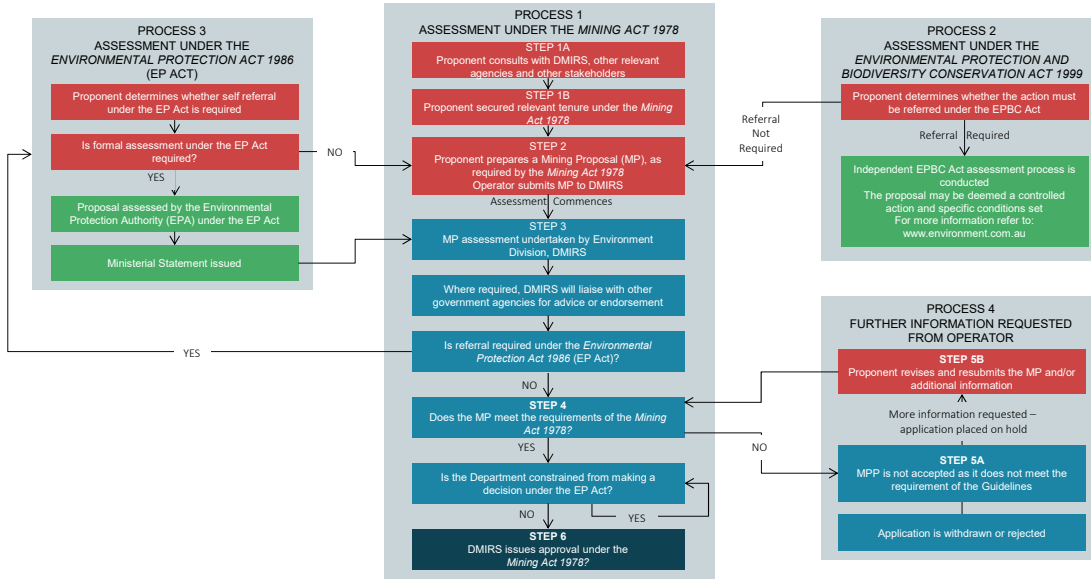
- Greater decision making power to States and Territories
- establishing legally enforceable 'national environmental standards' for matters of national environmental significance with a greater emphasis on regional (landscape) level planning
- establishing an independent regulator focused on enforcement and compliance
- reducing reliance on, and reviewing, environmental offsetting arrangements
- greater inclusion of Indigenous peoples' traditional knowledge and views in science processes and decision-making

The Commonwealth has powers that may be exercised for the purposes of environmental regulation, including:

- control of interstate and overseas trade and commerce (e.g. granting export licences with conditions that protect the environment)
- external affairs (e.g. implementation of the World Heritage Convention to protect world heritage areas).

The Commonwealth may also exercise its financial powers to make laws about taxation and expenditure of Commonwealth money in ways which protect the environment.

Approval Assessment and Determination Process



Outcome 4: Key WA and Commonwealth Acts

Part IV Referral for EIA

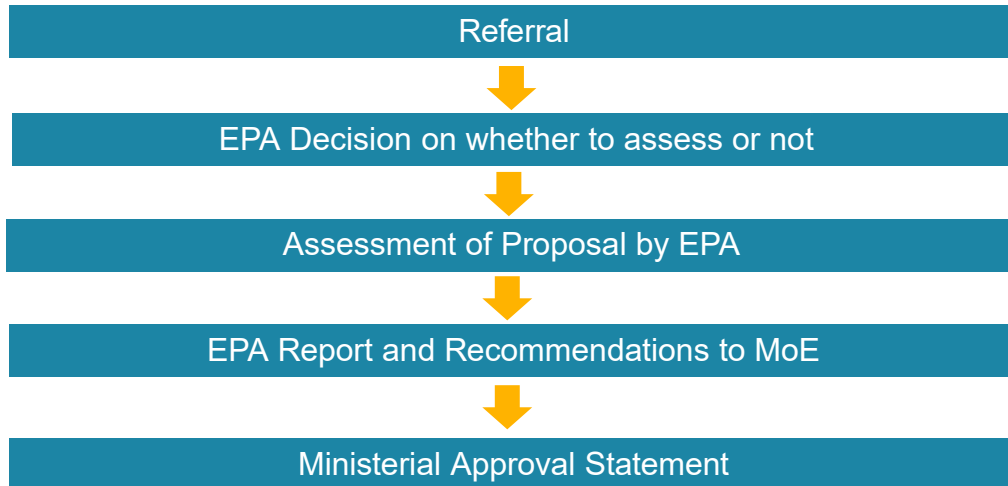
- Part IV of the *Environmental Protection Act 1986* makes provisions for the EPA to undertake environmental impact assessment of significant proposals, strategic proposals and land use planning schemes.
- Environmental Principles, Factors And Associated Objectives is the basis for assessing whether the environmental impact of a proposal is acceptable

[Statement of Environmental Principles, Factors and Objectives](#)

Factors and Objectives

Theme	Factor	Objective
Sea	Benthic Communities and Habitats	To protect benthic communities and habitats so that biological diversity and ecological integrity are maintained.
	Coastal Processes	To maintain the geophysical processes that shape coastal morphology so that the environmental values of the coast are protected.
	Marine Environmental Quality	To maintain the quality of water, sediment and biota so that environmental values are protected.
	Marine Fauna	To protect marine fauna so that biological diversity and ecological integrity are maintained.
Land	Flora and Vegetation	To protect flora and vegetation so that biological diversity and ecological integrity are maintained.
	Landforms	To maintain the variety and integrity of distinctive physical landforms so that environmental values are protected.
	Subterranean Fauna	To protect subterranean fauna so that biological diversity and ecological integrity are maintained.
	Terrestrial Environmental Quality	To maintain the quality of land and soils so that environmental values are protected.
Water	Hydrological Processes	To maintain the hydrological regimes of groundwater and surface water so that environmental values are protected.
	Inland Waters Environmental Quality	To maintain the quality of groundwater and surface water so that environmental values are protected.
Air	Air Quality	To maintain air quality and minimise emissions so that environmental values are protected.
People	Social Surroundings	To protect social surroundings from significant harm.
	Human Health	To protect human health from significant harm.

Outcome 4: Key WA and Commonwealth Acts



Outcome 4: Key WA and Commonwealth Acts

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- Any proposal likely to have a significant environmental effect on the environment should be referred to the EPA. Any person may refer a significant proposal to the EPA, except in certain situations:
- Only a proponent may refer a strategic proposal
- Only a proponent or a responsible authority may refer a proposal under an assessed scheme
- A decision-making authority is required to refer a proposal that appears to be a significant proposal.
- Under certain circumstances the EPA may refuse to accept a referral. For example, if the proposal is clearly not a significant proposal or the proposal has previously been referred to the EPA.
- Proponents are encouraged to discuss proposals with staff of the Environmental Services Division of the Department of Water and Environmental Regulation (DWER), relevant decision making authorities, government agencies and stakeholders before referral.

Outcome 4: Key WA and Commonwealth Acts

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EIA Process Stage 2- EPA Decision

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Once the EPA has registered a valid referral, it must determine whether to assess the referral.

Decision to assess

If the EPA decides to assess a proposal, the EPA will also decide on the level of assessment, which is the proposal-specific requirements that the EPA determines are necessary to assess the proposal.

Decision not to assess

When the EPA decides not to assess a proposal, it determines that the likely effect on the environment is not so significant as to warrant assessment by the EPA.

Derived proposals

A proponent may request that the EPA declares a referred proposal to be a derived proposal. This means that the proposal was part of a strategic proposal which has already been assessed by the EPA.

Outcome 4: Key WA and Commonwealth Acts

33

EIA Process Stage 3 - Assessment

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- Scoping the proponent environmental review (Optional)
- Preparation of additional assessment information (Optional)
- Public review (Optional)
- Preparation of EPA draft assessment report (Optional)
- Decision-making authority not to approve proposal until certain events occur
- Minor or preliminary work
- Changes to proposals during assessment.

Outcome 4: Key WA and Commonwealth Acts

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EIA Process Stage 4 – EPA Report

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- At the completion of the assessment, the EPA prepares a report and recommendations for the Minister for Environment.
- The assessment report sets out what the EPA considers are the key environmental factors identified in the course of the assessment, the EPA's recommendations as to whether or not the proposal may be implemented and the conditions and procedures to which implementation should be subject.
- Where the proposal is a strategic proposal, the EPA will recommend whether or not the future proposals, identified in the strategic proposal, may be implemented.
- Any person may lodge an appeal with the Minister against the content and recommendations in an assessment report.

Outcome 4: Key WA and Commonwealth Acts

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EIA Process Stage 5 – EPA Decision and Implementation

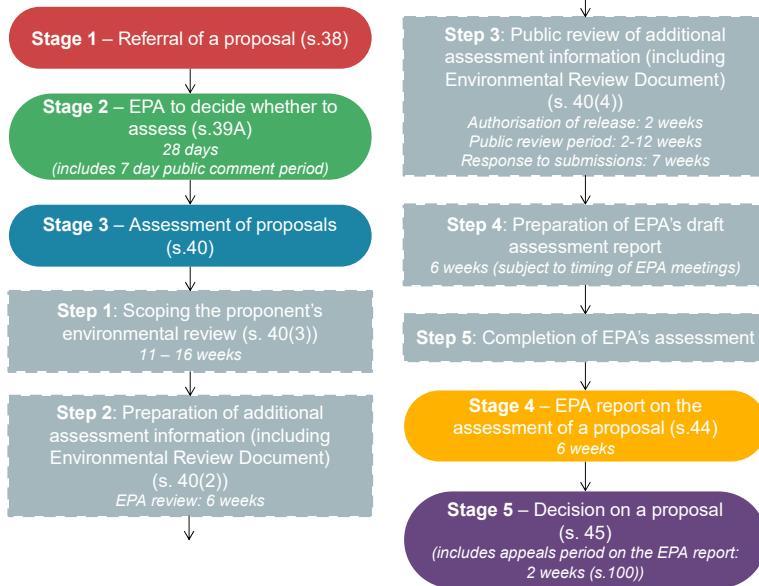
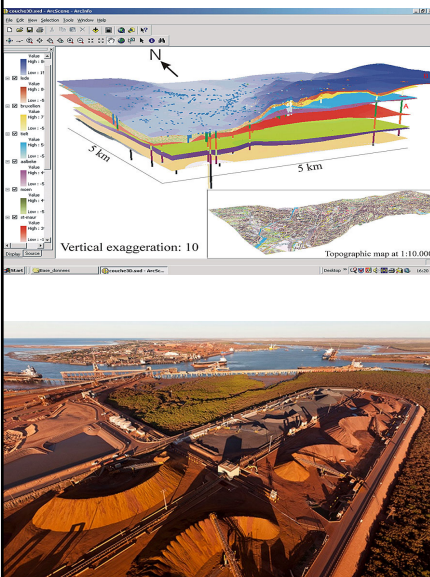
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- The Minister for Environment considers the EPA's report and any public appeals before determining, in consultation with other Ministers, whether the proposal should be allowed to proceed, and if so, under what conditions.
- If the Minister for Environment determines that a proposal may be implemented, a Ministerial Approval Statement is issued under s45(5) of the *Environmental Protection Act 1986*. This sets out the conditions and procedures that the proponent must adhere to during the project implementation.

Outcome 4: Key WA and Commonwealth Acts

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- Once a proposal has been approved and a Ministerial Approval Statement is issued, the proponent is required to ensure that implementation of the proposal is carried out in accordance with the implementation conditions, including any Environmental Management Plans required as a condition.
- The DWER monitors compliance with the Ministerial Approval Statements issued under the *Environmental Protection Act 1986*.



- DWER regulates industrial emissions and discharges to the environment via a works approval and licencing process
- The EP Act requires:
 - A works approval to be obtained before constructing a prescribed industrial premises
 - An operating licence to emit or discharge waste, odour, noise, electromagnetic radiation once the prescribed premise is operational
 - Licences and works approvals set conditions for prescribed premises to ensure that potential impacts and risks to the environment are minimised. This is based on a risk-assessment process.
- Occupiers of prescribed premises are required to submit annual reports on compliance with their licence conditions through an Annual Audit Compliance Report (AACR)



Outcome 4: Key WA and Commonwealth Acts

- Industrial premises with potential to cause emissions and discharges to air, land or water are known as 'prescribed premises' and trigger regulation under the EP Act. Prescribed premises categories are outlined in Schedule 1 of the [Environmental Protection Regulations 1987](#)



Category number	Description of category	Production or design capacity
1	Cattle feedlot: premises on which the watering and feeding of cattle occurs, being premises — (a) situated less than 100 m from a watercourse; and (b) on which the number of cattle per hectare exceeds 50.	500 animals or more
2	Intensive piggery: premises on which pigs are fed, watered and housed in pens.	1 000 animals or more
[3, 4 deleted]		
5	Processing or beneficiation of metallic or non-metallic ore: premises on which — (a) metallic or non-metallic ore is crushed, ground, milled or otherwise processed; or (b) tailings from metallic or non-metallic ore are reprocessed; or (c) tailings or residue from metallic or non-metallic ore are discharged into a containment cell or dam.	50 000 tonnes or more per year
6	Mine dewatering: premises on which water is extracted and discharged into the environment to allow mining of ore.	50 000 tonnes or more per year
7	Vat or in situ leaching of metal: premises on which metal is extracted from ore with a chemical solution.	5 000 tonnes or more per year
8	Mineral sands mining or processing: premises on which mineral sands ore is mined, screened, separated or otherwise processed.	5 000 tonnes or more per year

Outcome 4: Key WA and Commonwealth Acts

Environmental Protection Regulations 1987

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- Clean Air (Determination of Air Impurities in Gases Discharged to the Atmosphere) Regulations 1983
- Environmental Protection (Abattoirs) Regulations 2001
- Environmental Protection (Abrasive Blasting) Regulations 1998
- Environmental Protection (Clearing of Native Vegetation) Regulations 2004
- Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998
- Environmental Protection (Controlled Waste) Regulations 2004
- Environmental Protection (Domestic Solid Fuel Burning Appliances and Firewood Supply) Regulations 1998
- Environmental Protection (Fibre Reinforced Plastics) Regulations 1998
- Environmental Protection Goldfields Residential Areas Sulfur Dioxide Policy and Regulations 2003
- Environmental Protection (Kwinana) (Atmospheric Wastes) Regulations 1992
- Environmental Protection (Metal Coating) Regulations 2001
- Environmental Protection (NEPM-NPI) Regulations 1998
- Environmental Protection (Noise) Regulations 1997
- Environmental Protection (Packaged Fertiliser) Regulations 2010
- Environmental Protection (Petrol) Regulations 1999
- Environmental Protection (Recovery of Vapours from the Transfer of Organic Liquids) Regulations 1995
- Environmental Protection (Rural Landfill) Regulations 2002
- Environmental Protection (Unauthorised Discharges) Regulations 2004
- Noise Abatement (Noise Labelling of Equipment) Regulations (No. 2) 1985

Outcome 4: Key WA and Commonwealth Acts

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Contaminated Sites Act 2003 Overview

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Big Picture:

- Primary legislation for assessment and management of contamination
- Takes precedence over all legislative instruments except EP Act 1986
- Key component to mine closure and relinquishment.
- Having a Part V license does not exclude proponent from CS Act requirements
- Is deeming a closure issue and will be need to be undertaken if if Mine Closure Plan approved

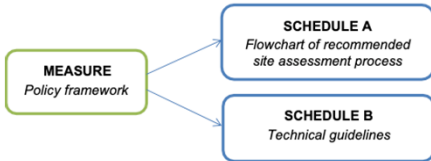
Noted Elements:

- Protect human health, the environment and environmental values by providing for the identification, recording, management and remediation of contaminated sites in the State of Western Australia.
- Under the Act, land owners, occupiers and polluters must report known or suspected contaminated sites to DWER.
- Contaminated in relation to land, water or a site, means having a substance present in or on that land, water or site at above background concentrations that presents, or has the potential to present, a risk of harm to human health, the environment or any environmental value.

Outcome 4: Key WA and Commonwealth Acts

42

NEPM ASC provides national framework for assessment of site contamination and recommends that the investigation of contaminated sites be carried out in stages. Only address site characterisation



Guidelines that form Schedule B of the NEPM

- Schedule B1 Guideline on investigation levels for soil and groundwater
- Schedule B2 Guideline on site characterisation
- Schedule B3 Guideline on laboratory analysis of potentially contaminated soils
- Schedule B4 Guideline on site-specific health risk assessment methodology
- Schedule B5a Guideline on ecological risk assessment
- Schedule B5b Guideline on methodology to derive ecological investigation levels in contaminated soils
- Schedule B5c Guideline on ecological investigation levels for arsenic, chromium (III), copper, DDT, lead, naphthalene, nickel and zinc
- Schedule B6 Guideline on the framework for risk-based assessment of groundwater contamination
- Schedule B7 Guideline on derivation of health-based investigation levels
- Schedule B8 Guideline on community engagement and risk communication
- Schedule B9 Guideline on competencies and acceptance of environmental auditors and related professionals

DWER - Contaminated Sites Guidelines

Contaminated Sites Guidelines	Contaminated Sites Management Series (superseded)
Assessment and management of contaminated sites (2014)	<ul style="list-style-type: none"> Development of sampling and analysis plans (2001) Community consultation (2006) Potentially contaminating activities, industries and land uses (2004) Assessment levels for soil, sediment and water (2010) Bioremediation of hydrocarbon contaminated soils in Western Australia (2004) The use of risk assessment in contaminated site assessment (2006) Reporting on site assessments (2001)
Identification, reporting and classification of contaminated sites (2014)	<ul style="list-style-type: none"> Reporting of known and suspected contaminated sites (2006) Site classification scheme (2006) Certificate of contamination audit scheme (2000)
Use of monitored natural attenuation for groundwater remediation (2014)	Use of monitored natural attenuation for groundwater remediation (2004)
Contaminated sites auditors—accreditation, conduct and reporting (2014)	Contaminated sites auditors—guidelines for accreditation, conduct and reporting (2009)
Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (joint publication with DoH) (2009)	Assessment, remediation and management of asbestos-contaminated sites in Western Australia (joint publication with DoH) (2009)
Contaminated sites and the land use planning process (proposed revision)	Contaminated sites and the land use planning process (2006)

Site Characterisation and Remediation

Site contamination reporting framework

Preliminary site investigation (PSI) consists of a desktop study, a detailed site inspection and interviews with relevant personnel. A PSI may also include limited sampling and analysis. The information is used to develop an initial CSM. If contamination or sources of contamination (potential areas of concern) are identified, further detailed site investigation is necessary.

Detailed site investigation (DSI) assesses potential or actual contamination through an appropriate sampling and analysis program. Several phases of investigation (including risk assessment) may be required to adequately characterise the site, particularly for complex sites. The CSM is refined on an iterative basis until there is sufficient information and understanding of the site to devise risk-based strategies to manage the identified risks.

Remedial action plan (RAP) documents the type and extent of remediation required to ensure that the site is suitable for its current or intended future use, and to protect the surrounding environment and land uses. The plan details the clean-up techniques proposed to achieve the remedial objectives and criteria for assessing the effectiveness of the clean-up in the site validation process.

Site remediation and validation (SRV) is the process of cleaning up the site (remediation) and evaluating the effectiveness of the clean-up (validation). Where the remedial objectives are not met, further work may be required such as further remediation, risk assessment or ongoing site management.

Site management plan (SMP) documents ongoing management of the site if this is required, such as long term monitoring and assessment of residual contamination. The SMP may require periodic revision and updating to ensure it remains relevant over time. A relevant stakeholder, such as the land owner or body corporate, must assume responsibility for maintaining and implementing the SMP.

Outcome 4: Key WA and Commonwealth Acts

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- Once classified, a *memorial (restriction)* is placed on Certificate of Title
- DWER determines the category of classification:
 - Report not substantiated
 - Possibly contaminated – investigation required (PCIR)
 - Not contaminated – Unrestricted Use
 - Contaminated – Remediation Required (CRR)
 - Remediated for Restricted Use (RRU)
 - Contaminated – Restricted Use (CRU)
 - Decontaminated.

Outcome 4: Key WA and Commonwealth Acts

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- Proponents identify the potential risks that a mining operation could pose to the environment, how the risks will be treated, establishing appropriate site-specific environmental outcomes
- Monitoring and reporting on the success of these outcomes
- The Mining Act defines a Mining Proposal as
 - In the format required by the guidelines
 - Contains such information as required by the guidelines
 - Contains a Mine Closure Plan

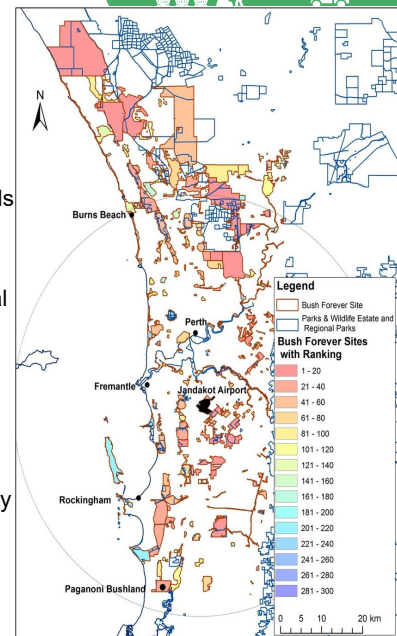


Figure 2: Structure of a Mining Proposal

Outcome 4: Key WA and Commonwealth Acts

DMIRS and EPA will confer on whether to refer (off shore criteria not shown)

- Environmentally Sensitive Areas including:
 - Within 500m of World Heritage Property
 - Within 500m of a Bush Forever site
 - Within 500m of a Threatened Ecological Community
 - Within 500m of defined wetlands (including Ramsar wetlands, ANCA wetlands Conservation category wetlands)
- Area containing rare flora Area covered by an Environmental Protection Policy.
- Within 500m of a declared/proposed State Conservation Estate, including National Park, Nature Reserve, Conservation Park, or State Forest and Timber Reserves.
- Within a Public Drinking Water Source Area.
- Within 2 kilometres of a declared occupied town site (for Mining Proposals and petroleum Environment Plans only).
- Hydraulic fracturing exploration and development activities.
- Activities within the Strategic Assessment for the Perth Peel Region and potentially in conflict with the outcomes of the Strategic Assessment.
- Area previously or currently subject to formal assessment by the EPA.




Outcome 4: Key WA and Commonwealth Acts

Table 1: Objectives for environmental factors

Environmental factor	Objective
Biodiversity/Flora/Fauna/ Ecosystem	To maintain representation, diversity, viability and ecological function at the species, population and community level.
Water resources	To maintain the hydrological regimes, quality and quantity of groundwater and surface water to the extent that existing and potential uses, including ecosystem maintenance, are protected.
Landforms	Mining will not result in appreciable land degradation ² or the contamination or pollution of the land.
Mine closure	Mines are closed in a manner to make them (physically) safe to humans and animals, (geo-technically) stable, (geo-chemically) non-polluting/ non-contaminating, and capable of sustaining an agreed post-mining land use, and without unacceptable liability to the State.

Outcome 4: Key WA and Commonwealth Acts



Statutory Documents

-  [ProForma - Mining Closure Plan for Small Mining Operations - March 2020 - 474 Kb](#)
Proforma to be used for reviewed Mine Closure Plans - as per the Statutory Guidelines for Mine Closure Plans - effective 3 March 2020 (word version)
-  [ProForma - Mining Closure Plan for Small Mining Operations - March 2020 - 201 Kb](#)
Proforma to be used for reviewed Mine Closure Plans - as per the Statutory Guidelines for Mine Closure Plans - effective 3 March 2020 (pdf version)
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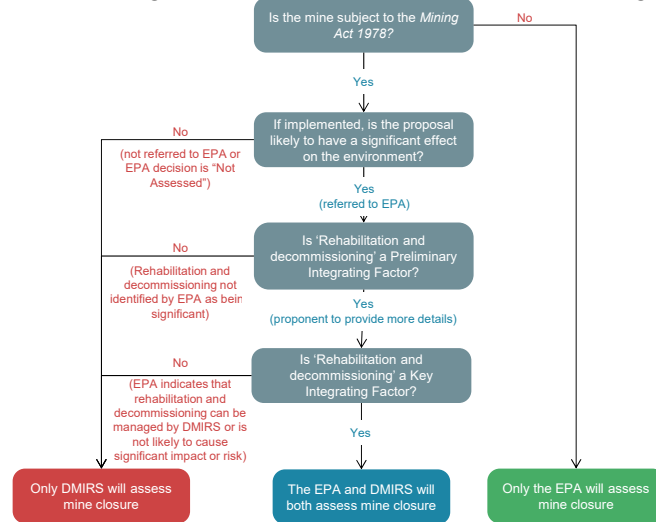
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This guide has been provided to assist tailings storage facilities (TSFs) designers and operators with preparing the required reports for managing a TSF.

Outcome 4: Key WA and Commonwealth Acts

Mining Act 1978: Mining Closure Plan

51

Mine closure plans – submitted by a company associated with a mining proposal and covering all aspects of mine decommissioning and rehabilitation



- Cover Page
- Summary
- Identification of Closure Obligations and Commitments
- Stakeholder Engagement
- Baseline and Closure Data Analysis
- Post Mining Land Uses
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- Management of Information and Data
- Reviewed Mine Closure Plans

Outcome 4: Key WA and Commonwealth Acts

51

Mining Rehabilitation Fund Act 2012

52

- The Mining Rehabilitation Fund is a pooled fund that WA mining operators contribute to
- It replaced an Unconditional Performance Bond system (that still exists on some tenure) because companies would go into liquidation and then the Government was left with the rehabilitation costs
- Approximately \$29M was collected for the 2017 year bringing the total amount to \$92.4M
- Bonds are still imposed or retained where DMIRS considers there is high risk that a tenement holder's rehabilitation liability may revert to the State
- Reporting is required 30 June each year
- Mining Disturbances are quite a bit higher
- Commence rehabilitation of exploration and no payment is required
- Auditing of the MRF reports are done periodically
- It is important to document previous disturbance on a tenement before commencing your own disturbance.
- Tenements with a Rehabilitation Liability below \$50,000 are not required to make a payment into the MRF
- Exploration disturbance cost \$2000 per ha, keep the disturbance below 25 ha per tenement and no payment is required

Outcome 4: Key WA and Commonwealth Acts

52

Mining Rehabilitation Fund Categories

53

Rehabilitation Liability Categories and Unit Rates

The following table has been reproduced from Schedule 1 of the MRF Regulations

Description of infrastructure or land	Category	Unit rate
Tailings or residue storage facility (class 1) Waste dump or overburden stockpile (class 1) Heap or vat leach facility Dam – saline water or process liquor	A	\$50,000
Tailings or residue storage facility (class 2) Waste dump or overburden stockpile (class 2) Low-grade ore stockpile (class 1) Plant site Fuel storage facility Workshop Mining void (with a depth of at least 5 metres) – below ground water level Landfill site Diversion channel or drain Dam - fresh water	B	\$30,000
Low-grade ore stockpile (class 2) Sewage pond Run-of-mine pad Building (other than workshop) or campsite Transport or service infrastructure corridor Airstrip Mining void (with a depth of at least 5 metres) – above ground water level Laydown or hardstand area Core yard Borrow pit or shallow surface excavation (with a depth of less than 5 metres) Borefield Processing equipment or stockpile associated with Basic Raw Material extraction Land (other than land under rehabilitation or rehabilitated land) that is cleared of vegetation and is not otherwise described in this Table	C	\$18,000
Land (other than land under rehabilitation or rehabilitated land) that has been disturbed by exploration operations	D	\$2,000
Land (other than land that has been disturbed by exploration operations) Topsoil stockpile	E	\$2,000
Exploration operations: land under rehabilitation, rehabilitated land	No rate applicable	-



Outcome 4: Key WA and Commonwealth Acts

53

RIWI Act 1914: Overview

54

- Governs the regulation and rights associated with water resources
- Licences and permits define how much water can be taken and specify required management conditions
- The Department of Water and Environmental Regulation issues licences and permits under the Rights in Water and Irrigation Act 1914 to
 - Take water (Section 5C)
 - Construct wells (including bores and soaks) (Section 26D)
 - Interfere with the bed and banks of a watercourse (Section 11/17/21A)



Outcome 4: Key WA and Commonwealth Acts

54

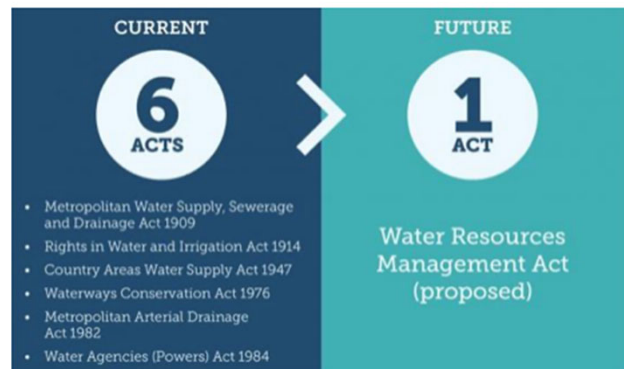
RIWI Act 1914: Overview

55

Water resources management is currently managed under six separate Acts. The department is leading the development of a new water Act and supporting legislation that will deliver more effective water resources management solutions for Western Australia.

Policies:

- Take and use of water
- Water resource assessment and planning
- Protecting public drinking water supplies and natural environment
- Manage breaches of water laws
- State Planning Policies



Outcome 4: Key WA and Commonwealth Acts

55

RIWI Act 1914: Overview

56

Access to water

Policies for the take and use of water

[Giving an undertaking to grant a water licence or permit](#)

[Management of unused licensed water entitlements](#)

[Managing unlicensed groundwater use](#)

[Measuring the taking of water](#)

[Water conservation/efficiency plans: achieving water use efficiency gains through water licensing](#)

[Section 5C licence tenure](#)

[Timely submission of required further information](#)

[Use of mine dewatering surplus](#)

[Use of operating strategies in the water licensing process](#)

[Water entitlement transactions for Western Australia](#)

[Western Australian water in mining guideline](#)

Outcome 4: Key WA and Commonwealth Acts

56

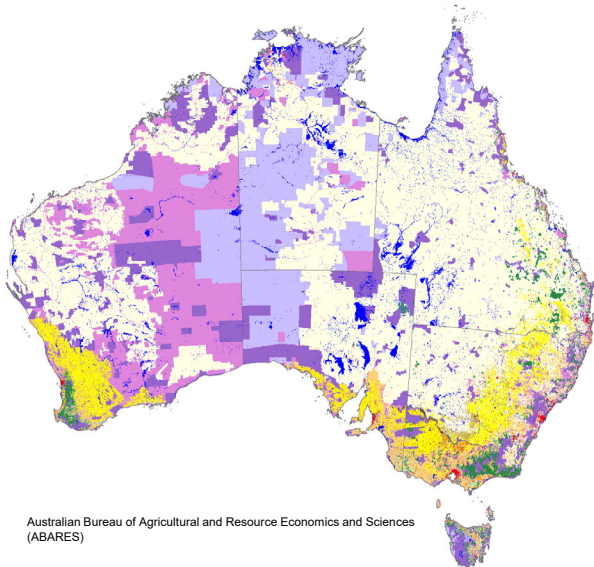
RIWI Act 1914: Life of Mine Components

	Stage A	Stage B	Stage C	Stage D	Stage E	Stage F
		Scoping the Water Management Task	Water Licence Application and EPA Assessment	Development of an Operating Strategy and Final Licence Decision	Construction, Operation and Closure Planning	Decommissioning and Closure
Inputs	<ul style="list-style-type: none"> Regulatory consultation – assess complexity of water issues Preliminary Conceptual Water Balance 	<ul style="list-style-type: none"> Proponent scopes assessment requirements and timetable Apply for 26D licence Conceptual Water balance (updated – will dewatering be required) 	<ul style="list-style-type: none"> Proponent conducts investigations and prepares hydrogeologic assessment documents <p>Operational policy no. 5.12 – Hydrogeological reporting associated with a groundwater well licence</p> <ul style="list-style-type: none"> Applications for 5C licence for the mining project (and permit applications where relevant) 	<ul style="list-style-type: none"> Proponent drafts operating strategy Finalise any additional work <p>Operational policy 5.08 – Use of operating strategies in the water licensing process</p>	<ul style="list-style-type: none"> Licensed proponent provides monitoring reports and other information required during term of licence, conditions and commitments of the operating strategy 	<ul style="list-style-type: none"> Proponent implements mine closure plan
Outputs	<ul style="list-style-type: none"> Clarity on any critical issues that may affect approval and conceptual water balance 	<ul style="list-style-type: none"> Agreed scope of regulatory requirements Section 26D 	<ul style="list-style-type: none"> Finalised hydrogeologic reports Input into preliminary mine closure plan 	<ul style="list-style-type: none"> Approved mine site operating strategy 5C Licence issued 	<ul style="list-style-type: none"> Reporting requirements 	<ul style="list-style-type: none"> Decommissioning of water related assets

Outcome 4: Key WA and Commonwealth Acts

Planning and Development Act 2005 (WA) Overview

Land Use of Australia –December 2018



Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)

- Main legislation that governs planning in Western Australia.
- Special control areas can be created to address issues such as landscape values, airport environs, bushfire prone land, flood prone land, industry buffers and special character areas where particular provisions apply.
- Local planning schemes can also include special conservation reserves.
- The EPA may also decide that the scheme is incapable of being made environmentally acceptable.

Outcome 4: Key WA and Commonwealth Acts

Aboriginal Heritage Act 1972 (WA)

59



- Foremost legislation in the protection of Aboriginal heritage within the Western Australia
- The focus of the AH Act is the protection of sites with social and heritage significance.
- Heritage Act protects:
 - *Places*
 - ‘All places’ that Aborigines used for traditional culture, sacred, ritual or ceremonial sites
 - *Objects*
 - ‘All objects, whether natural or artificial ... [that are of] sacred ritual or ceremonial significance to Aboriginal persons used for traditional cultural life’
- Both the *Environmental Protection Act 1986* (EP Act) and the *Aboriginal Heritage Act 1972* (AH Act) have the legal capacity to consider aspects of Aboriginal heritage.

Outcome 4: Key WA and Commonwealth Acts

59

Aboriginal Heritage Act 1972 (WA)

60



- When considering Aboriginal heritage matters as part of the assessment of a proposal, the EPA will consult with the National Indigenous Australians Agency
- Consent is required from the Minister for Aboriginal Affairs for any activity which will negatively impact Aboriginal heritage sites. Under the AHA, Aboriginal sites of outstanding importance may be declared Protected Areas. The AHA also provides protection for Aboriginal objects.

Outcome 4: Key WA and Commonwealth Acts

60

You will gain a general understanding of environmental legislation in WA.

- Definition of environmental law
- Sources of environmental law (and guiding principles)
- Common Law (Trespass, Nuisance and Negligence)
- Key WA and Commonwealth Acts:
 - Mining Act 1978
 - Environmental Protection Act 1986
 - Rights in Water and Irrigation Act 1914
 - Aboriginal Heritage Act 1972 (WA)
 - Planning and Development Act 2005 (WA)
 - Contaminated Sites Act 2003
 - Environment Protection and Biodiversity Conservation Act 1999
 - Relationship between State and Commonwealth Law



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Environmental Law in WA Part 2

Environmental Essentials WA

1

Outcomes

2

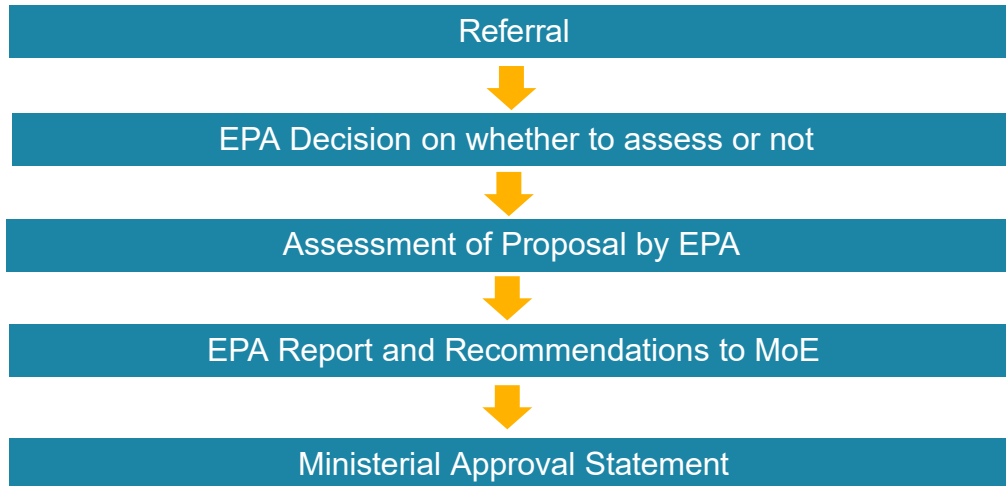
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- Environment Protection and Biodiversity Conservation Act 1999
- EP Act Part V – Works Approvals/Licencing
- Contaminated Sites Act 2003
- Mining Act 1978
- Rights in Water and Irrigation Act 1914
- Planning and Development Act 2005 (WA)
- Aboriginal Heritage Act 1972 (WA)

2

EIA Process – 5 Stages

3



Outcome 4: Key WA and Commonwealth Acts

3

EIA Process Stage 1- Referral

4

- Any proposal likely to have a significant environmental effect on the environment should be referred to the EPA. Any person may refer a significant proposal to the EPA, except in certain situations:
- Only a proponent may refer a strategic proposal
- Only a proponent or a responsible authority may refer a proposal under an assessed scheme
- A decision-making authority is required to refer a proposal that appears to be a significant proposal.
- Under certain circumstances the EPA may refuse to accept a referral. For example, if the proposal is clearly not a significant proposal or the proposal has previously been referred to the EPA.
- Proponents are encouraged to discuss proposals with staff of the Environmental Services Division of the Department of Water and Environmental Regulation (DWER), relevant decision making authorities, government agencies and stakeholders before referral.

Outcome 4: Key WA and Commonwealth Acts

4

EIA Process Stage 2- EPA Decision

5

Once the EPA has registered a valid referral, it must determine whether to assess the referral.

Decision to assess

If the EPA decides to assess a proposal, the EPA will also decide on the level of assessment, which is the proposal-specific requirements that the EPA determines are necessary to assess the proposal.

Decision not to assess

When the EPA decides not to assess a proposal, it determines that the likely effect on the environment is not so significant as to warrant assessment by the EPA.

Derived proposals

A proponent may request that the EPA declares a referred proposal to be a derived proposal. This means that the proposal was part of a strategic proposal which has already been assessed by the EPA.

Outcome 4: Key WA and Commonwealth Acts

5

EIA Process Stage 3 - Assessment

6

- Scoping the proponent environmental review (Optional)
- Preparation of additional assessment information (Optional)
- Public review (Optional)
- Preparation of EPA draft assessment report (Optional)
- Decision-making authority not to approve proposal until certain events occur
- Minor or preliminary work
- Changes to proposals during assessment.

Outcome 4: Key WA and Commonwealth Acts

6

EIA Process Stage 4 – EPA Report

7

- At the completion of the assessment, the EPA prepares a report and recommendations for the Minister for Environment.
- The assessment report sets out what the EPA considers are the key environmental factors identified in the course of the assessment, the EPA's recommendations as to whether or not the proposal may be implemented and the conditions and procedures to which implementation should be subject.
- Where the proposal is a strategic proposal, the EPA will recommend whether or not the future proposals, identified in the strategic proposal, may be implemented.
- Any person may lodge an appeal with the Minister against the content and recommendations in an assessment report.

Outcome 4: Key WA and Commonwealth Acts

7

EIA Process Stage 5 – EPA Decision and Implementation

8

- The Minister for Environment considers the EPA's report and any public appeals before determining, in consultation with other Ministers, whether the proposal should be allowed to proceed, and if so, under what conditions.
- If the Minister for Environment determines that a proposal may be implemented, a Ministerial Approval Statement is issued under s45(5) of the *Environmental Protection Act 1986*. This sets out the conditions and procedures that the proponent must adhere to during the project implementation.



Outcome 4: Key WA and Commonwealth Acts

8

EIA Process Stage 5 – EPA Decision and Implementation

9

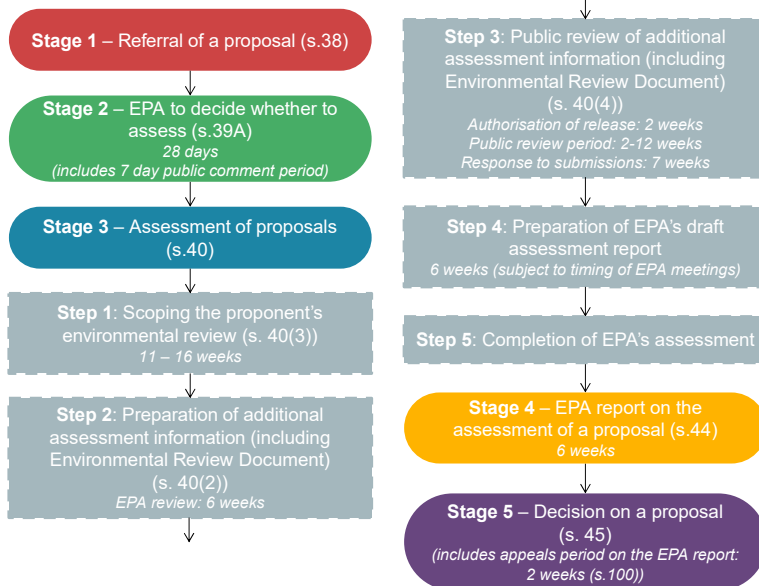
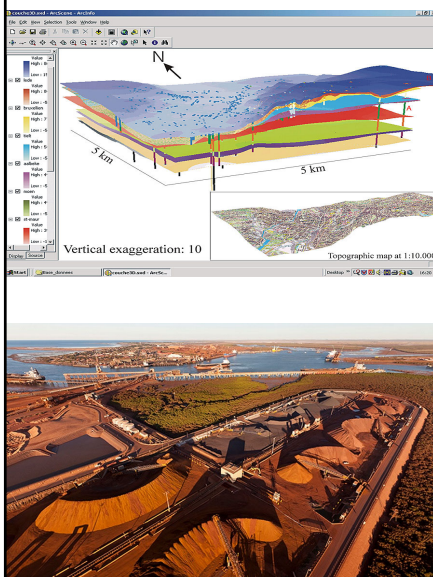
- Once a proposal has been approved and a Ministerial Approval Statement is issued, the proponent is required to ensure that implementation of the proposal is carried out in accordance with the implementation conditions, including any Environmental Management Plans required as a condition.
- The DWER monitors compliance with the Ministerial Approval Statements issued under the *Environmental Protection Act 1986*.

Outcome 4: Key WA and Commonwealth Acts

9

EIA Approvals Time Line

10



Outcome 4: Key WA and Commonwealth Acts

10

EP Act Part V Works Approvals/Licencing

11

- DWER regulates industrial emissions and discharges to the environment via a works approval and licencing process
- The EP Act requires:
 - A works approval to be obtained before constructing a prescribed industrial premises
 - An operating licence to emit or discharge waste, odour, noise, electromagnetic radiation once the prescribed premise is operational
 - Licences and works approvals set conditions for prescribed premises to ensure that potential impacts and risks to the environment are minimised. This is based on a risk-assessment process.
- Occupiers of prescribed premises are required to submit annual reports on compliance with their licence conditions through an Annual Audit Compliance Report (AACR)



Outcome 4: Key WA and Commonwealth Acts

11

Part V Works Approval/Licencing - Overview

12

- Industrial premises with potential to cause emissions and discharges to air, land or water are known as 'prescribed premises' and trigger regulation under the EP Act. Prescribed premises categories are outlined in Schedule 1 of the [Environmental Protection Regulations 1987](#)



Category number	Description of category	Production or design capacity
1	Cattle feedlot: premises on which the watering and feeding of cattle occurs, being premises — (a) situated less than 100 m from a watercourse; and (b) on which the number of cattle per hectare exceeds 50.	500 animals or more
2	Intensive piggery: premises on which pigs are fed, watered and housed in pens.	1 000 animals or more
[3, 4 deleted]		
5	Processing or beneficiation of metallic or non-metallic ore: premises on which — (a) metallic or non-metallic ore is crushed, ground, milled or otherwise processed; or (b) tailings from metallic or non-metallic ore are reprocessed; or (c) tailings or residue from metallic or non-metallic ore are discharged into a containment cell or dam.	50 000 tonnes or more per year
6	Mine dewatering: premises on which water is extracted and discharged into the environment to allow mining of ore.	50 000 tonnes or more per year
7	Vat or in situ leaching of metal: premises on which metal is extracted from ore with a chemical solution.	5 000 tonnes or more per year
8	Mineral sands mining or processing: premises on which mineral sands ore is mined, screened, separated or otherwise processed.	5 000 tonnes or more per year

Outcome 4: Key WA and Commonwealth Acts

12

Environmental Protection Regulations 1987

13

- Clean Air (Determination of Air Impurities in Gases Discharged to the Atmosphere) Regulations 1983
- Environmental Protection (Abattoirs) Regulations 2001
- Environmental Protection (Abrasive Blasting) Regulations 1998
- Environmental Protection (Clearing of Native Vegetation) Regulations 2004
- Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998
- Environmental Protection (Controlled Waste) Regulations 2004
- Environmental Protection (Domestic Solid Fuel Burning Appliances and Firewood Supply) Regulations 1998
- Environmental Protection (Fibre Reinforced Plastics) Regulations 1998
- Environmental Protection Goldfields Residential Areas Sulfur Dioxide Policy and Regulations 2003
- Environmental Protection (Kwinana) (Atmospheric Wastes) Regulations 1992
- Environmental Protection (Metal Coating) Regulations 2001
- Environmental Protection (NEPM-NPI) Regulations 1998
- Environmental Protection (Noise) Regulations 1997
- Environmental Protection (Packaged Fertiliser) Regulations 2010
- Environmental Protection (Petrol) Regulations 1999
- Environmental Protection (Recovery of Vapours from the Transfer of Organic Liquids) Regulations 1995
- Environmental Protection (Rural Landfill) Regulations 2002
- Environmental Protection (Unauthorised Discharges) Regulations 2004
- Noise Abatement (Noise Labelling of Equipment) Regulations (No. 2) 1985

Outcome 4: Key WA and Commonwealth Acts

13

Contaminated Sites Act 2003 Overview

14

Big Picture:

- Primary legislation for assessment and management of contamination
- Takes precedence over all legislative instruments except EP Act 1986
- Key component to mine closure and relinquishment.
- Having a Part V license does not exclude proponent from CS Act requirements
- Is deeming a closure issue and will be need to be undertaken if if Mine Closure Plan approved

Noted Elements:

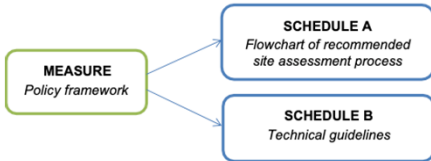
- Protect human health, the environment and environmental values by providing for the identification, recording, management and remediation of contaminated sites in the State of Western Australia.
- Under the Act, land owners, occupiers and polluters must report known or suspected contaminated sites to DWER.
- Contaminated in relation to land, water or a site, means having a substance present in or on that land, water or site at above background concentrations that presents, or has the potential to present, a risk of harm to human health, the environment or any environmental value.

Outcome 4: Key WA and Commonwealth Acts

14

Contaminated Sites Act 2003 Overview

NEPM ASC provides national framework for assessment of site contamination and recommends that the investigation of contaminated sites be carried out in stages. Only address site characterisation



Guidelines that form Schedule B of the NEPM

- Schedule B1 Guideline on investigation levels for soil and groundwater
- Schedule B2 Guideline on site characterisation
- Schedule B3 Guideline on laboratory analysis of potentially contaminated soils
- Schedule B4 Guideline on site-specific health risk assessment methodology
- Schedule B5a Guideline on ecological risk assessment
- Schedule B5b Guideline on methodology to derive ecological investigation levels in contaminated soils
- Schedule B5c Guideline on ecological investigation levels for arsenic, chromium (III), copper, DDT, lead, naphthalene, nickel and zinc
- Schedule B6 Guideline on the framework for risk-based assessment of groundwater contamination
- Schedule B7 Guideline on derivation of health-based investigation levels
- Schedule B8 Guideline on community engagement and risk communication
- Schedule B9 Guideline on competencies and acceptance of environmental auditors and related professionals

Outcome 4: Key WA and Commonwealth Acts

Contaminated Sites Act 2003 Overview

DWER - Contaminated Sites Guidelines

Contaminated Sites Guidelines	Contaminated Sites Management Series (superceded)
Assessment and management of contaminated sites (2014)	Development of sampling and analysis plans (2001) Community consultation (2006) Potentially contaminating activities, industries and land uses (2004) Assessment levels for soil, sediment and water (2010) Bioremediation of hydrocarbon contaminated soils in Western Australia (2004) The use of risk assessment in contaminated site assessment (2006) Reporting on site assessments (2001)
Identification, reporting and classification of contaminated sites (2014)	Reporting of known and suspected contaminated sites (2006) Site classification scheme (2006) Certificate of contamination audit scheme (2000)
Use of monitored natural attenuation for groundwater remediation (2014)	Use of monitored natural attenuation for groundwater remediation (2004)
Contaminated sites auditors—accreditation, conduct and reporting (2014)	Contaminated sites auditors—guidelines for accreditation, conduct and reporting (2009)
Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (joint publication with DoH) (2009)	Assessment, remediation and management of asbestos-contaminated sites in Western Australia (joint publication with DoH) (2009)
Contaminated sites and the land use planning process (proposed revision)	Contaminated sites and the land use planning process (2006)

Outcome 4: Key WA and Commonwealth Acts

Site Characterisation and Remediation



Site contamination reporting framework

Preliminary site investigation (PSI) consists of a desktop study, a detailed site inspection and interviews with relevant personnel. A PSI may also include limited sampling and analysis. The information is used to develop an initial CSM. If contamination or sources of contamination (potential areas of concern) are identified, further detailed site investigation is necessary.

Detailed site investigation (DSI) assesses potential or actual contamination through an appropriate sampling and analysis program. Several phases of investigation (including risk assessment) may be required to adequately characterise the site, particularly for complex sites. The CSM is refined on an iterative basis until there is sufficient information and understanding of the site to devise risk-based strategies to manage the identified risks.

Remedial action plan (RAP) documents the type and extent of remediation required to ensure that the site is suitable for its current or intended future use, and to protect the surrounding environment and land uses. The plan details the clean-up techniques proposed to achieve the remedial objectives and criteria for assessing the effectiveness of the clean-up in the site validation process.

Site remediation and validation (SRV) is the process of cleaning up the site (remediation) and evaluating the effectiveness of the clean-up (validation). Where the remedial objectives are not met, further work may be required such as further remediation, risk assessment or ongoing site management.

Site management plan (SMP) documents ongoing management of the site if this is required, such as long term monitoring and assessment of residual contamination. The SMP may require periodic revision and updating to ensure it remains relevant over time. A relevant stakeholder, such as the land owner or body corporate, must assume responsibility for maintaining and implementing the SMP.

Outcome 4: Key WA and Commonwealth Acts

- Once classified, a *memorial (restriction)* is placed on Certificate of Title
- DWER determines the category of classification:
 - Report not substantiated
 - Possibly contaminated – investigation required (PCIR)
 - Not contaminated – Unrestricted Use
 - Contaminated – Remediation Required (CRR)
 - Remediated for Restricted Use (RRU)
 - Contaminated – Restricted Use (CRU)
 - Decontaminated.



Outcome 4: Key WA and Commonwealth Acts

Mining Act 1978: Mining Proposal

19

- Proponents identify the potential risks that a mining operation could pose to the environment, how the risks will be treated, establishing appropriate site-specific environmental outcomes
- Monitoring and reporting on the success of these outcomes
- The Mining Act defines a Mining Proposal as
 - In the format required by the guidelines
 - Contains such information as required by the guidelines
 - Contains a Mine Closure Plan

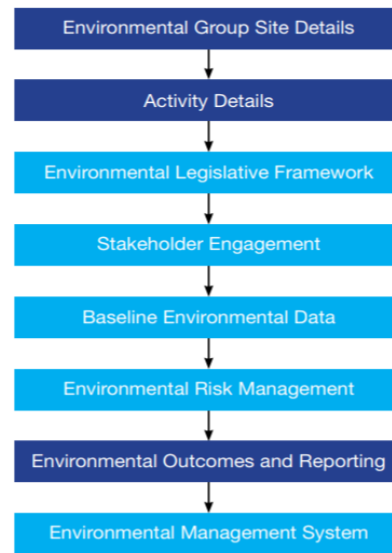


Figure 2: Structure of a Mining Proposal

Outcome 4: Key WA and Commonwealth Acts

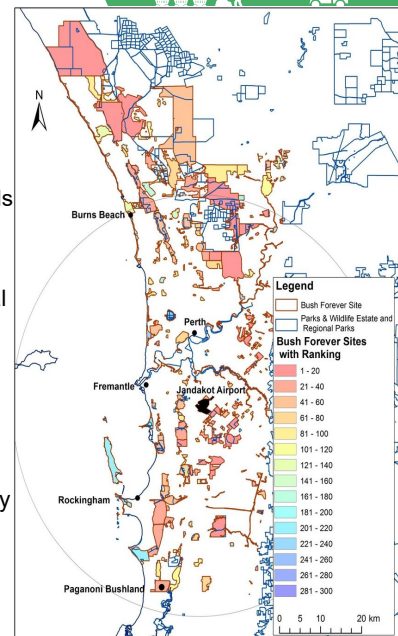
19

Mining Proposal Referral

20

DMIRS and EPA will confer on whether to refer (off shore criteria not shown)

- Environmentally Sensitive Areas including:
 - Within 500m of World Heritage Property
 - Within 500m of a Bush Forever site
 - Within 500m of a Threatened Ecological Community
 - Within 500m of defined wetlands (including Ramsar wetlands, ANCA wetlands Conservation category wetlands)
- Area containing rare flora Area covered by an Environmental Protection Policy.
- Within 500m of a declared/proposed State Conservation Estate, including National Park, Nature Reserve, Conservation Park, or State Forest and Timber Reserves.
- Within a Public Drinking Water Source Area.
- Within 2 kilometres of a declared occupied town site (for Mining Proposals and petroleum Environment Plans only).
- Hydraulic fracturing exploration and development activities.
- Activities within the Strategic Assessment for the Perth Peel Region and potentially in conflict with the outcomes of the Strategic Assessment.
- Area previously or currently subject to formal assessment by the EPA.



Outcome 4: Key WA and Commonwealth Acts




20

Table 1: Objectives for environmental factors

Environmental factor	Objective
Biodiversity/Flora/Fauna/ Ecosystem	To maintain representation, diversity, viability and ecological function at the species, population and community level.
Water resources	To maintain the hydrological regimes, quality and quantity of groundwater and surface water to the extent that existing and potential uses, including ecosystem maintenance, are protected.
Landforms	Mining will not result in appreciable land degradation ² or the contamination or pollution of the land.
Mine closure	Mines are closed in a manner to make them (physically) safe to humans and animals, (geo-technically) stable, (geo-chemically) non-polluting/ non-contaminating, and capable of sustaining an agreed post-mining land use, and without unacceptable liability to the State.

Outcome 4: Key WA and Commonwealth Acts



Statutory Documents

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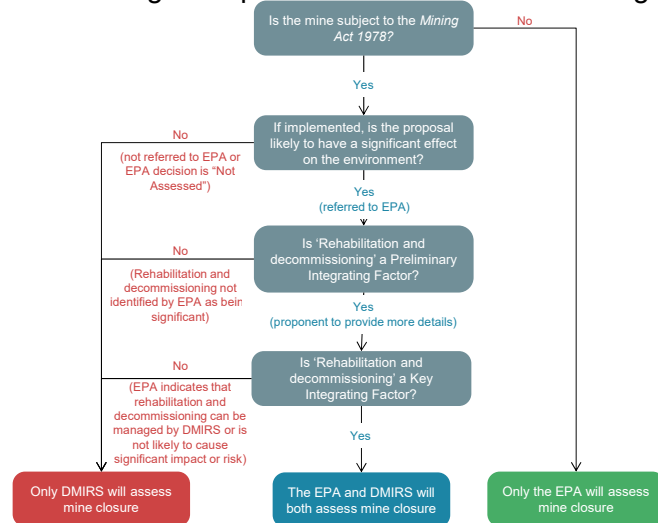
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Outcome 4: Key WA and Commonwealth Acts

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Outcome 4: Key WA and Commonwealth Acts

24

Mining Rehabilitation Fund Categories

25

Rehabilitation Liability Categories and Unit Rates

The following table has been reproduced from Schedule 1 of the MRF Regulations

Description of infrastructure or land	Category	Unit rate
Tailings or residue storage facility (class 1) Waste dump or overburden stockpile (class 1) Heap or vat leach facility Dam – saline water or process liquor	A	\$50,000
Tailings or residue storage facility (class 2) Waste dump or overburden stockpile (class 2) Low-grade ore stockpile (class 1) Plant site Fuel storage facility Workshop Mining void (with a depth of at least 5 metres) – below ground water level Landfill site Diversion channel or drain Dam - fresh water	B	\$30,000
Low-grade ore stockpile (class 2) Sewage pond Run-of-mine pad Building (other than workshop) or campsite Transport or service infrastructure corridor Airstrip Mining void (with a depth of at least 5 metres) – above ground water level Laydown or hardstand area Core yard Borrow pit or shallow surface excavation (with a depth of less than 5 metres) Borefield Processing equipment or stockpile associated with Basic Raw Material extraction Land (other than land under rehabilitation or rehabilitated land) that is cleared of vegetation and is not otherwise described in this Table	C	\$18,000
Land (other than land under rehabilitation or rehabilitated land) that has been disturbed by exploration operations	D	\$2,000
Land (other than land that has been disturbed by exploration operations) Topsoil stockpile	E	\$2,000
Exploration operations: land under rehabilitation, rehabilitated land	No rate applicable	-



Outcome 4: Key WA and Commonwealth Acts

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RIWI Act 1914: Overview

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- Governs the regulation and rights associated with water resources
- Licences and permits define how much water can be taken and specify required management conditions
- The Department of Water and Environmental Regulation issues licences and permits under the Rights in Water and Irrigation Act 1914 to
 - Take water (Section 5C)
 - Construct wells (including bores and soaks) (Section 26D)
 - Interfere with the bed and banks of a watercourse (Section 11/17/21A)



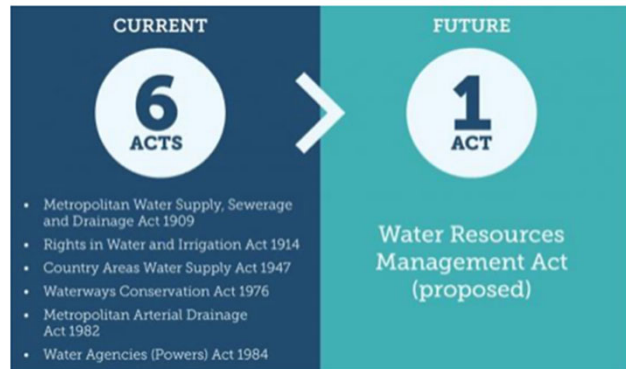
Outcome 4: Key WA and Commonwealth Acts

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Water resources management is currently managed under six separate Acts. The department is leading the development of a new water Act and supporting legislation that will deliver more effective water resources management solutions for Western Australia.

Policies:

- Take and use of water
- Water resource assessment and planning
- Protecting public drinking water supplies and natural environment
- Manage breaches of water laws
- State Planning Policies



Outcome 4: Key WA and Commonwealth Acts

Access to water

Policies for the take and use of water

- [Giving an undertaking to grant a water licence or permit](#)
- [Management of unused licensed water entitlements](#)
- [Managing unlicensed groundwater use](#)
- [Measuring the taking of water](#)
- [Water conservation/efficiency plans: achieving water use efficiency gains through water licensing](#)
- [Section 5C licence tenure](#)
- [Timely submission of required further information](#)
- [Use of mine dewatering surplus](#)
- [Use of operating strategies in the water licensing process](#)
- [Water entitlement transactions for Western Australia](#)
- [Western Australian water in mining guideline](#)



Outcome 4: Key WA and Commonwealth Acts

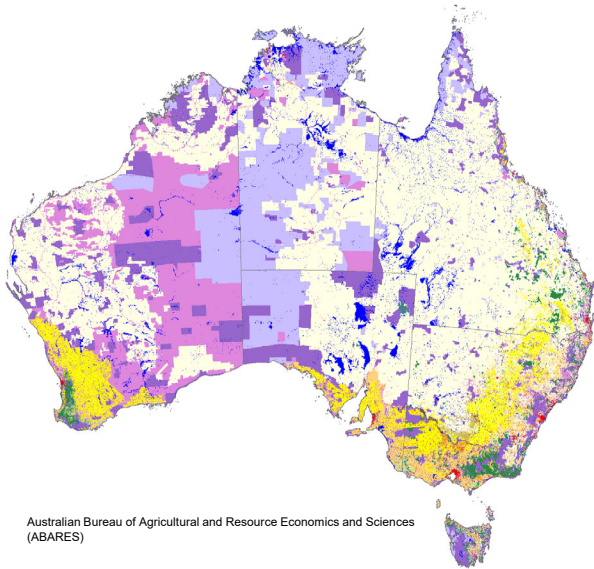
RIWI Act 1914: Life of Mine Components

	Stage A	Stage B	Stage C	Stage D	Stage E	Stage F
		Scoping the Water Management Task	Water Licence Application and EPA Assessment	Development of an Operating Strategy and Final Licence Decision	Construction, Operation and Closure Planning	Decommissioning and Closure
Inputs	<ul style="list-style-type: none"> Regulatory consultation – assess complexity of water issues Preliminary Conceptual Water Balance 	<ul style="list-style-type: none"> Proponent scopes assessment requirements and timetable Apply for 26D licence Conceptual Water balance (updated – will dewatering be required) 	<ul style="list-style-type: none"> Proponent conducts investigations and prepares hydrogeologic assessment documents <p>Operational policy no. 5.12 – Hydrogeological reporting associated with a groundwater well licence</p> <ul style="list-style-type: none"> Applications for 5C licence for the mining project (and permit applications where relevant) 	<ul style="list-style-type: none"> Proponent drafts operating strategy Finalise any additional work <p>Operational policy 5.08 – Use of operating strategies in the water licensing process</p>	<ul style="list-style-type: none"> Licensed proponent provides monitoring reports and other information required during term of licence, conditions and commitments of the operating strategy 	<ul style="list-style-type: none"> Proponent implements mine closure plan
Outputs	<ul style="list-style-type: none"> Clarity on any critical issues that may affect approval and conceptual water balance 	<ul style="list-style-type: none"> Agreed scope of regulatory requirements Section 26D 	<ul style="list-style-type: none"> Finalised hydrogeologic reports Input into preliminary mine closure plan 	<ul style="list-style-type: none"> Approved mine site operating strategy 5C Licence issued 	<ul style="list-style-type: none"> Reporting requirements 	<ul style="list-style-type: none"> Decommissioning of water related assets

Outcome 4: Key WA and Commonwealth Acts

Planning and Development Act 2005 (WA) Overview

Land Use of Australia –December 2018



Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)

- Main legislation that governs planning in Western Australia.
- Special control areas can be created to address issues such as landscape values, airport environs, bushfire prone land, flood prone land, industry buffers and special character areas where particular provisions apply.
- Local planning schemes can also include special conservation reserves.
- The EPA may also decide that the scheme is incapable of being made environmentally acceptable.

Outcome 4: Key WA and Commonwealth Acts

Aboriginal Heritage Act 1972 (WA)

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- Foremost legislation in the protection of Aboriginal heritage within the Western Australia
- The focus of the AH Act is the protection of sites with social and heritage significance.
- Heritage Act protects:
 - *Places*
 - 'All places' that Aborigines used for traditional culture, sacred, ritual or ceremonial sites
 - *Objects*
 - 'All objects, whether natural or artificial ... [that are of] sacred ritual or ceremonial significance to Aboriginal persons used for traditional cultural life'
- Both the *Environmental Protection Act 1986* (EP) Act and the *Aboriginal Heritage Act 1972* (AH Act) have the legal capacity to consider aspects of Aboriginal heritage.

Outcome 4: Key WA and Commonwealth Acts

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Aboriginal Heritage Act 1972 (WA)

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- When considering Aboriginal heritage matters as part of the assessment of a proposal, the EPA will consult with the National Indigenous Australians Agency
- Consent is required from the Minister for Aboriginal Affairs for any activity which will negatively impact Aboriginal heritage sites. Under the AHA, Aboriginal sites of outstanding importance may be declared Protected Areas. The AHA also provides protection for Aboriginal objects.

Outcome 4: Key WA and Commonwealth Acts

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You will gain a general understanding of environmental legislation in WA.

- Definition of environmental law
- Sources of environmental law (and guiding principles)
- Common Law (Trespass, Nuisance and Negligence)
- Key WA and Commonwealth Acts:
 - Mining Act 1978
 - Environmental Protection Act 1986
 - Rights in Water and Irrigation Act 1914
 - Aboriginal Heritage Act 1972 (WA)
 - Planning and Development Act 2005 (WA)
 - Contaminated Sites Act 2003
 - Environment Protection and Biodiversity Conservation Act 1999
 - Relationship between State and Commonwealth Law