



Statement of environmental principles, factors, objectives and aims of EIA

Environmental Protection Authority

October 2021

Version	Change	Date
1.0	Initial version	13 December 2016
2.0	Update to section 5 – consideration of significance Update factors and objectives table – landforms and inland waters Editorial changes for consistency across the framework	29 June 2018
3.0	Update factors and objectives table – addition of greenhouse gas emissions	16 April 2020
4.0	Amendments throughout document to reflect 2020 Environmental Protection Act 1986 amendments and clarify principles of the Act	22 October 2021

As EPA documents are updated from time to time, users should consult the EPA website to ensure they have the most recent version.

Environmental Protection Authority 2021, *Statement of environmental principles, factors, objectives and aims of EIA*, EPA, Western Australia.

This document is available in alternative formats upon request. National Relay Service
TTY: 133 677

(To assist persons with hearing and voice impairment)

More information:

EPA Services
Department of Water and Environmental Regulation

Prime House, 8 Davidson Terrace
Joondalup WA 6027

Locked Bag 10
Joondalup DC WA 6919

p: 08 6364 7000
e: info.epa@dwer.wa.gov.au
w: www.epa.wa.gov.au

1 Purpose

The purpose of this Statement is to communicate how, for the purposes of environmental impact assessment (EIA), the Environmental Protection Authority (EPA):

- considers the object and principles of the *Environmental Protection Act 1986* (the Act)
- considers what the aims of EIA should be
- uses environmental factors and objectives to organise and systemise EIA and reporting
- considers significance throughout the EIA process
- takes a holistic view of the environment and a proposal or scheme's potential impact on the environment
- considers cumulative effects when assessing a proposal or scheme's potential impact on the environment.

2 Introduction

Objective and functions of the EPA

Section 15 of the Act establishes the objective of the EPA (Authority):

It is the objective of the Authority to use its best endeavours:

- (a) *to protect the environment; and*
- (b) *to prevent, control and abate pollution and environmental harm.*

Section 16 of the Act establishes the functions of the EPA. One of these functions, and the function, which is the primary subject of this Statement, is to conduct an EIA.

Environmental impact assessment

Part IV of the Act makes provisions for the EPA to undertake an EIA of significant proposals, proposals of a prescribed class, strategic proposals and land-use planning schemes.

In general terms, EIA means an orderly and systematic process for evaluating a proposal (including its alternatives) and its effects on the environment, and mitigation of those effects. The process extends from the initial concept of the proposal through implementation to completion, and where appropriate, decommissioning.

The aims of EIA are set out in Section 4.

The EPA uses environmental principles, factors, and associated objectives as the basis for assessing a proposal or land-use planning scheme's impact on the environment. The environmental principles, factors and objectives underpin the EIA process. This Statement sets out the environmental principles, factors, and associated objectives.

Guidance on the procedures of EIA of proposals is provided in the EPA's [Environmental Impact Assessment \(Part IV Divisions 1 and 2\) Administrative Procedures 2021](#) and [Environmental Impact Assessment \(Part IV Divisions 1 and 2\) Procedures Manual](#).

Definition of environment

'Environment' is defined in section 3(1) of the Act:

Environment, subject to subsection (2), means living things, their physical, biological and social surroundings, and interactions between all of these.

Section 3(2) of the Act states:

In the case of humans, the reference to social surroundings in the definition of environment in subsection (1) is a reference to aesthetic, cultural, economic and other social surroundings to the extent to which they directly affect or are affected by physical or biological surroundings.

This definition of 'environment' establishes the scope of EIA conducted by the EPA. It clarifies what matters are relevant during EIA and what matters are beyond the scope of EIA.

3 Environmental principles

Section 4A of the Act establishes its principles:

The object of this Act is to protect the environment of the State, having regard to the following principles:

1. The precautionary principle

Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

In the application of the precautionary principle, decisions should be guided by:

- (a) careful evaluation to avoid, where practicable, serious or irreversible damage to the environment; and*
- (b) an assessment of the risk-weighted consequences of various options.*

2. The principle of intergenerational equity

The present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.

3. The principle of the conservation of biological diversity and ecological integrity

Conservation of biological diversity and ecological integrity should be a fundamental consideration.

4. Principles relating to improved valuation, pricing and incentive mechanisms

- (a) Environmental factors should be included in the valuation of assets and services.*
- (b) The polluter pays principle – those who generate pollution and waste should bear the cost of containment, avoidance or abatement.*
- (c) The users of goods and services should pay prices based on the full life cycle costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any wastes.*
- (d) Environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, which enable those best placed to maximise benefits and/or minimise costs to develop their own solutions and responses to environmental problems.*

5. The principle of waste minimisation

All reasonable and practicable measures should be taken to minimise the generation of waste and its discharge into the environment.

The object and principles guide the overall application of the powers of the Act. The principles are matters to which the EPA is required to have regard as a condition of the valid exercise of its powers to assess and report on proposals and schemes under the Act.

4 Aims of EIA

EPA

In conducting EIA, the EPA aims to:

1. fulfil the object of, and apply the principles of, the Act
2. provide independent, timely and sound advice about the environmental impacts of a proposal to enable the Government to make an informed decision in relation to the implementation of the proposal
3. provide opportunities for public participation, and input from decision-making authorities and other relevant government agencies in the assessment of the environmental impacts of a proposal before decisions are made
4. ensure that proponents take primary responsibility for the protection of the environment relating to their proposals, detailed in the aims of EIA for the proponent outlined below
5. promote adaptive environmental management, positive environmental outcomes and continuous improvement through learning and knowledge gained through the EIA process and project implementation
6. promote education and awareness of environmental issues.

The proponent

The EPA expects that proponents should aim to:

1. consult with all stakeholders, including the EPA, other decision-making authorities and relevant government agencies and the relevant community as early as possible in the planning of their proposal, during the environmental review and assessment of their proposal, and, where necessary, during the life of the proposal
2. ensure that members of the wider public are provided with sufficient information relevant to the EIA of a proposal to make informed comment before the completion of the EPA's assessment report
3. use best practicable measures, and genuine evaluation of options or alternatives, in locating, planning, and designing their proposal, to mitigate potential adverse environmental impacts and to facilitate positive environmental outcomes and a continuous improvement approach to environmental management
4. identify the relevant environmental factors and environmental values likely to be impacted and the Proposal elements likely to cause impacts and have cumulative effects in the early stages of planning for their proposal
5. identify the specific environmental outcomes of the proposal and demonstrate that the unavoidable impacts will meet the EPA objectives for environmental factors
6. consider the following, during project planning and discussions with the EPA, regarding the form, content, and timing of their environmental review:

- a) the activities, investigations (and consequent authorisations) required to undertake the environmental review
 - b) the efficacy of the investigations to produce sound scientific baseline data about the receiving environment
 - c) the cumulative impacts of the proposal
 - d) holistic impacts
 - e) the documentation and reporting of investigations; and the likely timeframes in which to complete the environmental review
 - f) use of best endeavours to meet assessment timelines.
7. identify in their environmental review, subject to the EPA's guidance:
- a) best practicable measures to protect, enhance, avoid, where possible, and otherwise abate, minimise, rehabilitate, monitor and manage impacts on the environment
 - b) responsible corporate environmental policies, strategies, and management practices, which demonstrate how the proposal can be implemented to meet the EPA's environmental objectives for environmental factors.

Public involvement

Members of the wider public are encouraged to:

1. participate in consultation by offering advice, identifying omitted relevant data and information, providing local knowledge and proposing alternatives
2. participate in strategic policy and planning as appropriate, since engagement at these earlier stages may influence the development and evaluation of future proposals
3. be informed of the administration and outcomes of EIA
4. take a responsible approach to opportunities for engagement in the EIA process, including being informed of objective information about the environmental issues.

5 Environmental factors and objectives

If the EPA assesses a proposal, section 44(1) of the Act requires the EPA to prepare a report on the outcome of its assessment of the proposal and give that report to the Minister for the Environment.

Section 44(2) establishes that the report must set out:

- (a) what the Authority considers to be the key environmental factors identified in the course of the assessment; and
- (b) the Authority's recommendations as to whether or not the proposal may be implemented and, if it recommends that implementation be allowed, as to the conditions and procedures, if any, to which implementation should be subject.

Similar reporting requirements relate to the assessment of strategic proposals (section 40B) and schemes (section 48D). The EPA's assessment report informs the Minister's decision. It does not constitute the final decision about the proposal or scheme.

Environmental factors (defined in the EPA's Administrative Procedures) are factors that the EPA uses as an organising principle for EIA, comprising a number of environmental values. They provide a systematic approach to organising environmental information for the purpose of EIA and a structure for the assessment report. The EPA has 14 environmental factors, organised

into five themes: Sea, Land, Water, Air and People.

The EPA has identified an environmental objective for each environmental factor. It will have regard to these objectives when determining whether the environmental impact of a proposal or scheme may be significant, and at most other stages of EIA. The environmental objectives are aimed towards ensuring the objects and principles of the Act are achieved.

The EPA's environmental factors and objectives are set out in Table 1. The EPA has also published guidelines on every environmental factor and associated objective, and technical guidance for several of the environmental factors. All are available on the EPA's website.

Table 1: EPA environmental 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.
	Terrestrial fauna	To protect terrestrial fauna so that biological diversity and ecological integrity are maintained.
Water	Inland waters	To maintain the hydrological regimes and 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.
	Greenhouse gas emissions	To reduce net greenhouse gas emissions in order to minimise the risk of environmental harm associated with climate change.
People	Social surroundings	To protect social surroundings from significant harm.
	Human health	To protect human health from significant harm.

6 Consideration of significance

The EPA usually considers significance when deciding whether to assess proposals and schemes. The EPA also usually considers significance at most other stages in EIA. The terms 'significance', 'significant impact' and 'significant effect' are not defined in the Act. Therefore, the ordinary or everyday meanings of these terms apply. When considering these terms, the EPA may have regard to, and expects the proponent to have regard to, various matters, including:

1. the object and principles of the Act
2. values, sensitivity and quality of the environment which is likely to be impacted
3. all stages and components of the proposal (such as any infrastructure required for the proposal to be practicably implemented, or a proposal life cycle)
4. extent (intensity, duration, magnitude, and geographic footprint) of the likely impacts
5. resilience of the environment to cope with the impacts or change (including considering pressures such as climate change)
6. consequence of the application of the mitigation hierarchy to the proposal
7. consequence of the likely impacts (or change), including off-site impacts (such as impacts on a wetland from chemicals discharged into upstream river systems) and indirect impacts (such as reduced fish harvest due to decreased water quality)
8. likely environmental outcomes, and whether these are consistent with the EPA environmental factor objectives
9. cumulative effects, taking into account cumulative environmental impacts - the successive, incremental and interactive impacts on the environment of a proposal with one or more past, present and reasonably foreseeable future activities
10. holistic impacts – connections and interactions between impacts, and the overall impact of the proposal on the environment as a whole
11. level of confidence in the prediction of residual impacts and the success of proposed mitigation Further guidance on the mitigation hierarchy is in the following section
12. public interest about the likely effect of the proposal or scheme, if implemented, on the environment, and relevant public information.

The application of the significance test is on a case-by-case basis.

7 Mitigation hierarchy

The mitigation hierarchy is a sequence of actions to help reduce adverse environmental impacts. The EPA applies two mitigation hierarchies, one specifically for greenhouse gas emissions and one for all other factors, referred to as the environmental factor mitigation hierarchy. These are listed below in order of preference (avoidance most preferred mitigation and offsets as the least preferred option).

Environmental factors

1. Avoid – avoid the adverse environmental impact altogether. This may include reducing the footprint or changing the location of the footprint to avoid areas with high environmental values.
2. Minimise – limit the degree or magnitude of the adverse impact. This may include reducing the footprint or carefully selecting technologies, processes (such as re-use of waste products) and management measures (such as bunding or dust and noise control measures) to reduce the impact.
3. Rehabilitate – repair, rehabilitate or restore the impacted site as soon as possible. Adequate rehabilitation information is integral to the mitigation hierarchy to ensure early identification of knowledge gaps and risk as well as development of criteria and research to meet objectives.
4. Offset – undertake a measure or measures to provide a compensatory environmental benefit or reduction in environmental impact to counterbalance significant adverse environmental impacts from implementation of a proposal. The measure(s) are taken after all reasonable mitigation measures have been applied and a significant environmental risk or impact remains. Offsets are not appropriate for all proposals and will be determined on a proposal-by-proposal basis.

Note: mitigation may be limited to avoid and minimise for some environmental factors, where rehabilitation options are not available.

Greenhouse gas emissions factor

1. Avoid – avoid emissions through best-practice design.
2. Reduce – reduce emissions over the project life.
3. Offset – offset some or all residual emissions.

Current offsets guidance is set out in:

- Biodiversity factors: [WA Environmental Offsets Policy](#), [WA Environmental Offsets Guidelines](#), including the WA Environmental Offsets template, [Instructions for preparing Impact Reconciliation Procedures and Impact Reconciliation Reports](#).
- Greenhouse Gas Emissions factor: *State Emissions Policy* and EPA's [Environmental factor guideline – Greenhouse gas emissions](#).

When considering the application of offsets, note that a significant residual impact that is relevant to one environmental factor after application of the mitigation hierarchy cannot be reduced by an offsets measure related to another environmental factor.